

TEACHERS' SELF-EFFICACY, SENTIMENTS, ATTITUDES, AND CONCERNS
ABOUT INCLUSION OF STUDENTS WITH DEVELOPMENTAL DISABILITIES

by

ANGELA MONTGOMERY

B. Ed., The University of British Columbia, 2001

B. A., University College of the Fraser Valley, 2000

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ABSTRACT

In a sample of 100 primary and intermediate teachers from a Western Canadian province, this study examined relationships between teachers' self-efficacy and teachers' sentiments, attitudes, and concerns about inclusive education of students with developmental disabilities. The study used both a web and paper-based survey based on two psychometrically sound scales: the Teacher Efficacy for Inclusive Practices (TEIP) scale, and the Sentiments, Attitudes and Concerns about Inclusive Education Scale – Revised (SACIE-R). Pearson product-moment correlations were calculated to examine associations between three TEIP factors (use of inclusive instruction, collaboration with others, and managing disruptive behaviour) and the three SACIE-R variables. A series of multiple regression analyses were then conducted to determine which TEIP factors, when considered simultaneously, best predicted sentiments, attitudes, and concerns. Results indicated that higher self-efficacy for collaboration was the only predictor associated with more positive sentiments and attitudes, and with fewer concerns, about inclusive education for students with developmental disabilities. The results highlight the importance of both pre-and inservice education aimed at providing educators with dispositions and skills related to effective collaboration with parents and other members of a school-based team.

PREFACE

This study received approval from the University of British Columbia's Behavioural Research Ethics Board (BREB) on May 10, 2012 (Certificate H12-01095). Ms. Montgomery was responsible for data collection and data analysis and is the sole author of this thesis.

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CHAPTER 1: INTRODUCTION

Research has provided us with a large body of literature about appropriate instructional practices for students with special educational needs, as well as long lists of the social and academic benefits of inclusive classrooms for these students (see, for example, Porter, Smith, Timmons, Kelly, & Richler, 2011). Simultaneously, federal, provincial, and local governing bodies have established a number of policies designed to clarify the nature of appropriate educational placements for students with special needs. Despite these research and policy efforts, the implementation of inclusive practices in British Columbia is inconsistent and most certainly inadequate. As Charlie Naylor stated in his 2005 paper, *Inclusion in British Columbia's Public Schools: Always a Journey, Never a Destination?*, "...it is not the lack of knowledge about appropriate strategies that is at the root of any dilemma with successful implementation of inclusive settings" (p. 9). If Naylor is correct, attention must be given to at least one additional factor that appears to be related to the implementation of inclusive practices: teachers' attitudes toward inclusion.

There is a considerable body of research suggesting that teachers who have positive attitudes toward inclusion take more responsibility for the education of students with diverse needs and use more effective teaching strategies in the classroom (Bender, Vail, & Scott, 1995 in Ernst & Rogers, 2009; Stanovich & Jordan, 1998). Thus, it is important to identify the conditions, beliefs, and practices that contribute to positive attitudes towards inclusion. It is also important to determine which factors are not amenable to change (e.g., demographic factors like age, years of teaching, undergraduate coursework), which factors are amenable to change (e.g., training opportunities, collaboration, planning time), and how to best affect the latter to create more positive attitudes and more inclusive practices.

Definition of Inclusion

If the practice of inclusion is both diverse and open to interpretation, it follows that how this term is defined varies, both in the literature and in the organizations seeking to implement this practice. In its broadest form, inclusion is the practice of having students with special needs attend their neighbourhood schools, with their same age peers, in general education classrooms (Fisher, Roach, & Frey, 2002; Hammond & Ingalls, 2003; Rafferty, Boettcher, & Griffin, 2001 in de Boer, Pijl, & Minnaert, 2011; Timmons, 2006). Yet, inclusion is defined by much more than the physical space children occupy. The essential tenet of inclusion is that children with special needs have access to, and receive, the instruction, resources, and supports that are necessary for them to participate fully with their peers in the general education classroom. The BC Ministry of Education, in the *Manual of Policies, Procedures and Guidelines for Special Education*, offers the following definition:

“Inclusion describes the principle that all students are entitled to equitable access to learning, achievement and the pursuit of excellence in all aspects of their education. The practice of inclusion is not necessarily synonymous with integration and goes beyond placement to include meaningful participation and the promotion of interaction with others.” (BC Ministry of Education, 2011, p. 10)

Thus, although specific definitions vary somewhat, inclusion typically includes the following three components: students attend neighbourhood schools, are educated with their same-age peers, and participate actively in both the curriculum and life of the classroom.

Special Education and Inclusion in Canada

In Canada, approximately 4.6% of children between the ages of 5 to 14 have one or more disabilities, which may include learning disabilities, cognitive impairments, and

developmental disabilities (Participation and Activity Limitation Survey [PALS], 2007). In addition, PALS reported that 63.6% of students with special needs are enrolled in general education classes and 23.5% and 12.8% of students with disabilities are enrolled in part-time and full-time special education settings, respectively. The PALS also found that students in separate special education classes have limited participation in physical education, organized games, playing with other children during breaks, school outings, and general education classroom activities.

It is important to note that there is no Canada-wide policy regarding the education of students with special needs or the practice of inclusion in schools. Instead, each province is responsible for its own educational statutes, a practice that results in widely differing rates of inclusion across the country. As of 2006 (the most current year for which PALS data is available), no Canadian province had a fully inclusive educational system.

Special Education and Inclusion in British Columbia

Statistics, legislation, and practices reveal a distinct and disappointing portrait of inclusion in British Columbia (BC). The PALS (2007) report revealed that close to 9% of children in BC schools are designated as having special needs – double the national average. However, only 40.6% of children with disabilities in BC receive special education services (PALS, 2007). In addition, 55.4% of parents of children with special needs report difficulty in accessing special education services, higher than the national average of 49% (PALS, 2007). Although the responsibility for legislating inclusive practices rests squarely on the shoulders of provincial governments, BC does not mandate full inclusion. The BC Ministry of Education's *Manual of Policies, Procedures and Guidelines for Special*

Education (2011) includes the caveat that students should participate in inclusive settings, “unless the student’s or other students’ needs indicate that the educational placement for the student with special needs should be provided otherwise” (p. 10), and that this “does not preclude the appropriate use of resource rooms, self-contained classes, community-based programs, or specialized settings” (p. 10).

If even partial inclusion is not mandated by federal or provincial governments, it is then left to individual school districts to interpret the legislation. In BC, this raises the question: If classrooms are not required to be inclusive, then where are students with special needs educated? The findings of a 2002 BC Teachers’ Federation survey on the working life of teachers addressed this question, at least in part. Only 22% percent of survey respondents somewhat agreed or strongly agreed with the following statement: “In my school or district, students with special needs are required to spend 100% of every day in a regular classroom” (Naylor, 2002, p. 17). Thus, it appears that the combination of a lack of federal guidelines, ambiguous provincial legislation, and inconsistent interpretations of inclusive education policy by school districts and individual schools results in an education system in which students with special needs do not have universal access to their neighbourhood schools or the equal opportunities to be educated in regular classrooms.

Students with Developmental Disabilities in British Columbia. Students with developmental disabilities (e.g., intellectual disabilities, autism spectrum disorders, physical disabilities, and multiple disabilities) account for the largest number of students with special needs in British Columbia. In the 2010/2011 school year, it was reported that 3.4% of students in the province (one-third of all students designated as having a disability) had a developmental disability (BC Ministry of Education, 2011). This percentage represents

approximately 18,000 students who might be included in regular classrooms if they were provided with appropriate resources and supports.

In the late 1990s and early 2000s, several studies focused on both appropriate practices for students with developmental disabilities in inclusive settings and on the benefits for these students and their nondisabled peers. In two seminal research reviews, Katz and Mirenda (2002) established that inclusive settings provide both educational and social benefits for students with developmental disabilities and their peers. The authors reported that students with developmental disabilities were able to learn basic communication, social, and academic skills and generalize their learning to other settings. They also noted that students' level of engaged behavior is generally higher in inclusive settings than in separate settings. In addition, McDonnell et al. (2003) found that students with developmental disabilities who were educated in inclusive classrooms made significant gains in adaptive behaviour (e.g., community living skills, communication skills, etc.). Perhaps one of the essential findings of the reviews by Katz and Mirenda is that opportunities to interact with their peers without disabilities may be at least partially responsible for the academic benefits experienced by students with developmental disabilities, something that is impossible to replicate in a wholly separate setting.

Numerous strategies for successfully instructing students with developmental disabilities in inclusive settings exist as well. Jordan and Stanovich (2004) reported that effective strategies for teaching students with special needs in the classroom rely on the basic tenets and techniques of good teaching. Naylor (2005) echoed this sentiment by noting that instruction for students with disabilities is simply "excellent teaching" (p. 10). If we know how to best teach students with developmental disabilities and if we are aware of the social,

academic, and adaptive skill benefits of inclusive classrooms, then the question is: Why are we not providing inclusive classroom placements for all students with developmental disabilities, a sizeable sector of BC's student population?

Factors that Affect the Inclusion of Students with Special Needs

Since inclusion of students with special needs varies across the country, across the province, and even within individual districts, schools, and classrooms, it is important to identify factors that contribute to this variability. These factors can be organized into four broad categories: systems issues, student characteristics, teacher characteristics, and support issues.

Systems Issues Affecting Inclusion

Systems issues refer to factors that are typically controlled by the various administrative arms of the education system and affect how schools are run. Ministries of Education, school boards, and even school principals affect how inclusion is implemented in their jurisdictions.

Administrative support. The support of provincial, district, and school-based administrative officers is key to the implementation of educational programs and initiatives. It is these individuals and boards that are responsible for drafting the policies and sharing the philosophical beliefs that guide implementation, as well as for providing the necessary financial and other resources to support inclusive programs and practices.

Several studies have used survey and/or interview techniques to ask teachers about their attitudes about inclusion and have identified administrative support at all levels as an essential component in the development and maintenance of inclusive practices in schools. For example, Soto, Muller, Hunt, and Goetz (2001) reported that participants in focus groups

cited several key indicators of successful inclusive programs for students who use augmentative and alternative communication (AAC) devices. One such indicator was philosophical support for inclusive education at the district level. Participants in a case study by Kugelmass (2001) described a building administrator who helped create an inclusive school because he had a “vision for the kids and especially for the school” (p. 57). A 2006 document called *Quality Indicators of Inclusive Schools*, created by the Maryland Coalition for Inclusive Education (MCIE), contained a checklist that enables schools to identify practices they have implemented or plan to implement in the future. The first section, entitled “School Leadership,” identified the role of administrators as one that involves providing leadership and enacting policies that support inclusive practices. In general, administrative policies are seen as one way by which provincial and district bodies can support the practice of inclusion in schools (Horne & Timmons, 2009; Timmons, 2006).

In addition to support for the philosophy and practice of inclusion, administrators play an important leadership role in inclusive schools. This leadership role includes, but is not limited to, attending meetings (Horne & Timmons, 2009), providing support for teacher initiatives and programs (Kugelmass, 2001), recruiting and retaining staff who are supportive of inclusion (Kugelmass, 2001), and using data to monitor the progress and impact of inclusive education initiatives (MCIE, 2006). In a survey by Blecker and Boakes (2010), 64% of teachers agreed or strongly agreed that the administrators in their schools provided a climate of support for inclusion, while 100% of survey respondents in a study by Horne and Timmons (2009) agreed that principals’ support is needed to make inclusion a success. Conversely, a study by Hammond and Ingalls (2003) identified insufficient administrative support as one of the reasons that inclusion was not supported in specific schools; in this

study, 94% of teachers agreed that inclusion could not be effective without administrative support.

The provision of key resources and supports such as knowledgeable personnel, reduced class sizes, and planning and collaboration time is another responsibility of administrators. The focus groups in Soto et al.'s (2001) study identified the need for both monetary resources (e.g., funding for technology, training, and meetings) and personnel resources as essential for successful inclusion. Administrative provision of adequate personnel (e.g., teacher assistants, special education teachers, and enough teachers so that class sizes can be small) has also been identified as a need (Horne & Timmons, 2009).

Several studies have also made recommendations for how administrative officers can increase their support for the implementation and maintenance of inclusive programs. These include learning more about special education (Daane, Beirne-Smith, & Latham, 2001) and the workloads of teachers in inclusive classrooms (Horne & Timmons, 2009), providing professional development and training opportunities related to inclusion (Daane et al., 2001; Soto et al., 2001), allocating time for collaboration between staff members (Daane et al., 2001; MCIE, 2006; Soto et al., 2001), and supporting teacher initiatives (Kugelmass, 2001).

School culture. Each school has its own culture that is a reflection of its demographic make up; educational programming; and the beliefs of its staff, students, and parents. This is no less so for schools that support inclusive education than for any others. The necessity of an articulated vision for inclusion was highlighted in teacher interviews that were collected by Lohrmann and Bambara (2006). General education teachers who had experience in including students with developmental disabilities mentioned the importance of a school culture that promoted inclusion, and noted that they often struggled with differences of

opinion about inclusion among fellow staff members. For example, some teachers described colleagues who talked about students with behaviour problems in ways that created a negative image or reputation for the students over the years. This was seen as detrimental to a cohesive school culture, and some teachers were apprehensive about teaching these students after they heard about the experiences and difficulties of their colleagues.

Nonetheless, 11 out of 14 of these teachers believed that a school vision for inclusion helped them feel supported in their inclusive classrooms, despite the challenges.

Two of the key indicators of successful inclusion are the existence of a school community that recognizes and supports diversity and individual differences, as well as one that provides membership and belonging for all (Lohrmann & Bambara, 2006; MCIE, 2006; Soto et al., 2001). In its checklist for schools, the MCIE referred to the importance of belonging and participation for both students with disabilities and their families. In addition, in a section entitled “Individual Student Supports,” an important aspect of belonging was that “non-special educators (e.g., peers, cafeteria workers, office personnel, volunteers) naturally support students with disabilities in the class and school” (p. 5).

How special education services are provided also affects the extent to which a school culture is truly inclusive. For example, Kugelmass (2001) described one school in which the principal and staff members felt that a pull-out model of service delivery resulted in fragmented learning for students, and thus moved towards a more inclusive, blended model instead. Positive behavior support is an example of a specific educational approach that creates an inclusive school culture. Having identified that students with developmental disabilities are at-risk for exclusion, teachers and administrators may find it beneficial to implement a school-wide positive behaviour support model that, by its very nature, provides

school, classroom, and individual behaviour supports for students. Lohrmann and Bambara (2006) found that general education teachers in schools that embraced this model were able to design and implement behaviour support programs and/or strategies in their classrooms, resulting in fewer requests for special classroom placements.

A culture of inclusion also provides an environment in which students with disabilities participate actively in the same activities and environments as their peers (Hammond & Ingalls, 2003; Soto et al., 2001). In a study by Blecker and Boakes (2010), 84% of teachers agreed or strongly agreed that full participation of students with disabilities should be a goal of inclusive education, and 88% of teachers agreed or strongly agreed that they included students in the general education curriculum as much as possible. The MCIE (2006) recommended that students with disabilities should not only be considered full members of their classrooms, but should also have access to the same physical spaces and ride the same school buses as their non-disabled peers. Being socially accepted by classmates and receiving natural supports from peers have also been noted as key indicators of successful inclusion (Soto et al., 2001).

Student Issues Affecting Inclusion

Students with disabilities have varied strengths and weaknesses and require diverse academic and behavioural supports. Thus, the nature of a student's disability and related educational needs also affect teachers' attitudes towards inclusion. Monahan, Marino, and Miller (1996) found that 62% of teachers did not believe that including students with special needs in their classrooms would be detrimental to the learning of other students, and Horne and Timmons (2009) found that 50% of teachers felt this way. Yet, the same study by Horne and Timmons also found that a majority of teachers believed that they would be unable to

meet the needs of all students in an inclusive classroom, and Lohrmann and Bambara (2006) found that teachers were unsure about their ability to balance the needs of students with disabilities and those of their classmates. So, while teachers may believe that inclusion of students with special needs will not have a negative impact on other students' learning, they appear to be unsure about whether they have the skills to address and balance the needs of all students in inclusive classrooms. Some teachers may feel that students with special needs require more time and attention than they are able to provide (Ammah & Hodge, 2005), or that placement decisions should be based on the amount of teacher time and attention that students with special needs are likely to take away from other students (Lohrmann & Bambara, 2006). In addition to these general concerns, some studies have also examined teachers' attitudes toward students with specific disabilities such as emotional/behavioural disorders, ADHD, Down syndrome, or visual impairments.

Students with emotional or behavioural disorders. Teachers' attitudes toward students with emotional or behaviour disorders have been examined in a number of studies. For instance, one study found that teachers had more negative attitudes towards students who exhibited behaviours that were disruptive in the classroom than towards those who did not (Cook, Tankersley, Cook, & Landrum, 2000). Similarly, Cook and Cameron (2010) found that teachers had more negative attitudes towards students with behaviour disorders than students with cognitive or no disabilities. In general, students who are aggressive or violent, refuse to do work, use inappropriate language, or behave in ways that disrupt the class are often seen as difficult to include in the general education classroom. Teachers are often concerned about student safety and worry that the time they spend dealing with disruptive behaviour will take attention away from their other students (Lohrmann & Bambara, 2006).

Teachers' attitudes towards inclusion of students with attention deficit hyperactivity disorder (ADHD) have been found to be inconsistent across studies. Although some teachers reported that they were confident in teaching students with ADHD (Bussing et al., 2002 in de Boer et al., 2011), Avrimadis and Norwich (2002) found that teachers held the most negative attitudes toward students with learning disabilities, ADHD, and behaviour problems. In addition, Ghanizadeh, Bahredar, and Moeini, 2006 in de Boer et al., 2011) found that 77.5% of teachers agreed that students with ADHD should attend special education programs that were separate from regular education classes.

It seems that, generally, teachers are more willing to include students with outward signs of disability compared to those with less obvious indicators (particularly those with behaviour/emotional issues). For example, de Boer et al. (2011) cited the results of several studies that found a greater willingness on the part of teachers to include students with physical disabilities compared to those with moderate to severe emotional and behaviour disorders. One of the reasons for this is that teachers may view students with more obvious signs of disability (e.g., the need for a wheelchair) as having a reason or "excuse" for disruptive behaviour, if it occurs (Cook & Cameron, 2010; Cook et al., 2000). On the other hand, students with emotional and behaviour problems may be held more accountable for their behaviour because the source of their disability is not as obvious. Regardless, it is likely that negative teacher attitudes toward the inclusion of students with emotional and behaviour disorders (including ADHD) have serious implications for student learning. For example, Cook et al. (2000) found that teachers typically viewed behaviour disordered students as low-achievers and interacted with them primarily to address behaviour issues rather than academic content.

Students with significant communication impairments. Kent-Walsh and Light (2003) interviewed teachers of students with severe communication impairments who used AAC devices to communicate. Many of the teachers were uncertain about whether the learning needs of these students were being addressed adequately and whether they were capable of assessing the students' academic gains. Some teachers felt that these students should be semi-included, or included in lower grades, because they were working on skills that were more aligned with younger children. In addition, they noted that students who rely on AAC require additional planning and instructional time. For example, teachers had to learn how to use the students' AAC devices and provide information to educational assistants so that the devices could be programmed to support active participation in classroom activities. Despite these challenges, the teachers believed that inclusion had benefits for the students and their classmates, who learned compassion, tolerance, and acceptance.

Students with sensory impairments. In a literature review by de Boer et al. (2011), a number of studies reported teachers' attitudes toward inclusion of students with sensory impairments. Some of these studies reported that the majority of teachers were not supportive of inclusion for blind students (Mushoriwa, 2001), and that teachers held negative attitudes about inclusion for students who were blind or deaf (Lifshitz, Glaubman, & Issawi, 2004). On the other hand, two studies found that teachers were most positive about inclusion for students with visual and hearing impairments (Alghazo & Naggar Gaad, 2004; Glaubman & Lifshitz, 2001).

Students with Down syndrome. A 2003 study by Gilmore, Campbell, and Cuskelly focused on teachers' attitudes toward students with Down syndrome and found that only 20% believed that regular classrooms are the best place for these students. While teachers

recognized the educational, social, and emotional benefits of inclusive settings, only 24% felt that a regular primary class with children of the same age was appropriate, and 28% believed that students with Down syndrome should be educated in separate schools.

Teacher Issues Affecting Inclusion

Teachers are the key players in any educational system; not only do they work most closely with individual students, but they are also responsible for providing inclusive environments at the classroom level. While some teacher characteristics are not amenable to change (e.g., years of teaching experience), most of them are (e.g., inservice training, self-efficacy). In this section, non-amenable factors will be discussed first, followed by those that can be addressed more directly.

Years of teaching experience. Research in this area has examined the effect of both years of teaching experience in general and years of inclusive teaching experience in particular. With regard to overall experience, Wilkins and Nietfeld (2004) found that teachers with 16 or more years of teaching experience were significantly more likely to report adequate to high levels of self-perceived expertise in teaching students with special needs. With regard to inclusive teaching experience, Kosko and Wilkins (2009) found that teachers were more likely to report a greater self-perceived ability to adapt instruction if they had had previous experience teaching students with individualized education plans (IEPs). Similarly, Ernst and Rogers (2009) found that teachers with more years of inclusive teaching experience had more positive attitudes towards inclusion. Cook et al. (2000) found that teachers with 7 or more years of inclusive teaching experience viewed special needs students as being able to learn but requiring more time and more praise than their peers. In general, these studies suggest it may be beneficial to place students with special needs in classrooms

taught by teachers with a history of inclusive teaching experience, who may be more able and willing to provide appropriate instruction and assistance.

Pre-service and inservice training for teachers. Most studies that have examined teacher attitudes towards inclusion have identified the importance of both pre-service teacher education and inservice training. Sharma, Forlin, and Loreman (2007) found that pre-service teachers had a number of concerns about teaching in inclusive classrooms. For example, pre-service teachers from Hong Kong, Singapore, Canada, and Australia identified not having enough resources as one of their top three concerns about inclusive education, while participants in all countries except Canada identified a lack of skills and training as another of their top three concerns. The authors of the study felt that, “if concerns perceived by pre-service teachers are identified early and addressed during [preservice] teacher training programs, their willingness to include students with disabilities may improve” (p. 98). In this regard, Forlin, Loreman, Sharma, and Earle (2009) provided pre-service teachers with training about how to meet the varied needs of students in regular classrooms. The pre-service teachers’ attitudes towards inclusion were measured before and after they participated in this unit of study, and the researchers found that pre-service teachers’ attitudes improved after the unit was completed.

Several studies have suggested that pre-service education programs should include specific topics that address (a) how to deliver effective instruction in inclusive classrooms (Monahan et al., 1996; Sharma, Loreman, & Forlin, 2011, Sharma et al., 2007), (b) collaboration (Sharma et al., 2011), and (c) strategies for managing disruptive behaviour (Sharma et al., 2011). Information about disability policies and legislation may also be an important topic to include in pre-service education programs, since it has been found that

pre-service teachers who know more about this topic express fewer concerns about inclusion (Sharma et al., 2007). Practical experience in inclusive classrooms has also been identified as an important component of teacher education programs (Burke & Sutherland, 2004; Monahan, et al., 1996; Sharma et al., 2007).

Unfortunately, pre-service training is not a factor that can be manipulated to improve teachers' attitudes towards inclusion once they have achieved certification and begin teaching in schools. However, practicing teachers may benefit from receiving updated information about inclusive policies and teaching practices through inservice opportunities (Burke & Sutherland, 2004; Sharma et al., 2011). Many teachers rate themselves and their colleagues as lacking knowledge about specific disabilities and the implementation of inclusive practices. Sadler (2005, in deBoer, et al., 2011) found that none of the teachers in his study rated themselves as having sufficient knowledge in the instruction of students with speech and language difficulties, and few believed that they were sufficiently knowledgeable about speech and language impairments in children. Many teachers also report that they lack the training to implement inclusionary practices, particularly with regard to specific instructional skills (Hammond & Ingalls, 2003; Monahan et al., 1996).

Given these self-perceptions, it is not surprising that many studies have identified inservice training as an important requirement for the implementation of inclusive educational practices. Inservice training can take many forms, including after-school or full-day workshops for practicing teachers, university coursework, and conference workshop experiences. Numerous studies have noted that inservice training in the philosophy and practices related to inclusive education is positively related to teacher attitudes (deBoer, et

al., 2011). Similarly, there appears to be a positive relationship between general knowledge about special education and attitudes about inclusion (de Boer et al., 2011).

While inservice training does not require the completion of advanced university degrees or extensive coursework, the amount of inservice training for teachers does appear to matter. Kosko and Wilkins (2009) investigated the relationship between hours of training and teachers' perceived ability to instruct students with disabilities. Teachers with more hours of training in inclusion-based instruction perceived themselves as more able to adapt instruction for students with special needs. In fact, the effect size for teachers with 8 or more hours of training was twice as large as that for teachers with less than 8 hours of training or for those with previous experience teaching students with IEPs. Since teachers' confidence in their abilities has an impact on their attitudes towards inclusion, this is an important finding.

Topics for inservice training vary widely, but usually fall into one of two broad categories: knowledge about specific disabilities and training in inclusive practices and instructional strategies. Teachers and focus group participants have also identified several key topics for inservice training, including program and curricular adaptations and modifications, assessing academic progress, managing behaviour/classroom management, developing IEPs, adapting instructional materials, and using assistive technology (including AAC devices) (Buell, Hallam, Gamel-McCormick, 1999; Daane et al., 2001; Kent-Walsh & Light, 2003; Soto et al., 2001).

While some studies have found that many teachers lack adequate opportunities for inservice training, others have found that teachers may fail to access the training provided. In a 2006 Canadian study focused on inclusion in Prince Edward Island (PEI), Timmons

described a 10-hour diploma program offered by the University of PEI. She noted that, while teachers overwhelmingly indicated the need for more training, very few accessed this program. Another study indicated that 87.5% of elementary school teachers, 50% of middle school teachers, and 72.3% of high school teachers had not attended any inservice training on inclusive education (Snyder, 1999). Thus, simply offering a variety of inservice programs on various topics is not necessarily the solution to an obviously complicated problem.

What kinds of inservice training should be offered to affect teachers' knowledge, abilities, and attitudes towards inclusion? In general, regular, school-wide training (i.e., yearly, monthly, or even weekly) is often recommended, rather than one-time sessions (Daane et al., 2001; Sari, 2007 in de Boer et al., 2011; Stanovich & Jordan, 1998). This gives teachers time to try out new approaches and skills and come back with questions or concerns. It may also be helpful to teach specific skills (e.g., the use of assistive technology) in hands-on workshops, so that teachers have the opportunity for practice. Finally, it has been suggested that teachers should be encouraged to visit exemplary inclusive classrooms so that they can see the necessary skills in action, and that it is possible to include all students (Daane et al., 2001).

Teachers' feelings towards individuals with disabilities. It stands to reason that teachers who feel uncomfortable around people with disabilities in general are likely to have more negative attitudes towards inclusion and may experience difficulty working with and providing learning opportunities for students with disabilities. Surprisingly, very few studies have addressed this issue. One exception was a study by Soto et al. (2001) that examined the inclusion of students with severe speech and physical impairments. Focus group participants identified having "discomfort with or fear of disability" (p. 67) as a barrier to inclusive

education and noted that that “overcoming fear of disability” (p. 68) was essential for an overall classroom program.

The only other mention of teachers’ attitudes towards people with disabilities in general can be found in the *Sentiments, Attitudes and Concerns about Inclusive Education (SACIE) Scale for Measuring Teachers’ Perceptions about Inclusion* (Forlin, Earle, Loreman, & Sharma, 2011). The SACIE has been rigorously tested and has been found to be a reliable and valid measure of pre-service teachers’ attitudes towards inclusion. Five of the 15 statements in the SACIE address general attitudes towards people with disabilities: “I find it difficult to overcome my initial shock when meeting people with severe physical disabilities”; “I am afraid to look a person with a disability straight in the face”; “I tend to make contacts with people with disabilities brief and I finish them as quickly as possible”; “I would feel terrible if I had a disability”; and “I dread the thought that I could eventually end up with a disability.” These statements do not address teachers’ feelings of confidence about teaching students with disabilities, but rather their core beliefs about disability in general. Because this area is significantly underrepresented in the literature, it is an important issue for further research.

Teacher self-efficacy and self-confidence. Self-efficacy, a concept first identified by Albert Bandura, has been defined as the “extent to which a teacher believes that she or he can influence students’ behavior and their academic achievement, especially of pupils with difficulties or those with particularly low learning motivation” (Friedman & Kass, 2002, p. 675). In this case, teachers’ feelings of self-efficacy and confidence in their abilities to teach in an inclusive setting may affect their attitudes towards inclusion. Wilkins and Nietfeld (2004) examined these constructs through the use of a Likert-type survey that included items

such as “I can be effective with special education students in my classes” and “My level of expertise in special education is...”. These authors found a positive relationship between teachers’ self-perceived levels of expertise and their preferences for inclusion. In contrast, Snyder (1999) found that 100% of elementary teachers, 80% of middle school teachers, and 84.6% of secondary school teachers did *not* feel confident in working with students with special needs. Similarly, Lohrmann and Bambara (2006) found that 71.4% of the 14 teachers in their study reported feeling initial apprehension and uncertainty about including a student with special needs who exhibited problem behaviour.

In a study by Soto et al. (2001), fear of discomfort, fear of failure, and personal insecurity were identified by focus group participants as barriers to successful inclusion. Teachers often report that a lack of training (both pre-service and inservice) contributes to their lack of self-confidence (Ammah & Hodge, 2005; Wilkins & Nietfeld, 2004). Conversely, teachers who do feel confident in their abilities often identify their experiences and training in special education as factors that contribute to this positive attribution (Lohrmann & Bambara, 2006). Exposure to, and positive experiences with, students with disabilities also contribute to feelings of confidence in teachers (Lohrmann & Bambara, 2006). Overall, it appears that teachers who feel confident in their ability to adapt and modify instruction and to provide effective instruction to students with special needs in regular classrooms are more likely to be the most effective at it.

Support Issues

One of the defining requirements of inclusion is that students receive the supports that are necessary for them to be educated in the general education classroom. Supports such as

smaller class sizes, collaboration time, effective teacher assistance support, and planning time are needed at adequate levels for inclusion to be successful.

Class size. Providing an effective inclusive education program in any classroom is a complex endeavor because a diverse student population has a variety of needs. Teachers must divide their time between providing instruction for the entire class and working with some students in small groups or individually. Some teachers may believe that students with disabilities require a disproportionate amount of their time, which may be at the expense of other students. This concern is compounded when class sizes are large. Large class sizes make it difficult for teachers to address the needs of all students, and may allow for fewer opportunities for interaction between a teacher or classmates and students with disabilities (Ammah & Hodge, 2005; Kent-Walsh & Light, 2003).

Research in this area is mixed. Large class sizes have been identified as a barrier to the inclusion of students with severe speech and physical impairments in both elementary and secondary schools (Ammah & Hodge, 2005; Kent-Walsh & Light, 2003). On the other hand, Cook et al. (2000) found that class size had no effect on teachers' attitudes towards inclusion. In this study, teachers were asked to nominate students (both with and without special needs) into a variety of categories. Students nominated in the "concern" category were seen more positively by their teachers, while students nominated in the "rejection" category were viewed more negatively. The researchers found no relationship between class size and the nature of teacher nominations. In fact, the authors noted that it may be possible for teachers to have small class sizes and still have negative attitudes toward students with special needs, especially if they engage in disruptive behaviour.

Perceptions of responsibility for students with special needs. Jordan, Schwartz, and McGhie-Richmond (2009) noted that teachers who take ownership for the education of students with special needs are more effective at teaching all students and that “the difference between effective and ineffective inclusion may lie in teachers’ beliefs about who has primary responsibility for students with special education needs” (p. 541). However, teachers’ beliefs about this responsibility differ greatly, despite the fact that many students with disabilities are educated in inclusive classrooms. In one study, only about 50% of general education teachers believed that they were primarily responsible for educating students with special needs in their classrooms (Monahan et al., 1996). In this same study, the majority of teachers said that regular education teachers preferred to send students with special needs to special education classrooms rather than have special education teachers provide service in their classrooms. Soto et al. (2001) found that a key indicator of success for inclusion was that the classroom teacher felt responsible for the education of the focus student with special needs. Some teachers also believe that parents of students with special needs are responsible for the majority of student learning through after-school tutoring and ‘catch-up’ work (Jordan et al., 2009).

Views of teachers’ responsibility for student learning may differ across general and special education teachers. One study found that special education teachers believed that general education classroom teachers do *not* have the primary responsibility for educating students with special needs in inclusive classrooms (Daane, et al., 2001). Similarly, Blecker and Boakes (2010) found that special education teachers are more likely to cluster students with special needs in separate settings and view special education as separate from general education. This is an important finding, considering that a lack of rigid boundaries between

general and special education has been identified in other studies as one of the indicators of successful inclusion (Soto et al., 2001).

Planning and preparation time. Teachers are responsible for many tasks throughout the school day, including academic instruction, conducting assessments and evaluations, providing remedial support, and preparing classroom and instructional materials. When teachers are asked to do something new (e.g., teach a new program, include English as an additional language learners for the first time, teach a new grade), they usually need to spend a great deal of time planning new lessons and creating new curricular materials. In the same way, teachers who are asked to include a student with a disability (or to include a student with needs that they have not previously encountered) may need to change some of their instructional techniques or materials, which means that more planning time is required. Thus, having adequate planning time is necessary for the success of inclusion.

In one study, 95% of teachers indicated that they were concerned or very concerned about having enough planning time to meet the needs of their students (Horne & Timmons, 2009). Some teachers may feel that they do not have enough time to perform all the jobs required of them, and others have described “the time-consuming nature of inclusion” (Kent-Walsh & Light, 2003, p. 109). In several studies, teachers in inclusive classrooms have identified the need for additional time in order to plan and prepare adaptive materials, implement new teaching techniques or programs (Kent-Walsh & Light, 2003; Lohrmann & Bambara, 2006; Soto et al., 2001), and learn how to use equipment such as assistive technologies or AAC devices (Kent-Walsh & Light, 2003). Finding creative ways to provide additional planning time is often the responsibility of administrators at both the school and district levels (Horne & Timmons, 2009; Soto et al., 2001).

As teachers learn more about teaching and providing curricular adaptations for students with special needs, they may find that less planning time is needed. Ideally, they come to realize that good teaching for students with special needs is good teaching for all students. Separate systems, curricula, and learning materials are not necessarily required in inclusive classrooms, as all students benefit from good pedagogical practices. Timmons described a number of key components that should be part of all teacher education programs, one of which is that pre-service teachers understand “that inclusive practice is excellent teaching” (Timmons, 2004 in Naylor, 2005, p. 10). The fact is that teaching in an inclusive classroom is not necessarily more work – it is just a different kind work.

Collaboration. General education teachers who include students with special needs often need to work closely with administrators, special education teachers, instructional assistants, speech-language pathologists, behaviour support workers, parents, and a number of other professionals. Thus, the ability to collaborate productively has been identified by both teachers and administrators as a crucial component of successful inclusion (Daane et al., 2001; Lohrmann & Bambara, 2006; Monahan et al., 1996; Soto et al., 2001).

Unfortunately, teachers may lack either a willingness or the skills needed for meaningful collaboration. In one study, 75% of elementary, 33.3% of middle, and 55.6% of secondary school teachers reported that they did not feel supported by special education staff (Synder, 1999). In another study, 82% of teachers believed that general and special education teachers did not collaborate at a level that was adequate to support students in their schools (Hammond & Ingalls, 2003). Yet a third study found that 67% of teachers preferred to send students to a special education classroom rather than have special education teachers work in their classrooms (Monahan et al., 1996). Some teachers may feel apprehensive about

working with special education teachers who are in the position of observing them as they teach students with special needs; personality conflicts may also be of concern (Daane et al., 2001; Lohrmann & Bambara, 2006).

In situations where effective collaboration does occur, teachers may work with other professionals in a number of different ways. One option is for general and special education teachers to plan IEPs together and to engage in team teaching in the general education classroom (Daane et al., 2001). In other cases, teachers may receive specialist assistance in specific areas, such as developing positive behaviour support plans (Lohrmann & Bambara, 2006) or selecting, maintaining, and programming AAC devices (Soto, 2001). Soto et al. listed a number of key components that are critical for effective collaboration, including having regular team meetings, establishing common goals, including a variety of educational personnel with the necessary expertise, and establishing a team leader.

Special education assistant support. Additional educational personnel are often required to support students with disabilities in inclusive classrooms. This support is often provided by an educational assistant who works with one or more students with special needs and/or with the other children in the classroom. A number of studies have identified instructional assistant support as being necessary for successful inclusion (Kent-Walsh & Light, 2003; Lohrmann & Bambara, 2006; Soto et al., 2001), although Cook et al. (2000) found that an increase in special education support may not prevent teachers from forming negative attitudes toward included students with disabilities. Provision of instructional assistant time is typically viewed as a district- or school-wide responsibility (Horne & Timmons, 2009; Lohrmann & Bambara, 2006).

While some teachers may experience initial apprehension about working with instructional assistants (Cook et al., 2000), many report that a well-trained instructional assistant can be a real asset with regard to adapting instructional materials, implementing behaviour support plans, sharing knowledge about particular students and/or the technologies they use to participate in the classroom, and providing individual attention to students with special needs (Kent-Walsh & Light, 2003; Lohrmann & Bambara, 2006; Soto et al., 2001). Teachers have identified the need for appropriate training of classroom assistants, including both a clear understanding of their professional roles (Soto et al., 2001) and the ability to interact amicably with teachers and parents (Lohrmann & Bambara, 2006).

A number of barriers to inclusion may also be related to the use of instructional assistants. Teachers report that some instructional assistants lack appropriate training (Kent-Walsh & Light, 2003) or implement behaviour support strategies inconsistently (Lohrmann & Bambara, 2006). Other concerns that act as barriers to successful inclusion include instructional assistant turnover, inconsistent coverage, lack of sufficient coverage time, and a disregard for job-related duties (Kent-Walsh & Light, 2003). Instructional assistants themselves have also identified barriers to successful inclusion, including a lack of preparation time, inadequate training, misunderstandings between general and special education teachers about instructional assistant roles, and poor working conditions (Soto et al., 2001). Both instructional assistants and teachers have also identified the need for instructional assistants to be involved in meetings and decision-making, as well to have their knowledge and opinions valued (Soto et al., 2001).

Summary of the Problem and Research Questions

Despite the proliferation of literature about the benefits of both academic and social inclusion for students with disabilities, many teachers, administrators, and policy-makers have not embraced inclusion in practice. Lack of knowledge about appropriate and effective strategies for inclusion, lack of necessary supports, and negative teacher attitudes towards inclusion are some of the reasons inclusion is not practiced consistently or successfully.

While several studies have investigated teachers' attitudes toward the inclusion of students with disabilities and the relationships between teacher attitudes and specific factors (e.g., type of disability, years of teaching experience), gaps in the literature remain. In particular, most studies about attitudes towards inclusion have focused on pre-service rather than practicing teachers (e.g., Forlin et al., 2009; Forlin et al., 2011; Loreman, Earle, Sharma, & Forlin, 2007; Sharma, Forlin, & Loreman, 2007), and only one study to date has measured this variable with a psychometrically sound instrument (Forlin, et al., 2011). Similarly, although teacher self-efficacy and inservice training have both been identified as important influences on teacher's attitudes toward inclusion, the relationship between these variables has not been explicitly explored with regard to the inclusion of students with developmental disabilities using psychometrically sound measures. Thus, this study was designed to address these gaps by answering the following two questions:

1. Regarding inclusion of students with developmental disabilities, is there a relationship between teachers' self-efficacy in using inclusive instruction, collaborating, and/or managing problem behaviour (TEIP factors) and teachers' sentiments, attitudes, and/or concerns (SACIE-R factors)?

2. Is there a relationship between the amount of inservice in special education (in hours) in the last 5 years and teachers' sentiments, attitudes, and concerns about inclusive education?

CHAPTER 2: METHOD

Participants

Participants for this study were recruited through two provincial organizations, the British Columbia Primary Teachers' Association (BCPTA) and the Provincial Intermediate Teachers' Association (PITA). All respondents were elementary school teachers in British Columbia and were able to read and complete a survey in English. The BCPTA sent out a letter of introduction and a web-based survey link to the email addresses of its members, who are teachers of students in Kindergarten through grade 3. In addition, the association included the survey link in their Fall, 2012 newsletter, which was sent to all members. Additional participants were recruited through PITA at the association's annual 2-day conference in October, 2012. PITA members teach students in grades 4 through 7. This conference attracted approximately 500 participants from all over the province. Attendees who stopped by the research table were invited to complete surveys and return them either at the conference or by mail. Those who returned them during the conference were invited to enter their names into a draw for four \$25 gift certificates from an online book store. In total, 115 surveys were returned; of these, 100 were sufficiently complete to be included in the sample. Table 1 provides a summary of demographic information for the sample.

Table 1: Participant demographic information

Demographic Variable	Percent of Respondents
Teaching assignment	
General education primary	19.3
General education intermediate	67.5
Special education	8.4
General education primary and intermediate	4.8
Gender	
Male	13.0
Female	87.0
Age	
< 25 yrs	2.0
26-35 yrs	30.3
36-45 yrs	24.2
46+ yrs	43.0
Years of teaching	
0-5 yrs	28.0
6-10 yrs	17.0
11-20 yrs	26.0
20+ yrs	29.0
Living region	
Vancouver Island	11.0
Lower Mainland	67.0
Thompson/Okanagan	11.0
Kootenays	2.0
Cariboo/Chilcotin	3.0
Northwest	5.0
Northeast	1.0
Highest level of education	
Bachelor of Education (B.Ed.)	61.0
Diploma in special education	3.0
Diploma (other)	10.0
Masters in special education	4.0
Masters (other)	19.0
Other	3.0
Hours of inservice in special education in the past 5 years	
0 hours	23.2
1-7 hours	27.3
8-15 hours	15.2
16-25 hours	6.1
25+ hours	28.3

Table 1: Participant demographic information (Continued)

Demographic Variable	Percent of Respondents
Category A (physically dependent) students taught	
0	53.1
1-9	44.9
10+	2.0
Category B (deaf blind) students taught	
0	80.0
1-9	20.2
10+	0.0
Category C (moderate-profound intellectual disability) students taught	
0	40.6
1-9	55.2
10+	4.0
Category D (physically disabled or chronic health impairment) students taught	
0	26.8
1-9	68.1
10+	5.0
Category G (autism spectrum disorder) students taught	
0	13.4
1-9	80.3
10+	6.0
Category K (mild intellectual disability) students taught	
0	23.7
1-9	62.9
10+	13.3

Thirteen percent of respondents were male and 87% of respondents were female; two-thirds were over the age of 35 and lived in the Lower Mainland of the province. Teaching assignments of the respondents varied widely. Primary teachers accounted for 19.3% of the sample, intermediate teachers 67.5%, special education teachers 8.4%, and teachers who taught both primary and intermediate students accounted for 4.8%. More than half (55%) of respondents had 11 or more years of classroom teaching experience. While 61% of respondents had completed B.Ed. degrees as their highest level of education, 13% had also completed post-baccalaureate diplomas and 23% had completed Masters degrees. Almost

half (49.6%) of the respondents had completed 8 or more hours of inservice in special education in the past 5 years, and 28.3% of participants had completed 25 or more hours of such inservice. With the exception of students with dependent handicaps and those with deafblindness, most respondents reported that they had taught between 1-9 students with developmental disabilities in various categories in the past 5 years.

Measures

Data were collected through the use of both online and paper surveys that were preceded by an introductory letter informing participants that, by completing the survey, they agreed to the inclusion of their confidential data in the study. The surveys consisted of a demographic form and two measures. The demographic form (Appendix A) gathered information related to participants' gender, age, years of teaching experience, grades taught, amount of inservice attended, and types of students with developmental disabilities who were taught.

Teacher Efficacy for Inclusive Practices (TEIP)

The Teacher Efficacy for Inclusive Practices (TEIP) scale (Sharma et al., 2011; Appendix B) was developed to measure preservice teachers' perceived self-efficacy for teaching in inclusive classrooms, across three factors: efficacy in using inclusive instruction, efficacy in collaboration, and efficacy in managing problem behaviour. The final scale was tested on a sample of 609 preservice teachers enrolled in teacher education programs at six universities across four countries (Canada, India, Hong Kong, and Australia). The scale uses a forced-choice, Likert-type scale in which 1 = strongly disagree, 2 = disagree, 3 = disagree somewhat, 4 = agree somewhat, 5 = agree, and 6 = strongly agree.

The TEIP scale has been found to be a reliable measure of preservice teachers' feelings of self-efficacy toward inclusive education. Sharma et al. (2011) reported that the reliability coefficient for the final scale was $r = .89$, and the three factors had coefficients of $r = .93$, $.85$, and $.85$, respectively. The strong validity and reliability of the scale make it a good choice for measuring the self-efficacy of practicing teachers. In fact, the authors suggested that this scale could be used by administrators and departments of education to “gauge an understanding of teacher efficacy of their teacher population to work effectively in inclusive classrooms, especially with new teachers, who may find inclusion challenging” (p. 6). The authors also suggested that, based on the results of the scale, a learning program could be developed to address specific needs of practicing teachers.

Sentiments, Attitudes, and Concerns about Inclusive Education-Revised (SACIE-R)

Data on teachers' sentiments, attitudes, and concerns about inclusive education were measured using the Sentiments, Attitudes and Concerns about Inclusive Education Scale – Revised (SACIE-R) instrument (Forlin, et al., 2011; Appendix C). The original instrument (Loreman, 2007) contained items from three pre-existing surveys: the Attitudes Towards Inclusive Education scale; a modified version of the Interaction with Disabled Persons scale; and the Concerns about Inclusive Education Scale. This instrument went through a number of refinements in order to produce the current 15-item scale, which includes three sections. The Sentiments section measures how teachers feel about engaging with people with disabilities, the Attitudes section measures how teachers accept learners with different learning needs, and the Concerns section addresses the concerns that teachers may have about inclusive education. The SACIE-R employs a forced-choice, Likert-type scale with the following descriptors: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly disagree.

To date, research related to the SACIE-R has been conducted with samples of preservice teachers only (Forlin, et al., 2011). The authors evaluated the internal consistency of the SACIE-R with 542 pre-service teachers from nine institutions in four countries (Hong Kong, Canada, India, and the United States). The subscales (sentiments, attitudes, and concerns) had reliabilities of $r = .75$, $.67$, and $.65$, respectively, and the overall scale had a reliability of $r = .74$. The authors suggested that the scale could be validated with other populations, including practicing teachers.

Data Analysis

Data from the surveys were analyzed using the Statistical Package for the Social Sciences (SPSS) software, version 16.0. To answer the primary research question, reliabilities for each factor of the two study measures were first measured using Cronbach's alpha, a measure of internal consistency. Next, the strength and direction of relationships between the TEIP factors and the SACIE-R factors was measured using Pearson's Product-Moment Correlations. This test is used to determine whether change (increase or decrease) in one variable is associated with change (increase or decrease) in another (Abu-Bader, 2011). The value of the coefficient indicates the strength of the relationship, while the positive or negative sign indicates the direction of the relationship. A correlation coefficient of $r = \geq .91$ indicates a very strong relationship between the variables, $.71 \leq r \leq .90$ indicates a strong relationship, $.51 \leq r \leq .70$ indicates a moderate relationship, $.31 \leq r \leq .50$ indicates a weak relationship, and $r \leq .30$ indicates a very weak relationship (Abu-Bader, 2011). Finally, a series of multiple regression analyses were conducted (Brace, Kemp, & Snelgar, 2012), with each of the SACIE-R subscales entered as the dependent variable and the TEIP subscales that were significantly correlated with each SACIE-R subscale entered as the

independent variables. These analyses were conducted to determine which self-efficacy factors were the best predictors of Sentiments, Attitudes, and Concerns when examined simultaneously.

To answer the second research question, a Pearson's Product-Moment Correlation was calculated between the number of inservice hours in special education that teachers reported completing in the past 5 years (from the demographic survey) and scores on the sentiments, attitudes, and concerns subscales of the SACIE-R.

CHAPTER 3: RESULTS

The main purpose of this study was to examine relationships between three factors related to teacher self-efficacy and teachers' sentiments, attitudes, and concerns about inclusive education. The first step in the analysis was to determine the reliability of each factor on the TEIP and the SACIE, using data from the study sample. Cronbach's alpha was calculated in this regard and the results are summarized in Table 2.

Table 2: Cronbach's alpha results for the TEIP and SACIE-R factors

Scale Factors	Cronbach's alpha	Interpretation (DeVellis, 1991)
TEIP		
Self-efficacy in using inclusive instruction	.76	Respectable
Self-efficacy in managing disruptive behaviour	.77	Respectable
Self-efficacy in collaboration	.65	Minimally Acceptable
SACIE		
Sentiments	.68	Minimally Acceptable
Attitudes	.82	Very Good
Concerns	.79	Respectable

DeVellis (1991) suggested that coefficients of .65 or above provide evidence of at least "minimally acceptable" internal consistency of a scale or subscale. The results indicate that, because all six TEIP and SACIE-R subscales achieved this level of reliability or higher, the individual items in each subscale measure a single underlying (i.e., latent) construct.

Question #1: Relationships Between Self-Efficacy and Sentiments, Attitudes, and Concerns

The first research question was: Regarding inclusion of students with developmental disabilities, is there a relationship between teachers' self-efficacy in using inclusive instruction, collaborating, and/or managing problem behaviour (TEIP factors) and teachers' sentiments, attitudes, and/or concerns (SACIE-R factors)? Descriptive statistics related to this question will be presented first, followed by results of the correlation analyses.

Descriptive Statistics

All three TEIP subscales employ **positive** statements related to self-efficacy [e.g., "I am confident in designing learning tasks so that the individual needs of students with disabilities are accommodated" (using inclusive instruction), "I can make parents feel comfortable coming to school" (collaboration), and "I can make my expectations clear about student behaviour" (managing problem behaviour)]. The highest possible score on each of the three TEIP subscales is 36, with higher scores indicating higher perceived self-efficacy. In the present sample, the mean scores were as follows: 28.1 for using inclusive instruction (range = 18-36, SD = 3.7); 28.3 for collaboration (range = 19-36, SD = 3.38); and 26.8 for managing problem behaviour (range = 14-36, SD = 3.94).

The Sentiments subscale of the SACIE-R employs **negative** statements to assess respondents' feelings about disability in general (e.g., "I dread the thought that I could eventually end up with a disability" and "I am afraid to look at a person with a disability"). The highest possible score on the subscale is 20. In the present sample, the mean score was 9.1 (range = 5-17, SD = 2.29). Because higher scores on this subscale are indicative of more

negative attitudes about people with disabilities in general, negative correlations with the three TEIP self-efficacy factors are desirable.

The Attitudes subscale of the SACIE-R employs **positive** statements that endorse the belief that students with (in the present study) developmental disabilities should be included in regular education classrooms (e.g., “Students who have difficulty expressing their thoughts verbally should be in regular classes” and “Students who need an individualized academic program should be in regular classes”). The highest possible score on the subscale is 20. In the present sample, the mean score was 15.3 (range = 7-20, SD = 2.57). Because higher scores on this subscale are indicative of more positive attitudes about including students with disabilities, positive correlations with the three TEIP self-efficacy factors are desirable.

Finally, like the Sentiments subscale of the TEIP, the Concerns subscale provides **negative** statements about potential barriers that teachers may experience (e.g., “I am concerned that it will be difficult to give appropriate attention to all students in an inclusive classroom” and “I am concerned that my workload will increase if I have students with disabilities in my class”). The highest possible score on the subscale is 20. In the present sample, the mean score was 13.9 (range = 5-20, SD = 3.14). Because higher scores on this subscale indicate greater concerns, negative correlations with the three TEIP self-efficacy factors are desirable.

Correlations

Table 3 summarizes the results of the Pearson product moment correlations analyses related to the research question.

Table 3: Correlations between teachers' self-efficacy and teachers' sentiments, attitudes, and concerns

TEIP Factors	SACIE-R Factors		
	Sentiments	Attitudes	Concerns
Using inclusive instruction	-.215*	.339**	-.480**
Collaboration	-.450**	.373**	-.561**
Managing problem behaviour	-.245*	.235*	-.484**

* $p < .05$ ** $p < .01$

Sentiments. As noted previously, negative correlations between the three TEIP subscales and the Sentiments subscale are desirable. The results suggest a weak but statistically significant negative relationship between Sentiments and teachers' self-efficacy related to collaboration; and very weak but significant negative relationships between Sentiments and self-efficacy for using inclusive instruction and managing problem behaviour. In other words, teachers with more positive sentiments about people with disabilities in general tended to feel more confident in their ability to collaborate and (to a lesser degree) to use inclusive instruction and manage problem behaviour of students with developmental disabilities.

Attitudes. As noted previously, positive correlations between the three TEIP subscales and the Attitudes subscale are desirable. The results suggest weak but statistically significant positive relationships between Attitudes and teachers' self-efficacy related to using inclusive instruction and collaborating; and a very weak but significant positive relationship between Attitudes and self-efficacy for managing problem behaviour. In other words, teachers with more positive attitudes about including students with developmental

disabilities tended to feel more confident in their ability to use inclusive instructional practices and collaborate and (to a lesser degree) to manage problem behaviour.

Concerns. As noted previously, negative correlations between the three TEIP subscales and the Concerns subscale are desirable. As displayed in Table 3, a moderate and statistically significant negative relationship was found between Concerns and teachers' self-efficacy related to collaboration; and weak but significant negative relationships were evident between Concerns and self-efficacy for using inclusive instruction and managing problem behaviour. In other words, teachers with fewer concerns about including students with developmental disabilities tended to feel more confident in their ability to collaborate and (to a lesser degree) to use inclusive instructional practices and manage problem behaviour.

Multiple Regression Analysis

Because all of the TEIP factors were found to be correlated with all three SACIE-R variables, a series of multiple regression analyses were conducted using the Enter method in SPSS, to determine which TEIP factors best predicted Sentiments, Attitudes, and Concerns (the criterion variables). Collinearity statistics for all three analyses revealed acceptable tolerance values, indicating that the predictor variables (i.e., TEIP factors) were not correlated to an unacceptable degree. Results of the multiple regression analyses are summarized in Table 4.

Table 4: Results of multiple regression analyses

Criterion variable (SACIE-R)	df	F	<i>p</i>	Adjusted R square	Predictor variable(s) (TEIP)		
					β	<i>p</i>	
Sentiments	3,86	5.83	.001	.140	Collaboration	-.416	.002
Attitudes	3,86	5.65	.001	.136	Collaboration	.317	.014
Concerns	3,90	16.84	.0005	.338	Collaboration	-.368	.001

In all three models, teachers' self-efficacy for collaboration emerged as the only significant predictor of Sentiments, Attitudes, and Concerns, when all three self-efficacy factors were considered simultaneously. Neither self-efficacy for using inclusive instruction nor self-efficacy for managing problem behaviour were significant predictors in this model. The Adjusted R square values indicate that collaboration accounted for 14%, 13.6%, and 33.8% of the variance in the three criterion variables, respectively.

Question #2: Amount of Inservice

The second research question was: Is there a relationship between the amount of inservice in special education (in hours) in the last 5 years and teachers' sentiments, attitudes, and concerns about inclusive education? Previous research suggests that teachers with 8 or more hours of inservice in this area have more positive attitudes toward inclusion of students with disabilities. Table 5 summarizes the results for this question.

Table 5: Correlations between inservice hours and teachers' sentiments, attitudes, and concerns

	Pearson Correlation (<i>r</i>)
Sentiments	-.318*
Attitudes	.299*
Concerns	-.306*

* $p < .01$

The results suggest weak but statistically significant, negative relationships between attendance in 8 or more hours of inservice and both teacher Sentiments and Concerns about inclusion. In addition, there was a very weak but significant positive relationship between having attended 8 or more hours of inservice and teachers' Attitudes towards inclusion. In other words, teachers who attended at least 8 hours of special education inservice in the past 5 years had somewhat more positive sentiments and attitudes and somewhat fewer concerns about including students with developmental disabilities in regular classrooms.

Exploratory Analyses

A number of analyses were conducted post hoc to examine additional relationships that were not included in the original research questions. These exploratory analysis revealed that no statistically significant relationships between the number of years of teaching experience and respondents' sentiments, attitudes, and concerns about inclusive education for students with developmental disabilities. In addition, no relationships were found between sentiments, attitudes, and concerns and either teachers' age or the number of students with developmental disabilities they have taught. However, a very weak, negative relationship ($r = -.236, p < .05$) was evident between the level of education and teacher concerns, suggesting

that teachers with more education (i.e., a diploma or masters' degree in addition to the B.Ed.) had fewer concerns about inclusive education for the target population.

Summary

A multiple regression analysis revealed that teachers' self-efficacy in collaboration was the only variable (when all three self-efficacy factors were considered together) that was a statistically significant predictor of sentiments, attitudes, and concerns. In addition, attendance at 8 or more hours of special education inservice over the past 5 years was associated with more positive attitudes and sentiments, and fewer concerns, about inclusive education for students with developmental disabilities.

CHAPTER 4: DISCUSSION

A significant amount of literature has explored the importance of inclusive education for students with developmental disabilities and the factors that are necessary for its implementation in schools. Both teachers' self-efficacy and teachers' attitudes, among other variables, have been identified as key factors that influence the success of inclusion. Sharma et al. (2011) used the TEIP to measure teacher self-efficacy in using inclusive instruction, collaboration, and managing disruptive behaviour with preservice teacher populations, while Forlin et al. (2011) used the SACIE-R to measure preservice teachers' sentiments, attitudes, and concerns about inclusive education. This study endeavoured to replicate and extend their findings in two important ways: 1) it sought to establish that both the TEIP and SACIE would produce reliable results with an inservice teacher population; 2) it explored the relationships between self-efficacy and teachers' attitudes, sentiments, and concerns towards inclusive education for a specific sub-set of the disability population -- those with developmental disabilities.

Like the research by Wilkins and Nietfeld (2004), this study found that teachers who were confident (i.e., had higher self-efficacy) in their ability to provide inclusive education had more positive feelings about inclusion in general. This was found to be true for each of the three components of self-efficacy that were examined: using inclusive instruction; collaborating with others; and managing disruptive behaviour. The study also found that teachers with 8 or more hours of inservice in special education in the last 5 years had more positive sentiments and attitudes, and fewer concerns, about inclusive education. This replicates one of the results found in a 2009 study by Kosko and Wilkins, who investigated the relationship between hours of training and teachers' perceived ability to instruct students

with disabilities. These authors also found that teachers who attended 8 or more hours of training in inclusion-based instruction perceived themselves as more able to adapt instruction for students with special needs.

Perhaps the most significant finding of this study is the importance of teachers' feelings of self-efficacy with regard to collaboration that emerged in the regression analysis. When considered together with the other components that were measured (i.e., the ability to use inclusive instruction and manage disruptive behavior), only self-efficacy with regard to collaboration emerged as a significant predictor of sentiments, attitudes, and concerns about inclusive education. In inclusive classrooms, teachers are called upon to consult and collaborate with a wide variety of professionals and others, including parents, on a regular basis and in a variety of ways. Teachers who do not feel confident working with other adults in and out of the classroom may feel more apprehensive and, as a result, more negative about inclusive education.

Effective Collaboration

Effective collaboration requires that a team of professionals and parents work together to design, implement, and evaluate appropriate educational goals for students with disabilities. Research has identified the benefits of collaboration in inclusive education. Cahill and Mitra (2008) noted that collaboration between teachers (particularly general and special education teachers) is an important strategy for supporting student learning in inclusive settings. Similarly, Santoli, Sachs, Romey, and McClurg (2008) found that collaboration is critical for ensuring that students receive appropriate educational programming and services.

Collaboration is necessary to increase teachers' knowledge about inclusion, best practice, and individual disabilities, as well as specific student needs (Cahill & Mitra, 2008; Tucker & Schwartz, 2013). For example, through collaboration and team-teaching, special education teachers have opportunities to share disability-specific knowledge as well as best practices in instructional strategies for students with special needs with their general education teaching partners. In addition, when general and special education teachers collaborate, they can work together to learn new instructional approaches and increase their understanding of inclusive education (Cahill & Mitra, 2008).

Collaboration with parents can also enable teachers to increase their knowledge about individual disabilities and individual student needs. In a study by Tucker and Schwartz (2013), parents of students with autism spectrum disorders, their teachers, and their principals were asked about their perceptions of collaboration. Parents identified the importance of having professionals who understood the importance of their children's lives outside of school when planning IEP goals. Parents are in a unique position to provide specific information about their child's disability as well as the goals that are important to them, including goals for family and community settings. Parents may also request the input of professionals from outside agencies, which can further increase educators' knowledge of students and their needs (Tucker & Schwartz, 2013).

Co-Teaching for Effective Collaboration

Collaboration may involve a special education teacher and general education teacher working together in the same room; this is often referred to as co-teaching. Co-teaching tends to fall under one or more of the following four categories, identified by Thousand, Villa, and Nevin (2007): supportive teaching, parallel teaching, complementary teaching,

and team-teaching. In supportive teaching, one teacher leads the class while another teacher helps students in small groups or individually. In parallel teaching, two or more teachers share similar roles in the classroom and work with small groups of children in order to provide instruction. Complementary teaching requires teachers to have different but complementary roles in the classroom; for example, one teacher might pre-teach important vocabulary words that are necessary for understanding a lesson taught by another teacher (Snell & Janney, 2000; Thousand et al., 2007). Finally, in team-teaching, two teachers plan and share all of the teaching roles as well as responsibility for the instruction of all students (Snell & Janney, 2000; Thousand et al., 2007). In all of these scenarios, students receive more assistance and instructional time, which benefits their learning.

Barriers to Collaboration

Despite the benefits of collaboration, there are several barriers that restrict its use and effectiveness. Many teachers and school teams struggle to implement collaborative practices and collaborative decision-making, perhaps because of confusion over professional roles and responsibilities. General and special education teachers often have specific sets of skills and knowledge that benefit programming for students with special needs, but may not understand one another's roles in an inclusive classroom. It is necessary for teams to understand the roles of teachers in both of these roles (Cahill & Mitra, 2008; Tucker & Schwartz, 2013) and for all parties to understand that both general and special education teachers are jointly responsible for student instruction (Smith & Leonard, 2005).

Another barrier to collaboration is that teachers often lack training in effective collaboration and communication skills. When working with a team to develop goals and strategies for learning, effective communication is essential; thus, it is important for teachers

to be provided with opportunities to develop their collaboration and problem-solving skills (Friend, 2000; Smith & Leonard, 2005). Some of the key skills necessary for effective collaboration include active listening, empathy, assertiveness, and negotiation (Solas, Vaughn, Swanson, & McCulley, 2012). It is also important that school teams communicate effectively with parents. In one study, 66% of parents of students with autism reported that there had been at least one time when they were not involved in planning for their child's programming (Tucker & Schwartz, 2013). Professional development in communication and collaboration, including strategies for working with parents, should be priorities in inclusive schools.

The logistics of collaboration can also prevent its regular and effective use in schools. In order for collaboration to be successful, time is needed for meetings between members. Smith and Leonard (2005) noted the importance of administrators who have a commitment to collaboration and who provide time for meetings among staff and other professionals. Time was also identified as an essential component of successful collaboration by several other authors as well (e.g., Cahill & Mitra, 2008; Santoli et al., 2008).

A final barrier to collaboration may be related to the input of professionals from agencies and service providers outside of the school system. Many students with disabilities are involved in therapy and treatment programs outside of school, and parents often want professional from these programs to attend school-based team meetings. For instance, applied behaviour analysts, private speech pathologists, and other consultants may be asked to identify important goals for inclusion on a student's IEP. In addition, Tucker and Schwartz (2013) noted that some parents value the advice of a third party advocate when faced with a communication breakdown with their school team. School teams may be reticent to include

input from outside service providers because their goals may not match the school goals or may require expertise that is not readily available in a school setting. These outside providers, however, often are able to provide extra information that may be useful to the school team.

Collaboration and Professional Development

The challenges of collaboration are not new and have been at the forefront of educational policy discussions in recent years. For example, in 2008, the Hewko case (Hewko v. B.C., 2006 BCSC 1638) drew national attention to the issue of meaningful consultation and collaboration with parents and outside service providers. Darren Hewko was a kindergarten student with autism in a British Columbia school district in the 2002/2003 school year, and was also involved in a home-based applied behaviour analysis (ABA) program. The school district decided that Darren would be placed in a resource room for his grade 1 year and refused to allow his home-based ABA providers to consult with school staff. When his parents lost their appeal of this decision, they filed a lawsuit, alleging that Darren was discriminated against because of his disability and that the school district was negligent in their duties under the School Act. While the judge did not find that Darren had been discriminated against, she did find “that the...School District breached its statutory duty to meaningful consult with the Hewkos about Darren Hewko’s education placement and program” (p. 114).

If inservice training is related to teachers’ self-efficacy in collaboration – as the results of this study suggest -- and if self-efficacy is related to teachers’ sentiments, attitudes, and concerns about inclusive education, then providing effective and adequate professional development on collaboration should be a major focus for districts and provincial ministries

of education. For example, in response to the Hewko decision, the BC Council of Administrators of Special Education (2008) produced a resource manual for teachers and educational staff entitled, “Supporting Meaningful Consultation with Parents.” Yet, professional development opportunities for collaboration are still sorely lacking in the province. For example, at the Provincial Intermediate Teachers’ conference in the Fall of 2012, 70 different workshops were offered over the course of 2 days, but not one focused on strategies for collaboration, collaborative teaming, or working with parents. At the BC Special Education Association’s annual conference in 2013, only one workshop (out of 11) addressed strategies for collaboration; another focused on transition planning that included teachers, parents, and students, but no mention was made of the specific skills required for collaboration. From these two recent examples, it appears that professional development opportunities to learn about effective collaboration are not readily available to many teachers. The results of this study highlight the critical need for such information.

Limitations

Like all research, this study has a number of limitations. As with most survey-based studies, there may be some self-selection bias because all of the participants volunteered to complete the survey. In addition, only members of the BC Primary Teachers’ Association and Provincial Intermediate Teachers’ Association were invited to participate; thus, the results do not apply to teachers in secondary schools (grades 8-12). However, since participants of these two organizations represent teachers from across the province, and since teachers from all regions of the province were included in the sample, the results may be representative of the larger provincial population of elementary and intermediate-level teachers.

Another limitation of this study is the small sample size; only 100 primary, intermediate, and special education teachers completed the survey, which restricts the conclusions that can be drawn. In addition, the two scales used in this study (the TEIP and SACIE-R) were developed for use with preservice teacher populations and have only been used in that way in previous research. However, both Sharma et al. (2011) and Forlin et al. (2011) suggested that the scales could be used with inservice teacher populations; and the results of this study suggest that the scales are reliable measures of teachers' self-efficacy and sentiments, attitudes, and concerns about inclusive education. However, additional research with larger sample sizes is required to replicate this finding.

Directions for Future Research

Further validation of the TEIP and SACIE-R instruments with a broader range of inservice teachers is needed to provide additional information on the reliability of these scales with this population. In addition, future research should focus on the types of inservice that would be most effective in developing teachers' self-efficacy in collaboration. For instance, professional development opportunities that provide several workshops over time are likely to be more effective than single-session workshops, because they provide time for participants to practice and reflect on the new skills they have learned, as well as to receive feedback.

Conclusion

This study makes an important contribution to research on teachers' self-efficacy and teachers' sentiments, attitudes, and concerns about inclusive education for students with developmental disabilities. It is the first study to assess the reliability of the TEIP and SACIE-R scales with a sample of inservice teachers. In addition, the study is the first to

report that teachers' self-efficacy with regard to collaboration is associated with positive sentiments and attitudes and fewer concerns about inclusive education. The study sheds light on the importance of pre- and inservice training in the area of collaboration as an important contributor to the implementation of inclusive educational practices for students with developmental disabilities.

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APPENDIX A: Survey Demographic Form

Please ✓ on the line as appropriate.

*The students referred to in this survey are those with **developmental disabilities**. A developmental disability is one that begins in childhood (before age 18), is life-long, and significantly affects intellectual capacity and/or adaptive skills. Some examples of developmental disabilities are: cerebral palsy, autism, Down syndrome, and intellectual disabilities. Please keep this definition in mind when responding to the following questions.*

A. Current Assignment

- General education refers to a classroom taught by an enrolling teacher that may or may not include students with special needs.
- Special education refers to a program specifically developed for students with special needs (e.g., resource room, life skills program, etc.) or programs that service students with special needs that are taught by non-enrolling teachers (e.g., learning assistance).

I am teaching:

- _____ 1. General Education Primary (gr. K-3)
 _____ 2. General Education Intermediate (gr. 4-7)
 _____ 3. Special Education (gr. K-7)

B. I am: _____ 1. Male _____ 2. Female

C. What is your age?

- _____ 1. 25 years or below _____ 3. 36-45 years
 _____ 2. 26-35 years _____ 4. 46+ years

D. How many years have you been teaching in total?

- _____ 1. 0-2 years _____ 4. 11-15 years
 _____ 2. 3-5 years _____ 5. 16-20 years
 _____ 3. 6-10 years _____ 6. 21+ years

E. Where do you live?

- | | |
|----------------------------|---|
| _____ 1. Vancouver Island | _____ 5. Cariboo/Chilcotin |
| _____ 2. Lower Mainland | _____ 6. Northwest (i.e. Prince Rupert) |
| _____ 3. Thompson/Okanagan | _____ 7. Northeast (i.e. Dawson Creek) |
| _____ 4. Kootenays | |

F. My highest level of education completed is:

- | | |
|---------------------------------------|--------------------------------|
| _____ 1. Bachelor of Education (B.Ed) | _____ 4. Master in Special Ed |
| _____ 2. Diploma in Special Ed | _____ 5. Master Degree (other) |
| _____ 3. Diploma (other) | _____ 6. Other _____ |

G. In addition to University level coursework I have completed since my B.Ed., I have attended the following hours of inservice in special education in the last 5 years:

- | | |
|-------------------------|----------------------|
| _____ 1. 0 hours (none) | _____ 4. 16-25 hours |
| _____ 2. 1-7 hours | _____ 5. 25+ hours |
| _____ 3. 8-15 hours | |

H. In the past 5 years, how many students in each of the following categories have you taught?

- | |
|---|
| _____ 1. Category A – Physically Dependent – Multiple Needs |
| _____ 2. Category B – Deaf Blind |
| _____ 3. Category C – Moderate to Profound Intellectual Disability |
| _____ 4. Category D – Physically Disabled/Chronic Health Impairment (e.g.,
FASD, muscular dystrophy) |
| _____ 5. Category G – Autism Spectrum Disorder (autism, Asperger
Syndrome) |
| _____ 6. Category K – Mild Intellectual Disability |

APPENDIX B: Teacher Efficacy for Inclusive Practices (TEIP) Scale

When responding to the statements below, please think **ONLY** about the students you have taught who have **developmental disabilities**. A developmental disability is one that begins in childhood (before age 18), is life-long, and significantly affects intellectual capacity and/or adaptive skills. Some examples of developmental disabilities are: cerebral palsy, autism spectrum disorder, Down syndrome, and intellectual disabilities. Please keep this definition in mind when responding to the following statements.

Use the following scale when responding to the statements below.

SD (1) Strongly Disagree	D (2) Disagree	DS (3) Disagree Somewhat	AS (4) Agree Somewhat	A (5) Agree	SA (6) Strongly Agree
--------------------------------	-------------------	--------------------------------	-----------------------------	----------------	-----------------------------

	SD	D	DS	AS	A	SA
1 I can make my expectations clear about student behaviour.	1	2	3	4	5	6
2 I am able to calm a student who is disruptive/noisy.	1	2	3	4	5	6
3 I can make parents feel comfortable coming to school.	1	2	3	4	5	6
4 I can assist families in helping their children do well in school.	1	2	3	4	5	6
5 I can accurately gauge student comprehension of what I have taught.	1	2	3	4	5	6
6 I can provide appropriate challenges for very capable students.	1	2	3	4	5	6
7 I am confident in my ability to prevent disruptive behaviour in the classroom before it occurs.	1	2	3	4	5	6
8 I can control disruptive behaviour in the classroom.	1	2	3	4	5	6
9 I am confident in my ability to get parents involved in school activities of their children with disabilities.	1	2	3	4	5	6
10 I am confident in designing learning tasks so that the individual needs of students with disabilities are accommodated.	1	2	3	4	5	6
11 I am able to get children to follow classroom rules.	1	2	3	4	5	6
12 I can collaborate with other professionals (e.g. itinerant teachers/speech pathologists) in designing educational plans for students with disabilities.	1	2	3	4	5	6

13 I am able to work jointly with other professionals and staff (e.g. aides, other teachers) to teach students with disabilities in the classroom.	1	2	3	4	5	6
14 I am confident in my ability to get students to work together in pairs/in small groups.	1	2	3	4	5	6
15 I can use a variety of assessment strategies (e.g. portfolio assessment, modified tests, performance-based assessment, etc.).	1	2	3	4	5	6
16 I am confident in informing others who know little about laws and policies related to the inclusion of students with disabilities.	1	2	3	4	5	6
17 I am confident when dealing with students who are physically aggressive.	1	2	3	4	5	6
18 I am able to provide an alternate explanation/example when students are confused.	1	2	3	4	5	6

APPENDIX C: Sentiments, Attitudes and Concerns about Inclusive Education (SACIE)

Scale

When responding to the statements below, please think **ONLY** about the students you have taught who have **developmental disabilities**. A developmental disability is one that begins in childhood (before age 18), is life-long, and significantly affects intellectual capacity and/or adaptive skills. Some examples of developmental disabilities are: cerebral palsy, autism spectrum disorder, Down syndrome, and intellectual disabilities. Please keep this definition in mind when responding to the following statements.

Please circle the response that best applies to you.

	SD	D	A	SA			
	Strongly Disagree	Disagree	Agree	Strongly Agree			
1	I am concerned that students with disabilities will not be accepted by the rest of the class.			SD	D	A	SA
2	I dread the thought that I could eventually end up with a disability.			SD	D	A	SA
3	Students who have difficulty expressing their thoughts verbally should be in regular classes.			SD	D	A	SA
4	I am concerned that it will be difficult to give appropriate attention to all students in an inclusive classroom.			SD	D	A	SA
5	I tend to make contacts with people with disabilities brief and I finish them as quickly as possible.			SD	D	A	SA
6	Students who are inattentive should be in regular classes.			SD	D	A	SA
7	I am concerned that my workload will increase if I have students with disabilities in my class.			SD	D	A	SA
8	Students who require communicative technologies (e.g. Braille/sign language) should be in regular classes.			SD	D	A	SA
9	I would feel terrible if I had a disability.			SD	D	A	SA
10	I am concerned that I will be more stressed if I have students with disabilities in my class.			SD	D	A	SA
11	I am afraid to look at a person with a disability.			SD	D	A	SA
12	Students who frequently fail exams should be in regular classes.			SD	D	A	SA
13	I find it difficult to overcome my initial shock when meeting people with severe physical disabilities.			SD	D	A	SA
14	I am concerned that I do not have the knowledge and skills required to teach students with disabilities.			SD	D	A	SA
15	Students who need an individualized academic program should be in regular classes.			SD	D	A	SA