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General Education Elementary Teachers' Perceptions of Developing "Interventionist" Beliefs and Practices

Michelle Pompeo, *The University of Western Ontario*

Supervisor: Dr. Jacqueline A. Specht, *The University of Western Ontario*

A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Education

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GENERAL EDUCATION ELEMENTARY TEACHERS' PERCEPTIONS OF
DEVELOPING "INTERVENTIONIST" BELIEFS AND PRACTICES

(Spine title: Development of Inclusive Practices)

(Thesis format: Monograph)

by

Michelle N. Pompeo

Graduate Program in Education

A thesis submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

The School of Graduate and Postdoctoral Studies
The University of Western Ontario
London, Ontario, Canada

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THE UNIVERSITY OF WESTERN ONTARIO
School of Graduate and Postdoctoral Studies

CERTIFICATE OF EXAMINATION

Supervisor

Dr. Jacqueline Specht

Supervisory Committee

Dr. Wayne Martino

Examiners

Dr. Elizabeth Nowicki

Dr. Susan Rodger

Dr. Bernard Hammond

Dr. Sheila Bennett

The thesis by

Michelle Nicole Pompeo

entitled:

**General Education Elementary Teachers'
Perceptions of Developing "Interventionist"
Beliefs and Practices**

is accepted in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

Date: Monday, August 15th, 2011

Chair of the Thesis Examination Board

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Abstract

This thesis investigates how "Interventionist", "general education" (GEN) teachers, (or "core" teachers, as opposed to special educators) in the elementary stream, in Ontario, have learned inclusive beliefs and practices that have been considered effective for teaching and including children with exceptionalities in their classrooms. 10 GEN elementary teachers, consisting of 3 men and 7 women, from 2 local school boards, were interviewed to determine if they were "Interventionist" (Stanovich & Jordan, 1998). From this sample, 6 GEN teachers; 2 men and 4 women, were found to be "Interventionist". Classroom observations and follow-up interviews were used to gain insight into the development of their beliefs and teaching practices. Effective teacher perceptions in the form of qualitative data were coded, themed, and analyzed based on the "constant comparative" method (Miles & Huberman, 1994), which gave rise to single case, and cross case analyses. Teachers' perceptions are organized in results according to a framework based on 3 main questions: (a) what are teachers' current practices for inclusion?; (b) how did teachers develop inclusive practices?; and (c) how did the Community of Practice (e.g. teachers, principals) influence and support teachers' inclusive practices? Discussion centers on teachers' perceptions of the development of their positive beliefs and practices, ongoing professional development, and the importance of the community of practice.

Keywords: Effective Teaching, Inclusion, Elementary Teachers, Teacher Development of Beliefs and Practices

ACKNOWLEDGEMENTS

I would like to acknowledge and thank my supervisor: Dr. Jacqueline A. Specht. Dr. Specht has been consistently available, patient, and a trusted advisor. I admire her greatly for her consistency and transparency with her students, and I am very fortunate to have had a supervisor like Dr. Specht. Additionally, I would like to express my gratitude to Dr. Wayne Martino for his ongoing support and positive encouragement.

I would like to acknowledge the important role of family. Armando, Marilyn, and Mark: without your infinite love and support, this would not have been possible. I would like to thank Michel for sincerely listening and respecting the process.

I would like to thank all of the elementary teachers who expressed keen interest in the importance of this topic and for allowing me into their classrooms. It is a privilege to be able to learn from teachers in the field, and I thank you for your time.

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CHAPTER 1

Introduction

Statement of the Problem:

The majority of general education teachers in Ontario are not prepared to teach their students with disabilities (Stanovich & Jordan, 2002). Most general education teachers have had little to no instruction in special education in their preservice program (Stanovich & Jordan, 2002). This is primarily due to the fact that special education has not been mandated in preservice preparation programs, and has often been offered as an elective course. In some faculties of education there are mandated courses, but these may consist of relatively few hours dedicated to instruction in special education. In Canada, education is the jurisdictional responsibility of the thirteen individual provinces and territories: each province and territory, therefore, differs in their approach to special education (Edmunds & Edmunds, 2008).

Many classroom teachers continue to report they do not feel they have been properly prepared for including students with exceptionalities and therefore lack confidence in their knowledge and skills in this area (Bennett, 2009). Similarly, many teacher candidates expressed a need for extended, mandatory studies in special education within preservice education programs (Woloshyn, Bennett, & Berrill, 2003). In addition to concerns with training, teachers have reported that classroom management issues, general and special education collaboration, as well as a perceived lack of support and resources are barriers to inclusion (Bennett, 2009).

Given this lack of preparation, then, how do general education elementary teachers learn to teach students with exceptionalities? The answer, unfortunately, is that most of them do not learn how to teach students with exceptionalities effectively. Most general education teachers do not evolve into “experts” (Berliner, 2004) with the skill and will to teach “effectively” in heterogeneous settings (Tomlinson, et. al., 1997). This lack of preparation is disconcerting considering inclusion has been found to have positive benefits for all children.

Inclusion has positive benefits for students with exceptionalities. Timmons and Wagner (2008), in their analysis of the Statistics Canada Participation and Activity Limitation Survey (PALS), found students with the same categories of exceptionalities performed best in “high inclusive” settings, compared to other students with the same exceptionality categories placed in “middle and low inclusive” settings. Timmons and Wagner (2008) also found that students with exceptionalities in more robust inclusive arrangements exhibited more positive health outcomes. They were clear to define “health” as a larger concept than a singular examination of an individual’s physical or mental condition (Timmons & Wagner, 2008). Timmons and Wagner (2008) outlined these health outcomes as follows: better general health, academic progress, more interaction with peers, looking forward to school, and less utilization of health services.

Teachers who are considered effective at including students with exceptionalities have been found to be more effective in their overall teaching skills and therefore benefit all students in the general education classroom compared to teachers who exhibit less inclusive beliefs and practices. Anne Jordan and her

colleagues found evidence of effective inclusionary teachers. Thus, despite lack of preparation in preservice, teachers who are effective at teaching students with exceptionalities exist in practice. Jordan and colleague's ongoing work has spanned over a decade and stems from the social constructivist framework of learning. Their ongoing work has provided a framework for understanding the relationship between teacher variables (eg. teacher beliefs, teacher behaviour, teachers' repertoire of knowledge, and teaching efficacy) and student outcomes, including the influence of the school norm on inclusion. They also developed measures for researchers to use in order to help determine if a teacher is inclusionary.

The Pathognomonic-Interventionist (P-I) Continuum

It was found that effective instructional practices in inclusive classrooms were related to classroom teachers' beliefs about the nature of learning and exceptionalities (Pajares, 1992; Jordan & Stanovich, 2001, 2003; Stanovich & Jordan, 1998).

Teachers' beliefs have a major influence on shaping what they perceive about their students, and this in turn has a profound influence on how they teach. For example, teachers' beliefs about their roles and responsibilities in inclusive classrooms influence both the quantity and the quality of their instructional interactions with students both with and without exceptionalities (Jordan, Lindsay & Stanovich, 1997). Teachers' beliefs about working with students with exceptionalities have been characterized as lying along a continuum (Jordan, 2007). At one end are teachers with Interventionist beliefs, who see themselves as responsible for removing barriers to students' access to learning. Teachers with Interventionist beliefs: have higher levels of efficacy about their teaching, achieve higher scores on measures of overall

classroom effectiveness, and they interact with students both with and without exceptionalities and higher levels of cognitive engagement (Jordan & Stanovich, 2003).

Teachers whose beliefs are located at the other end of the continuum hold Pathognomonic (P) beliefs (derived from path=disease, gnomon=naming, or naming the pathology) (Jordan, 2007). They view exceptionality as a stable, internal condition of the student, characterized by a medical-pathological condition, and generally not amendable to instructional intervention. They expect diagnosticians to label the child and they believe that students with confirmed labels or identifications are the responsibility of specialists outside of their classroom. Teachers who hold Pathognomonic beliefs therefore tend to interact little with students with exceptionalities included in their general education classrooms. Interactions tend to be managerial rather than instructional, and of limited cognitive engagement with the student. Students with and without exceptionalities, in classrooms of Interventionist teachers, experience superior instructional interactions with their teachers (Jordan, Lindsay, & Stanovich, 1997; Stanovich & Jordan, 1998). Since academic engagement is significantly related to achievement, researchers speculate that students both with and without exceptionalities in the classrooms of Interventionist teachers have a better opportunity to learn (Jordan & Stanovich, 2001).

In his doctoral dissertation, Robinson (2008) examined the development of Interventionist instructional practices. He sampled 7 “exemplary” teachers who had first participated in a larger study called “Supporting Effective Teaching” (SET) project (Jordan and Stanovich, 2003) and who were identified as exemplary because

they stood out from their teacher peers. His teachers were given the P-I interview, observed using the Classroom Observation Scale (COS), and then asked follow up questions about where they learned their specific instructional practices in the form of the Teacher Experience Interview (TEI). Robinson's work is the only other study to focus specifically on the development of Interventionist instructional practices. However, there still remains a need to examine teachers' perceptions of their communities of practice in general and in relation to how their specific communities of practice have influenced the development of their Interventionist beliefs and practices.

Interventionist teachers are not the norm in Ontario publicly funded schools (Jordan, 2007). Further research is needed to better understand the process of *how* the general education elementary teacher develops into an Interventionist elementary teacher, and what is in fact working in specific classroom contexts. The researcher wanted to know answers to the following main research question: How do general education teachers develop into "Interventionist" teachers given that they have little to no preparation in special education? As very little research on this topic exists, further research which investigates how teachers learn to teach inclusively is important and can contribute further to knowledge about inclusive pedagogy in the field of special education. As stated by Jordan and Colleagues in a recent article, "very little is known about how skills for effective inclusion are developed" (Jordan, Schwartz, & McGhie-Richmond, 2009).

Purpose

The purpose of this dissertation was to learn about the development of elementary teachers who were effective at including students with exceptionalities in general education classrooms in publicly funded schools. The researcher's main interests, therefore, were threefold. A primary focus was on teachers' beliefs and pedagogical practices with their students with exceptionalities in the general education classroom. A further interest within this focus was discovering the specific strategies and named programs teachers used to foster a social climate of inclusion in their classrooms. Secondly, the researcher was interested in where practices and skills were learned and how they were developed. A third purpose of this study included acquiring teachers' perceptions towards the workings of a "community of practice" within their schools and its importance in the development of their effective practices. The researcher wanted to determine how one becomes an Interventionist teacher so that she could provide this information to preservice and inservice areas of professional development.

The research was broadly situated within a socio-cultural perspective of development. The sociocultural perspective maintains that behavior and mental processes are shaped not only by prior learning experiences (the behavioral perspective) or intrapsychic forces (for instance, the unconscious) but also by the social or cultural context.

Theoretical Frameworks

This work utilized Wenger's (1998) "Communities of Practice" perspective as the main theoretical framework, which may be considered similar to situated cognition, or the social theory of learning.

Social Theory of Learning

Etienne Wenger's (1998) notion of "Communities of Practice" guided the interpretation of the pedagogical practices with students with exceptionalities. Keeping consistent with social theory of learning, it was hypothesized that teachers would have individualized beliefs, but that such beliefs and practices would be heavily influenced by their situated communities (other teachers, administration, the school, and broader institutional influences). This contribution aided in the understanding of elementary teachers' attitudes towards; children with exceptionalities, their abilities to teach them, current practices, and their preparation in special education in relation to their current practices.

Etienne Wenger's (1998) "Communities of Practice"

Wenger's work stems from the social theory of learning. From this perspective, when thinking of how learning occurs, one has to remember its social character. Social character includes the significance of active participation in social communities, the development of modes of belonging, and the construction of identity.

Wenger (2006) defines the "Community of Practice" as follows:

Communities of practice are groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly (p.1).

According to Wenger (2006), the community of practice must adhere to the following:

- The domain: the identity defined by a shared domain of interest: membership therefore implies a commitment to the domain and a shared competence that distinguishes members from other people.
- The community: members engage in joint activities and discussions, help each other, and share information-they build relationships that enable them to learn from each other.
- The practice: members of a community of practice are practitioners, they develop a shared repertoire of resources; experiences, stories, tools, ways of addressing recurring problems (Wenger, 2006, p.1-2)

Teachers within classroom contexts and schools, therefore, are part of a domain, community, and practice as defined by Wenger. Through their relationship building, joint activities and discussions, they were able to learn from each other and develop their practices. Another similar example Wenger provided was nurses, he stated: “nurses who meet regularly for lunch in a hospital cafeteria may not realize that their lunch discussions are one of their main sources of knowledge about how to care for patients. Still, in the course of all these conversations, they have developed a set of stories and cases that have become a shared repertoire for their practice” (Wenger, 2006, p.2).

Wenger's work (1994) centered on an ethnographic study he conducted that was concerned with practices and communities of practices through the processing of medical insurance claims, as he described in his 1998 work, His colleague, Eckert

focused her earlier ethnographic work on high school subcultures that students formed (i.e. jocks, burnouts, etc). This work was based on detailed empirical observation of the central features of practice and communities of practice as they actually operated. His goal was to identify “social infrastructures that foster learning” and their implications for education (Wenger, 1998). Wengers’ analyses of practices can be applied to traditional teaching contexts. For example, he defines “practice” as being everywhere (Wenger, 1998), but this does not mean one can use them in an unrestricted way. According to Wenger, “to describe every imaginable social configuration as a practice would render the concept meaningless”. Thus, he provides levels of what constitutes a valid “practice.” He states, “a practice is a mid-level category of analysis: it is neither a specific narrowly defined activity or interaction, nor a broadly defined aggregate that is abstractly historical and social” (Wenger, 1998). Therefore, a one-time interaction or conversation would not count as a practice, it would be “too transient to qualify”, just as a nation or culture would be disqualified because it is “too general and embraces many discontinuous elements” (Wenger, 1998). In this way, then, his conception of practice is general, inclusive, and teachers of elementary specialization would fit under his category. It was a fitting theory for this research, especially when asking teachers about how they, as a community, came to know how to teach and include children with exceptionalities in their classrooms. As stated by Wenger (2006) “communities of practice have been around for as long as human beings have learned together... they are a familiar experience, so familiar perhaps that it often escapes our attention. Yet when it is given a name and brought into focus, it becomes a perspective that can help us

understand our world better” (p.2). The IPRC (Identification Placement and Review Committee) and IEP (Individualized Education Plan) process, and teacher communication regarding specific students with exceptionalities, is a collaborative effort occurring in social settings. Decisions about children with exceptionalities are made collectively by teachers, parents, principals, resource/special educators, child psychologists, educational assistants, and the IPRC in the social context of school. The researcher entered this research believing the way “exceptionality” is defined, conceptualized, and acted upon by the general education teacher would also be influenced by social contexts, and/or by collaborating with others. The primary unit of analysis was “neither the individual nor social institutions, but rather the informal communities of practice that people form as they pursue shared enterprises over time” (Wenger, 1998).

Another important distinction Wenger makes when defining his “practice” is that it can be engaged in for extrinsic reasons (such as pay) and goods. Finally, a community of practice has three dimensions: “mutual engagement, a negotiated enterprise, and a repertoire of negotiable resources accumulated over time” (Wenger, 1998). He outlined 14 indicators to look for when determining whether or not a community of practice has formed. The key point to remember throughout these definitions is that his conception of practice depends on human actions which are socially based and organized, underpinned by formal or informal rules, procedures, “standards” and institutions, implicated in discourse and part of the materiality of social reality (Wenger, 1998). Further his notion of community of practice highlights

that relationships between participants in a practice involve continuous interactive coordination and negotiation.

For Wenger, and those employing this conceptual framework in subsequent studies, the importance placed on understanding a community's conception of itself stems from the importance of reproduction. A community of practice, even if deemed to be evil, unjust, and prejudicial has the ability to reproduce itself (Wenger, 1998). The idea, then, is to tap into the shared histories of learning that a specific community of practice holds in order to understand the forms of "knowing" that occur in that practice. A practice also includes "all the implicit relations, tacit conventions, subtle cues, well-tuned sensitivities, embodied understandings, underlying assumptions, and shared world views...most of these may never be articulated, yet they are unmistakable signs of membership in communities of practice"(Wenger, 1998). Thus, practices are related to each other in complicated ways, and it was this relationship between members the researcher wanted to articulate.

The Community of Practice perspective is not without its controversies. One criticism is that it neglects the role of power (Contu & Willmott, 2003) within organizations or a "community of practice". Similarly, it has been criticized for its failure to take into account pre-existing conditions such as socially learnt dispositions and social codes of the community (Mutch, 2003).

This framework was beneficial for coming to understand how elementary teachers negotiated their own personal knowledge about how to teach and include children with exceptionalities in relation to their particular school context. According to Wenger, learning is situated within various pre-existing contexts (such as in a

trade, or even within a school community). Further, within these contexts, or “communities of practice”, there also exists “communities of knowledge” about that practice. Related specifically to this dissertation, then, existing teachers in different school settings will already have constructed knowledge about children with exceptionalities and about pedagogical practices. Such knowledge, according to Wenger, is replicated because it is passed down to the newcomer who is struggling with the challenges of being in a new practice and environment. Applied specifically to this research, the researcher additionally wanted to know the answer to the following question; how did the effective inclusion teacher inherit the constructed “knowledge” through Wenger’s notion of “apprenticeship”? Therefore, it was presupposed that “knowledge” about children with exceptionalities, and how to teach them in practice, depended on the atmosphere of the specific school environment in which teachers entered (positive, negative, inclusive, exclusive) in addition to their own individual “knowledge” (assumptions, etc) and beliefs (positive, negative, inclusive, exclusive) about children with exceptionalities.

This framework was further useful in guiding methodological considerations to determine if this was the case for the interventionist elementary teachers in general. In other words, this framework guided the research questions, specifically: Was it the “community of practice” that influenced elementary teachers’ beliefs, or were beliefs developed elsewhere? This framework was further useful in determining whether or not interventionist teachers relied on one another for pedagogical and emotional support, and how this was achieved.

It was hypothesized that teachers of children with exceptionalities would rely heavily on other teachers and supports within the school. Further, that teachers would be influenced by the system into which they were socialized (Wenger, 1998). New teachers are, as Wenger suggests, wading through the “apprenticeship” phase of their “community of practice” (Wenger, 1998). That is, they begin to acculturate to the pre-existing professional climate, whether that was consistent with their own values or those of the profession as a whole. The researcher wanted to learn if this was the case; did the effective inclusion teacher become Interventionist because of a positive principal and school climate? (e.g. appropriate professional development over time, continuing professional development, etc), or did they have individual beliefs and practices that would lend themselves to becoming effective on their own? Since it has been found that most “effective” general education teachers are somewhat experienced (3-5 years generally), teachers in this category were chosen because it is typically where the most effective teachers are found.

Ontario Ministry Documents and Inclusion

The term ‘exceptionality’ has been used to apply to students with disabilities in this research. Teachers are familiar with the term ‘exceptionality’, as they refer to this definition in their daily practice. Exceptionalities are defined in this dissertation according to the definition provided in the Ontario Ministry of Education’s Resource Guide (2004) which are as follows; Behaviour, Autism, Deaf and hard-of-hearing, Language impairment, Speech impairment, Learning disability, Giftedness, Mild Intellectual disability, Developmental disability, Physical disability, Blind and low vision, and Multiple exceptionalities (Ontario Ministry of Education, IEP Resource

Guide, 2004). These definitions of exceptionality are possible identifiable exceptionalities according to the Ministry of Education through the IPRC process.

Regulation 181 came into effect in 1997 and it states that an Identification, Placement, and Review Committee (IPRC) should use the definitions provided by the Ministry of Education to identify a student's exceptionality. While avoiding the word inclusion, it states that "the IPRC should recommend placement in a regular class, with appropriate special education services whenever that meets the students' needs and the parents' preferences" (Ontario Ministry of Education Regulation 181/98: <http://www.edu.gov.on.ca/eng/general/elemsec/speced/highlights.html>). Since that time, more and more children with exceptionalities are being educated in the general education classroom.

Therefore, pursuant to Regulation 181, general education elementary teachers became responsible for educating and socially including their students with exceptionalities in the general education classroom. Unfortunately, this shift in practice did not occur smoothly for the majority of teachers in publicly funded schools. Teachers have long reported great difficulties including children with exceptionalities in the general education classroom. Problems of general education teachers have been well documented in the research literature: the organization of time (Scruggs & Mastropieri, 1996), isolation from the school community (Busch, Pederson, Espin & Weissenburger, 2001), lack of collaboration with EAs (Education Assistants) and resource teachers, and problems with differentiating instruction (Cesar & Santos, 2006; Tomlinson et. al., 1997). Other difficulties with inclusion have been reported, such as knowledge about how to adequately construct IEPs,

(Individual Education Plans) issues related to IPRC meetings, as well as problems with Classroom Management (Carter & Scruggs, 2001). Such concerns continue among teachers, as well as issues with the collaboration between general and special education teachers as well as a perceived lack of support and resources (Bennett, 2009).

A significant contributing factor to such difficulties has been the lack of preparation in preservice education programs regarding the teaching of children with exceptionalities. This particular gap in preparation has been formally acknowledged. The “*Education for All*” report, for example, states that “Ontario university programs leading to a B.Ed. degree should contain mandatory course hours on special education. Given the numbers of students with special education needs receiving instruction in regular classrooms, every Ontario teacher needs to be prepared to provide effective instruction for all students”(Ontario Ministry of Education, 2005). The “*Education for All*” report is reflective of a 20 year ideological shift from “integration”/“mainstreaming” (child with exceptionality is removed on occasion from the general education classroom for specialized services) (Hutchinson, 2002) to “inclusion” (child with exceptionality is educated and socially accepted in the general education classroom, school, and community) (Farrell, 2001; Hutchinson, 2002) model of school practice.

Further to the *Education for All* report is the *Learning for All* document (Ontario Ministry of Education, 2009), which was created in response to a need to address learners in grades beyond Kindergarten to grade six and is not just for students with exceptionalities. Like the *Education for All* report, the *Learning for All*

document outlines ways of getting to know all of the students in the class so that the teacher may plan and teach according to their students' needs through multiple ways of differentiation. It also provides teachers with concept maps of Universal Design for Learning, Differentiated Instruction, and the importance of Professional Learning Communities. The overarching idea with both documents is that there are evidence based practices teachers can use to lessen the gaps in student achievement.

The need to amend existing teacher-education programming to assist teachers in meeting these needs has been further expressed in the “*66 recommended changes to the Teacher’s Qualifications Regulation (TQR)*” that were approved by Council and forwarded to the Minister of Education, Kathleen Wynne, in December, 2006. Among those 66 recommendations, a long awaited change was formally suggested; “to make Special Education a required part of initial teacher education” (Ontario College of Teachers, 2006).

The term “Inclusion” has been used in this dissertation. Inclusion is generally defined as students with exceptionalities attending their neighbourhood school with the general education teacher taking responsibility for their learning (Bunch & Valeo, 2004; Burstein, Sears, Wilcoxon, Cabello & Spagna, 2004).

The term “At-Risk” was used in this dissertation in order to get a broader sense of teachers’ willingness to take responsibility for all of their students. Lupart and Watson (2003) summarize the current understanding of students who are at-risk for school failure, noting that “risk is a characteristic of situations, not individuals” (p.218). Such situations can be viewed as falling into two broad categories, first familial situations and second, school-related factors. Lupart and Odishaw (2003)

have categorized students who are at-risk for school failure into a number of subgroups. One of the major at-risk subgroups identified is students with exceptionalities. Other subgroups identified are socioeconomic status (SES), parenting styles, culturally and linguistically diverse children, aboriginal children, gifted children, children raised in circumstances of poverty, and those who live in conditions of substance abuse (Lupart & Odishaw, 2003). For the purposes of this research, when interviewing teachers with the P-I Interview, it was clarified that “children with exceptionalities” are those defined by the Ontario ministry, whereas “children at-risk” are children with learning difficulties that are not identified and on an IEP and children with one or more of the potential risk factors identified above by Lupart and Odishaw (2003).

Research Questions

In keeping with the purpose of this work, the researcher was concerned to produce knowledge about general education teachers’ beliefs and practices regarding students who had been identified as having exceptionalities. The following 4 main guiding questions were used to inform my observations and the construction of highly individualized and in-depth follow-up interviews for each specific teacher in his or her particular context:

1. What are the general education teacher’s current teaching practices for children with exceptionalities?
2. How did the general education teacher come to learn these techniques (Tomlinson, 1999)?

3. How useful was preservice and other professional development in relation to classroom experiences of children with exceptionalities?
4. How would you describe your current school context (Wenger, 1998) in relation to instructing and including children with exceptionalities (probe: collaboration models, community of practice)?

CHAPTER 2

Literature Review

In this chapter, significant literature in the field is reviewed as it pertains to two main research areas: the benefits and importance of inclusion and practices that support inclusion. The term exceptionality is being used to be in line with the Ontario Ministry definitions, but there may be instances where authors used different definitions for the purposes of their research, and therefore there will be instances where alternate words like disability and special needs may appear in this literature review.

Benefits and Importance of Inclusion

Booth, Ainscow, Black-Hawkings, Vaughan, and Shaw (2000) and Kalambouka, Farrell, Dyson, and Kaplan (2007) provide evidence that students with exceptionalities included in the general education classroom consistently benefit from such settings compared to students in segregated and withdrawal settings.

Timmons and Wagner (2010) in their analysis of the Statistics Canada Participation and Activity Limitation Survey (PALS), found students across disability categories and severity levels performed best in “high inclusive” settings, compared to other students with the same disability categories and severity levels placed in “middle and low inclusive” settings. In the high inclusion group, 52% of children with “any category” (categories: mobility, seeing, hearing, dexterity, developmental, speech, psychological and learning as well as severity: mild/moderate or severe/very severe categories) of disability were progressing “very well” or “well” at school and

only 15.8% of children are progressing “poorly” or “very poorly” (Timmons & Wagner, 2010). Comparatively, in the “low inclusion” group, 40.5% of children were progressing poorly at school and 31.7% were progressing “very well” or “well” at school. These percentages indicate there is a marked difference amongst the success at school by children with disabilities in the 3 inclusion groups (Timmons & Wagner, 2010). Demeris, Childs and Jordan (2007) showed that the number of students with disabilities included in Grade 3 classrooms had no negative influence on the provincial test achievement scores of the students without disabilities. They found the opposite; that the presence of students with disabilities might be related to slightly improved scores of the rest of the class (Demeris, Childs & Jordan, 2007). Clearly, the inclusion of students with disabilities in the general education classroom has been found to positively influence both groups of students in terms of their academic achievement

Timmons and Wagner (2010) additionally found that students with disabilities in more robust inclusive arrangements exhibited more positive health outcomes. They were clear to define “health” as a larger concept than a singular examination of an individual’s physical or mental condition (Timmons & Wagner, 2010). Timmons and Wagner (2010) outlined these health outcomes as follows: better general health, academic progress, more interaction with peers, looking forward to school, and less utilization of health services. In addition, they found evidence of more social interaction and friendships when children with “any category” of disability were placed in more inclusive settings. This was measured based on the percentages of children’s activities in extracurricular and leisure activities. For example, children in

higher inclusive settings used the internet to email friends more, talked with more friends by phone, and read for pleasure more often than did children in lower inclusive settings (Timmons & Wagner, 2010). They also found students in the higher inclusive group took part in sports, both with and without a coach, more often than students in the middle and lower inclusive groups. Students in low income status groups with “any category” of disability also looked forward to going to school, did well/very well in school and had excellent/very good general health in high inclusive settings compared to students with the same category of disability in the lower and middle inclusion settings. Results suggest that there may be an association between inclusivity and health (broadly conceived) but that a causal relationship cannot be assumed at this point.

In a study of 11, 000 students in the United States, Blackorby, Wagner, Cameto, Davies, Levine and Newman (2005) report that students with disabilities who spend more time in general education classrooms had higher scores on achievement tests, were absent less and performed closer to grade level than their peers who were withdrawn for instruction. Wanger, Newman, Cameto, Levine and Marder (2003) found that students with disabilities in inclusive settings perform closer to grade level on standards-based achievement tests than students with the same disabilities in segregated settings. The performance of students without disabilities may even be slightly enhanced in classes where students with special education needs are included. Demeris, Childs, and Jordan (2007) concluded that the number of students with disabilities included in Grade 3 classrooms had no negative

influence on the provincial test achievement scores of the students without disabilities.

In the U.K., Dyson, Farrell, Polat, Hutcheson, and Gallannaugh (2007) found that schools that are effective in inclusion develop unique ways to adapt to their local communities. Dyson, Polat, and Farell (2004) suggest that effective schools develop an “ecology of inclusion” (p.14). Florian and Rouse (2001) note that when schools have access to a variety of supports and teaching strategies, they can be effective both in inclusion and in sustaining high levels of student achievement.

Practices that Promote Inclusion

The teacher remains the single most important figure with respect to implementing inclusive practices in his or her classroom, as it is the teacher who accompanies the children for the majority of their school day. Therefore, this section will first focus on research that has identified effective teacher beliefs and practices for inclusion. In addition to the teacher being a primary figure of importance, there are others within the school who are additionally important. Thus, research on principals and inclusion will follow after teachers’ effective beliefs and practices are first presented.

Development of the Pathognomonic-Interventionist Interview for Teacher Beliefs

Beliefs are so heavily linked to actions in general that one cannot adequately discuss teacher practices without first discussing the beliefs that must occur to drive them. This section will precede the section on teacher practices by outlining the extant literature on teachers’ beliefs about including students with exceptionalities in the general education classroom.

Prior to the making of the Pathognomonic-Interventionist (P-I) scale, Jordan had been investigating Bandura's (1977) work, particularly Bandura's "Theory of Self Efficacy" (1977), and "Social Learning Theory" (1977), which was later re-named "Social Cognitive Theory" (Jordan, Kircaali-Iftar, & Diamond, 1993). In addition, Jordan and colleagues also consulted Gibson and Dembo's (1984) work on Teacher Efficacy. Gibson, building from the theory of self efficacy, developed an instrument to measure teacher efficacy (Gibson & Dembo, 1984) which attempted to uncover the extent to which teachers believe they can affect student learning (eg. having the confidence in their own skills, strategies, and abilities to execute these so that the child may learn). Further, other work by Dembo and Gibson (1985) found that a teacher's sense of teaching efficacy influenced their classroom behaviour: high efficacy teachers were very different compared to low efficacy teachers. Low efficacy teachers used large and whole group instruction only, were flustered by any interruptions to the delivery of their content, and did not display Kounin's (1970) notion of "withitness", for example (Dembo & Gibson, 1985). High efficacy teachers combined whole and small group instruction, were not flustered by interruptions, were much more flexible overall, and they also communicated higher expectations to their students (Dembo & Gibson, 1985). Thus, teachers must have a high sense of teaching efficacy to be effective, but they also must additionally hold certain beliefs about disabilities or the nature of learning.

Traditionally, within special education, beliefs about disability have been from a medical perspective, wherein the labeled student is eligible for special education services within a specific category of disability (Jordan, Kircaali-Iftar & Diamond,

1993). General education classroom teachers from a more medical approach would tend to believe that the labeled child is beyond their responsibility. The medical perspective leads teachers to confirm their belief that something is wrong within the student, rather than within their teaching environment or their instruction. Such a belief system tends to omit complex factors (e.g., instructional and teacher characteristics) which influence student performance in school.

Jordan and colleagues were interested in teachers differing belief systems along a continuum, but they were particularly interested in the ecological or preventive model (Graden, Casey, & Christenson, 1985; Jordan-Wilson & Silverman, 1991; Ysseldyke & Thurlow, 1984) which views student problems as resulting from the interaction of the student with the environment. Contrary to the medical perspective, when the student presents a problem, the teacher accepts the responsibility to try to solve the problem by modifying his/her instructional strategies. Working collaboratively with the resource teacher, the teacher tries several intervention alternatives before referring the student to special education personnel (Jordan, Kircaali-Iftar & Diamond, 1993). Attaching a label to the student is not assumed to be necessary to define the type of instruction needed and to deliver that instruction (Pugach & Lilly, 1984). For a child who is exceptional, this approach involves working collaboratively with resource personnel to maintain the student's progress in the general education setting. In summary, Jordan and colleagues have built upon research on beliefs of teachers: their sense of personal and teaching efficacy, their beliefs about the nature of disability, and their views about their responsibilities for their students with disabilities. From this understanding, they

developed several constructs and scales in order to measure teacher beliefs and resulting practices in the classroom.

Teachers who believe students with exceptionalities are their responsibility tend to be more effective overall with all their students (Jordan, Schwartz, & McGhie-Richmond, 2009). In the Supportive Effective Teaching (SET) project model, teacher beliefs were predicted to influence teaching practices. Jordan has studied teacher beliefs, teaching efficacy, and instructional strategies for including Canadian students with exceptionalities in the general education setting for over twenty years.

As alluded to previously within this dissertation, they found that there are generally two types of teachers, which they termed Interventionist and Pathognomonic, formerly referred to in the literature as Preventive and Restorative (Jordan-Wilson & Silverman, 1991). “Effective” teachers are those who first hold specific beliefs about that nature of exceptionalities, and students with exceptionalities. Jordan and Silverman (1991) developed the P-I interview to determine if a teacher holds Interventionist (I) or Pathognomonic (P) beliefs: this interview also determines practices, as teachers have to describe how they have intervened with two students who are “at risk” of failure (not identified) and two students who have exceptionalities (identified).

Teachers with Pathognomonic beliefs believe that the diversity in their classrooms has been imposed on them (Jordan & Stanovich, 1998) and they think that “systemic measures should be employed to reduce such diversity” (p.222). Pathognomonic teachers view exceptionality as residing within the individual and therefore are an individual’s problem. The problem of the individual, then, should be

dealt with externally (i.e. through specialized services, segregated settings, and/or special education teachers) by those specifically trained. They are more likely to refer problematic or hard to teach children to special education services: immediately, without attempting to determine or rule out multiple factors that may be causing the problems in learning or behaviour. They also tend to refer difficult students to special education services without attempting interventions (with the help of advice of support personnel in the school). Pathognomonic teachers tend to completely disengage from the responsibility of attending (instructionally and socially) to children with exceptionalities in their classrooms.

Interventionist teachers demonstrate beliefs and practices in opposition to their Pathognomonic counterparts. Firstly, according to Jordan and Stanovich (1998) they try interventions in their classrooms prior to making special education referrals. In addition, they “work with support personnel using a team-based approach, link assessment procedures with their curriculum and instructional methods, and have regular communication with parents” (p. 223). Interventionist teachers understand that exceptionalities do exist for students, but they take responsibility for intervening in their classrooms to ensure children with exceptionalities are included in their lesson planning and learning. Interventionist teachers tend not to refer as many children for special education services (Stanovich & Jordan, 1998) as do Pathognomonic teachers. Furthermore, Interventionist teachers accept sociocultural diversity.

In their ongoing studies (Jordan, Lindsay & Stanovich, 1997; McGhie, 2001, 2004; Stanovich & Jordan, 1998), it was found that 25% of general education

classroom teachers held Pathognomonic beliefs, while 20% held Interventionist beliefs. The remaining 55% of teachers held beliefs which had characteristics of both ends of the spectrum and they tended to vacillate between them (Jordan, Schwartz, & McGhie-Richmond, 2009). Such teachers have been termed “Mixed” or teachers with “mid range” beliefs. Jordan and colleagues explain that mid range teachers “are indicative of teachers’ struggles to resolve the paradox between their beliefs and the policies and procedures that favoured one or the other end of the P-I continuum” (Jordan et al., 2009). Therefore, Interventionist teachers are not the norm in our school systems. Similarly, Robinson (2008), an administrator who studied Interventionist teachers in his dissertation, commented “in my experience, it is less common to see a truly inclusive classroom” (p. 151) simply because there aren’t many teachers of this kind to be found in practice. This should be a concern for many, since a teacher’s Pathognomonic or Interventionist perspective has instructional implications for individual student-teacher interactions (Jordan, Lindsay, & Stanovich, 1997). Based on Jordan and colleagues’ ongoing work; the Supporting Effective Teaching (SET) project, it was found teachers’ beliefs about exceptionalities transferred over into their teaching practices.

In addition to specific beliefs about exceptionalities, “effective” teachers will also have a strong sense of “teaching efficacy” regarding the effect of their practices on all children (Jordan, Kircaali-Iftar, & Diamond, 1993; Stanovich & Jordan, 1998). In other words, teachers have to be confident in their own abilities to teach students with exceptionalities and feel that they are somehow making a difference in that student’s life. If they can observe students progressing or having positive outcomes,

such as meeting a goal, this will contribute to their sense of teaching efficacy (Stanovich & Jordan, 1998).

In terms of an order of the relationship between teacher variables (beliefs, practices, efficacy, and student outcome), Jordan and colleagues have suggested a framework. It begins with the teacher having beliefs about exceptionalities and inclusion, which translates into practices with students with exceptionalities. Specific practices lead to student outcomes, which then effects teaching efficacy. If student outcomes are positive, this leads to a strengthening teacher efficacy and beliefs about exceptionality. The relationship is cyclical, ongoing, and the more positive experiences with students with exceptionalities, the more positive the beliefs about the individual teacher's ability to teach these students, which therefore influences the teacher's willingness to teach students with exceptionalities in the future (Stanovich, 1994). Stanovich and Jordan (2002) found statistical significance between the aforementioned teacher variables and have illustrated the cyclical and interdependent relationships in diagram form (Stanovich & Jordan, 2002). They state "what this research demonstrates is that there are three major teacher variables; teacher beliefs held about students with exceptionalities and their inclusion in the general education classrooms (P-I), teachers' sense of teaching efficacy, and the classroom teachers repertoire of teaching behaviors (practices), and one school variable (administrator beliefs about staff responsibility for students with exceptionalities) that provide the key to successful inclusion" (Jordan, Schwartz, & McGhie-Richmond, 2009; Stanovich & Jordan, 2002).

In addition to teachers having individualized beliefs regarding their responsibilities towards students with exceptionalities in their general education classrooms, researchers have recently investigated teachers' underlying epistemological beliefs. Glenn (2007) developed and administered a questionnaire titled the 'Beliefs about Learning and Teaching Questionnaire'. This questionnaire was based on a survey of teacher beliefs about mathematics and was administered to 280 teachers and teacher-candidates. Glenn was able to identify teachers' personal epistemological theories about the nature of ability as either 'an entity' (E) or as 'incremental' (I). Entity beliefs hold that ability is a fixed and static trait, likely present at birth, and particularly at the lower end, has a limited responsiveness to learning. Incremental beliefs view ability as malleable, influenced by learning, amenable to improvement and developing incrementally under the right learning conditions. Jordan, Glenn and McGhie-Richmond (2010) draw the link between Glenn's Entity-Incremental scale to the Pathognomonic-Interventionist scale: Entity beliefs about ability are akin to the Pathognomonic perspective, whereas Incremental beliefs about ability are in line with Interventionist beliefs about exceptionalities. There is a relationship between elementary classroom teachers' beliefs about the fixed or malleable nature of both disability and ability, suggesting an underlying beliefs construct about the nature of ability to learn, as broadly conceived (Jordan, Glenn & McGhee-Richmond, 2010).

Lastly, Berliner and Jordan and colleagues suggest that effective teachers are not typically found until at least several years of teaching in the field (Berliner, 2004; Stanovich & Jordan, 2002). This is because teachers in early phases are still mastering

foundational aspects of teaching and tend to exhibit more traditional forms of teaching. For example, they tend to adhere to teacher-directed, whole-class lesson formats, and little teaching interaction with individual students (Cole & Leyser, 1999; Stanovich & Jordan, 2002). Over several years, they begin to develop more flexible lesson formats, experiment with groupings and peer partnerships, and find ways to engage in lengthy interactions with individuals and small groups (Jordan, 2007; Stanovich & Jordan, 2002). Thus, as a general rule, one can expect to find Interventionist teachers after several years of teaching in the field.

Teaching Practices

There is empirical evidence to support the notion that teachers who are effective overall with their classes are also effective in working individually with students with exceptionalities in the general education classroom (Glenn, 2007; Jordan, Lindsay and Stanovich, 1997; Jordan & Stanovich, 2001; McGee, 2001). Jordan and colleagues have claimed and established that in elementary classrooms, effective teaching skills are effective for all students, both with and without exceptionalities (Jordan, Schwartz, & McGhie-Richmond, 2009). This section will review research that has demonstrated effective teaching practices found in the general education literature are applicable and beneficial to students with exceptionalities. Jordan and Colleagues hypothesized that certain teacher beliefs give rise to effective behaviours. One set of beliefs that have been demonstrated to be positively associated with effective teaching falls along a continuum that is labeled Pathognomonic-Interventionist (Stanovich & Jordan, 2002). Stanovich and Jordan (2002) suggested that “effective teaching principles are foundational to successful

inclusion” (p.182). From the larger SET (Supporting Effective Teaching project) three teachers were found to stand out from their peers and were found to be exemplary (extremely high Interventionists). They shared many attributes which seemed to be foundational to good teaching. Stanovich & Jordan (2002) reported that exemplary teachers exhibited the following:

They have an expanded zone of responsibility-they believe they are responsible for all of the students on their class list. However, they believe that in order to provide targeted instruction for individual students they must free up instructional time for that targeted instruction without sacrificing instructional quality for their other students. Consequently, they become masters at managing their instructional time, they are also effective users of flexible grouping strategies. By combining these grouping strategies with the large amounts of teaching time they have created, they thus manage to free themselves up to target teaching adaptations and modifications for specific students (p.182).

Therefore, according to Jordan and colleagues effective teaching for all is Interventionist teaching.

Effective teachers interact more often with all of their students within their lessons by calling on them more frequently. In addition, the type of instructional interactions with students has been found to be superior. In a study completed by Jordan, Lindsay, and Stanovich (1997) nine third-grade teachers were asked to wear a lapel microphone and a radio-frequency transmitter in order to tape-record their verbal interactions with individual students during the seatwork part of their language arts or mathematics lessons. The students with whom the teacher was interacting were identified on the second channel of the tape recorder as ‘typically achieving’, ‘at risk’ or ‘exceptional’. The type of dialogue (academic vs. non academic), the frequency and length of interaction and the level of engagement of each teacher-student

interaction were scored from the transcripts on a 5-point rating scale: no dialogue with the student, cursory management comments by the teacher, and instructional transmissions, to interactive dialogue between the teacher and student. Thus, the level of engagement measure involved the extent to which the teacher elicited student participation and cognitive extension of the lesson topic they were discussing. Cognitive extension was defined as either “partial: the teacher interacts briefly with the student about the student’s work, but does not push the student to develop his/her thinking”, or “full: the teacher engages the student in a discussion about the student’s work, and pushes the student to extend his/her thinking”. The amount of time was assessed in seconds, and was recorded as instructional or non-instructional (i.e. management, discipline, social). The nine teachers were also ranked on their P-I interview scores. The study showed that the amount of instructional time is correlated to time management, classroom management, and lesson presentation skills of teachers and these skills vary from one teacher to the next. Further, the study showed that teachers who demonstrated all of the above skills scored as Interventionist. Teachers conserve instructional time by establishing clear routines, well understood roles for both teacher and students, and by delivering well-designed lessons with a clear beginning, middle, and end. The more efficient the teacher is at conserving instructional time, the more the students receive extended dialogues with the teacher, both individually and in small groups, that are intended to develop higher order thinking skills. As pointed out in Jordan, Glenn, and McGhie (2010), “few teachers regularly reached this level of instructional engagement of students... it is a relatively rare phenomenon that was noted in less than a third of the group”. (p. 261).

Approximately three teachers were found to be engaging all of their students in the type of dialogue, or “full cognitive extension”, which would push their thinking. However, students with ‘exceptionalities’ in the classrooms of the three highest scoring and most effective teachers received more instructional time at higher levels of cognitive engagement than the ‘typically achieving’ students in the classes of the low-scoring (on items of the COS-Classroom Observation Scale) teachers.

In a factor analysis of the Beliefs about Learning and Teaching Questionnaire with 280 teachers, Glenn (2007) reports that the Beliefs about Learning and Teaching Questionnaire contained three further factors that help to identify teachers’ preferences for instructional styles. The first was Teacher-led instruction (item example: it is important for students to complete assignments exactly as the teacher planned). High scores on this factor reflect a Transmissive style of teaching in which the teacher is the source of knowledge (Glenn, 2007). The second factor was Student-centered instruction (item example: Good teachers give students choices in their learning tasks). High scores on the items in this factor reflect a focus on student-initiated learning, with the teacher as a guide. The third factor was Attaining Standards (item example: Giving grades is a good strategy for getting students to work). This measure distinguishes a preference for techniques of extrinsic motivation over intrinsic motivation. The correlations between teachers’ Pathognomonic-Interventionist beliefs and remaining three factors were examined. A significant positive correlation was found between Student-Centered Instruction and Pathognomonic-Interventionist and between Attaining Standards and Pathognomonic-Interventionist. Teachers with Interventionist beliefs about exceptionalities were more likely to report that they

preferred student-centered instruction, and were less likely to report motivating their students through extrinsic sources such as grades (Jordan, Glenn, & McGhie-Richmond, 2010). Further, teachers who reported a preference for teacher-led instruction were likely to report less incremental views of ability (Glenn, 2007). Teachers, therefore, seemed to differ in their self-reported preferences for different practices, such as teacher-led instruction or Student-centered instruction, and methods of motivating students that are consistent with their beliefs about the fixed or malleable nature of ability and disability. Teachers with Interventionist beliefs about exceptionalities were more likely to report that they preferred Student-centered instruction (student initiated learning, with the teacher as guide) and were less likely to report motivating their students through extrinsic sources such as grades. Whereas, teachers with Pathognomonic beliefs about disability were more likely to report that they preferred Teacher-led instruction. Glenn's findings (2007) support Jordan and Colleagues' contention (Jordan & Stanovich, 2004) that there are general epistemological belief structures about the nature of ability, disability and learning that are linked to the decisions teachers make about how they teach and to whom, and to their preferences for teaching styles. Epistemological beliefs were described by the authors as "assumptions, attitudes, and beliefs about the nature of ability, and beliefs about knowledge, knowing and how knowing proceeds" (Jordan, Schwartz, & McGhee-Richmond, 2009).

Effective teachers use specific instructional techniques. Deciding which approach works best under different circumstances is complex. Jordan and her colleagues indicate that new teachers should not feel that strategies are prescriptive.

Rather, strategies should offer a range of practices from which teachers can choose, keeping the students' development and individual needs in mind (Jordan, 2007).

There has been a push to move away from traditional methods of teaching that is considered "teacher dominated". In teacher dominated classrooms, students are expected to engage in such learning tasks as memorizing facts, covering a large quantity of curriculum, and learning isolated skills often within inflexible time schedules (Caine & Caine, 1995). This has also been termed the "banking" model of teaching, wherein the teacher fills the student with large quantities of information that may not be synthesized or understood. In a study on students' learning preferences (Hertzog, Morgan, Diamond & Walker, 1996) found that 18 randomly selected students, from third to fifth grade attending a summer school program, reported the following most preferred ways of learning; hands-on activities and small group activities (Hertzog et. al, 1996). The styles of teaching they disliked the most were the use of worksheets, lectures, board work and traditional reading groups. Others have called this style of teaching to be "transmissive" whereby the teacher is most concerned with delivering the curriculum as opposed to assessing where the child is at, in terms of knowledge or ability level, and whether or not the child is understanding what he or she is learning. The teacher is to be seen by students as the facilitator of learning and not the expert holding all of the information. According to Brophy (2004), effective teachers were presumed not to transmit knowledge but to co-construct it through dialogue with students. It is claimed that teachers who are constructivist in their teaching style view learning as centered in the development of skills and knowledge in the child, while those who are transmissive are focused on the

delivery of curriculum and on the efficiency of information flow to the learner (Torff, 1999, 2003; Torff & Sternberg, 2001). Olson and Katz (2001) have claimed that curriculum centred, transmissive techniques of instruction that maximize the flow of knowledge to the learner are negative instructional techniques derived from an erroneous view of learning based in trait psychology. However, Heward (2003) suggests that there is no basis for believing that structured curricula impede true learning, that drill and practice limits students' deep understanding and dulls their creativity, or that teaching discrete skills ignores the whole child.

In their meta-analysis, Swanson and colleagues (Swanson, 1999; Swanson, Hoskyn & Lee, 1999) synthesized the results of 180 intervention studies that predicted effect sizes of the different instructional strategies that are recommended for students with learning disabilities. They compared direct instruction, strategy instruction, a combination of direct and strategy instruction, and instructional approaches with neither direct nor strategy components. The instructional techniques used in the 180 studies were classified into 45 components that influence student outcomes. These were recorded into 20 clusters of components for analysis and assigned to either Direct Instruction or Strategy Instruction. They then analyzed each cluster of studies to see which forms of instructional interventions resulted in the greatest learning gains in reading, mathematics, spelling and writing performance. The teaching techniques with the greatest impact on the outcome measures of students with learning disabilities were components of both direct instructional methods and strategy instruction: each contributed to significant increases in student

learning outcomes. The meta-analysis revealed that no single technique for instruction was superior overall.

Effective classrooms are positive spaces: they contain classroom communities that support and nurture students at a variety of ability levels (Downing & Eichenger, 1990; Heron & Jorgensen, 1995; Hunt, Staub, Alwell & Goetz, 1994). Cabello and Terrell (1994) observed 10 teachers, identified as being effective, for a period of 3 months. Additionally, Cabello and Terrell (1994) observed five classroom teachers that were not identified as effective. Findings indicated that the effective teachers exhibited a cluster of supportive behaviours, such as; use of cooperative learning, peer tutoring, daily collaborative activities as well as encouraging student interdependence. They found that teachers also used conflict resolution and negotiation strategies; modeling mutual assistance and providing constructive feedback. Cabello and Terrell (1994) noted 4 common themes about students in effective heterogeneous classrooms; 1) students assisted one another, 2) problems were solved through discussion and negotiation, 3) students provided feedback and praise to one another, and 4) learning about diversity and self esteem was relevant across all subject areas (Cabello & Terrell, 1994). Therefore, students were encouraged to work collaboratively, in groups, rather than solely relying on the teacher to solve problems.

Creating supportive environments can also occur through relationships: working on establishing teacher-student relationships are a component of effective classrooms. Jordan (2007) lists 9 traits of effective teachers and their practices, based on her ongoing work with effective GEN teachers. Trait 7 and 9 deal specifically with

teacher-student relationships and are as follows: (7) “knowing their students in considerable depth and allow for their differences; however, they focus on each child as a whole person and not on their difficulties and differences”. Similarly, trait (8) “preserve the dignity of each individual and model respectful interaction”.

Another important variable in the teacher-student relationships is the demonstration of care. Initial conversations about care emerged in Nel Noddings’s “ethic of caring” work (1984). When teachers demonstrate an “ethic of care” (Flinders & Noddings, 2001; Katz, Noddings & Strike, 1999; Noddings, 1996, 2003) they understand the importance of the moral and ethical aspects of teaching, in addition to the delivery of curriculum. An “ethic of care” requires teachers and schools to be concerned for their students’ overall well being. Teachers need to be aware of the students’ socioeconomic realities and sensitive to their needs, fears, and anxieties in addition to supporting their learning.

Creating supportive environments in the classroom involves students feeling safe and another important way this is achieved is by the teacher’s classroom management techniques. If teachers are constantly attending to disruptive behaviours, reprimanding students, and trying to get students on task, they are losing out on precious instructional time (Johnson & Edmunds, 2006). In Interventionist classrooms, organization and managerial routines were well rehearsed and largely student-orchestrated, such that teacher management of them took little time away from instruction (Jordan & Stanovich, 2001).

Interventionist teachers were found to interact more with all students, possess excellent classroom management and organization. Further, they were described as

having a “repertoire” of effective practices, such as preparing students for the work, modeling, scaffolding, circulating around the room, displaying Kounin’s notion (1970) of “withitness” (Jordan, 2007) of what is going on in the room, using visual and non verbal methods of communication in addition to other forms of communication, for example (Stanovich & Jordan, 1998).

Teachers who fail to gain control of their own classrooms do their students a disservice because in addition to depriving their students of instructional time and learning, they also lose a sense of respect among their students. It becomes apparent to students that their teacher cannot seem to gain control of their class as a whole, which often contributes to the continuance of acting out (Johnson & Edmunds, 2006). Further, for students with combined behaviour and learning disabilities, acting out may be a deliberate tactic for avoidance, or not deliberate and due to factors beyond the individual’s control (e.g. impulsivity, for example). It is therefore pressing that teachers have a specific program or plan in place in their classrooms to create an atmosphere of routine, stability, and consistency for all students. One might want to think of classroom and behaviour management in terms of the classroom as having its own uniquely choreographed routine of what is expected of students continuously throughout the day.

Similarly, Englert, Tarrant and Mariage (1992) reported that effective teachers have rules and procedures in place that are actively taught, monitored, and for which consequences are applied immediately. In addition, they reported that effective teachers scanned and monitored the classroom for student behaviour, positioned themselves in the classroom for effective monitoring, used nonverbal

signals whenever possible, and administered specific and contingent praise (Englert et al, 1992). In the area of seatwork management, effective teachers closely monitored seatwork activities (circulating, providing additional instruction as needed), provided their pupils with activities that allowed a high rate of accurate responding, used seatwork that required active rather than passive responding, made sure that students understood the purposes and strategies involved in seatwork tasks, and had effective accountability procedures in place (Englert et al, 1992). Due to the benefits of effective classroom management, it was important to learn about what specific procedures (e.g. reward systems, named programs) teachers had in place and where they learned how to successfully manage their classroom with efficient use of lesson planning for instructional time.

Another important indicator of teacher effectiveness is the teacher's ability to engage students in learning. McGhie-Richmond, Underwood and Jordan (2007) analyzed the results of Classroom Observation Scale (COS) observations of 63 elementary classroom teachers, collected over 5 years of the project, to identify which items discriminated the highest scoring from the lowest scoring teachers. They found a cluster of five items clearly discriminated the most effective teachers; four items relating to the establishment of clear lesson expectations and engaging student attention, and one to maintaining high rates of student responses with prompting, error correction, and feedback (McGhie-Richmond, Underwood, & Jordan, 2007). These items were as follows: (a) states expectations for seatwork in advance, (b) establishes clear lesson routines that signal a beginning and an end, (c) gains students' attention at the beginning of the lesson and maintains it during instruction at 90%

level, (d) monitors transitions by scanning and circulating among students, and (e) maintains high accurate responding rate in teacher-led activities. Examples of teacher-led responses were as follows: (a) repeats practice opportunities until students are not making errors, (b) delivers instructional cues and prompts (c) provides error correction procedures, and (d) uses prompting and modeling following errors (McGhie-Richmond, Underwood & Jordan, 2007). Evidence from the SET project suggests that the most effective teachers work more with their students with and without exceptionalities at higher levels of cognitive engagement, and engage their students at higher levels of thinking and responding through dialogical interactions that feature questioning (Jordan, Glenn, & McGhie-Richmond, 2010).

As more classrooms increasingly become heterogeneous and diverse, teachers must collaborate with as many professionals within the school community as possible (Boyer & Lee, 2001; Walther-Thomas et al., 2000). Successful collaboration is built on a solid foundation of interpersonal communication skills, trust, and mutual respect (Tschannen-Moran, 2004). Co-teaching is the service delivery option for students with exceptionalities as well as those in bilingual or related programs, in which two teachers share instructional responsibility for all or part of the school day. It is a true instructional partnership (Friend and Pope, 2005). Many experienced teachers have reported co-teaching takes considerable time and effort. Some teachers may have difficulty giving up the lead role and they inadvertently relegate their colleagues to work more as teaching assistants than teachers.

In some co-teaching partnerships, difficulties arise regarding decision making for the child or discipline and grading. However, the positive outcomes of co-teaching

are many (Friend & Cook, 2007), including reducing the stigma sometimes associated with leaving the classroom for special instruction. Students with exceptionalities are afforded more opportunities to be with their same aged peers when special services are embedded in core academic classes. When teachers in inclusive schools do work together in a positive collaborative style and form strong networks, the children benefit. Friend and Pope (2005) suggest ways that teachers can share responsibilities in a co-teaching situation; using technology to help with communication (sending emails when they cannot get face-to-face shared planning time), or filing their teaching ideas by grade level, subject and unit on their schools' servers for others to access. Collaboration is a way for professionals to not feel responsible for knowing every strategy and intervention: a way to lessen the pressure of being the all knowing teacher with all of the answers. In addition, encouraging collaboration among students, through intentional grouping, has led to more inclusive classroom settings (Cesar & Santos, 2006), since children of varying abilities become familiarized with many different types of learners and students.

Thus so far, it has been argued that effective teaching practices for students without exceptionalities in the general education classroom are also effective for students with exceptionalities in the general education classroom. In addition, the reverse might also be considered: that practices originally designed for people with exceptionalities can also benefit students without exceptionalities in the general education classroom. This concept is *Universal Design for Learning* and will be discussed below in its own section, even though it is also an example of a teacher practice which promotes inclusion.

Universal Design for Learning (UDL)

The basis for thinking about instruction comes from the notion of universal design, a concept that originated in the field of architecture (Turnbull, Turnbull, Shank, Smith & Leal, 2002). Friend and Pope (2005) describe the origins of UDL in architecture and compare this concept to its practical use in helping to make schools inclusive:

Think about buildings in your community: Do some have ramps that were installed long after the building was erected? The ramps may be functional, but are not well integrated into the building design. Contrast those buildings with ones in which ramps were included in the original design. These ramps are functional, too, but they are integrated seamlessly into the structure. UDL applies this idea to curriculum and instruction. A universally designed curriculum has built-in flexibility and options for all learners from the beginning –at the planning stage- and this leads to more elegant, integrated, and seamless educational opportunities (Friend & Pope, 2005).

UDL has been conceptualized as the broader idea of accessibility, barrier free curriculum, and therefore may be thought of as an orientation intended to shape teaching in order to provide all students with access to the curriculum (Turnbull et. al, 2002). Differentiated Instruction, on the other hand, has been commonly thought of as the application, the ‘how-to”, address specific skills and difficulties in practice. The idea is that when individuals merge the two frameworks together (broader beliefs about accessibility, and then enacting the specific suggestions in the general classroom), inclusion from an instructional viewpoint is enabled to happen (Ontario Ministry of Education, 2005).

UDL is built on understanding universality and equity, flexibility and inclusion, an appropriately designed space, simplicity, and safety (Ontario Ministry of Education, 2005). In the *Education for All* document, readers are reminded as to what

UDL is not for instruction; “this does not mean planning instruction for students with average achievement levels, and then making after-the-fact modifications to meet the special needs of certain students” (p.11). UDL expects that teachers: “define and make known expectations and objectives of learning situations, employ flexible teaching strategies and learning situations, use varied pedagogical materials, are receptive to integrating technological tools and assistive technology in the classroom, and a variety of student products or ways for students to demonstrate what they have learned”. Finally, UDL requires teachers provide flexible, ongoing, and continuous assessment, or information that helps teachers adjust instruction and maximize learning (Ontario Ministry of Education, 2005).

According to Meyer and Rose (1998) and Rose and Meyer (2002) research supporting UDL has emerged from *Positron Emission Topography* (PET) studies. These studies have confirmed that brain activity occurs in roughly the same areas for most individuals performing a given task, but that each individual has a unique signature of brain activity for that task (Meyer & Rose, 1998). Research from the Center for Applied Special Technology (CAST), based on neurological research stemming from Richard Cytowic in 1996 has found the principles of UDL useful for developing effective educational tools (Rose & Meyer, 2002). CAST uses a framework of 3 spatially and functionally distinguishable brain systems; recognition (identifies patterns), strategic (generates patterns), and affective (establishes importance and fuels motivation)(Rose & Meyer, 2002). Each system is marked by a set of educationally relevant characteristics that may vary among individuals. Thus, the way they people learn and what is occurring in the brain differs from person to

person. Therefore, according to these authors, teaching needs to be varied in order to ensure the three areas have been addressed (Rose & Meyer, 2002). Students also learn for different reasons: some are motivated by feedback, while others have a love of the subject (Rose & Meyer, 2002) and it has been recommended that teachers need to have multiple approaches for engagement. A flexible use of media, for example, can support all learners' interests by varying content and teaching materials.

The implications of brain development research are many, but one that is of prime importance for education is that educators can now see students with disabilities along a continuum of learner differences rather than as a separate category (Rose & Meyer, 2002). Similarly, teacher adjustments for learner differences can now occur for all students, not just those with exceptionalities. In addition, Curriculum materials can now be varied and diverse and include digital and online resources rather than a single textbook. Lastly, the curriculum can be more flexible and accommodate a wider range of learner differences instead of providing remedial help to students so that they can learn from a set curriculum.

An application of UDL: Differentiated Instruction

Differentiated Instruction (DI) is a teaching theory based on the premise that instructional approaches should vary and be adapted in relation to individual and diverse students in classrooms (Tomlinson, 2001). The model of Differentiated Instruction requires teachers to be flexible in their approach to teaching and adjust the curriculum and presentation of information to learners rather than expecting students to modify themselves for the curriculum.

DI first emerged in the general or heterogeneous classroom to include gifted students. After being applied to gifted children, DI was applied to children who struggle with reading, and now it can be used for the whole class. Differentiated Instruction represents a relatively recent response to the growing trend of including students with exceptionalities in general education, which demands individualizing within increasingly heterogeneous classrooms. Differentiated Instruction is defined as follows,

Differentiated Instruction is teaching with student variance in mind. It means starting where the students are, rather than adopting a standardized approach to teaching that seems to presume that all learners of a given age or grade are essentially alike. Thus differentiated instruction is responsive teaching rather than One-size-fits-all teaching (Tomlinson, 1999).

Differentiated Instruction requires teachers to transform their practices from a program-based pedagogy to a student-based pedagogy. Teachers attempt to adapt pedagogical interventions to the needs of each student, acknowledging that each student differs in interests, learning profile, and level of functioning. Curriculum tells the teacher what to teach, while Differentiated Instruction tells teachers how to teach it to a range of learners by employing a variety of teaching approaches. There are many underlying theories of Differentiated Instruction, such as: Constructivist Learning Theory, learning styles, brain development with empirical research on influencing factors of learner readiness, interest, and intelligence preferences toward students' motivation, engagement, and academic growth in schools (Tomlinson & Allan, 2000). Another underlying theory of Differentiated Instruction is Lev Vygotsky's (1980) "Zone of Proximal Development" (ZPD). Vygotsky believed that social context and the interactions of the student within that social context play a

fundamental role in the acquisition of knowledge. Vygotsky put forth the idea that students in their “Zone of Proximal Development” can, with assistance, resolve a problem that they could not have resolved alone and move on to another level of knowledge. Teachers can help accelerate students’ cognitive development by supporting children in resolving problems by questioning their conceptions and they can also provide specific interventions or “scaffolding” to assist students.

The teacher can differentiate one or a number of the following elements in any classroom (Tomlinson, 2004): content (what students are going to learn), process (the activities), and products (the accomplishment following a learning period).

Differentiating Instruction can also be achieved through a variety of groupings to meet student needs. It may also be achieved by providing accommodated instruction and assessment activities, challenging students at an appropriate level through modifications, in light of their readiness, interests and learning profiles. In other words, the teacher structures a lesson at multiple levels so that each student has an opportunity to work at a moderately challenging, developmentally appropriate level.

It is acknowledged that most teachers will need to collaborate with special education teachers and others in the school because they might not know how to effectively adapt their instruction. There are many different ways a teacher can differentiate his or hers instruction and management strategies. For more information about ways to differentiate, the reader may wish to consult other sources, such as the EFA document (Ontario Ministry of Education, 2005).

In Differentiated classrooms, all students work on a variety of learning tasks in a variety of ways. Students identified as “exceptional” are not singled out to

receive instruction that meets their individualized needs because all students are considered to have unique needs. The premise of differentiated teaching and learning is that students with varying abilities, interests, and needs can be successful in classrooms that are organized to offer multi faceted curricular and instructional approaches.

The classroom is to be based on an underlying notion of mutual respect wherein learning goals and activities are to be co-created with students. Students can assist the teacher in planning how and what he or she needs to learn. This does not mean that students have total control and teach themselves entirely, but that they may have input as to the content focus of a unit of study based on an area of interest. Perhaps a teacher will offer students a menu of choices for a particular assignment. Another example of involving students is to structure the room in a way that would allow a hands-on learning lab or learning centers that capitalize on different learning preferences. While DI is quite popular, there is a gap in the research regarding its effectiveness and further studies are warranted in this area.

A major report from the National Centre on Accessible Instructional Materials, entitled “Differentiation Instruction and Implications for UDL Implementation”, by Hall, Strangman and Meyer (2009) reviewed the literature on the evidence of effectiveness for DI. These authors argue that DI is a compilation of many well known theories and practices, but as a “package”, it is lacking empirical validation (Hall et. al, 2009). Further, that there is an acknowledged and decided gap in the research literature. Others have expressed similar concerns about the reliability of DI as a package (Anderson, 2007). Hall and colleagues report that while no

empirical validation of differentiated instruction as a package was found for their review, there were a generous number of testimonials and classroom examples of positive effects of using DI in the classroom that authors of several publications and web sites provided. Further work has reported individual cases of settings in which the full model of differentiation was very promising and teachers using differentiation have written about improvements in their classrooms (Brimijoin, 2002; Brimijoin, Marquisee & Tomlinson, 2003; Zeichner, Kenneth & Liston, 1996). In addition, research has supported the separate components of DI (Hall et. al, 2009). These practices include effective management procedures, grouping students for instruction, and engaging learners (Ellis & Worthington, 1994).

However, some research has found evidence to support the positive effects of DI. Gregory and Chapman (2007) found that the extent to which teachers differentiate—that is, the ways in which they adjust instruction to help students learn information, remember it, and demonstrate that they have learned it—strongly affects the achievement of their students (Gregory & Chapman, 2007). Evidence that the type of instruction should try to match students' abilities was found in research completed by Sternberg, Torff and Grigorenko (1998). There were 2 empirical studies involved in this research. The first involved 213 gifted and non gifted students from low SES who were taught third grade social science. The second study involved 141 grade eight students who were taught an Introductory Psychology course for a summer school course. There were control groups for each study. Students were chosen to represent particular ability patterns and then were given instruction that either more or distantly matched their patterns of abilities. All students were assessed

for achievement in terms of multiple-choice memory tests as well as for analytical, creative, and practical performances (Sternberg et. al, 1998). It was found that students who were better matched to instruction in terms of their patterns of abilities out performed those students who were poorly matched. Students in both studies who received instruction in the three main areas (analytical, creative, and practical, also referred to as the triarchic theory of intelligence) generally learned more than students who received either traditional memory based or analytically based instruction. The results of the two experiments reported in Sternberg's work suggest that students benefit from triarchic instruction, not only if it is matched to their pattern of strength (Sternberg et. al, 1998), but also if it is given in equal fashion to all students.

Sternberg and colleagues make no claim that only triarchic instruction will improve achievement, as instruction based on other theories of intelligence might also result in enhanced achievement. The results of this study suggest that further testing of the triarchic theory in the classroom is worthwhile (Sternberg et. al., 1998). Baumgartner, Lipowski, and Rush (2003) found attitudes toward reading and student achievement improved after Differentiated Instruction was used to improve reading achievement of primary and middle school students across 2 midwestern communities across the United States.

Principals and Inclusion

It has been found that the principal heavily influences the school culture, and that the principal's values and actions are a powerful predictor of positive teacher attitudes in schools as they implement inclusive education practices for students with exceptionalities (Billingsley, 1993; Brownwell & Smith, 1993; Rea, McLaughlin &

Walter-Thomas, 2002). When school leaders focus on fundamental instructional issues, demonstrate strong support for special education, and provide ongoing professional development, academic outcomes for students with exceptionalities improve (McLeskey & Waldron, 2000; Stanovich & Jordan, 1998). That is, principals who genuinely believe that their school mission is academic success for all communicate this value. The principal's values, beliefs, and personal characteristics inspire people to accomplish the school's mission. Tschannen-Moran (2004) indicated that the job of an effective principal is to give high leadership attention in support in two major areas; principals must develop, enhance, and monitor the professional skills and knowledge of their faculty, and principals must work with their communities to create a common cluster of expectations promoting implementation of those skills and knowledge (Tschannen-Moran, 2004).

Stanovich and Jordan (1998) found that the beliefs of principals about inclusion and about the roles and responsibilities of their staff in promoting inclusive practice was the most influential variable in the model of effective inclusion (Stanovich & Jordan, 1998).

However, White's study (2007) hypothesized that the beliefs and practices of five teachers, (who were part of the Supporting Effective Teaching project in 1999 and continued to participate in 2004), would change over the length of their inservice teaching experiences. The teacher participants taught in two schools with strong policies of inclusion and in which considerable resources were spent in providing inservice education and on-site support to teachers to promote inclusive practices. White found that changes in teachers' thinking over the five-year time period was

largely dependent on their beliefs when they entered the project. Teacher 1 started with Interventionist beliefs and five years later her beliefs were the same, if not stronger. Three other teachers started with Pathognomonic beliefs and five years later, their beliefs were the same. White's study (2007) suggests that inclusion in the classroom depends on the beliefs of the individual teacher and has little to do with the principal's influence on the school culture or inservice preparation.

Conversely, Jordan and Stanovich (1998) uncovered that school culture may affect the instruction offered by teachers in heterogeneous classrooms. Hallinger et al (1996) believe the principal shapes the school's learning climate, thereby having an indirect effect on instructional outcomes. In their model, the principal's leadership affects student achievement through mediating variables. In Jordan and Stanovich's research (1998), they found that an Interventionist school norm predicted effective teaching in the classroom. In addition to interviewing 33 teachers with 10.3 years of experience with the P-I Interview and Attitude Towards Mainstreaming Scale, they also measured the "school norm" by ascertaining the principal's perception of his or her school. The 12 principals completed a Pathognomonic-Interventionist Principal Questionnaire, and an Attitude Towards Mainstreaming Scale (ATMS). In addition, both principals and teachers completed the Regular Education Initiative Survey (REITS) and the Teacher Efficacy Scale (TES). The P-I principal questionnaire was adapted from the P-I Interview for Elementary Teachers. The questionnaire consisted of 17 pairs of statements, one statement of each pair representing an Interventionist attitude and one representing a Pathognomonic attitude (labelled "statement A" or "statement B"). Principals were asked to read each pair of statements and then rate the

general practice of the teachers at their school by checking one of seven labelled points on a scale. The points were labelled “strongly aligned with statement A,” “moderately aligned with statement A,” “somewhat aligned with statement A,” “midway between statements A and B,” “somewhat aligned with statement B,” “moderately aligned with statement B,” and “strongly aligned with statement B”.

First they were asked to rate the current general practice in their school. Second, they provided ratings for their goal as principal for their teachers’ practice. Stanovich and Jordan (1998) thought that allowing a goal statement would reduce the implied social pressure to indicate that their teachers were already achieving all of the goals of Interventionist practice. Scores on the task were obtained by summing the 17 current general practice responses.

A composite score reflecting each principal’s beliefs regarding inclusive education and the norms for his or her school was formed by standardizing the principal’s scores on the ATMS, REITS, and P-I scales. These were then summed to form a composite score that was assigned to each of the teachers in the principal’s school. There was a strong connection between the principal variable and effective teaching behaviours. Jordan and Stanovich (1998) suggest that this finding has implications for staff development: staff development aimed at improving instruction in heterogeneous classrooms should be school wide and should involve developing a collaborative ethic within the school. Best practice inclusive schools shared an ethic of inclusion (Ainscow, West & Nicolaidou, 2004) and this ethic results in all members of the school sharing a philosophy and resulting support for one another. Further, staff development designed to promote Interventionist attitudes, such as

those examined in the P-I interview, might directly affect classroom practice. Such efforts could include modeling of effective instructional practices in addition to providing teachers with in-class support.

Based on this review of the literature, one can expect a profile of what effective teachers who include students with exceptionalities in the general education classrooms, i.e. interventionist, might look like. They will have beliefs about knowledge, beliefs about exceptionalities, and beliefs about their responsibilities to include students with exceptionalities; furthermore, these beliefs will affect the quality of their teaching practices. They tend to be excellent managers of time, and know how to plan for the diverse needs in their class, allowing for students to eventually work on their own, freeing up time to attend to those who may still be struggling. Such teachers will plan lessons efficiently, plan with students strengths and weaknesses in mind, keep students engaged, interact more with all students in ways beyond managing them or homework checking. Effective teachers will believe in collaboration with many, including, but not limited to: resource teachers, parents, and support staff, for example. They will believe in the principles of UDL and demonstrate ways of Differentiating Instruction and learning, making accommodations and modifications for their students. Therefore, they will tend to favor a student-centered approach to instruction. They will hold high expectations for all of their students and believe in goal setting for all of their students. They will model inclusion and create a safe and supportive classroom environment with a clearly defined and explicitly communicated plan, involving the class's input. Rather than relying on one method alone, the effective teacher is flexible minded, and willing

to try new strategies or approaches learned through others. They will have developed an “ethic of care” and demonstrate “withitness” in their classrooms, and they find unique ways of reflecting on the successes and failures of their own practices through internal thoughts or through note taking or recording. Typically, Interventionist teachers will have a minimum of 3-5 years or more of experience. If fortunate, they may be found among inclusive administrators and supportive communities of practice. Such teachers should remain an interest because students with such teachers have been found to have higher self concept scores, overall better health (broadly defined by having friends, interacting more, exercising more), without negatively affecting provincial test scores.

CHAPTER 3

Method

Participants

The rationale for selecting inservice teachers was based on a review of expertise literature that provided developmental knowledge about teachers' progressive stages: suggesting most teachers are ready to attend to issues of academic diversity and social justice after they have learned the foundational aspects of teaching (Fuller & Brown, 1975; Lesar, Benner, Habel & Coleman, 1997; Berliner, 2004).

Schumm, Vaughn, Haager, McDowell et al. (1995) found that elementary teachers were more positive about the philosophy of inclusion, students with exceptionalities, instructional strategies, adaptations/accommodations than their secondary counterparts (Yellin et. al., 2003). Due the findings of past research, the researcher wanted only to investigate elementary teachers because it has been found that they tend to be more positive about inclusion in their orientation.

Teachers were invited to self-select into this study if they believed they had successful stories to share around inclusion of exceptional learners. Six "interventionist" general elementary teachers from the local district school board from a larger pool of ten teachers participated in all phases of research. The four remaining teachers could not participate beyond the first interview, as one was a long term occasional teacher who had been teaching for many years, but her position came to an end and therefore had no classroom when it was time for observation. The

second teacher did not want to participate in the observation part of the research. The third teacher directly told me that she did not believe in inclusion. The fourth teacher completed the P-I Interview and scored as Interventionist, but during the observation and informal conversations, I realized she did not embrace a total inclusive view, as she told me she believes only some children with exceptionalities should be included in the general education classroom, and not others. Therefore the current research has six Interventionist teachers and they are Mike, Joe, Jessica, Janice, Maria, and Andrea.

Participant Profiles

Mike

Mike is a grade 5/6 elementary teacher in a publicly funded Catholic school in Ontario. He has been certified for 8 years, but has been teaching full time, meaning that he has been fully hired in the school board for 6 years. Mike completed a Bachelor of Arts degree, a Bachelor of Education (outside Canada), and was certified in 2002. He obtained the following Additional Qualifications courses: Religious Education Part 1, 2, and Specialist, and Special Education Part 1. In addition to this information available on the OCTs public registry, Mike also has his Master's in Theology and advised me that he is interested in going back to school to complete a second Master's in Education.

Mike had been trained in Tribes levels I and II. Mike's classroom is comprised of 28 students. Out of the 28 students, 7 have IEPs and 3 are "at-risk" of failing or experiencing difficulties at school and might qualify for an IEP but

currently are un-diagnosed. Therefore, 10 students have special educational needs. This year, Mike did not have an Educational Assistant.

Mike often commented that his class as a whole comes from a diverse socioeconomic background: some children are those of doctors, while some are from government/co-operative housing.

Joe

Joe is a general elementary teacher of grade 8 students in a publicly funded Catholic school in Ontario. Joe has 4 students who were on IEPs. For students who were “at risk”, Joe believes there were between 3 and 5 that had some difficulties but had not yet been identified. For those “at-risk”, their barriers had been lack of prior knowledge coming in to grade 8 because Joe was from a transient school, so he had a lot of students who came to him from other cities, different boards, and there was a lack of information about them. He also found that if they spoke another first language other than English, then that too was a barrier.

Joe was part of a Tribes Trained School. Joe received Tribes Level I training, and had also taken Fred Jones workshops for professional development. In addition, he sought out conferences and workshops on Assistive Technology and training for the specific technology in his class. Some training he has had was in “Premier Tools”, which is a text to speech program. Joe also tried using “Smartboard Airliner”. Joe found specific workshops on AT were really beneficial for helping his students with exceptionalities.

Joe has a Bachelor of Arts, a Bachelor of Education (outside of Canada) and was certified in 2004. He also holds the following Additional Qualifications:

Religious Education Part 1, Part 2, and Specialist. He has taught for 5 years full time in the board.

Jessica

Jessica was a grade 4/5 split general elementary teacher in a public school in Ontario. She had a total of 23 students this year. She had 2 students she considered “at risk”: 1 had emotional and behavioural difficulties and 1 struggled with Math. Through her Learning Support Teacher, she had been given access to an EA that came in at the beginning of every class to help her student who has emotional and behavioural difficulties. Jessica felt that the EA has proven to be very beneficial to her student with EBD. Jessica had 2 students on IEPs.

Her student who was on an IEP for being Gifted/LD had access to things like a lap top, a printer, scanner, and Dragon, for example, which made him more independent.

Jessica worked closely with “experts” in her school; the resource teacher and any other specialists, such as a gifted itinerant teacher, for example. She made it very clear that she does not go out and consult the internet (i.e. Google) to find out more about the different labels of exceptionalities. She feels that this is not real research and could actually make things worse and she would rather rely on those who have been more formally trained. She said she could read scholarly journals, but she finds there isn’t a lot of time for this. Jessica found her resource teacher was amazing, but that there is only one of her for the entire school.

Jessica found that her Bachelor of Education program in Ontario was helpful to teach her how to lesson plan for students on IEPs. Jessica commented that she finds

that the inclusion of students with exceptionalities does depend on the specific subject: she believed it was easier to plan and include students in Language compared to other subjects. Jessica believed that since she was a split grade, she already has to plan for differing levels and then she planned for her students with exceptionalities in addition to her varying grade levels. For her, she found her split classes almost prepared her for lesson planning for her students with exceptionalities because she had to prepare all activities in a tiered manner.

Jessica has a Bachelor of Arts degree, a Bachelor of Education degree (within Canada), and was certified in 2006. She has obtained the following Additional Qualifications: Special Education Part 1, and Reading Part 1. She has been working full time for 4 years in the board.

Janice

Janice was a grade 6 elementary teacher in a publicly funded school in Ontario. She had “many” students she considered to be “at-risk” and she would say her main worry was about their reading at grade level because if they can’t read at grade level, then they will also have problems in Math (understanding what the question is asking of them, and so on).

She had 3 children on IEPs for the following; 1) LD, 2) Hearing Impairment, and 3) MID. What Janice found particularly interesting was that her student with a hearing impairment just came to her school from another board. At the former board, the student was diagnosed as “Hearing Impairment and LD”, but at the current board he was “Hearing Impairment” only. Janice found this interesting: how “exceptionality” was constructed differently from board to board. However, despite

this change in label, Janice was not sure she agreed with this change, as this student still exhibited low performance in Math-he was at about a grade 3 level Math, even though he was in a grade 6 class. Janice was frustrated by the change of label and found herself struggling with this new student who had just come to her school. In addition, the information hadn't "followed him" so many people in the school were not sure about his history and he was being assessed as the term progressed. There is a sound system Janice used so that her student with a hearing impairment could better hear her lessons.

Janice has a Bachelor of Arts degree, A Bachelor of Education degree and was certified in 1987. Janice left education for some time to raise her 4 children, but has since returned and completed the 2007 New Teacher Induction Program (NTIP). She then enrolled in the following Additional Qualification Courses: French as a Second Language Part 1 and Special Education Part 1. I was unable to assess the amount of years (if any) she had been teaching prior to her leave in the past. However, I do know she has been teaching full time in her current board for 3 years. Three years may not adequately represent how many years of teaching experience she has had, as it may be more than this.

Maria

Maria was a general elementary teacher of a grade 5/6 split class in a publicly funded school in Ontario. There were a total of 26 students in her class: 2 of which are "low" and could be considered "at risk", and 1 was formally identified and on an IEP for EBD.

The nature of this identified child's EBD was very specific; the child was depressed and took anti-depressant medication, which affected his overall mood and his desire to want to do things in the classroom: he didn't want to do things that everyone else wanted to do, and he's wasn't as able to control his anger as easily as the other kids.

Maria worked with the LST, as well as trained individuals from the local organization who were "experts" of his specific mental illness. In addition, the principal and parents were involved.

The student had to leave and go to the hospital for having suicidal thoughts, so he was out of the general education classroom for quite some time. Because of this, Maria focused on getting him re-integrated into the general education classroom routine.

Maria has a Bachelor of Arts degree, a Bachelor of Education degree, and was certified in 1999. She has been teaching for 11 years full time in her current board. In terms of Additional Qualifications, there are none listed on OCT. Based on interview data, she has additional qualifications in the form of ongoing "practical psychology courses" offered by a different source other than faculties of education.

Andrea

Andrea was a general elementary teacher of grade 5/6 in a publicly funded school in Ontario. Her students were with her for all subjects other than French and Music.

Andrea had 2 students on an IEP: 1 had LD and the other had MID. Andrea reported that they had difficulties in all subjects, but they also sometimes had

difficulties socially because of the way they would act. She found they acted a bit immature, compared to other classmates their age, and Andrea reported she has noticed they are a bit behind socially. Andrea has an EA that comes in to the class to help these two children.

However, Andrea called her class “warm and accepting” but this has not occurred by accident, rather it was due to her deliberate prepping of the whole class. Andrea communicated that she has had a lot of conversations with the class, especially before Gym class, to prepare the students for inclusion. Andrea commented that “inclusion is an ongoing lesson”.

Andrea has a Bachelor of Arts degree, a Bachelor of Education degree (within Canada) and was certified in 2006. She has no current Additional Qualifications at the present time. She has taught full time for 4 years in LTO positions. Andrea has returned (sept 2010) to University to complete her Masters in Education.

Materials

Pathognomonic-Interventionist (P-I) Interview

This interview, as it appeared in Stanovich & Jordan (1998), was used to determine teachers’ beliefs and reported practices about children who are “at-risk” of failure and who have exceptionalities. The researcher was able to determine what type of teacher the individual was based on their answers to the questions in the interview. A strength of the P-I interview is an interview that avoids the transparency of standard paper-and-pencil measures of attitude and belief. When asked to focus on specific students who have difficulty learning, teachers are able to explain in chronological sequence the steps they have taken over a school year, in the manner of

a narrative story (Engel, 1993). Teachers describe their recalled experiences, reporting their perceptions of the students' characteristics, the decisions they made, their intentions and reasons for doing so, and their judgments about the results, in relation to their understanding of their roles and responsibilities in meeting the needs of their students with exceptionalities. Engel (1993) describes the narrative interview as the collection of "origin myths", in which the narrator constructs concepts of self in relation to the society and culture in which he or she lives and acts. Engel notes that the retelling of myths is an act of insight, a reinterpretation of the past, reaffirmation of core values and beliefs (p. 792).

The interview was conducted as a narrative of the teachers' experiences over the previous school year with students with exceptionalities included in the class, and students with whom the teacher considered to be "at risk" of academic failure. By the end of the interview, five main topic areas were covered. Those five topics are as follows: 1. referral and assessment, 2. programming and adapting, 3. review and teacher monitoring, 4. communication with staff, 5. communication with parents (see appendix for an example of the P-I interview).

The Classroom Observation Checklist

The Classroom Observation Checklist, as it appeared in Stanovich & Jordan (1998), was used. The Classroom Observation Checklist is based on an amalgamation of two measures to identify effective inclusive teaching in general education classrooms; *The Classroom Observation Checklist* (Englert, 1984; Englert, Tarrant, & Mariage, 1992) for effective instructional practices and *The Classroom Climate Scale* (McIntosh et. al, 2005) for including children with special education needs in

the general classroom. The Classroom Observation Checklist is organized by 4 categories of teacher behaviours; classroom management, organization and management of instructional time, lesson presentation and seatwork management within 2 domains of classroom and instructional management. These four categories are based on Englert et. al (1992)'s work wherein it was found that effective teachers display all four categories in their classrooms. These findings are consistent with Berliner's work (2001) wherein he describes that expert teachers are more organized in their lesson planning, instruction, and classrooms. Stanovich and Jordan also added four items from the *Classroom Climate Scale*, developed by McIntosh et. Al. (1993) for observing special education students integrated in general education classrooms. This final 31 item checklist, therefore, includes the following four categories of teacher behaviour; 1. classroom management practices (8 items), 2. time management (8 items), 3. lesson presentation (11 items), and 4. adaptive instruction.

The researcher did not score the checklist, but used it as a way to help structure observations. In addition to the P-I interview and using the Classroom Observation Checklist as a guide, I took extensive field notes, jotting down any new positive teaching practices not identified on the above noted measures.

Procedure

After ethical consent was granted through the university and school boards, principals were contacted by research officers of the school boards and asked to post the call for participants in their schools. In addition, I met with interested principals to introduce myself and the research and to additionally obtain their verbal consent.

Principals posted the call for participants to their staff members. Teachers responded to the call by phone or email.

10 general education elementary teachers initially responded to the call. They all completed the first interview; the P-I Interview. The confidential interviews were conducted individually with teachers in a private room in the school, and took between 45 and 70 minutes in length. The interviews were digitally recorded, uploaded to a secure network at the university, in a locked office. Interviews were uploaded immediately after they were completed and were immediately erased off the digital recording equipment. Later, the P-I interviews were transcribed verbatim for scoring. The scoring system (described in analysis of this methods section) was applied to participants' statements in the transcripts to yield a numerical score of either 1, 2, or 3 for each of 20 criteria. The summed score reflects beliefs about the characteristics of exceptionality. The teachers' narratives were also coded by using a third-party coder on a three-point scale on each of 20 pairs of criteria as well.

Teachers who scored as "Interventionist", and agreed to observations, were then invited to participate in the observation component of the research. After the teachers agreed, the researcher observed their teaching practices in the classroom. Observations occurred at different times of the day, during different lessons, and at different points of the first and second term. All teachers had a minimum of 10 classroom observations for a duration of at least one full period (e.g. Language or Math). Teachers provided their schedules and the researcher dropped in to their classes when they were teaching core subjects (Math, Language or Social Science).

The classroom observation checklist was used as a guide to help the researcher with observations and fieldnotes. The checklist was used during the early observations, to help remind the researcher to look for specific practices, such as “prepares students for transitions” and “students are engaged for more than 90% of the time”, for example. After preliminary observations took place, the rest of data was in the form of extensive field notes. The researcher conducted “non-participant” observations and therefore was in no way participating in the class or teaching. The researcher remained at the back of the class during observations. The observation checklist has pre-established categories to help structure and organize the purpose of the observations. In addition, the researcher was also looking for potentially different practices and social interactions not included on the classroom observation checklist.

Observations continued until saturation of the data occurred: until no new data emerged at a particular school site. After saturation of the data, Interventionist teachers were interviewed a second time. They were asked specifically about the positive practices that were observed. Approximately 20 questions per teacher were asked, in a semi-structured interview format. Each interview was specific to the individual teacher and the questions differed depending on what was observed in the classroom. While devising the detailed and teacher specific follow-up interviews, the 4 guiding questions of the work were kept in mind. The 4 main and guiding questions of this work were as follows;

1. What are the elementary teacher’s current teaching practices for children with exceptionalities?
2. How did the GEN teacher learn these techniques (Tomlinson, 1999)?

3. How useful was preservice and other professional development in relation to classroom experiences of children with exceptionalities?
4. How would you describe your current school context (Wenger, 1998) in relation to instructing and including children with exceptionalities (probe: collaboration models, community of practice)?

Questions in the first round of follow up interviews were designed to discover how the teachers arrived at becoming Interventionist teachers. In other words, how did they develop the knowledge necessary to become Interventionist? It should also be noted that when asking teachers about the community of practice, question #4, the researcher was clear to ask (if applicable) what specific community created the Interventionist perspective (a former school community in the case of a transfer, etc., or the current school community, or none of the above).

By conducting follow-up interviews, the researcher noted that two teachers with Tribes training spoke about their principals and their positive relationships with them in terms of their explicit support for inclusive classroom practices. However, four teachers did not mention their principals. The researcher sought out the four remaining teachers for a second follow-up interview and they were asked five questions about their perceptions of their school community and culture as well as about the role of their current principals with respect to inclusion.

Second follow-up interviews with 4 specific Interventionist teachers were necessary in order to gain more data. Second follow-up interviews occurred in September 2010, via phone, in order to confirm any points which might have needed further clarification. The four specific teachers were asked the following questions:

1. How would you describe your principal's role with respect to inclusion in the school? (probe: leader, indifferent, not inclusive, not able to comment),
2. Do you believe your principal has helped you in your development of inclusive beliefs and/or practices? If so, how so?
3. How would you describe the school community or culture with regards to inclusion: a unified whole for the most part, or fragmented (meaning teachers vary from teacher to teacher)?
4. Are there any others in the school who have really contributed and helped you with any inclusive practices?
5. Do you have any further comments or is there anything else you wanted to add?

Analysis of data

In order to analyze the P-I Interview, Jordan and Stanovich (1998) outline key words and answers the researcher must look for when analysing the transcript. Coding of this interview occurs according to the *Interview Coding Form* devised by Jordan-Wilson and Silverman (1991) and used by Jordan et.al. (1993). There are 20 items to be coded on the coding form representing the five interview topic areas: 1. referral and assessment, 2. programming and adapting, 3. review and teacher monitoring, 4. communication with staff, 5. communication with parents. Each topic area was scored on a three-point scale with a score of 1 represented a Pathognomonic perspective, a score of 3 represented an Interventionist perspective, and a score of 2 indicated a Mixed perspective. If it were found that a teacher had a mixed perspective, the researcher would need to consider that that teacher was overall more Pathognomonic. Jordan and Stanovich (1998) replicated the findings of Jordan-Wilson and Silverman (1991) and found a large common factor running through the items. An estimate of internal consistency (Cronbach's alpha) was .89. The mean correlation between

components of the scale was .53. Prior to the development of this measure, there were no measures to determine teaching effectiveness regarding students with exceptionalities in the general education classroom. After interviews took place, teachers scheduled windows of observation times wherein the researcher could “drop in” and these occurred during core subjects; Math, Language and Social Studies. Each teacher had a minimum of 10 observations which lasted for a period of just over a month per teacher.

This qualitative study employed the “social anthropology” approach to analyzing data (Miles & Huberman, 1994). This approach permits detailed and rich descriptions across cases to emerge. Social anthropologists are interested in “individuals’ perspectives and interpretations of their world and in the behavioral regularities of everyday life, such as relationships” (Miles & Huberman, 1994). While the primary methodology used by social anthropologists is ethnography, “researchers in ecological psychology, narrative studies, and in a wide range of applied studies (education) often take this general line” (Miles & Huberman, 1994).

All interviews were transcribed verbatim and analyzed using constant comparative, single case, and cross case analysis. Starting with individual case studies, the researcher analyzed all data about each person individually before performing a cross case analysis. During cross case analysis, answers from the different individual cases were grouped to identify common questions or analyze different perspectives on central issues (Patton, 1994). The researcher looked for themes from which to build analytic categories conveying general education teachers’ perceptions about their situational teaching practices. The methods used were a)

studying interview data for themes, b) building analytical categories from teachers' perceptions of their situational teaching practices, and c) re-reading the personal accounts in order to gain perspective. The analysis resulted in in-depth descriptions and observations of effective practices that may be useful for informing future preservice preparation programs. Assuring trustworthiness of the data involved repeating observations and interviews until saturation occurred and no new information emerged (Lincoln & Guba, 1985).

In -depth comparison of the experiences of general education teachers, in relation to their preservice preparation in special education in Ontario, and other variables relating to their development ensued. In-depth comparison allowed the analysis of how the teacher developed inclusive beliefs and practices and how they felt their community of practice stood in relation to inclusion. Data was also able to determine how additional qualifications contributed to teachers' current level of confidence with teaching children with exceptionalities. This study allowed for triangulation of the data to occur, by searching for convergence of, or consistency among, evidence from multiple and varied data sources (participants: observations, and two to three interviews).

Establishing "Trustworthiness"

This research selected appropriate participants; Interventionist general education teachers in the elementary stream. The scoring of P-I transcripts was also independently completed by the thesis supervisor for inter-rater reliability. Using multiple sources reduces threats to validity, since the coding and emergence of themes is not biased by the single researcher who may desire to see hypothesized

themes emerge. The interview questions were reasonable because they built from previous work in the area, were clearly worded and not leading. The researcher demonstrated that adequate mechanisms to record and transcribe interviews were used (e.g. digital recording, transcribed verbatim, secured in a locked cabinet on campus).

CHAPTER 4

Results

The results section is structured by presenting the data using the overall questions in the research as a framework: Current Practices, Development of Practices, and Community of Practice. Themes, in the form of subcategories, are found within each of these three main areas.

Current Practices

In this section, the subcategories are as follows; Differentiating Instruction, Classroom and Behaviour Management, Consultation, and Teacher-Student Relationships.

Differentiating Instruction

Teachers used many ways of differentiating their instruction. Differentiated Instruction requires teachers to transform their practices from a program-based pedagogy to a student-based pedagogy. The term Differentiated Instruction (DI) refers to the way that teachers change their content (what the students are going to learn), process (the activities) and product (the accomplishment following a learning period) according to students' readiness, interests and learning profile (Ontario Ministry of Education, 2005).

Teachers who subscribe to DI attempt to adapt pedagogical interventions to the needs of each student, acknowledging that each student differs in interests, learning profile, and level of functioning. DI is not creating individual lesson plans

for each student, nor does it mean that students never work in a large group. Instead, it is a way of thinking about teaching and learning based on the understanding that because all students are different, classrooms need many options to facilitate student learning (Friend & Pope, 2005). DI may facilitate high levels of both student engagement and student achievement (Ontario Ministry of Education, 2005).

First, examples of teachers in this research who changed their content, process, and product will be provided. Teachers made modifications, used assistive technology, and provided accommodations to students. The purpose of DI is to engage students in different ways, so that learning may occur.

An example of a teacher who made changes to his classroom in content, process, and product was Mike. We spoke about offering different types of texts to different groups of learners as some teachers report this strategy to work. That is, if the topic is introduction to poetry in Language, in a grade 6 class, then each group of 4 would be assigned to a different poem. The teacher may group some students with a difficult poem and group others with a less difficult poem, but they are all doing the same unit; introduction to poetry. Mike explained that assigning differing poems to groups allows for students of varying abilities to participate in the same unit.

Similarly, Jessica was observed using this type of lesson in her class. She started out with her hook, by first playing a song for students and she also provided students with the typed out lyrics of the song in duo tangs. The song linked to the previous social studies unit on recycling and the environment. The song was played on the Smartboard, so the students could watch the singer playing the guitar, read the lyrics, or read and sing along. Then, after the song, she asked the class a question: how is a

poem like a song?. Discussion ensued, and a Venn Diagram), linking songs to poetry, was placed on the board. Students would provide answers and she would take notes as the students gave her the answers and drew parallels. Then, pre-selected and deliberate groups of 4-5 would be assigned to their station, which contained a poem and questions. In this case, the poem was the same, but the questions differed. Group 1 would go to station 1, Group 2 would go to station 2, for example. At each station was a poem with questions for the group. Group 1 had to answer content questions about the poem. For example: 1. how many characters are in the poem?; 2. what occurred between character 1 and 2. Group 2, however, had to answer slightly more difficult content questions and some additional structural questions about the poem. For example: 1 what is the relevance of the title of this poem?; 2. Does this poem use onomatopoeia- if so, where and how do you know?. Group 3, for example, had to answer difficult content, as well as structural questions, and then they had to create their own poem. Thus, the three groups were pre-established and formed based on Jessica's previous assessments of her students. She had some students who would finish way ahead of the class, and they would need to be placed in group 3, as group 3 questions would be challenging enough for them and include an extra activity to complete. Group 1 would be for the struggling learners, Group 2 would be for grade level, and Group 3 would be for above grade level students. Jessica's lessons were well planned out, as they involved pre-planning in terms of thinking about her students' needs and ranging abilities. Her lessons were also engaging and interactive. More importantly, her lessons allowed for multiple grouping strategies, visual cues and visual maps, as well as auditory components. They incorporated music,

movement, and a variety of media to communicate key concepts. Jessica asked questions across a variety of levels, ensuring to call on all students and she asked students based on their learning level. When following up with Jessica about such a lesson, she indicated ‘I always keep my lessons moving, with a minimum of at least 3 different activities occurring, because if they stagnate, it’s boring for everyone and I noticed that when students are bored, behaviour occurs’.

Another example of differentiating was shared by Mike. He shared that where he usually modifies is in the level of his questioning, as opposed to the type or difficulty of the text. He explains an example of a modification the researcher observed in his class below. In this example, the change occurs in the questions asked for homework (e.g. which is an example of differentiating product) about the reading and not changing the actual text itself (e.g. an example of differentiating content).

Mike explains:

So, for example, we might ask (non-modified program) “What was the relationship between character 1 and character 2, explain the difficulties?” To modify that question you could ask “Why was it hard for character 1 and character 2 to be together?” So, what you are doing is you’re using kind of similar language, but you’re changing the expectation for that student, so I’m not expecting that student to write 10 pages on it, I might be expecting a paragraph. And I might be expecting them to only do 2 questions or to have 2 thoughts about it. Generally, when you’re modifying a program, you’re changing the expectations above grade level or below grade level and you’re changing the work as well.

In order to know how to differentiate, all teachers stressed the importance of getting to know their students’ learning preferences. An example is found in Joe’s class. Early on in the school year, Joe sends out “getting to know you” sheets that he created. There is a sheet for the student, as well as a sheet for the parents. As the teacher pointed out, “The student one asks ‘how do you think you learn?’, ‘what

discourages you?', 'what encourages you?', 'what are your fears?', 'what are your strengths?' just kind of questions like that, rather than 'what is your favourite subject?' and 'what do you like?' Through this getting to know you sheet, Joe claimed this helped him to know what strategies to use with his students with exceptionalities, such as scribing for certain students who may have difficulty writing to get them started, or providing students with a print out of the lesson in an outline form. An outline of the lesson was found to be helpful for the student who was very visual and he was better able to follow along with the class.

Similarly, Mike indicated that it is important to first consider the individual needs of all of his students. He taught a split grade 5/6 class, so he needed to think about different levels or abilities co-occurring before assigning in-class seat work. In Math, for example, he gave out the same worksheet to everyone in the class. One of his students, on an IEP for Math, was only assigned the first 5 questions, whereas the rest of the class had to complete 25. In the follow up interview, he was asked about this practice, and he explained:

For a student who is accommodated, the expectations are just the same as for any other student. But what you are doing is you are allowing some extra accommodations, so whether that's less work, extra time, a certain space...you know that 25 questions of that kind of math will cause that student anxiety and he will not feel positive in the class.

After the students were all seated and began completing seatwork, Mike casually went around the room to monitor their seatwork. He discretely made a small mark, in pencil, beside the questions this student was to complete and then he quickly moved on to checking the entire room. Therefore, he did not single this student out or disrupt the rest of the class with his accommodation.

Janice was an example of a teacher who used accommodations for her student with multiple exceptionalities. Janice accommodated her student on his Math test. She stated:

We just did a Math test with the adding and subtracting of decimals with quite complex multi-step word problems, and I didn't ask him (student on IEP for Language) to do the word problems. Mostly with him its about focusing on the computation skills because his reading skills are so far behind, he can't focus on the Math within the question, so I just have him do the computation. He can add, he can subtract, he can multiply and he can divide. He can do it at the grade 6 level, but it's just that he can't do the word problems, so I'm okay with him doing just the computation because I know that he has mastered those concepts and he has demonstrated he knows the answers. If we have him complete the word problems, he will be so distracted by the language that he will lose out on demonstrating that he knows the Math part. Without such an accommodation, his Math might appear to be more of a grade 4 level when, truly, he's at a grade 6 level.

Janice spoke informally about the concept of fairness and sameness, as did other teachers such as Mike, Jessica, and Andrea. They spoke about how other teachers or parents sometimes had difficulties with the ideas of accommodations and modifications because they viewed it as an unfair advantage the child with exceptionalities receives. The notion that students are people first, they're not all the same, and teachers shouldn't think that they must treat all students the same is a notion the above noted teachers shared.

In addition, teachers used assistive technology in their classrooms. Some teachers were required to have specific technology because the individual child was on an IEP and received funding for the technology: they were therefore expected to provide accommodations to these particular students. Others incorporated technology in the classroom on an ongoing basis because they found it increased the appeal of their lessons. Whether it was online version of textbooks, FM system for a student

with hearing difficulties, or Dragon Naturally Speaking, for example, teachers knew what the technology was for, how it applied to each individual student, and how to use it themselves. Teachers understood that the technology is an assistive device, meant to help level out the playing field, rather than thinking it was an unfair advantage that the child had over others.

While observing Joe's class, it was noticed there were several computers located at the back of the classroom. This was set up as a computer station for the whole class, and often Joe would remind his students about this. There was also a computer that was deliberately set up with several assistive technology programs installed for a specific student who needed the programs.

Joe explained:

I try, and I hope other teachers try, to use differentiated instruction, so that there may be many different options or choices going on for a lesson, so computers would be always one of those options, so it's not so black and white, so 'you're (student with disability) going to the back now', but rather having conversations with students prior to let them know they can all use the computer for this component, so that it does not become just student A (child on IEP) who is going to the back to start working.

He differentiated his lessons so that an activity on the computer is always one of the choices for completing in-class work. He also indicated that most students want to be on the computer and are comfortable with it because they have so much technology at home, so notions of worrying about the child being singled out by assistive technology are becoming obsolete. In fact, Joe reported the opposite was the case, students preferred to use the computer.

Students had opportunities to learn essential competencies by exploring their own interests, which is an indicator of a classroom that has differentiated instructional

content (Bursuck & Pope, 2005). Joe often made his instructional content interesting, engaging, what has been referred to as a hook. He stated “get to know your kids, what is going on in their lives, and then make that connection in your lessons...you can see them actually sit up right away when connections are made...they are thinking: wait, that relates to that? Sports or family relates to what I am learning in school!”

According to Joe, especially with his at-risk students, he found they did not view school as something useful or relevant. Sadly, he has had some students ask him “why do we need school when we can just look up the answers to anything we need on the internet? Joe indicated that he knows some of it comes with their age (Grade 8), but he found at his school that there was a predominant attitude to disengage, that school is unimportant, and that they know it all. Joe expressed that he felt he constantly needed to bring them back into the lesson. Joe admitted, “for novel study, I deliberately pick texts that relate because they won’t read them if the texts are not relating to their lives.. I have some students who live with their grandparents, others who have family members in the army, and this influenced my choices in their reading materials”. Similarly, on the topic of students’ interests and giving students choices for what they want to focus on or learn, Mike indicated:

When I teach Math or Language, I’ll try to bring in topics that are interesting to them, so I’ll tie in video games or hockey or I’ll put a twist to it. Or, you get them to do a project that they are going to enjoy doing, rather than me just getting up and reading from a text book, for example. We did an activity on planets and the kids were engaged in it because they owned it, they wanted to research their planet because I didn’t say to them, okay, you’re going to do an Earth unit, rather we had a class vote on three possible areas of focus and Earth won. Then, they were allowed to pick the planet of their choice. Who wants to do something that someone has told you to do? I’m trying to teach them how to go out on their own and find information about a topic or research a topic, which is part of the grade 5/6 curriculum. So, I try to give them as many options as I can so that they can choose and feel like it was

theirs and I've found when they own it, they learn it. When they don't own it, it's just information that goes in one ear and out the other. I think, as a teacher, I need to come up with activities, assignments or educational games that I know they are going to learn because when they go off to high school one day or college or university, I want them to remember that not only did they have fun in my class, but also that they learned about themselves and what they enjoy to learn and also that they learned how to learn.

The same was true for Maria's student, who had multiple exceptionalities relating to emotional behavioural disorders. Maria noticed her student would be calm and engaged when instructional tasks and assignments were related to art, artists' lives, and their artwork, such as paintings.. Therefore, this theme was used in order to entice the student to learn underlying skills such as: how to research a topic, how to write a report on the topic, and how to present the topic to the rest of the class. While other students presented a report on native tribes, this one student was allowed to present a report on a Canadian artist.

Janice reported the same approach to work for her student who was deaf and had a LD. Janice said:

He has been one of the trickiest students I've ever taught in my teaching career, but I'm getting to know him better as time progresses, so when he's interested in something, he's on fire. He did the most amazing social studies project he completed the poster, the model, and the written part. He had the entire thing in his head and he just stood up and presented it all very well to the class. I was impressed. He was engaged in the task and he was allowed to use the computer for the written part, and so I know that he can become engaged and he can interact nicely with everyone when he's interested. I know he can do it, because he has shown us he can.

The Learning Environment, or the use of space, for example, is also important in a Differentiated Classroom (Friend & Pope, 2005). Janice, Maria, and Jessica had the use of desk carrels for students who needed privacy as they worked. The

researcher observed students in the above classes making use of the carrels. Jessica additionally had a private work area, free of distractions, which she named “Concentration Corner” in addition to carrels. In all classes, classroom furniture was used flexibly and seating plans were often frequently changed. According to Jessica:

I’ve never had my kids in rows and it’s always been in groupings. They work in groups, they learn in groups, and you have to get the students working in pairs as well as in 3’s, 4’s 5’s and 6’s. And then, as a whole group as well. It is important for them to learn from each other.

Jessica believed this because “in the real world, people often work in groups and they work collaboratively, rather than always sitting in rows and talking to the back of someone’s head”. Jessica and Andrea discussed the importance of changing the grouping from “Think, Pair, Share” activities to smaller groups and then back to whole group instruction, as it gave students the opportunity to learn from each other. They believed this was important because they wanted students to learn to collaborate, which they will have to do in the working world, but also to avoid them having to rely solely on the teacher with every question or concern. Additionally, both Jessica and Andrea wanted their students to work with all students in the class, and not always their preferred peer group. Jessica and Andrea would therefore change groups often. Andrea explained that she liked to change the make up of their groups or “pods” “every 4 weeks because I want students to learn the skill of having to put differences aside and work together”.

In summary, there were many ways of differentiating one’s instruction by changing the content, process, product and the learning environment. In the area of content, teachers used reading materials at varying levels (e.g. Mike and Jessica in poetry), they also presented ideas through both auditory and visual means (e.g. Jessica

and Joe). Further, teachers used various grouping for students who were struggling in language and also for students who were advanced and needed their thinking extended (e.g. Jessica, Mike). In the area of process, teachers used tiered activities through which all learners worked with the same important understandings and skills, but proceeded at different levels of challenge (e.g. Mike, Jessica). In the area of product, teachers gave students options of how to express required learning by presenting on a topic of interest (e.g. Janice, Maria). In terms of altering the learning environment, teachers provided quiet places for students to work without distraction (e.g. Janice, Jessica, and Maria) and places that invited student collaboration. Lastly, they provided materials that reflected a variety of cultures and home settings (e.g. Joe, Mike, Maria, Janice, Jessica).

Classroom and Behaviour Management

All teachers in this research held in common a system of classroom management that was successful. While teachers may have used different named programs, or combinations of individual strategies they have learned over time, they all demonstrated the following: clearly posted and communicated behavioural expectations, consistent rewards and consequences, flexibility to change their systems, and attention to details that influenced the management of their classrooms (e.g. seating arrangements, “withitness”, preparing students for transitions).

All teachers had clearly stated or named reward systems posted on their walls which served as visual reminders of appropriate class and school behaviour. In some classes, such as in Andrea, Maria, Jessica, and Janice, for example, there were named reward systems in place. Whether it was termed the “buck award

system” (Andrea), or “point systems” (Maria, Janice) or “stars,” (Jessica), students would be rewarded for good behaviour through such points or stars. Once students accumulated enough points or stars, then they could purchase a prize or have a movie or pizza lunch, for example. Regardless of what type of behaviour reward system was in place, it was clearly defined and well explained and students knew what was expected of them. Further, it was consistently followed and rewards given to those who deserved it and consequences were allocated fairly to the individual student(s) who may have caused the problem, rather than the entire class.

Similarly, teachers were ready to be flexible to change the reward system in place if it did not work. Maria, for example, was using a general point system for the entire class as well as a “reward incentive checklist” for her student with EBD and mental illness. For her student with EBD, using the checklist, he was originally expected to obtain a total of 15 checkmarks a day for good behaviour and then he would be rewarded with extra time on the computer. The problem, however, was that the student never achieved 15 checkmarks because his behaviour was so severe: to listen for one entire class might be an example of a good day for this student. The teacher soon realized this checklist, which she had learned from another teacher and student, was not working for her particular student: not only was it too time consuming for her to monitor, her student never met his expectations in this way, as they were simply too difficult for him. It became counter-productive, almost cruel, and he never was rewarded. She quickly realized that she had to change her system by rewarding the student more frequently, and that meant finding a way for him to be successful behaviourally, so he could be rewarded. She reduced the amount of good

behaviour down to instructional tasks within a period, for example. “If you do not shout out, and work quietly at your desk during Language Arts (morning), then you will have extra computer time at lunch” This behavioural goal was attainable, broken down into something manageable. Right after she set this goal with him, he demonstrated good behaviour in the given class. She has since tried negotiating with him for rewards that he values. In particular, she noticed he is passionate for building objects, such as models of bridges, so he is allowed to work for 10 minutes on the object at the beginning of social studies class in exchange for working on social studies after the 10 minutes ended. For this particular student, this technique, of having a verbal agreement, and constant goal setting and reminders has been working well. What was admirable about this teacher was her ability to see, quickly, that it was not working and be willing to admit it, move on, and try something new.

Mike, on the other hand, believed in fair and constant rewards for those who were deserving of them. He was not opposed, for example, to pay for pizza for the students once a month because it was a promised reward and they deserved it. Andrea followed a similar approach of rewarding and praise. Andrea said:

A management strategy learned in teacher’s college (preservice), was to praise rather than punish. So, rather than coming down on students for not getting started on their work, I go around and give bonus points to those who have started on their work, and then usually, you get a student who sees that and says ‘oh, I can do that too’ and then all of a sudden, they’re doing exactly what you want them to do.

For Andrea, rewarding good behaviour is used as the model for the other students in the class. In Jessica’s class, she used many systems. She used the stars for individual groups or pods, and she also used a chart for the class overall. Andrea explained:

It's a classroom management sort of thing, so each student has a card: a green, yellow, blue, and red. Green means that you are making great choices, yellow is a warning, blue means you are in for recess and a note goes home, so a morning or an afternoon recess, and a red means a phone call home and they'll have to maybe talk to the principal or something like that. If you are getting a blue or a red, then you are making very poor choices. One thing about the cards is that it does show everyone how you are behaving today, so I don't have a problem with that. If they don't do well in the morning and the whole day shows a blue card, well, so be it, you know? Also, I never physically change the card, the students do because they are the ones acting out, not I, so they have to take responsibility for their actions. I will tell the student, 'okay, Johnny, you have had a warning and have been yellow, but now you're in blue, so please change your card. Johnny would go to the front of the class, where all students' cards are situated, and change his card. Each student has their own pocket and the remaining cards are in the pocket. They would simply change the colour to the front of the pocket. I like the chart because they will receive warnings and they are aware of their escalating behaviour. Every day, however, is a new day and the entire class is changed to Green.

In addition to the points system, the chart of behaviour, Andrea also had an additional behaviour chart for students on an IEP for behaviour that she had stapled into their planners so that parents could also have a sense of how the day went..

Andrea used terminology and phrases familiar to students to assist and remind them with tasks such as "park your pencils, park your markers" (pay attention or look up at the front of the class), or "get your engines running" (begin working, or time for transition), for example. Andrea commented further

So, I think of classroom management as a proactive approach and I've done a lot of things to be proactive, rather than always dealing with their behaviour. I find that if they are being rowdy, then I always stop the entire class and say "what should it look like, what should it sound like?" (a phrase they are familiar with) and then they've all had a warning and then if they are not working, then they can automatically change their card because sometimes they need an extra reminder.

Andrea believed in using multiple approaches to form an overall proactive approach

so that “I calm it down before it escalates”.

In addition to teachers having clearly posted behavioural expectations in their rooms, some teachers followed a specific framework or named program, such as Tribes. A part of Tribes is “The 4 Agreements”, by which students have to abide. In Mike Joe, and Maria’s class, they would be posted on the wall. The 4 Agreements are as follows: (1) Attentive Listening, (2) Appreciation/No put downs, (3) Right to Pass, (4) Mutual Respect. There is the possibility that the some teachers may divide up the 2nd Agreement and they might call it the ‘5 Tribes Agreements’ in their class. Teachers in this study used either 4 or 5 agreements. The agreements would be followed through by the teacher. For further information about Tribes and the way the program works, one may wish to consult one of the books written by Jeanne Gibbs (2001); Tribes: A New Way of Learning and Being Together.

In Joe’s Tribe’s class, he also borrowed aspects from Fred Jones’ program. One strategy he used from Fred Jones was assigning responsibility to the child who acts out. Janice liked to assign extra responsibilities to one girl in her class for the same reason: some examples of assigning responsibility to this student would be for her to act as a peer mentor to the lower grades or clean the blackboard, something the student enjoyed and would ask for on a regular basis. Maria adopted foundational principles she learned from additional psychology courses they took, such as “planned ignorance”, whereby the teacher ignores minor behaviour issues of a student with a behavioural disorder. By ignoring the student, the student is no longer gaining the anticipated reaction out of the teacher and the behaviour is no longer working to irritate the teacher, or take some control or time away from her class. Additionally,

Andrea also expressed that she sometimes used planned ignorance because “you have to choose your battles...If 2 kids are whispering to themselves for a brief moment, is it worth it for me to disrupt 30 kids for that brief moment, resulting in 32 children being disrupted, or is it better to pretend to not notice, and it dissipates? My class has a very hard time settling down to begin with, especially when they come in from lunch or recess.

Maria posted what she termed “Classroom Behaviour Rules”, which were very close to the 4 Agreements of Tribes. Therefore, teachers adopted similar strategies in their classes to help them successfully manage their students.

Teachers were very cognizant of their seating arrangements and where all students would be deliberately placed. Similarly, they would also be aware of when it was time for a change in seating arrangements. All teachers in the study were observed changing their seating arrangements on a regular basis. The researcher probed about this observation and the cumulative answer was that the students become accustomed to being with those around them and this could be detrimental for several reasons; 1) they become too comfortable with one another and do not attempt to socialize with others, or 2) they may be influenced by those they are sitting near that it interferes with their learning, A constant change of seating was seen as “healthy” by the teachers in this study.

There was particular attention to the seating arrangements of students with specific exceptionalities as well. It depended on the child, but if the child had difficulty hearing, then he or she would be placed at the front near the board or at the back near the hearing system. If the child had EBD and other students would set

them off, then they would deliberately be placed away from those students: which was evident in Maria's class. Some students needed to be at the front so they are not disrupted by all of the students in front of them as visual distractions. Or, other students needed to be at the back in case they needed more breaks or chances to move around and access their assistive technology. Teachers constructed their seating arrangements and classroom set ups carefully, with special attention to the details of their students and also paying attention to how they interacted as a group. During informal conversation with a teacher during an observation, the researcher wrote down that he said this was one of the most challenging groups of his entire teaching career. When probed about this, he confirmed and explained:

I've never had a mix of varying levels of achievement as well as levels of need, so attention need, emotional need, educational need and all in one group and also how they played off each other. We had 2 different age groups in here and we had a lot of different maturity levels, so it was challenging...I have 4 or 5 who could be the one to set it off for the group.

It became evident that teachers exhibited shared behavioural strategies for the successful management of their classes. For example, teachers tended to display a high level of "withitness", and when asked about this "withitness", teachers confirmed. Maria explains: "yes, I'm so aware of what is constantly occurring in my class, sometimes it is too much and perhaps I need not notice every single detail (laugh)".

Another teacher strategy for proactive behaviour management was preparing their students for transitions. Mike might say:

Okay, so, what we are going to do, listen please, after we complete our math, is put our math texts and workbooks in our desks. Then, we will push in our chairs, quietly, go down the hall to French, the way we practiced yesterday, and then wait for Madame to start talking.

And there would be many conversations to the class in this style before or after any type of change. Even though this was a grade 5/6 class, students still needed help with transitions to help direct them to what they would be doing next. Another strategy that many teachers seemed to possess was being very flexible. In addition, teachers were patient in understanding that it takes time to 'get to know' the student and what works for them in terms of classroom management. What may work for one student, will not work for another, or what is seen as a 'reward' by one student, may be viewed as 'punishment' by another (i.e. board washing).

In summary, Interventionist teachers used reward incentives in various forms; "stars" (Jessica, Maria), "buck award system" (Andrea), or a general "points system" (Janice) to assist them with their classroom and behaviour management. Once students individually and in groups accumulated enough points, they were rewarded by having a movie period, extra time on computers, a pizza lunch, or actual prizes provided by the teacher. Having rewards worked well for teachers and students in this research. Two other teachers used Tribes (Mike, Joe) in their classrooms and a large component of this approach is setting a tone for a way of being in the classroom and therefore influences classroom and behaviour management. In this approach, clear expectations were set from the first day of class and the class was defined as a Tribe, or a community. Behaviour was modeled, practiced, and students were reminded (by having the 4 Agreements posted in the class) of expectations. When those expectations were broken, students had to address their behaviour by examples provided to teachers in the Tribes booklets. Mike and Joe also rewarded their students with similar rewards as the other teachers, but it wasn't given a name and it wasn't an

overt point system such as “buck awards”, for example. In addition to reward incentives, or a way of being in the classroom, it was clear teachers possessed a great deal of “withitness” and attention to details that would largely affect the class behaviourally, such as seating arrangements, preparing students for transitions.

Consultation

Teachers in the study were found to consult an array of sources to help them understand how their students will best learn. Teachers reported not wanting to allow negative biases of others to influence their current decisions about the child with exceptionalities. The information they found most useful was that in the IEP. Teachers consulted with sources that ranged from internal sources (e.g. child, IEP, parents, and professionals in the school) to external sources (board teachers, community agencies) regarding their students with exceptionalities.

Some teachers would consult with the child. It may be as simple as asking the child what he/she can do for them or what they find helps them to learn. It may be having follow-up conversations with the child before or after classes, for example, in order to get feedback on the child’s perception of what worked and what did not. Joe used a more formal approach to assess the child’s perception of what he or she is learning; he uses “Stop, Start, and Continue” (child fills in what they would like teacher to stop, start and continue doing) sheets with his class. When following up with him about why he used these sheets, he indicated:

I do that with them all the time. And I also ask them, you know, What do you think? How is this going for you? And just that ongoing, honest reflection with the kids.

Similarly, Mike reported having constant follow-up conversations with his students, especially students he knew were struggling in a given subject, whether they were on an IEP or not.

Teachers would consult documents that related directly to the individual child and his or her need: they found that IEPs were definitely helpful and they consulted with the child's IEP because it indicated specific facts about the individual child and his/hers learning needs. For example, one child may need chunking and breaking down ideas into manageable pieces. Jessica commented that the IEP tells you things there is no way you would know from just working with the child on your own, such as her student's dual diagnosis of being "gifted and LD".

Teachers would have frequent contact with parents via agenda book communication, phone calls, and meetings. In one school, parents were directly involved in their student's learning due to a program that has parents come in and help the teacher teach the class. In a follow up with teachers who have this system in place, they reported this experience to be positive and they find the children respond well, behaviourally, to having their parents and other students' parents assisting the class.

Other teachers consulted with sources within their school community, such as Educational Assistants (EAs). Teachers stressed the importance of developing a positive relationship with support staff because this ultimately benefits the children. Mike described being thankful for having EA support and regarding his relationship with his EAs over the years:

I had a wonderful relationship with all of my EAs and I have to treat them in the same way I would treat the students and myself because they are teachers

and they have gifts and talents and they don't happen to have the piece of paper that says they are a teacher, but there are some wonderful people that are there to help assist the classroom and the student and I think that is one of the biggest things is that a lot of teachers don't have a good relationship with EAs and they treat them as below them and as far as I'm concerned, I treat them like they are like me or higher because without their help, I'd be lost and I think you need to have that relationship with them too.

Mike was very passionate about this subject and noted that teachers "need" to have good relationships with EAs for a) learning of strategies and ways of helping the child and also b) for survival. In other words, this relationship is to work like a team to best help the child and the teacher and vice versa.

Other teachers commented that they do not consult anything online about the diagnosis of the child, or conduct their own type of research: rather they always consulted with the specialist or resource teacher. For Jessica, she had a student with two exceptionalities; Gifted/LD and she would value the advice and guidance the Itinerant gifted teacher would give her, noting

she's pretty amazing, she has so many years of experience working with these kids, so I listen to what she says, not the internet and/or other sources...she knows the child I'm teaching directly and I find her advice the most meaningful and helpful.

This teacher told me that she thinks it is dangerous when teachers read too much about a specific diagnosis and try to assess the child and take on roles that are out of their professional training and jurisdiction. She always made use of the resource teachers in her school and valued their expertise and tried to learn from them.

Teachers in the study also consult with sources external to their school. Some consulted with specialist teachers at the school board. One teacher had a low class in Math and she would take her entire class to the Math specialist at the board office on Fridays, for example. They reported consulting with external agencies meant to deal

with the specific disability. Thus, if their student has mental illness or autism, for example, they would consult agencies that were trained specifically to support children with mental illness or autism. They would consult with these agencies for support, strategies, and/or any other ideas. In some cases, the family may have the child already involved with the agency, and the agency may come into the classroom for assessments and support on occasion.

Teacher-Student Relationship

All teachers stressed the importance of relationship building at school for their students. Teachers discussed the ways they tried to build a positive relationship with their students and the reasons why they feel relationships are important. Ways to build a relationship involved the demonstration of care, giving students a voice, holding and communicating high expectations of all students, and having a sense of humour.

Teachers spoke about the importance of “showing the students you care.” Some examples of how teachers might demonstrate a caring attitude are by showcasing the work students have completed around the classroom, or even in the hall for the other classes to see. One teacher has a table that sits in the junior hallway and as different assignments are completed, the work gets put on display. Some examples of work that were placed on the table might be an example of art work or essay writing.

Another way to demonstrate care was to designate special place as the ‘showcase wall’ within the classroom. Students’ personal stories and pictures would be placed here and remain here for a good portion of the school year. This would

always be a wall where the children could share things and no assignments or graded work was ever to go on this wall. This wall was similar to a show and tell wall and a great opportunity for children to show their talents they have outside of the school as well.

When following up with teachers about developing a caring relationship, for example, their reasons for doing so were different. One teacher indicated that they 'had' to show different examples of work levels, so that kids would be able to see the difference between level 1, 2, and 3 from which to model future work. One teacher commented:

teachers who show they care get more out of their students...they will produce more work for you.

Maria commented that if students feel they can trust you, and if you care, then they will work harder for you. Another teacher, when asked about how he develops relationships with his students with exceptionalities stated:

Well, I think you have to develop a relationship with a student with special needs in the same way you would develop a relationship with the so called "regular" student or whatever and I don't like using that term, only because every student, in my eyes, is a special student and every student in my classroom has emotional problems or has something going on at home, you know.

In addition, teachers indicated that students with exceptionalities are "people first" and you have to get to know them to develop a relationship, just as the same way you would get to know any person; by having conversations with people and finding out who they are, what makes them tick, and what motivates them to feel positive.

Teachers wanted their relationships with their students not to be one-sided, or heavily teacher led. One way of building relationships with students was to let them

have a voice in the class. Teachers commented that they weren't always sure where these students come from, and/or what is going on at home. Mike said that "I have the feeling some of these kids aren't allowed to have a voice at home, so I would like to give them this opportunity in our class." Joe reported a similar feeling about his students as well.

Maria also wanted to address the issue of student voice in her class because she noticed students didn't have one and tended to not demonstrate their opinions, or not have the confidence to speak up and comment on their opinion in front of the class. For Maria, she wanted to teach students to learn to have an opinion and care about broader social issues occurring in the community (i.e. the new factory built in their area which makes war equipment: on the one hand, the factory creates jobs for their families, but on the other, it is creating things that help perpetuate war). When the researcher followed up with Maria about this, she said she wanted to teach them to have an opinion and practice "sticking up for a viewpoint, so that one day they will be able to stick up for themselves".

Teachers held high expectations of their students, both academically and socially, while at school. Teachers felt that everyone was expected to work as hard as they could and put forth their best effort while at school. This didn't mean that every child was expected to be an A student, but that each student was expected to work and behave appropriately. Mike pointed out that he had high expectations of his students because he felt a part of his job was that of a role model and that his high expectations equate with positive behaviour and habits he hoped to develop in his students. Similarly, Joe said:

like it or not, as a teacher, you do have a hand in shaping how they will turn out one day...having high expectations shows them that you care about them and that you believe they can act appropriately and achieve as well.

Teachers had a sense of humor in their daily practices. Some teachers integrated their sense of humour throughout the lesson, making the kids laugh and lighten up. Other teachers used their sense of humour when correcting minor behaviour. In a grade 8 class, Joe noticed two people were talking and taking a long time to return to their desks, so he said “um, excuse me, BFFs (best friends forever), can you return to our class now?”. The kids laughed and the girls said “sorry” and quickly returned to their desks. This teacher got to know that those two girls were best friends, and also that they would be okay with this humour, and he used it sparingly. When following up with him, he laughed and said, “classroom management doesn’t have to be mean and strict”. Mike said “It is a long year and if you have a sense of humour, it makes everyone’s day a bit nicer.”

In conclusion regarding the importance of teacher-student relationships and relationships in general, Mike stated: “It’s all about relationships.” Further, according to Joe, “While it is grade 8, it isn’t just about getting an education, we are also shaping people”. Teachers believed that school is a place for all students to socialize, make friends, learn people skills, learn to work in a group (as in former examples, i.e. Tribes), try out different activities, and find out what you enjoy and want to do in life. It isn’t strictly about academics. Teachers in this study realized this and wanted their students to feel a sense of “success” at school, so they will remain in it and continue to develop their social skills in addition to academic skills. Teachers commented that it is important for their students to make friends while they were at school and would

often talk about this regarding their students with exceptionalities and how happy they were that their students with IEPs were participating in the general education classroom and being successful socially. According to Andrea,

“Oh yes, Jamie has a ton of friends here, and he gets invited to birthday parties and non-structured extracurricular events with the other boys in this classroom...he’s no different, socially, than the other kids and they’ve truly accepted him and I would say he’s popular. In fact, if you saw them playing and interacting socially, you would no idea about Jamie’s learning difficulties and so this is a constant positive and something I keep telling myself is the reason he should remain in this class.”

In summary regarding the Current Practices section of Results, it remains evident that Interventionist teachers were differentiating their instruction by changing the content, process, and product and they achieved this in creative ways specific to their students’ needs. It was clear through the detailed examples provided that there were multiple ways teachers differentiated when they taught. Mike differentiated his content through modifications, such as altering the level of his questioning. Mike and Joe differentiated their process by using assistive technology as part of their instruction to engage students learning preferences. Mike differentiated his product by accommodating students in terms of amount of workload in Math.

In addition to Differentiating Instruction, Interventionist teachers in this research led very well-managed classrooms wherein clearly laid out expectations, routines, rewards and consequences were the norm. Joe and Mike abided by a specific program named Tribes, while Andrea, Jessica, Janice and Maria adhered to similar expectations for behaviour without labeling it Tribes. In addition, Joe liked to use some principles of Fred Jones in his classroom, but not all of it. The importance of this section is that classroom and behaviour management was a non-issue. This

type of management was said to be due to much practice at the start of the school year, when expectations and class routines about behaviour and morale are first clearly laid out, and communicated.

All teachers consulted what they believed to be professional and reputable sources. As Jessica's example reminded us, teachers did not attempt to find out information on their own about the disability diagnosis of the child (e.g. google search). All teachers consulted with what was readily accessible to them within their school; IEPs, EAs, resource, other teachers, the child with exceptionalities and his or hers parents. In addition, they sought external sources of support; agencies of a specific disability, and specialist teachers at the school board, for example.

Finally, teachers all reported on the importance of establishing a relationship with their students by showing students they care, allowing students to have a voice, holding high expectations of all of their students, and demonstrating a sense of humour in daily practices.

Development of Practices

Teachers were asked about the development of their specific practices. Teachers reported practices emerging from different named sources. In this next section, salient strategies reported in the previous section will be traced back to their reported origins. Subcategories in this section are as follows: Differentiating Instruction, Classroom and Behaviour Management, Consultation, and Teacher-Student Relationship.

Differentiating Instruction

There were many ways teachers differentiated instruction. When the researcher followed through with teachers about how they learned certain practices relating to differentiating, the answers varied according to the specific practice. This next section will outline the specific practices and where teachers both learned about them and how to apply them.

Mike made many Accommodations and Modifications. When asked where he learned how to make such accommodations and modifications, he responded:

It kind of comes from the Ministry. There's differences when you are doing the IEPs: there's modifications and accommodations and when you're modifying something you're changing it and you're giving them something completely different. I have students in here who are on modified programs and the programs are such that the expectations for the report card are completely different than a student who is accommodated. A student who is accommodated has the same expectations as any other "regular" student, but what you are doing is, you are allowing some extra accommodations. So, whether that is less work, extra time, or a certain work space.

Similarly, after asking the remainder of the teachers about where they learned of appropriate accommodations and/or modifications for a student, they would respond "it's Ministry driven" and would not want to take credit for knowledge of a technique or strategy that they felt was not entirely theirs.

As presented previously under question one of the framework, Joe incorporated assistive technology into his classroom on a regular basis. When the researcher asked him where he learned about the different types of assistive technology available to students and how to use it, he replied that his resource teacher helped him to learn different technology. In addition, he also learned through Board initiated workshops, and through professional development:

They (Board) taught us about Premier Tools, which is like a software component that helps with Microsoft Word, like reads things to the student and has word recognition.

He also commented that the resource teacher is valuable because she “took the initiative to purchase those things (Premier Tools) for our school and/or to seek out what is available.” In terms of learning how to differentiate in general, Joe reports “so, the board taught me, and also through looking at actual teaching manuals-it actually tells you how to differentiate (excited)”. Some of the teaching manuals he looked at were Nelson Mathematics, and the new Nelson Language and Science. Joe found the new Nelson Language and Science to be “excellent, and it had some ways of scaffolding and ways to differentiate for kids”.

In summary, it seems that Interventionist teachers using DI have primarily learned about it from the Ministry of Education. All teachers claimed the Ministry is primarily where they have learned about Differentiating Instruction. The case of Joe, however, illustrates that in addition to the Ministry, he has also learned specific examples through his resource teacher, professional development (in the case of learning about specific assistive technology programs for differentiating), and because he took the initiative to read through teaching manuals that accompany the assistive technology.

Classroom and Behaviour Management

In Current Practices section, the following teachers used reward incentives through point systems: Maria, Janice, Jessica, and Andrea. When the researcher followed up with them regarding where they learned to use point systems, they all

reported the primary source to be preservice preparation programs. In the case of Jessica and Andrea, Andrea used the “buck award system”, which Andrea learned from Jessica specifically, but the idea of using points to eventually reward students for good behaviour was originally learned in preservice.

Joe and Mike did not seem to use such overt point systems in their classrooms: they used Tribes. When following up with them about where they learned about Tribes, they reported that they belonged to schools that were Tribes schools. This meant that they had principals who mandated the entire school to be trained in Tribes level 1. Through professional development, Joe and Mike obtained their Tribes level 1 certification, which consisted of two full days of training in the program. Mike, however, drew a link between what was learned in his preservice preparation and what he later learned in Tribes. He felt the two were synonymous in terms of their general principles, but the difference was Tribes was labeled, packaged, or the name that was assigned to the foundational principles he already learned in his preservice preparation program outside of Canada. As Mike stated:

As I was going through the Tribes training 4 years ago, I kept thinking about how very similar it was to what I did in ----- (preservice program) but they didn't call it Tribes, it was just what you did in the class. When I was in teacher's college, it was part of the daily teaching and they didn't call it “Tribes”, they didn't call it anything, it was just called giving the kids a voice.

This teacher serves as a reminder of how concepts he learned in his preservice preparation program were similar to this program. The researcher wanted to know more about how he was linking preservice to Tribes, so the researcher probed this, and he commented:

Tribes is giving the child, or the student, the opportunity to learn from others before they learn from the teacher and to pull on resources that are around them and readily available, rather than just having the teacher do the talking all day long. So, the philosophy is that the student learns from others before they learn from the teacher and that they learn from doing rather than listening. And the other thing is that students are in groups and they face each other rather than looking at the back of the student's head. And, another thing we were taught (in preservice) is in the real world, people work in groups and collaboratively rather than sitting in rows and talking to the back of someone's head. They work in groups, they learn in groups, and you have to get the students working in pairs and you have to get them working in groups 2,3,4,5,6. And then, as a whole group, to give them a voice and for them to teach each other and learn from each other because it is important for them to learn how to learn from each other.

This quote demonstrates how Tribes is a way of being in the classroom and has multiple layers to its understanding and application. It is interesting to note this teacher's application of concepts and strategies taught in preservice to his current practices. Joe similarly defines his concept of Tribes; "Tribes focuses on that holistic community and continuing to have consistent messages of respect and listening and choices as well as a common mentality in the school". In Maria's class, she posted agreements very similar to the "4 Agreements" of Tribes, but she termed them "Rules". When the researcher asked her about where she learned to clearly post her behavioural expectations, she reported learning this from preservice preparation in Ontario.

Teachers were very aware of their set-up for classroom management.

When I asked them where they learned to do this, the response was from preservice preparation. In addition, in the Current Practices section, teachers who displayed "withitness," indicated that they felt it was something they naturally possessed and considered it to be part of their personality. Additionally, in Current Practices, Joe reported borrowing aspects of his classroom and behaviour management practices

from Fred Jones training. When following up with him about what exactly he used from Fred Jones, he reported he uses it to assist with his classroom and behaviour management in a year with 11 children on IEPs, he reported:

Fred Jones training is awesome. It holds students accountable. He uses differentiated instruction to help with classroom management. So, how do you take away the 'helpless handraiser?' So what do you do, what do you do? Well, he works with a gradual release of responsibility, so it's that we are to use less teacher-led teaching and more student-led teaching. So, basically, 'I do a lesson, here's your task and we'll come back'. Now what we want to be doing is 'I'm going to do less teaching and you are going to do more task', and it kind of works in a reverse triangle.

Joe indicated that Fred Jones is "something the board, I think a lot of the boards, are kind of working toward". He also commented that experience of getting to know the different types of students helped, as did observing other teachers and teaching styles. In addition to Fred Jones, Joe was trained in DI and part of a Tribes school. Therefore, as indicated in other sections of results, Joe has been trained in several professional development programs over his 6 year full time teaching career and uses combinations of techniques and strategies learned over time.

In closing of this section, the first pattern to emerge from teachers' responses was clear; they learned general classroom and behaviour management techniques first in preservice and were still using these learned strategies (eg. posting behaviour expectations, reward incentive programs) in their classrooms to date. It was interesting that all teachers were able to recall and retain what was taught to them in preservice and preservice education in the area of classroom and behaviour management. A secondary pattern was that teachers later took professional development courses to help them with classroom and behaviour management specifically for inclusion (Mike, Joe, and Maria), in the case of Mike and Joe, it

should not be forgotten that such PD was principal mandated. For Maria, she wanted strategies to help her with her students with EBD, but also had a pay grid incentive, and she was not mandated to take the psychology courses. Similarly, while mandated for Tribes level 1, Joe was not mandated to take Fred Jones and his DI training. Thus, while the principal does play an important role in influencing teachers' practices, Interventionist teachers in this research demonstrated a willingness and interest to seek out their own PD in addition to those mandated.

Teacher-Student Relationships

The examples in Current Practices illustrated that teachers believed it was important to develop a teacher-student relationship. It was important for teachers to show students: you care about them, they are allowed to have a voice, you have high expectations of them (academically and behaviourally), and you have a sense of humour in your lessons and interactions. When following up with teachers about where they learned they needed to develop relationships with their students, answers varied. Mike, Joe, and Maria all believed in all of the above examples: showing care, giving voice, having high expectations, and using humor in the classroom. Andrea believed in showing care, having high expectations, and a sense of humour, but she did not discuss the idea of voice. Jessica and Janice commented on having high expectations and a sense of humour as being important to developing the relationship, and they did not comment on giving students a voice. This section will look at where each practice, for those practicing, was learned.

Maria, Mike, and Joe would often talk about care and showing students care. Recall, Maria had a very strategic reason; that demonstration of a caring relationship

results in the student producing more work. This teacher took several additional psychology courses offered through her teacher's union. Therein, she learned many principles and strategies because this is what she found herself wanting as her time progressed as a professional teacher. One of the courses explained that if students feel that you care about them and if they feel they can trust you, they will work harder for you and produce more while they are at school. The union courses taught Maria concrete "strategies" and "things that work" as opposed to "more theories".

According to Maria:

it was just through those courses I learned a lot. (in the course) You look back to a lot of your own teaching practices over the last few years and you're like Ohhh, if I showed interest, or you know, got to their level, or asked about their family or home life or asked how they are doing, that personal connection, then it makes them want to be there, it makes them therefore produce more for you. That's what I found in one of the courses I took.

Her motivation for taking these courses was twofold; 1) they provided helpful strategies for classroom and behaviour management and teacher-student relationships, for example, and 2) they work like Additional Qualifications (AQ) courses provided by faculties of education, but they were reported to be more attractive due to the times they were offered. Maria stated:

I can go once a week, in the evenings, while I'm teaching...also, they work like Aqs because they help advance me up the pay grid.

In addition to practical and strategic reasons, Maria reported being surprised by the impact her practice of demonstrating care had on her students. In a conversation she had with her student on an IEP for Emotional and Behavioural Disorder, she realized the importance of showing you care:

He drew some Christmas pictures, not sure if you noticed, but he had one on the door (of the classroom), but it kind of fell off. And, letting him put it up.

Maybe a few years ago I might have been “oh that’s nice, you can take it home”, but letting him put it up shows him that I care. Then I remember once having a conversation with him once and he was doing something (annoying) and I was asking him to stop and then he asked “why do you care?” so when he realized that I did, he said “most teachers never did”.

Another teacher commented on a different reason for developing a good relationship with his students. For Mike, he wanted his students to feel comfortable in his classroom. Mike tried to reduce any situations that might have caused anxiety for students in his class in general. One specific example was how he tried to reduce anxiety when his students took tests. One way to do this was to have students all close their eyes together and have them complete a breathing activity before the test in hopes that students would be able to calm down a bit before the test. Mike did this because “if children have feelings of anxiety, then they can’t relax and learn”. Mike reported to have learned this particular strategy from recollections of his own childhood.

Mike reminded me that many teachers at the beginning of the year are so worried about getting the curriculum delivered that they forget that the most important part. That is, that they first have to get students ready to learn the curriculum, which happens by having classroom management skills in order. Mike believed that routines created consistency and consistency is important in building the teacher-student relationship and therefore has to occur early in the school year. In Mike’s words:

If you don’t get your classroom management skills down, then they are not going to learn, nor will they care to learn...I think you just have to be consistent with them and tell them ‘you know this can be fun’ and when they are successful, you have to praise their success. And, you give them an extra period to do something or you give them a fun activity or play a game with them, and the more they do it, the more successful they are.

Mike believed in the importance of building a good teacher-student relationship in general and when I followed up with him on where he learned this, he felt he first knew to demonstrate care because it was naturally part of his personality. For example,

For every student in this class, I have certain goals and expectations for each one. And you just have to have that relationship with them and build that relationship with them, I think it's part of who you are and I think that's definitely difficult to teach a student teacher.

Similarly, Joe indicated his high expectations (grades and behaviour) and extensive "getting to know you" sheets demonstrated to his students that he cared about them.

so just those kinds of questions to really let the student see 'wow, mr. ---really cares, he wants to get to know me and he wants to help me learn and make this experience beneficial for me.

When following up with Joe about this, he answered that he genuinely cares about his students and believed this stems from his beliefs about the roles of teachers: not only to deliver the curriculum, but also to deliver morals and values. Joe acknowledged his role is more than communicating information, it is also about socialization. In addition, Joe wanted to teach accountability and responsibility to his students for future generations. Perhaps the old adage that children learn what they live could be Joe's Mantra. Likewise, Andrea believed that knowing how to show her students she cared about them stemmed from her beliefs about the roles of teachers: they are socializing agents in addition to delivering the curriculum. By modeling caring and inclusion, she hopes that her students will act this way towards one another.

Mike, Joe and Maria spoke of giving students a voice in the class: allowing students the chance to speak about their lives, opinions, what matters to them, for

example. Mike believed he first learned the idea of “giving students a voice” from his preservice preparation program, which he found to be extremely helpful in his development. The second place he learned to “give students a voice” was at Tribes training and running a Tribes classroom. Similarly, Joe reported learning about “giving students a voice” through his Tribes training. Maria reported that she gives her students on IEPs for emotional behavioural disorder a voice by listening to them, telling them she believes them and this was learned in ongoing professional development courses with her union. For Mike, Joe, and Maria, demonstrating care and giving students a voice to help foster the student-teacher relationship was primarily learned from ongoing professional development: with the exception of Mike who believes he first learned it in preservice, but it was strengthened through professional development. Janice, Jessica and Andrea did not comment about voice or giving students a voice. It may be because these three teachers were not taught about this idea since they did not take the same professional development that the former three teachers took (e.g. Tribes or psychology courses).

All teachers believed in holding high expectations for students both behaviourally and academically and having goals for their students. Interestingly, teachers reported this was first learned in preservice preparation programs. All teachers demonstrated a sense of humour in their classrooms: when following up with teachers about knowing how to develop a sense of humour, they all reported it was part of “Who I am” and therefore part of their personalities.

Teachers were asked about how their community of practice has helped them develop inclusive beliefs and practices. The subcategories in this section are as follows: Teachers Helping Teachers to Learn Inclusive Practices and Principals Helping Teachers to Learn Inclusive Practices.

Teachers Helping Teachers to Learn Inclusive Practices

Teachers would rely very heavily on their colleagues for sharing of resources, co-teaching and for providing overall support as needed. Evidence of an internal community of practice was present among some of the teachers' schools. More interesting was the way in which some teachers branched out to their larger or external communities. Teachers acknowledged that they collaborated often and communicated regularly with one another both formally and informally. In some cases, teachers were friends beyond working hours and informal conversations about teaching in general might continue well beyond formal school hours.

Teachers would rely on other teachers for resources, particularly when they might need to modify a program for a level or two below their grade level and therefore out of their division. In one school, there were several resource binders that the teachers made available for each other to use for examples of modifying. Teachers had a designated spot, i.e. a common cabinet, which was filled with resources for children with exceptionalities. For example, one might find some manipulatives or worksheets that could be photocopied. The cabinet contained an ongoing supply of material. Jessica, the teacher in grade 5/6, for example, found herself using grade 3 resources for one of her students who required grade 3 Math.

Joe noticed his classroom was being difficult, behaviourally, in French. All the students were disrespectful towards the French teacher and the subject in general. The students with exceptionalities (LD and EBD) would act even worse in French than with Joe, their homeroom general education teacher. The French teacher was very stressed with this particular class's persistent behaviour problems and inattention. Joe decided he would attempt to put a stop to this behaviour by being present in the room during French rather than taking his prep. The researcher took note of this and probed about it in the follow up interview. He said that in addition to using his presence in the class (i.e. proximity, so that the students know he is watching and present), he also sits in for other reasons, for example:

I really like to be in there as much as I can, to reinforce that as a teaching staff we are supporting each other and working together. Especially for different class management techniques and skill sets. Maybe the French teacher has different techniques or strategies, so when we're both there we can kind of compliment each other. I can use some of the language she uses and she can use some the skills that I use...we can kind of bounce off each other.

In this way, he was very supportive and showed a collegial and communal approach to his teaching. While this observed instance happened to indicate the children were misbehaving in French and not in homeroom, the homeroom teacher indicated that sometimes the reverse was the case where the students behave well for the French teacher and not the homeroom teacher. Thus, the teacher commented that after instances of the class behaving better in French, he might also say, 'I noticed you behaved so well for Madame, but not for me today, so what is going on here?'

Another teacher would bring in a retired school teacher because he had a great way of reaching a student named James (with EBD and mental illness) through his storytelling: he was able to tell stories in a particularly engaging way to all of the

children, but James took a particular liking to this guest speaker. The researcher observed one of the classes wherein this individual would come in and read to the class. He knew exactly how to handle James. He would read the story, scan the class, and when he could see James was about to speak out of turn and disrupt the flow of the story to the rest of the class, he would interject, perhaps by saying:

now James, I can see you are getting excited about this part of the story, but keep listening because it is only going to get better (sincere and showing enthusiasm), okay?

And James quietly whispered “okay” and kept listening. This guest speaker, then, took a preventive approach with James and had great timing and a good rapport with James. The story the guest speaker read was about a boy who had trouble in school. The guest speaker said, at the end of the story,

I was also sort of like the boy in this story when I was young because I often acted out and didn't want to listen to the teacher, but I am a teacher now, so you can do things if you set your mind to it.

Then he went on to say “maybe some of you in this class today are like the boy in the story”. And James was engaged and silent. When following up with the homeroom teacher, she said she first brought this guest speaker/retired teacher in because they are friends and he offered to help her out and read to her students. However, it went so well with the class as a whole and James, that she invited him back on a regular basis. Her students would look forward to his visits and one could often hear them saying “Mr. Brown is coming in today” with excitement.

Some teachers would have the Math specialist come in to teach the class, while others would deliberately ask their principal to teach a particular lesson of his or hers expertise or favourite subject. Joe asked a teacher from the local high school

to come and teach his class some Math in exchange for Joe teaching one of his courses at the high school.

In addition to formal meetings, teachers continued to have a lot of informal discussions about their students. When the researcher asked Jessica about where she learned teaching strategies for students with exceptionalities overall, she replied:

A lot of it stems from talking with other teachers, like colleagues, a lot of it. A LOT! More so than I think from any book or workshop I've been involved in because everyone (students) is so individualized so what will work for student x is not going to work for student y. I'd say 90% of knowing what to do is from talking to other people and what they do.

In order to confirm, the researcher asked Jessica if she believed she learned from observation. She said that some things come from observation, but she believed that more was learned from talking to other colleagues. She explains: "If I'm feeling frustrated, I go and talk to my colleague and I say "okay, so now what would you do?" This other colleague was one that Jessica explained she sought out herself, someone who served as a mentor figure.

Teachers reported seeking out an individual mentor, usually a more senior teacher at the same school, whom they trusted for advice and guidance relating to educating exceptional learners. When the researcher followed up with them about this, the researcher asked if the mentor was someone they self selected or someone who was assigned to them, thus trying to probe if they had been part of the New Teacher Induction Program (NTIP) in Ontario, a ministry initiative to assist new teachers transition into the profession by assigning them to a more senior teacher mentor. However, they answered that the mentor was someone they sought out on

their own and that they were not part of any programs promoting the idea of teacher mentoring. Jessica's advice to new teachers was as follows:

find yourself some really good mentors, that is the best thing I ever did. They have the NTIP program for people who have a full contract and this year they now have it for teachers who also have their first full LTO, which is new. I sought out my own mentors though. Find someone that you kind of click with that you have the same sort of ideas and if you don't do that, then good luck because you have to be proactive because once you get into this job, no one is going to hold your hand. You have to do it, you don't have a choice, so it's good, I think, to find a really good mentor. It's helped me a lot.

Jessica stressed the importance of seeking good mentors and more than one mentor.

The researcher probed her further and she explained that she tried to seek as many mentors as possible, not only one:

one of my mentors is a teacher who has been working here for about 10 years, another one was the literacy coach last year who I don't talk to anymore, but she was awesome, she's on maternity leave that's why, and a friend and ESL teacher who has 25 years experience, so I talk to her. Mentorship is a big thing for me.

Typically, one might think of informal time as in between classes, on prep, or during lunch. According to Jessica:

this year I talk to one teacher and we are good friends and I said 'I'm not sure what to do with x' and she has a lot more experience and I said "so, what do I do?" and she said "well, chunk it this way, so instead of giving him a huge graphic organizer, just tell him just the first part, so that's all we're doing today is the first part, so chunking, so it's super chunked" every tiny little step is broken down.

Additionally, Jessica and Andrea reported their informal conversation times occurred after school as well and with other teachers beyond themselves as well. According to Andrea:

Oh yeah, last night I phoned Jessica at 7pm because I wanted to re-cap my day with her and share the experiences I had with Tom. I know Jessica has had experience with students like Tom in the past and she has been a good person

to talk to about knowing where to go for resources and how to plan effectively.

It seems some teachers developed mini support networks through other teacher colleagues they tended to naturally gravitate towards. Interestingly, through observing both Andrea and Jessica's classes, it became evident that the two teachers used the exact same classroom management approaches, used the same reward systems and had the same outlook towards their students with exceptionalities. The researcher probed Andrea about using the same point system as Jessica and she admitted "oh yeah, this is from Jessica's class (laugh) this one was her idea, but the division of classroom chores, for example, was mine (playful)." When speaking to Jessica, she brought up the following question: "Did you see this system in Andrea's class...it was my idea, but I don't mind if she borrows it". Thus, both Andrea and Jessica were in tuned they were with each other's practices because of the extent of their informal communication.

Principals Helping Teachers to Learn Inclusive Practices

Teachers' perceptions regarding their principals as leaders of inclusion varied according to the individual teacher. Accounts from teachers show that principals were perceived as being "indifferent", "amazing", or having "room for improvement".

In this section, teachers' accounts will help to illuminate their particular stances about their principals.

Maria and Janice will first be considered because at the time of the research they were at the same school and therefore had the same principal. Maria felt that her principal was "indifferent" and uninvolved with matters of her classroom relating to inclusion and inclusion in general. She said:

well (sigh)...he does believe that the kids should try and stay in the regular class as much as possible, yeah, he does try to do that (declining voice).

The researcher probed a bit further, as the tone of voice did not match the content of the words spoken:

“Okay, let’s say, someone were to ask you how you developed your current practices for students in your class, would you say that your principal was instrumental in that development?”

Maria said “Um, then my answer is No (laugh)”. And then she continued:

I guess it’s hard because he doesn’t get to get in here (classroom) that much...I actually found my VP much more proactive and helpful regarding anything to do with inclusion.

In addition, she felt that her school did not share a common vision of inclusion, nor did it feel like everyone in the school was on board with inclusion, she stated:

I think we would love the idea of having one big culture of inclusion, and I think we start out that way, but because we are so big, it ends up being just every teacher for his/herself.

Another teacher from a different division in Maria’s school, who was not a participant but wanted to comment and remain anonymous. This teacher confirmed Maria’s sentiments; that the same principal was indifferent towards inclusion and stated:

It’s pretty much like this: if you, the teacher, want to take the lead and do something in your own classroom, then great, the principal will not object, but he will not lead it...I think this principal will just say whatever to whomever (regarding inclusion) is in his office, you know, like a politician (laugh). Luckily our VP is here, he’s a real help for getting things for the kids with exceptionalities.

However, Janice, also a teacher at Maria’s school, reported that this same principal was “amazing” and the key person to lead an inclusive school. She stated:

I think everything is up to them (principals) and they definitely set the tone (for inclusion) for the school. He is a positive role model, very supportive, and teachers feel that they can go to him. I think that when you have positive experience, your principal is positive, and they treat you like a team, it works.

Janice reported, like Maria, that this principal's main emphasis was keeping the kids with exceptionalities in the general education classroom as much as possible. Janice stated "really, their (principal) role is leading the policy, because they are not in the classrooms". It seemed Janice and Maria differed in their expectations of the role of their principal, which might have influenced their perceptions of their principal's role as a leader of inclusion. Janice believed that her schools, or the teachers in her division, were mostly united regarding their beliefs about inclusion, and that they were in favor of it. Again, this was contrary to Maria's perception of their division.

Janice was asked about preservice, professional development classes, and/or anything else that she believed would have helped to influence her, and she stated:

I always remember feeling, and I'm not sure where it comes from, just within myself, that if students are in my class and doing the best they can do and being the best they can be, then that is good enough for me. In addition, I have to feel that I can help them achieve their goals, or that I can help them in some small way.

In the case of Janice, then, she originally did not speak of her principal as being key to her inclusive development of beliefs and practices because she didn't attribute her personal beliefs to the principal. Janice believed that her inclusive beliefs had nothing to do with the principal, rather:

I think that inclusiveness comes from within. Years ago my sister completed her DSW (Developmental Service Worker) diploma and she would teach me all about dealing with different students, so I think that fostered my inclusive beliefs. So, I think beliefs are influenced way outside of the school system, much earlier on, and have to do more with life experience.

Janice believed that inclusiveness comes from within and is developed earlier on in life. She also believed the principal's role to be the driver of policy, and not dealing with the classroom at the classroom level.

Andrea, Jessica and Maria did not feel their principals were leaders of inclusion and that there was "room for improvement". Andrea and Jessica came from a different school than Maria. Andrea was adamant that her principal was not at all a leader of an inclusive community. She commented:

When you ask me the question (Question #1 of second follow up) the first person who does come to mind is our resource teacher: she fostered inclusion a lot more (than the principal) and was very strong, to the point where the resource teacher could have played a stronger role (with being a leader of inclusion) than the principal, but she did not want to step out of her role. Our principal is...very good with paper work (laugh), and that is important, but in terms of leading teachers or providing that sense of community? I feel more supported by our resource teacher. Our resource teacher should be our leader.

Andrea wanted more scaffolding directly from the principal, more personal contact and an occasional presence in her class. Maria also perceived the lack of presence, or checking in on her class and inquiring about her students with exceptionalities, to be an indication that the principal did not care and therefore was not fostering inclusion by taking more of an initiative in this way. Andrea commented that she also wanted supports beyond relations alone; she wanted tangibles, or materials for her students (i.e. assistive technology, specific programs) and she felt much more could have been done from the administration end. Further, she felt her resource teacher played an administrative role and would actually serve as acting principal while the principal was frequently absent.

Andrea expands:

it was getting to the point where the resource teacher was literally, as well as figuratively, the leader because we already felt her to be our leader, and for all intents and purposes, she was becoming our principal. More and more, our principal was absent- not sure where she went (sarcastic tone, then laugh)? We noticed that our resource teacher, being the caring person she was, backed down a bit to not overstep the principal's job, it was quite interesting to observe.

Jessica reported wanting similar support with the same principal. Frustrated, she stated "we have a lot of meetings (re: child on IEP) but not a lot of follow through or next steps". What became evident, from these accounts, is that teachers wanted to be led by an inclusive administrator, they wanted to know about their leader's beliefs and values toward inclusion, so that they are not unsure or perceived the administrator to be indifferent. Teachers wanted an occasional presence in their classrooms to indicate the principal was concerned and cared about them. Lastly, teachers wanted tangible supports.

Thirdly, there was Joe and Mike who came from different schools, but schools where positive relations with principals and inclusion were reported. Joe's school was a Tribes school, which meant that the entire school took over 2 full days to get the first Level (Level 1) or Series 1 of Tribes. Joe commented about the benefits of Tribes to his students,

I think that seeing a lot of people come (to the training), different principals and teachers, means having a consistent message. The students really latch on to trying to manipulate each teacher (for behaviour) and how to play teachers against teachers, so I think having that common message of mutual respect is so good.

In addition, Joe indicated that his students knew they were a Tribes school because it went on the announcements every morning, there was a poster in Joe's room outlining "The 4/5 Agreements" and it "shows that we are all in this together". Joe reported

great support from other colleagues regarding the Tribes approach because the principal, teachers, and support staff in the school agreed and abided by Tribes: it would be enforced on the daily announcements, for example, through visual reminders in the classroom and in assemblies that this was a Tribes school and the kids would be held accountable for non-Tribes behaviour. Thus, Joe's personal belief systems matched the perspective of his community of practice.

Mike was trained in Tribes Level 1 and 2 at a previous school with a supportive principal. His current school was not a "Tribes" school, but it did consist of highly supportive staff members, including a supportive school administrator and frequent communication among professionals. As Mike pointed out, regarding one example of how his school is a community was evident by the way that school staff communicated about students with behavioural disorders:

This school is really good for communication between staff
We tend to talk to one another about people's behaviours.
For example, if one of my students is behaving in a manner that is not how the school wants them to behave, then I'll get an email from another teacher saying 'I saw so and so doing this, could you please deal with it tomorrow or chat with them or whatever'. Then, the next day, the principal will talk with both teachers and deal with situations that way. Our principal is excellent for that, so communication is a big thing in this school.

Mike commented that the email system works well because teachers at opposite ends of the school can quickly communicate without having to physically get to one another. Similarly, if an incident happened at last recess, then the next teacher can be informed of it before he or she has that child in the class and will be prepared for any possible changes or differences in that student's behaviour.

Mike also pointed out that despite a well intentioned staff and a supportive community of practice being in place, a barrier to inclusion is the lack of available

support staff. While Mike found his SPST to be really good with assisting with IEPs and behaviours, for example, there is only one of her for the entire school, which consisted of 10 classrooms. This year, Mike had 5 students on IEPs, with an additional 3 to 5 that could potentially be on IEPs, and he had no EA support this year. Mike stressed the importance of EAs and maintaining positive relationships among staff members for the benefit of the children. Mike stressed the point that a community of practice can work if:

if you have an EA or another teacher or anyone else that can work with you, it's (inclusion in the community of practice) amazing, if you have a good relationship with those other people and everybody's on the same page and they're all working towards a common goal, then I think it's awesome.

However, speaking from experience, he also pointed out that he has also been on the flip side where it does become difficult when “my expectations and the other person's (teacher, support staff, etc) expectations are not the same, then it's a struggle, but progress in a school (as a community with the same goals) is great”.

While Mike had been teaching for 6 years, he had just switched to a new school at the time of this research. His current school was not a Tribes school, yet Mike still decided to run a Tribes classroom.

In summary, teachers helped other teachers to learn about inclusion by sharing resources, regular communication, both formally and informally, and some teachers spoke after hours with one another about their practices for specific students.

Additionally, teachers reported on their perceptions of their principals and what they believed constituted a supportive principal role with respect to inclusion. It appears that teachers wanted support for inclusion on varying levels. That is, teachers understand that the principal's main role is “leading the policy” (e.g. Janice), “good

with paper work” (i.e. Andrea), but teachers with principals who had “room for improvement” felt that an occasional presence in their classrooms would help them feel supported, or at least that it sends the message across that the principal truly cares, regarding students with exceptionalities in their classrooms. Further, for teachers who perceived their principals to be “indifferent” (i.e. Maria), they desired more of a demonstrated stance on inclusion in order know where they stood and in order for them to be perceived as a leader (e.g. Andrea and Jessica). Apart from stating beliefs in inclusion and an occasional presence in their classes, teachers desired the demonstration of inclusive beliefs through tangible supports, such as the allocation of funding so that assistive technology could be purchased for children who were identified on IEPs and needed the equipment, for example. For teachers who were not part of a school that had a common vision or program relating to inclusion, they seemed to form their own micro communities of practices, or support systems. Jessica and Andrea were teachers who found there was “room for improvement” for their particular principal with respect to inclusion. Interestingly, when teachers perceived they did not have an inclusive principal, they self-appointed another individual whom they perceived was their leader: in the Andrea’s school, she indicated that her leader of inclusion became, by default, the resource teacher. Similarly, Jessica and Andrea also forged their own mini support system with each other. It seems that teachers seek out their own support systems and form their own micro networks of like minded professionals. Finally, in the schools of both Joe and Mike, the opposite was observed; an inclusive principal mandated teachers to be

trained in inclusive programs, and they reported a positive experience in their daily professional lives because their leader's values meshed well with their own.

CHAPTER 5

Discussion

The purpose of this dissertation was to learn about the development of elementary teachers who were effective at including students with exceptionalities in general education classrooms in publicly funded schools. The researcher's main interests, therefore, were threefold. A primary focus was on teachers' beliefs and pedagogical practices with their students with exceptionalities in the general education classroom. Further interest within this focus was discovering the specific strategies and named programs teachers used to foster a social climate of inclusion in their classrooms. Secondly, the researcher was interested in where practices and skills were learned and how they were developed. A third purpose included acquiring teachers' perceptions towards the workings of a "community of practice" within their schools and its importance in the development of their effective practices. The researcher wanted to learn more about how one gets to be an Interventionist teacher so that the researcher could provide this information to preservice and inservice areas of professional development.

The discussion will be structured by first referring back to the original hypotheses/presuppositions in the introduction and addressing them in the form of questions asked: 1. What are the general education teacher's current teaching practices for children with exceptionalities? 2. How did the general education teacher come to learn these techniques? 3. How would you describe your current school context in relation to a "community of practice" and did this aid you in the development of

knowing how to instruct and include children with exceptionalities? Then, unanticipated findings will be provided, followed by strengths and limitations of the work. Implications for practice and future research will end the discussion.

The Development of Interventionist Teachers' Current Practices

When examining the first section of Current Practices; “Differentiated Instruction”, it was clear teachers relied on concepts from UDL: accommodations and modifications were observed being made for students on IEPs. Similarly, teachers were observed differentiating their content, process, and product. If one analyzes where teachers reported first learned these principles, it was transparent that it was not in preservice. 5 teachers did not bring up preservice in this section. Andrea is the only exception, and she indicated that preservice taught her that she would have to work with IEPs, but nothing beyond this level of understanding (from preservice).

When teachers reported on how they learned about UDL and Differentiated Instruction, for example, there was no consistency. Some sought out extra training in the area, while others used a trial and error approach based on recommendations from the IEP. As results illustrated, it seemed each teacher consulted a unique combination of sources for acquiring UDL and DI skills, ranging from professional development to consulting resource teachers. This is particularly highlighted in the case of Joe. Once Joe was in practice, he was trained specifically in a course devoted to DI offered at the board. In addition, he also consulted online textbooks, which provided examples of how to differentiate, as well as consulting with his resource teacher. Joe consulted an array of sources including the understanding that some of the learning occurred by “actually trying it out in class” based on recommendations from numerous sources.

Joe was an excellent example of a teacher who engaged in ongoing learning about a way of instruction he has found very beneficial for his students with exceptionalities. In addition, he attended specific professional development in Assistive Technology. For Mike, a different story of development emerged, as he claimed to know about accommodating and modifying from the “Ministry” and using the IEP recommendations about the individual student to guide his practice. What was consistent in the development of making accommodations and modifications was that teachers such as Mike, Maria, Jessica and Andrea reported relying primarily on the IEP. The IEP contained lists of possible accommodations and modifications for the particular student. Janice reported that “no one ever told me this is how you do it” (modify/accommodate). Janice reminded me “the lists on the IEPs are good, but you still have to go out and find the sources and so a lot of it is trial and error, a juggling act, at first, and letting the children guide me”.

If one delves into Assistive Technology, as being a part of UDL, the main source of knowledge about AT was the resource teacher. The resource teacher was an invaluable source for teachers and the person who first trained them in understanding the technology: Maria, Janice, Jessica, and Andrea reported the resource teacher was the first person to help them with understanding assistive technology (e.g. what it does, what it is for, how it can help the specific child). Joe also reported on the help of the resource teacher, but as a secondary source. Therefore, the resource teacher remained an asset to teachers in practice who did not have any preservice preparation in Assistive Technology. The lack of reporting about preservice as a trend, and this piecemeal approach to learning about concepts of UDL and DI in practice, suggests

there is more room for instruction in these principles at the preservice level. All teachers in this study reported that they learned about AT on the job and once they were in practice. In the case of Andrea and Jessica who attended a special lap top program in preservice (a program meant to be technologically oriented), they were familiar with technology in a general way, and not familiar with programs like Kurzweil, Dragon Naturally Speaking, for example. In other words, they were not familiar with technology specifically for children with exceptionalities until being in practice and learning from the resource teacher. Unfortunately, these findings about UDL/DI and AT are not too surprising, given that preservice education in special education and inclusion more often than not tends not to be a required course. In conclusion about development of UDL, DI, and AT, teachers learned how to accommodate and modify differently. They all learned about it once in practice and they reported they were not taught about it in preservice. Further, teachers reported consulting with the IEP for knowing how to accommodate and modify for students with exceptionalities. Finally, it was the resource teacher with whom teachers consulted for many things, particularly for understanding Assistive Technology. These results indicate that many practices necessary for inclusion (e.g. Assistive Technology) were not learned until the teacher was in the field. Furthermore, the results indicate that the resource teacher is primarily leading the teachers through inclusive practices. Based on the observations and narratives of the teachers in this research, it seems there is room in preservice for teachers to be taught about assistive technology, and technology in general. Teachers reported that most of their professional development is spent going to conferences and workshops dedicated to

AT. They were most excited when they saw how the technology produced results with their students with special education needs and levels out the playing field by the saving of time. It seems that teachers in this research would recommend that prospective teachers learn about technology in a hands-on and practical manner. For example, teachers might be expected to take complete an assignment themselves by using the assistive technology, or demonstrating its use to the rest of the class to increase familiarity with the technology and therefore increase the teacher's confidence for future usage in the classroom.

Conversely, if we consider where teachers first learned about Classroom and Behaviour Management, a much clearer pattern emerges in stark contrast to the previous section. That is, all teachers reported learning about foundational aspects of classroom and behaviour management in their preservice preparation programs. Specifically, teachers learned about reward incentives and how to use them, as well as having and posting behaviour expectations. These consistent findings among teachers reflect the reality that preservice teachers have had more instruction in classroom and behaviour management at the preservice level, compared to UDL and DI. The comparison of the findings in UDL/DI section to Classroom and Behaviour Management section indicates that teachers in this research were being taught about classroom and behaviour management in preservice, but not about UDL/DI in preservice. It also indicates that teachers were able to apply these concepts to their practice long after having graduated. Thus, the continuance of instruction in this area is essential: teachers retained and applied what they learned in preservice. Teachers did not stop at what they learned in preservice, rather some teachers continued their

professional development in classroom and behaviour management techniques beyond the preservice level. This was true for Mike, Joe, and Maria. Mike and Joe, however, were mandated to take Tribes and Maria took psychology courses, but this alone does not suggest that they would not have taken further professional development on their own or without their principal's mandate, as these teachers took other professional development courses without being mandated (e.g. Joe and DI and Fred Jones, for example and Maria and her ongoing psychology courses in which she self enrolled). Further, in areas of "withitness" another trend emerged: teachers reported that this was a part of "who I am" and therefore something they thought was not able to be taught.

Teachers spoke about consultation and how they did it, but not about where they learned that they must consult once in practice. Such discussion never arose. In hindsight, the researcher would have probed specifically about where they learned they must consult with IEPs, Children, Parents, and External Agencies meant to help people and families of the specific disability, for example. Therefore, consultation did not appear in the development of practices section and this was deliberate. In future work, the researcher will be sure to probe on the issue of how one knows they must consult.

Teachers established teacher-student relationships with their students for different reasons. What is important was that this theme emerged and that relationship building was found among all teachers who participated, as previous research has demonstrated that all children who have positive relationships with adults, particularly teachers, are more apt to experience success at school (Goddard, 2003;

Pianta & Stuhlman, 2004; Isenbarger & Zembylas, 2006). Similarly, children who are considered at-risk for school failure may move from risk to resilience if they experience a positive relationship with teachers (Pianta & Walsh, 1998).

Within this theme of teacher-student relationships there were several subcategories; demonstration of care, giving voice to students, holding and communicating high expectations and having a sense of humour in the classroom. Each teacher was a unique individual with regard to whether or not they demonstrated all subcategories, however there were some trends regarding where they believed they learned aspects of building teacher-student relationships, particularly in the area of demonstrating care. Recall that Mike wanted to show his students he cared because of moral reasons: to improve the social context of school for his students. Mike recalled his school experiences as being anxiety inducing based on its testing environment and emphasis on rote memorization. Mike wanted his classroom to be nothing like his recollections of childhood experiences of school. Mike demonstrates what Fullan meant regarding teachers entering the field to be “change agents” (Fullan, 2001). That is, many teachers have reported wanting to go into teaching to change an aspect of schooling based on their own formative experiences at school. Similarly, Joe wanted to demonstrate care because he wanted to be a moral role model to students: he hoped they would emulate him in the future. The notion of care and caring has long been taken up in Nel Noddings’ work about the importance of an ethic of care (1984; 1988; 2005). Noddings termed this precise finding (caring for others for personal and/or ethical reasons) as “one-caring”. The teachers in this research support Noddings’ concept, whereby the person is choosing to have a caring relationship with their

students for personal and/or ethical reasons. Maria wanted to demonstrate care for more strategic reasons; to have students trust her and therefore produce more work, thus Maria would fall into the “personal” reasons part of Noddings’ work, whereas Mike, Joe, and Andrea might fall into the “ethical” part. While Janice and Jessica did not use the word “care” in their responses, the researcher knew they cared about their students based on ongoing conversations and their transcript data. In Robinson’s doctoral work (2008) of 6 Interventionist “Exemplary” teachers, he also found that care was an overwhelming finding in his research: all teachers professed it and demonstrated it. In his discussion, Robinson examines Noddings’ work (2005) on distinctions of care within an “ethic of care”. Robinson (2008) stated:

She (Noddings) points out that most people who choose to become teachers ‘care’; however, she differentiates how some people show ‘care’ in their teaching. Many of these teachers “profess to care and work hard at their teaching” (p.1) but they do not “adopt the relational sense of caring” (p.1). Noddings holds that they ‘care’ in the sense that they conscientiously pursue certain goals for their students, and they often work hard at coercing students to achieve those goals. These teachers must be credited with caring in the virtue sense of the word. However, these same teachers may be unable to establish relations of care and trust (Noddings, 2005) (p. 150).

Robinson’s explanation and Noddings’ types of care aided the researcher’s understanding of teachers like Janice and Jessica who seemed to care, but did not seem to demonstrate the same type of care as Joe, Mike, and Maria. Maria quoted her own student with EBD saying “why do you care?” to which Maria replied “why not?” and then the student replied “most teachers never did”. Joe, Mike, Maria and Andrea truly demonstrated the relational sense of caring that Noddings first described and Robinson later examined in his research. Thus, with the exception of Maria, teachers wanted to have a caring relationship due to their belief that part of the role of teachers

was to socialize children, and this was something they felt they knew they should do and was their duty. Teachers who spoke about care did not speak about learning this from a specific source, such as preservice preparation or ongoing courses, other than Maria. The significance of this finding is that teachers in this research were demonstrating this deeper type of care and they did not recall learning it from anywhere and therefore claimed it came naturally to them. It may be that teachers were taught care, but they do not remember where it was learned, for example, due to the passage of time. Furthermore, perhaps teachers would rather own a skill such as care and due to the retrospective nature of this research, teachers' imaginations may have filled in the gaps as to where care was actually learned. This finding relates to work about teachers beliefs about teaching skills as either innate or learned. Some teachers may wish to believe that this skill was "innate" and therefore came naturally to them, or was one of their "gifts" (Fives and Buehl, 2005).

All teachers had a sense of humour and they believed this was part of "who I am" and their personality. They didn't recall learning to demonstrate a sense of humour to improve the teacher-student relationship and develop a sense of trust with students. This finding links with what was previously found in classroom and behaviour management section about "withitness". It seems, then, that even Interventionist teachers in this research believed certain skills are part of their personality, who they are, and therefore unable to be taught. The perception that some people are "born teachers" (Fives & Buehl, 2005) has been articulated in case study research suggesting that entity (innate) theories may exist regarding teaching ability. Fives and Buehl (2008) examined preservice and practicing teachers' beliefs about

teaching knowledge and teaching ability in two studies. It was found that the process of teaching can be conceptualized as an integration of personal attributes (e.g. care, humour, patience) and professional preparation. If entity theories about teaching ability are pervasive among preservice and practicing teachers, these beliefs may explain how individuals respond to professional preparation as well as inservice professional development. That is, some preservice teachers with entity beliefs will not be as receptive to learn the information in their programs, if they secretly believe it is a gift that some possess, while others do not. Similarly, some teachers with entity beliefs will also not be as receptive to ongoing professional development or see the need for it. More desirable is if teachers hold increment (teaching can be learned) beliefs: these teachers will be more apt to enrol in ongoing professional development, thereby improving their practices. Teachers in this research believed in ongoing professional development because there was evidence they enrolled in it, either through principal initiatives or by individual choice. Yet, some of these same teachers felt that certain practices were innate (e.g. sense of humour and wit). Teachers in this research might fit into what Fives and Buehl (2005) termed “innate for some, learned for others” a category to explain the perception of teachers who held both increment and entity beliefs. The significance, therefore, even among Interventionist teachers in this research, is that teachers still believe certain aspects of teaching are innate. If teachers believe certain skills are innate, they may not be as receptive to reflect upon them or seek to improve them via ongoing professional development, thereby keeping them fixed at a less than competent level of teaching (Berliner, 2004)

Teachers' Perceptions of the Development of their Inclusive (towards students with disabilities) Beliefs:

Based on the theoretical lens of this dissertation, it was predicted that teachers would be influenced by the system into which they were first socialized (Wenger, 1998). New teachers are, as Wenger suggests, wading through the “apprenticeship” phase of their “community of practice” (Wenger, 1998). That is, they begin to acculturate to the professional climate that existed prior to their arrival, whether positive, negative, and/or potentially different from their original or individual belief systems. Wenger indicated that the first place of professional work is highly influential. Similarly, the culture of that first workplace community shapes the individual who is trying to gain both knowledge of the practice and acceptance by colleagues by fitting into the local culture of that workplace. In addition to individual teacher variables, the particular school context, or school norm, embedded in a particular community context (Hamilton & Richardson, 1995) is also highly influential in shaping the beginner teacher.

Surprisingly, this was not the case for the teachers in this research in terms of personal beliefs about disability and inclusion. All teachers agreed that their inclusion beliefs were shaped “well beyond the educational realm”, as Janice put it. In other words, teachers believed their inclusive beliefs emerged earlier on in life (i.e. for some, way earlier than even knowing they wanted to enter the teaching profession and therefore their beliefs were formed earlier than entry into teacher preparation programs) and were based in life experience. Mike had a sibling with an exceptionality and this positive relationship influenced him to be inclusive with others. Maria had a brother who struggled with speaking English due to having a first

language other than English. Maria commented that when her current students struggle to communicate or when her student with EBD acts inappropriately, she remembered her brother's struggles and helps to include her students with exceptionalities (of EBD nature) by acting as a mediator by ignoring certain behaviours (e.g. planned ignorance) or deflecting, rather than contributing to their potential ostracization. Similarly, Janice had an older sister who took a DSW (Developmental Service Worker) course and shared with Janice what she was learning about people with exceptionalities while she was studying to become a DSW. Janice reported, therefore, that it was her sibling's early interest and approach to understanding children with exceptionalities that influenced her beliefs. As Janice reported in results, "it (inclusion) is very personal and something I always knew I believed in". The remaining 3 teachers reported similar causes and time periods in their lives which they believe contributed to the origins of their beliefs. The 6 teachers in this dissertation, therefore, perceived the origins of their beliefs about disability and inclusion to be individually based and therefore not reliant upon the first, or current, community of practice. Teachers' perceptions were consistent with the idea that beliefs about students with exceptionalities and wanting to include them in a general way are formed as early as childhood. This supports the knowledge base on beliefs about inclusion as being something that develops fairly early on in an individual's life and is therefore deeply rooted (Pajares, 1992; Berry 2006, 2008; White, 2007; Robinson, 2008).

Teachers did not believe that others within the community of practice would be able to influence their personal beliefs about students with exceptionalities or

inclusion. However, teachers acknowledged that the community of practice in which they worked was very important for allowing their inclusive practices to be strengthened and continued. They all reported wanting to be a unified whole with respect to inclusion and desired having an inclusive administrator. Teachers believed that a community's definition of itself, or perhaps its common vision, was vital in helping to continue inclusive practices. Having other individuals who are like minded and "on board with inclusion", as Joe put it, makes daily professional life much easier, as there is consensus among members about the values of the practice. Teachers agreed that working collaboratively with supportive others was key to ensuring the success and continuance of inclusion. In summary, teachers who participated in this work believed that their beliefs were individual and developed early on in life. However, they acknowledged that beliefs of others within the community of practice relating to inclusion were important to support their practices.

Principals

It has been re-iterated and generally accepted in the literature that in order for inclusion to be successful, first and foremost, the school administrator must display a positive attitude (Evans, Bird, Ford, Green & Bischoff, 1992; Rude & Anderson, 1992). Stanovich and Jordan (1998) found that not only does the principal influence the school culture, but the principal affects the instruction offered by teachers in heterogeneous classrooms, which in turn influences student achievement (Stanovich & Jordan, 1998). The principal's beliefs have previously been found to directly influence the type of instructional practices of the general educator, (Bossert, Dwyer, Rowan & Lee, 1982; Leithwood, Begley & Cousins, 1992; Stanovich & Jordan,

1998). The principal, as Janice put it, “is the final person to say yes or no to ideas relating to inclusion” and “every principal runs their school and students differently and it is up to the principal to interpret and apply the special education legislation, so this can mean very different things for students based on who is interpreting policies”. As reported in Results, all 6 teachers viewed the principal as having an important role to play. All teachers reported wanting to have an inclusive principal that outwardly stated he or she was inclusive and displayed certain actions to demonstrate and affirm this belief to the community. Goodlad and Lovitt (1993) found the decision to develop an inclusive school depends largely upon the leader’s values and beliefs. They outlined 6 key points that help teachers determine if their leader demonstrates inclusive beliefs;

1. How they make and honor commitments,
2. What they say in formal and informal settings,
3. What they express interest in and what questions they ask,
4. Where they choose to go and with whom they spend time.
4. When they choose to act and how they make their actions known, and
5. How they organize their staff and physical surroundings (Goodlad & Lovitt, 1993).

Teachers in this research were perceptive of these 6 key points and were therefore able to sense whether or not their leader was inclusive. When they perceived their leader to be indifferent, or not as supportive as desired, teachers reported seeking out support elsewhere. What became clear was that each person valued the other person’s work, but that expectations for relationships and roles were not fully communicated. In research by Edmunds, Macmillan, Nowicki, Specht and Edmunds (2009), administrators reflected on their schools’ educational practices regarding inclusion. One particular principal from this research stood out in relation to the findings of this research. The principal communicated that she heard from one of her staff that

although they felt supported by her in terms of students with special needs, they felt that she was not involved daily with the students. The principal responded to them and her quote was provided (Edmunds et. al., 2009) to explain to her staff:

Students with special needs take up the bulk of my time...they require the most meetings, interactions with the SPST, and others on the Board team, as well as problem solving meetings with teachers. I told them that I was not insulted but felt that perhaps they did not know that I spent so much time becoming familiar with the students and checking on their progress...my next steps will include reviewing IEPs with the SPSTS to check and see if they are being implemented...I will continue to support the teachers and EAs in their efforts.

Andrea and her administrator might share a similar experience of what transpired with this administrator and her staff. It seems that when teachers desire more of a presence in their classrooms, and that they perceive care to be expressed in this manner, they feel supported in addition to more formalized supports. However, it may be that some teachers are not aware what is required of the principal and what their roles are regarding inclusion of special education students. For Janice, for example, she rarely saw her principal, but she still commented that the principal was supportive because “their job is to be concerned with policy and paperwork”, thus Janice knew the principal did not have time to be in her classroom. According to Begley and Zaretsky (2004), school leaders play a crucial role when they nurture more authentic relationships among educators and members of their school communities. Clearly, both Maria and Andrea yearned for more of this type of relationship building and direct involvement of this kind from their principals.

In essence, all teachers believed the principal remains an important figure because he or she enforces what is mandated and therefore influences teachers’ practices of inclusion, from a policy driven perspective. From what has been reported

by teachers in this work, it seems the principal's attitude towards inclusion can not influence teachers' (who are already positive) personal beliefs about including students with special education needs negatively, but the principal can influence what teachers are professionally obligated to do with their students. In addition, the principal can influence the tone of their working environments, the quality of their daily working lives (if in line with their own values or not) and supports and opportunities for their students.

Unanticipated Findings

There was a teacher in the research who had to be removed. I realized, only through following up further with this teacher to clarify the relationship she had with her administrator that she was not as Interventionist as I had originally thought. She was inclusive of some disability diagnoses, but not others. In their literature review of teacher's attitudes towards integration and inclusion, Avramidis and Norwich (2002) found that some teachers although positive towards the general philosophy of inclusive education, do not share a "total inclusion" approach to special educational provision. According to Avramidis and Norwich (2002), "instead, they hold different attitudes about school placements, based largely upon the nature of the students' exceptionalities". It was found that teachers were more willing to include students with mild disabilities or physical/sensory impairments than students with more complex needs (Avramidis and Norwich, 2002). Similarly, in previous work completed by Jordan and Stanovich (1998), they found examples of teachers who appeared to be inclusive, or "Interventionist", but would also exhibit Pathognomonic tendencies (whether through comments or actions, for example). Jordan and

Stanovich termed such teachers as being “mixed”, as they weren’t entirely “Interventionist”, and they weren’t entirely “Pathognomonic” either. However, Jordan and Stanovich (2003) later found that if a teacher was “mixed”, then he or she was really closer to being “Pathognomonic” overall than “Interventionist. However, the “mixed” teacher remains interesting and could potentially be a future area for further exploration. For example, the “mixed” teacher may be more easily influenced by the community of practice compared to Interventionist and Pathognomonic teachers, since this individual isn’t entirely one or the other and may be more easily swayed by others regarding inclusion.

Unfortunately, this teacher’s beliefs were not discovered earlier on in the study because the teacher managed to do well on the P-I Interview: she scored as Interventionist. I realized, retrospectively, that part of the P-I Interview asks the teacher to think of 2 students with exceptionalities in the classroom. The year I asked the teacher to complete the P-I Interview, she did not have any students with Developmental Disabilities in her classroom. Some general education teachers have been found to exhibit difficulties accepting children with developmental disabilities (Avramidis & Norwich, 2002). This means that a teacher’s score on the P-I test might be different if I had asked this teacher to reflect on students with DD or Autism, for example. If students with DD or Autism would have been present in her class when she completed the P-I Interview, then this teacher may not have scored as “Interventionist”.

The implication of this particular finding is to caution anyone wishing to replicate components of the study against using the P-I interview alone. Evidently, if

used alone, it may not always be the best method to determine if a teacher is inclusive. In my research, I went into this teacher's classroom for many observations, spoke informally with her on an ongoing basis, and conducted two follow up interviews with her and therefore I was able to come to this realization. This finding reminds researchers of the importance of using multiple means of gathering data on a given participant in order to make a sound judgment about the individual's candidacy for being inclusive. Perhaps additional questions could be added to the P-I interview that would deliberately target a teacher's set of beliefs and practices towards students of the categories of disabilities some teachers have reported they tend to struggle with including. The P-I interview asks teachers to think of two students (who are at-risk and who have been formally identified and therefore have IEPs) with whom they have worked with in the previous year. The P-I Interview is a somewhat lengthy interview: it lasted between 45 minutes to 2 hours. If there was a section to assess beliefs about including students with the other categories of disabilities, then this might be helpful, but a concern is that it would make the interview much longer. If the teacher does not bring up a student with DD, Autism, or a non verbal student, for example, then perhaps there could be an additional section the researcher could use at his or her discretion that would be designed regarding a fictional child diagnosed with such categories that the participant would have to address. Through the descriptions of how the teacher would work with this fictional child, the researcher might begin to get an earlier sense of the teacher's overall Interventionist beliefs towards students of varied disability diagnoses.

The case of this non-Interventionist teacher supports research that some elementary teachers' perceptions of inclusion depend on the type of disability diagnosis of the child. Work by Scruggs and Mastropieri (1996) on teacher's perceptions of including students with disabilities in their general classrooms found that for some teachers, the disability diagnosis of the child is what dictates whether or not that teacher will want to include that child in the classroom. It was found (Scruggs & Mastropieri, 1996) that if a teacher has a child who has LD, then that teacher would accept the child with LD more so than she/he would accept a child with DD. This finding is important and raises some questions about talking in generalities about students with exceptionalities because there are teachers who are on the cusp of P-I beliefs and/or are "Mixed". Therefore the type of exceptionality and hence the requisite knowledge of each exceptionality may affect a teacher's approach or willingness to embrace inclusion in a full sense and may in turn be related to their own sense of self-efficacy in being able to address the specific learning needs of the student.

The case of this teacher indicates that it may be important for the researcher using the P-I interview in the future to find a way to address Developmental Disabilities. Could there be a way for the measure to catch teachers' perceptions towards more pervasive disorders? Perhaps the researcher could additionally ask participants about their perceptions of including children with Developmental Disabilities, in addition to having them think of 2 children with exceptionalities and 2 who are at-risk. It is important to remember that one must use multiple means to help identify inclusive teachers beyond the P-I interview alone (i.e. self efficacy tests of

teachers and student, student achievement data, classroom observation checklists, for example). In addition to the P-I Interview, the researcher used in-class observations during different core subjects and times of the day, the classroom observation checklist to help structure my field notes, and two follow up interviews.

Implications for Practice

Teachers recalled and used what they learned in preservice preparation programs in Ontario and abroad. The negative attitude sometimes expressed by associate teachers, inservice teachers or others who help to perpetuate the idea that ‘teachers learn nothing in preservice’ is therefore just that; a negative attitude. Teachers were well aware and confident with their classroom and behaviour management, something they all reported first learning from preservice preparation. Whereas, this was not the case for UDL and DI, which was often learned beyond preservice through ongoing professional development, either mandated by the principal or by the will of the individual teacher.

Based on data from interviews, informal conversations and observations in classrooms, teachers require more instruction in instructional methods for including students with exceptionalities in the regular education classroom. In particular, there is a need for more instruction about UDL and DI: how to modify content, process and product as well as how to provide accommodations, in preservice and inservice preparation.

Work by Fives & Buehl, (2005) reminds researchers that relaying information back to preservice candidates may not be as simple as sharing or presenting our findings of ‘what effective teachers do’ and then expecting them all to emulate

effective practices. The reasoning, according to work by Fives and Buehl (2005) is that teachers educators first have to consider the audience they are teaching and whether or not members of that audience hold entity (innate), incremental (learned), or mixed (a bit of both) beliefs about the ability to teach. Fives and Buehl (2005) received 351 preservice responses to their mailed questionnaire about teaching knowledge and beliefs for preservice teachers. Some of the items of interest were as follows: Item 4-“What Knowledge is necessary to be an effective teacher?”, Item 8-“What Knowledge do teachers hold that is unique to the profession?”, Item 2- “Is teaching a talent people are born with?” Please Explain, and Item 9-“Can someone learn how to be an effective teacher?” (Fives & Buehl, 2005). They found the following themes in participants’ answers; innate, requires polish, innate for some-learned for others, learned, and a calling or gift. They found beliefs about ability to teach existed along a continuum, and they also found a large portion of their sample indicated that teaching is an innate ability and something that teachers are ‘born with’. Therefore, some preservice teachers claimed that teaching cannot be learned. When teachers have fixed ability beliefs, they attribute their success or failure to innate tendencies or traits. Fives and Buehl (2005) argue the same attribution in teachers about teaching may have the same repercussions as fixed ability beliefs in their students, namely, the belief that nothing can be done to improve on these abilities. If entity theories about teaching ability are pervasive among preservice and practicing teachers, these beliefs may explain how individuals respond to professional preparation and failures in classroom settings.

Fives and Buehl (2005) express the concern that if preservice candidates believe that the ability to teach is an innate talent, they may be less receptive to the information presented in their education programs. When difficulties are encountered in the classroom, individuals who hold innate views of teaching abilities may experience threats to their sense of teaching efficacy and be more likely to leave the profession. This view of teaching also has implications for the mentoring of student teachers and new teachers. That is, veteran teachers may be less likely to offer support and assistance to those they perceive as not having it. Similarly, new (and established) teachers with an innate belief about teaching ability may be less likely to seek out or accept help from colleagues with more or different experiences. The best view, in these authors opinion, was the belief that individuals can learn to teach as most adaptive as individuals with this view are more likely to be receptive to teacher education. Such individuals may also be more resilient to obstacles or difficulties in the classroom. Instead of viewing a situation as a failure that reflects their inherent ability to teach, individuals who believe teaching is learned may view difficulties as learning opportunities that can lead to further growth and development.

The development of their Interventionist practices, however, occurred on an ongoing basis and was dependent upon factors in addition to the teacher, such as the principal, additional qualifications, and ongoing professional development for obtaining concrete behavioural and instructional strategies. Teachers, therefore, may hold inclusive beliefs from earlier on in their lives, but they still require training, preparation, ongoing development to assist them in improving their inclusive practices (eg. conferences on DI, training in AT or specific programs).

It has been suggested that teacher beliefs are to be deliberately confronted during both preservice preparation programs and inservice professional development opportunities (Hutchinson, 2004). Teachers may need to make explicit their implicit beliefs before they are able to deal with them (Bendixen, 2002; Howard, McGee, Schwartz, & Purcell, 2000). Tacit beliefs can become explicit when teachers have the opportunity to reflect on them and to discuss them and to be challenged by feedback from colleagues and peers (Howard et al., 2000). Several studies have investigated how teachers' epistemological beliefs can change and become more sophisticated through reflection about teaching and learning (Brownlee, Boulton-Lewis, & Purdie, 2002; Howard et al., 2000; Stanovich & Jordan, 1998; Stuart & Thurlow, 2000).

The research indicates (Jordan et. al) that beliefs about students with exceptionalities and those who are "at-risk" influence practices with these students. In addition to beliefs about students' abilities, teachers often hold complicated continuum beliefs about their own abilities to teach (Buehl & Fives, 2009; Fives & Buehl, 2005). When teachers with innate beliefs about the ability to teach (and if effective teaching can be learned) experience difficulties in the classroom they may question their teaching ability and their sense of teaching efficacy may decrease. They may determine that they are not "cut out" to teach and leave the profession or resign themselves to being "bad" teachers. Teacher educators, mentors, and administrators who are aware of these beliefs as well as their potential negative consequences, can foster beliefs that are more adaptive by encouraging teachers to see teaching more as

a skill to be developed and that even if some aspects of teaching are innate, polishing and training is still needed.

Lastly, if there are ways of recognizing teacher expertise (eg. inclusive and Interventionist beliefs and overall more effective practices for all students), such as the combination of the COS, P/I Interview, and Efficacy tests, for example, then one might think about asking the question about using these measures in contexts other than research alone. If it is known that beliefs are deeply rooted, often difficult to change (Pajares, 1992) without confrontation, and that beliefs equate to the quality of practices, then why are these measures, (particularly the P-I interview, as the COS is difficult to administer to those without a class) not considered as a mandatory prerequisite for gaining entry into teacher preparation programs or teaching positions? Robinson (2008) had already suggested the P-I interview could potentially be used as a screening tool in educational contexts.

Limitations of the Study:

Although the findings from this study have potential implications for theory, practice, and future research in the fields of teacher beliefs, practices and special education, it is important to acknowledge that the sample size limits the ability to generalize these findings beyond the current teachers in this study. Limitations of the data reported in this study include small sample size and selection of teachers from two boards in one Canadian city. However, the purpose of qualitative research is to provide richness and depth in both explorations and descriptions, so that the reader may be provided with a much more detailed understanding of the phenomenon of interest.

Additionally, there was a focus on Ontario literature and the study was based in Ontario. Similarly, in the case of some participants, preservice preparation program may have pre-dated the inception of DI into some preservice courses in special education, hence why some participants reported they were not learning DI in preservice.

Further, more probing in certain areas was warranted during follow up interviews. For example, in the area of the development of consultation, there was probing about how teachers consulted, but not about where they learned that they must consult once in practice.

While the researcher did use the Classroom Observation Checklist to help structure observations, the researcher did not use and score the Classroom Observation Scale (COS), meant to recognize expertise in teaching practices. Past studies on Interventionist teaching have tended to use the COS combined with the P-I interview (Robinson, 2008) as well as teacher efficacy in order to have multiple means of identifying and validating effective teaching.

The researcher deliberately focused only on the development of the beliefs and practices of Interventionist teachers, not Pathognomonic teachers. The researcher wanted to learn from the development of Interventionist teachers as they hold positive beliefs and practices. However, the perspective of Pathognomonic teachers and their development may be useful for future research. Further understanding of the development of the Pathognomonic perspective may assist researchers and teacher educators interested in belief change, as first one might want to better understand where Pathognomonic perspectives come from, and where teachers are learning and

developing them?. It has been suggested that Pathognomonic teachers fear that they may not have the specialized knowledge and skills to work with students with special education needs in regular classrooms and that this fear may also be a cause of their reluctance to accept inclusion (Jordan, Schwartz & McGhie-Richmond, 2009). It is known, as alluded to in the literature review, that teachers with more Pathognomonic perspectives attribute to their students with special education needs internal, fixed, and unreachable characteristics that are beyond the teachers' expertise and therefore beyond their help (Jordan, Schwartz & McGhie-Richmond , 2009). Therefore, while it is known what constitutes Pathognomonic beliefs, and the practices arising from Pathognomonic teachers, very little is known about the development of Pathognomonic beliefs.

Strengths: Methodology

Avramidis and Norwich (2002) found, in their review of literature on teacher attitudes towards integration and inclusion, from Australian, European (UK), American and Canadian studies, suggested some possible methodological shortcomings to avoid when conducting research on attitudes. Firstly, they argued that using Likert-type inventories does not uncover the factors that may underlie particular attitudes (Avramidis and Norwich, 2002). Further, it was found that paper-and-pencil measures prevailed in the methodologies and few attempts were made to include other sources of data, such as teacher interviews, or other unobtrusive measures to validate the measurements taken.

In addition, due to “inclusion” being a recent politically correct idea, there is always the danger of the participants giving socially desirable answers that have little

or no correspondence with their everyday behaviour. According to Avramidis and Norwich (2002)

Teachers may endorse general statements in favour of having children with difficulties in regular classrooms, but it is another matter entirely how willing they are to make specific adaptations for these children. For this reason, it is recommended that observations of teachers' actual classroom behaviour and interactions with the integrated child are conducted. One limitation of direct observations, of course is that the person being observed may alter his or her behaviour during the observation period. However, one is more likely to observe samples of true behaviour over periodic observations, rather than by relying solely on questionnaire data.

The current study addressed the above concerns by having teachers self-select into the study. Teachers had to first complete the P-I interview, which was an interview that tends to avoid the transparency of standard paper-and-pencil measures of attitude and belief (Jordan & Stanovich, 1997). When asked to focus on specific students who have difficulty learning, teachers are able to explain in chronological sequence the steps they have taken over a school year, in the manner of a narrative story (Engel, 1993). Teachers describe their recalled experiences, reporting their perceptions of the students' characteristics, the decisions they made, their intentions and reasons for doing so, and their judgments about the results, in relation to their understanding of their roles and responsibilities in meeting the needs of their students with disabilities. Engel (1993) describes the narrative interview as the collection of "origin myths" in which the narrator constructs concepts of self in relation to the society and culture in which he or she lives and acts. Engel notes that the retelling of myths is an act of insight, a reinterpretation of the past, reaffirmation of core values and beliefs (p. 792).

In addition, an independent coder was used to score the transcripts of the P-I Interview and this coder found similar numerical scores indicating which teachers were Interventionists.

Importance of the Findings

Interventionist teachers who came from schools with specific programs in place (Tribes), which were enacted as a whole school approach, spoke highly of their principals: they spoke about the principal's occasional presence in their classes by co-teaching classes with them, the holding of regular "Tribes" assemblies, and supporting the "4 agreements" through following through with consequences, for example. Where there was not a whole school vision, or an inclusive administrator, Interventionist teachers felt they relied more on others within their divisions. They actively sought out other colleagues for informal and formal support. These findings support the research on the benefits of establishing a professional learning community for obtaining support for practices.

According to Zimmerman & Rappaport, 1988, implementing a participative management method such as professional learning communities has many positive impacts: the most notable impact is that participants develop a feeling of empowerment (Zimmerman & Rappaport, 1988). This feeling is that their strengths and skills are allied, that they have natural systems for mutual help, and that they engage in proactive behaviour when facing changes. Interventionist teachers in this research who felt they belonged to a professional learning community reported they felt less isolated when faced with complex tasks, more confident in dealing with new, unfamiliar strategies; were more effective, reported that they belonged to a group, that

change was possible and they could make a contribution. This was similar to what Zimmerman & Rappaport, (1988) and Koffi, Laurin & Moreau, (2000) found among their participants. Further, participants reported increased self-confidence and self-esteem, that their individual efforts would be supported by the group and that they could experience leadership development (Zimmerman & Rappaport, 1988).

As discussed earlier, teachers in this work believed their Interventionist beliefs were developed in the early years of their lives, deeply rooted, and they felt it would be quite difficult, if not impossible, for them to be negatively influenced by others in this regard. The findings of these 6 Interventionist teachers about their beliefs after several years of teaching in the field provides findings that were similar to previous work on preservice teachers' beliefs during the initial period of preparation; it is known that teachers enter the initial period of preparation with beliefs that are intransigent and hard to change ((Pajares, 1992; Richardson, 1996; Tillema, 2000; Williams, Specht & Edmunds, 2006). The findings also relate to research on practicing teachers both White (2007) and Robinson (2008) found that beliefs of practicing teachers regarding their students with exceptionalities and those at-risk did not change over time. In his doctoral work, Robinson (2008) expressed frustration with this finding for those who wish to impart change in the thinking of teachers, whether at inservice or preservice levels. In addition, Robinson (2008) openly admitted in the conclusion of his discussion that the lack of truly "exemplary" teachers to be found in practice was disappointing.

The current research sought out teachers who were Interventionist and believed they were positive, as they selected into this study to "share stories of

success relating to inclusion”. Therefore, because these teachers were so inclusive, it may be that such individuals will always be inclusive in their beliefs, regardless of the culture of their community of practice. Again, similar findings were reported in White’s (2007) study which also revealed the intransigence of teachers’ beliefs over time. After five years had passed, both Pathognomonic or Interventionist belief systems did not change. In fact, in one case, teacher beliefs were strengthened: an already inclusive teacher seemed to more inclusive because she had developed more skills and confidence to accommodate a wide range of learners, while negative teachers were still negative. Teachers from White’s (2007) study were pulled from two schools, both of which had strong policies of inclusion in which resources were spent in providing in-service education and on-site support to teachers to promote inclusive practices. Both this research and White’s (2007) study contradict the Wengerian notion that the “community of practice” is influential in being able to shape individual teacher’s beliefs. However, Stanovich and Jordan (1998) found evidence to the contrary; that the beliefs of the principals about inclusion and about the roles and responsibilities of their staff in promoting inclusive practice were the most influential variable in the model of effective inclusion. These few studies concerned with the development of Interventionist belief combined with the discrepancy in the findings between Stanovich and Jordan’s work (1998) and White (2007), and this current research, indicates that this area merits further investigation.

In closing, it has long been known that beliefs beget actions. Recall, Interventionist teachers are effective teachers (Jordan, Schwartz & McGhie-Richmond, 2009). Jordan and colleagues stated:

we make the case that effective inclusionary practices, and therefore overall effective teaching, depend in part on the beliefs of teachers about the nature of disability, and about their roles and responsibilities in working with students with special education needs. Elementary classroom teachers who believe students with special needs are their responsibility tend to be more effective overall with all of their students (p.535).

It is further accepted that teachers' beliefs are important to examine and consider because they influence teaching practices, which directly affects students in both academic achievement and socio-emotional ways. It has also been well established that certain teaching practices have been found to be more effective overall for all students and therefore more effective for their students with exceptionalities: we could label such teachers effective, Interventionist, or exemplary, for example. Less is known, however, about the development of such teachers' beliefs and practices. For example, are beliefs about students with exceptionalities and inclusion able to be shaped by a supportive community of practice? Further, how do teachers who already have Interventionist beliefs in place develop Interventionist practices? Where are such practices learned and in what order are they learned? Is it because they are placed in inclusive communities and the culture of such communities shape them, causing them to want to learn more inclusive practices so that they may acculturate to the professional climate of their colleagues? Or, is it that due to their already existing and strong Interventionist beliefs, such teachers actively take steps to improve their own individual practices, such as: enrolling in professional development, AQs, taking the initiative to working collaboratively with others to share ideas, and so forth? Further, the researcher wanted to know what sources have been helpful to these types of teachers and what sources do teachers perceive to require more attention? This dissertation has begun to answer these often unasked questions qualitatively, and

based on both retrospective and current experiences of the 6 Interventionist teachers. From their accounts, coupled with observations, this research affirms that teachers perceive their Interventionist beliefs are developed early in life, and are therefore deeply rooted and linked to socialization and familial experiences. It also adds to the extant literature that teachers' perceive their beliefs about their students with exceptionalities and including them are difficult to change, since teachers in this study claimed to be resilient to the prevailing beliefs of their various communities of practices over time, and not easily influenced-belief wise- by them. Learning about the development of Interventionist teachers' beliefs and practices continues to be important due to findings of past correlations between beliefs about including students with exceptionalities in the general education classroom, and resulting overall effective practices which support all students. Further, learning about the development of Interventionist teachers will help us to better support our teachers who remain the most important facilitators of inclusion in the classroom.

REFERENCES

- Adams, C. & Pierce, R. (2003). Teaching by tiering: Creating lessons with multiple levels can be an effective method for meeting the needs of all learners. *Science and Children*, 41(3), 30-34.
- Ainscow, M., West, M., & Nicolaidu, M. (2004). Putting our heads together: A study of headteacher collaboration as a strategy for school improvement. In C. Clark (Ed.), *Improving schools in difficult circumstances*. London: Continuum.
- Aksamit, D. (1990). Practicing Teachers' Perceptions of their preservice preparation for Mainstreaming. *Teacher Education and Special Education*, 13(1). 20-29.
- Anderson, K. (2007). Tips for teaching. Differentiating instruction to include all students. *Preventing School Failure*, 51(3), 49-54.
- Avramidis, E., Bayliss, P., & Burden, R. (2000). Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school. *Teaching and Teacher Education*, 16, 277-293.
- Avramidis, E. & Norwich, B. (2002). Mainstream teachers' attitudes towards inclusion/integration: a review of the literature. *European Journal of Special Needs Education*, 17(2), 1-19.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Baumgartner, T., Lipowski, M. B., & Rush, C. (2003). *Increasing reading achievement of primary and middle school students through differentiated instruction*. (Unpublished master's thesis). Retrieved from Education Resources Information Center (ERIC No. ED479203).
- Begley, P.T., & Zaretsky. (2004). Democratic school leadership in Canada's public school systems: Professional value and social ethic. *Journal of Educational Administration*, 42(6), 640-655.
- Bendixen, L. (2002). A process model of epistemic belief change. In *Personal epistemology: The psychology of beliefs about knowledge and knowing*. B. K. Hofer & P.R. Pintrich. (pp. 191-208). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Bennett, S. (2009). *Including Students with exceptionalities. The literacy and numeracy secretariat. What works: A research into practice*. Retrieved from <http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Bennett.pdf>
- Berliner, D. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research*, 35, 463-482.
- Berliner, D. (2004). Describing the behavior and documenting the accomplishments

- of expert teachers. *Bulletin of Science, Technology & Society*, 24, 200-212.
- Berry, R. W. (2006). Beyond strategies: Teacher beliefs and writing instruction in two primary inclusion classrooms. *Journal of Learning Disabilities*, 39(1), 11-24.
- Berry, R. A. W. (2008). Novice teachers' conceptions of fairness in inclusion classrooms. *Teaching and Teacher Education*, 24(5), 1149-1159.
- Billingsley, B.S. (1993). Teacher retention and attrition in special and general education: A critical review of the literature. *The Journal of Special Education*, 27(2), 137-174.
- Blackorby, J., Wagner, M., Cameto, R., Davies, L., Levine, P., & Newman, L. (2005). *Engagement, academics, social adjustment, and independence*. Palo Alto, CA: SRI.
- Boe, E., Shin, S., & Cook, L. (2007). Does teacher preparation matter for beginner teachers in either special or general education? *The Journal of Special Education*, 41(3), 158.
- Booth, T., Ainscow, M., Black-Hawkings, K., Vaughan, M., & Shaw, L. (2000). *Index for inclusion: Developing learning and participation in schools*. Bristol, UK: Center for Studies in Inclusive Education.
- Bossert, S. T., Dwyer, D. C., Rowan, B., & Lee, G. V. (1982). The instructional management role of the principal. *Educational Administration Quarterly*, 18(3), 34-64.
- Boyer, L. & Lee, C. (2001). Converting challenge into success: Supporting a new teacher of students with Autism. *Journal of Special Education*, 35, 75-83.
- Brantlinger, E., Jimenez, R. Klinger, J., Pugach, M., and Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children*, 71(2), 195-207.
- Brimijoin, K., Marquisee, E., & Tomlinson, C. A. (2003). Using data to differentiate instruction. *Educational Leadership*, 60(5), 70-73.
- Brimijoin, K. (2002). *A journey toward expertise in differentiation: A preservice and inservice teacher make their way*. An unpublished doctoral dissertation. Charlottesville: University of Virginia
- Brophy, J. (2004). *Motivating students to learn* (2nd ed.). Boston, MA: McGraw Hill.
- Brownell, M.T., & Smith, S.W. (1992). Understanding special education teacher attrition: A conceptual model and implications for teacher educators. *Teacher Education and Special Education*, 16, 370-382.
- Brownlee, J., Boulton-Lewis, G., & Purdie, N. (2002). Core beliefs about knowing and peripheral beliefs about learning: Developing a holistic conceptualization of epistemological beliefs. *Australian Journal of Educational & Developmental Psychology*, 2, 1-16.

- Buehl, M. & Fives, H. (2009). Exploring teachers' beliefs about teaching knowledge: Where does it come from? Does it change? *The Journal of Experimental Education*, 77(4), 367-408.
- Bunch, G., & Valeo, A. (2004). Student attitudes towards peers with disabilities in inclusive and special education schools. *Disability and Society*, 1(1), 61-78.
- Burstein, N., Sears, S., Wilcoxon, A., Cabello, B. & Spagna, M. (2004). Moving toward inclusive practices. *Remedial and Special Education*, 25(2), 104-116.
- Busch, T., Pederson, K., Espin, C., & Weissenburger, J. (2001). Teaching students with learning disabilities: Perceptions of a first-year teacher. *The Journal of Special Education*, 35(2), 92.
- Cabello, B., & Terrell, R. (1994). Making students feel like a family: How teachers create warm and caring classroom climates. *Journal of Classroom Interaction*, 29(1), 17-23.
- Caine, R., & Caine, G. (April, 1995). Re-inventing schools through brain based learning. *Educational Leadership*, 52(7), 43-47.
- Carroll, A., Forlin, C, and Jobling, A. (2003). The impact of teacher training in special education on the attitudes of Australian preservice teachers. *Teacher Education Quarterly*, 30(3) 65-79.
- Carter, K., & Scruggs, T. (2001). Thirty-one students: Reflections of a first-year teacher of students with mental retardation. *The Journal of Special Education*, 35(2), 100-104.
- Cesar, M., & Santos, N. (2006). From exclusion to inclusion: Collaborative work contributions to more inclusive learning settings. *European Journal of Psychology of Education*, 21(3), 333-346.
- Cole, K. B. & Leyser, Y. (1999). Curricular and instructional adaptations: Views of special and general education student teachers and their cooperating teachers. *Teacher Educator*, 34(3), 157-172.
- Contu, A. & Wilmott, H. (2003). Re-embedding situatedness: the importance of power relations in learning theory. *Organization Science*, 14(3), 283-296.
- Cooper, K. (2003). From left field to safe at home-base: Building a community in the pre-service classroom and beyond. *Teacher Education Quarterly*, 30(4) 83-90.
- Dembo M.H. & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *The Elementary School Journal*. 86(2), 173-184.
- Demeris, H., Childs, R., & Jordan, A. (2007). The impact of students with disabilities included in third grade classrooms on the large-scale achievement scores of their non-identified peers. *Canadian Journal of Education*, 30, 609-627.
- Downing, J., & Eichenger, J. (1990). Instructional strategies for learners with dual sensory impairments in integrated settings. *Journal of the Association of Persons with Severe Handicaps*. 15(2), 98-105.

- Dyson, A, Farrell, P., Polat, F., Hutchenson, G., & Gallannaugh, F. (2007). The relationship between inclusion and academic achievement in English mainstream schools. *School Effectiveness and School Improvement, 18*(3), 333–352.
- Dyson, A., Polat, F., & Farrell, P. (2004, April). *Inclusion and student achievement*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Dyson, L. & Zhang, N. (2004). Concerns about the integration of elementary school children with disabilities: A comparison of Canadian and Chinese teachers. *Exceptionality Education Canada, 14*. 141-168.
- Edmunds, A.L., & Edmunds, G. A. (2008). *Special education in Canada*. Toronto, ON: McGraw-Hill Ryerson.
- Edmunds, A.L., MacMillan, R.B., Nowicki, E., Specht, J., Edmunds, G.A. (2009). Principals and inclusive schools: Insight into practice. *The Journal of Educational Administration and Foundations, 20*. 1-23.
- Ellis, E.S., & Worthington, L.A. (1994). Research synthesis on effective teaching principles and the design of quality tools for educators (Technical Report No. 5). Eugene: University of Oregon, National Center to Improve the Tools of Educators. Retrieved from ERIC Document Reproduction Service. (ED386853).
- Engel, D. M. (1993). 'Origin myths: Narratives of authority, resistance, disability and law. *Law and Society, 27*, 785-826.
- Englert, C.S. (1984). Measuring teacher effectiveness from the teacher's point of view. *Focus On Exceptional Children, 17*, 1-15.
- Englert, C.S., Tarrant, K.I., & Mariage, T. V. (1992). Defining and redefining instructional practice in special education: Perspectives on good teaching. *Teacher Education and Special Education, 15*, 62-86.
- Evans, J. H., Bird, K. M., Ford, L. A., Green, J. L., & Bischoff, R. A. (1992). Strategies for overcoming resistance to the integration of students with special needs into neighborhood schools: A case study. *Case in Point, 7*(1), 1-15.
- Farrell, P. (2001). Special education in the last twenty years: have things really got better? *British Journal of Special Education, 28*(1). 3-9.
- Fives, H. & Buehl, M. (2005). Accessing teacher beliefs about pedagogical knowledge: Developing an instrument. New Orleans: LA.
- Flinders, D. J. & Nel Noddings (2001). In Joy A. Palmer (ed.) *Fifty modern thinkers on education: From piaget to the present*. London: Routledge,.
- Florian, L. & Rouse, M. (2001). Inclusive practice in English secondary schools: Lessons learned. *Cambridge Journal of Education, 31*(3), 399-412.

- Friend, M., & Cook, L. (2007). *Interactions: collaboration skills for school professionals*. 5th Edition. New York: Pearson Education Inc.
- Friend, M., and Pope, K. (2005). Creating schools in which all students can succeed. *Kappa Delta Pi Record*. 41 (2), 56-61.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Jossey-Bass.
- Fuller, F, & Brown, O.H. (1975). Becoming a teacher. In K. Ryan (Ed.), *Teacher education*. Chicago: University of Chicago Press.
- Gibbs, J. (2001). *Tribes: A new way of learning and being together*. Windsor, CA: Center Source Systems.
- Gibson, S. & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569-582.
- Glenn, C. (2007). The impact of teachers' epistemological beliefs and their beliefs about disability on their teaching practices in inclusive classrooms. Unpublished doctoral dissertation, University of Toronto.
- Goddard, R. D. (2003). Relational networks, social trust, and norms: A social capital perspective on students' chances of academic success. *Educational Evaluation and Policy Analysis*, 25(1), 59-74.
- Golder, G., Norwich, B. & Bayliss, P. (2005). Preparing teachers to teach pupils with Special educational needs in more inclusive schools: evaluating a PGCE (Post Graduate Certificate in Education Programme). *British Journal of Special Education*, 32, 92-99.
- Goodlad, J.I. & Lovitt, T.C. (Eds.) (1993) *Integrating general and special education*, Macmillan, New York: Merrill.
- Gordon. S., Benner. P. & Noddings. N. (Eds.) (1996). *Caregiving: Readings in knowledge, practice, ethics and politics*. Philadelphia: University of Pennsylvania Press.
- Graden, J., Casey, A., & Christenson, S. (1985). Implementing a prereferral intervention system part II: The data. *Exceptional Children*, 51, 487-496.
- Gregory, G., & Chapman, C. (2007). *Differentiated instructional strategies. One size doesn't fit all*. Thousand Oaks, California: Corwin Press,.
- Hall, T., Strangman, N., & Meyer, A. (2003). *Differentiated instruction and implications for UDL implementation*. National Center on Accessing the General Curriculum. Retrieved from http://aim.cast.org/learn/historyarchive/backgroundpapers/differentiated_instruction_udl .
- Hamilton, M. & Richardson, V. (1995). Effects of the culture in two schools on the process and outcomes of staff development. *The Elementary School Journal*, 95(4), 367-385.

- Hallinger, P., Bickman, L., & Davis, K. (1996). School context, principal leadership and student achievement. *Elementary School Journal*, 96(5), 498–518.
- Hallinger, P., & Heck, R. (1996a). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980–1995. *Educational Administration Quarterly*, 32(1), 5–44.
- Hallinger, P., & Heck, R. (1996b). The principal's role in school effectiveness: A review of methodological issues, 1980–95. In K., Leithwood, et al. (Ed.), *The international handbook of educational leadership and administration* (pp. 723–784). Dordrecht, Netherlands: Kluwer.
- Heron, E., & Jorgensen, C. (1995). Addressing learning differences right from the start. *Educational Leadership*, 52(4), 56-59
- Hertzog, C. J., Morgan, P. L., Diamond, P. A., & Walker, M. J. (1996). Transition to high school: A look at student perceptions. *Becoming*, 7(2), 6-8
- Heward, W. L. (2003). Ten faulty notions about teaching and learning that hinder the effectiveness of special education. *The Journal of Special Education*, 36(4), 186-205
- Hines, J. (2008). Making collaboration work in inclusive high school classrooms: Recommendations for Principals. *Intervention in School and Clinic*, 43(5) 277-282.
- Howard, B.C., McGee, S., Schwartz, N., and Purcell, S. (2000). The experience of constructivism: Transforming teacher epistemology. *Journal of Research on Computing in Education* 32 (4), 455-462.
- Hutchinson, N.L. (2002). *Inclusion of exceptional learners in Canadian schools: A practical handbook for teachers*. Toronto: Prentice Hall.
- Hutchinson, N. (2004). Critical Reflection by teacher candidates on cases based in their experience: Teacher Education for inclusive education. *Exceptionality Education Canada* 14, 89-114.
- Hunt, P., Staub, D., Alwell, M., & Goetz, L. (1994). Achievement by all students within the context of cooperative learning groups. *Journal of the Association for Persons with Severe Handicaps*, 19, 290-301.
- Isenbarger, L. & Zembylas, M. (2006). The emotional labor of caring in teaching. *Teaching and Teacher Education*, 22, 120-134.
- Johnson, F. & Edmunds, A. (2006). *From chaos to control: Understanding and responding to the behaviour of children with exceptionalities*. London, ON: Althouse Press.
- Jordan, A., Lindsay, L., & Stanovich, P. (1997). Classroom teachers' instructional interactions with students who are exceptional, at risk, and typically achieving. *Remedial and Special Education*, 18(2), 82-93.

- Jordan, A., Glenn, C., & McGhie-Richmond, D. (2010). The SET project: Effective teaching and its relationship to teachers' epistemological beliefs and inclusive teaching practices. *Teaching and Teacher Education*, 26, 259-266.
- Jordan, A., Kircaali-Iftar, G., & Diamond, C. T. P. (1993). Who has a problem, the student or the teacher? Differences in teachers' beliefs about their work with at-risk and integrated exceptional students. *International Journal of Disability, Development and Education*, 40(1), 45-62.
- Jordan, A., Schwartz, E., & McGhie-Richmond, D. (2009). Preparing teachers for inclusive classrooms. *Teaching and Teacher Education*, 25 (4), 535-542.
- Jordan, A., & Stanovich, P. (2001). Patterns of teacher-student interaction in inclusive Elementary classrooms and correlates with student self-concept. *International Journal of Disability, Development and Education*, 48(1), 33-52.
- Jordan, A. & Stanovich, P. (2003). Teachers' personal epistemological beliefs about students with disabilities as indicators of effective teaching practices. *Journal of Research in Special Educational Needs*, 3(1), 1-12.
- Jordan, A., & Stanovich, P. (2004). The beliefs and practices of Canadian teachers about including students with special needs in their regular elementary classrooms. *Exceptionality Education Canada*. 14(2&3), 25-46.
- Jordan-Wilson, A., and Silverman, H. (1991). Teachers' assumptions and beliefs about the delivery of services to exceptional children. *Teacher Education and Special Education*, 14,, 198-206.
- Jordan, A. (2007). *Inclusive education*. Mississauga, Ontario: John Wiley & Sons Canada Ltd.
- Kalambouka, A. Farrell, P. Dyson, A. & Kaplan, I. (2007). The impact of placing students with special education needs in mainstream schools on the achievement of their peers. *Educational Researcher*, 49(4), 365–382.
- Katz, M., Noddings, N., & Strike, K. (1999) *Justice and caring: the search for common ground in education* Professional ethics in education series. New York: Teachers College Press.
- Koffi, V., Laurin, P., & Moreau, A. (2000). *Quand l'école se prend en main* (2nd ed.). Quebec: Presses de l'Université du Québec.
- Kounin, J. (1970) *Discipline and group management in classrooms*. New York: Holt, Rinehart, & Winston.
- Lesar, S., Benner, S. M., Habel, J., & Coleman, L. (1997). Preparing general education teachers for inclusive settings: A constructivist teacher education program. *Teacher Education and Special Education*, 20, 204-220.
- Leithwood, K. A., Begley, P. T., & Cousins, J. B. (1992). *Developing expert leadership for future schools*. London, UK: Falmer

- Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- Lupart, J., & Odishaw, J. (2003). Canadian children and youth at-risk. *Exceptionality Education Canada*, 13(2&3), 9-28.
- Lupart, J. & Watson, S. (2003). What can we conclude about children and youth at-risk in Canada? *Exceptionality Education Canada*, 13(2&3), 217-226.
- Martin, A., Hutchinson, N., & Levac, M. (2003). Meeting the challenges of adapting teaching for exceptional students: the role of teacher education. *Exceptionality Education Canada*, 13(1), 65-80.
- Maxwell, J. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, 62(3) 279-300.
- McCay, L. & Keyes, D. (2002). Developing social competence in the inclusive primary classroom. *Childhood Education*, 78(2), 70-78.
- McGee, M. R. (2001). *Measuring effective teaching in inclusive classrooms*. (Unpublished master's thesis), University of Toronto, Toronto, ON.
- McGhie-Richmond, D., Underwood, K., & Jordan, A. (2007). Developing effective instructional strategies for teaching in inclusive classrooms. *Exceptionality Education Canada* 17(1), 27-51.
- McIntosh, R., Vaughn, S., Schumm, J.S., Haager, D., & Lee, O. (1993). Observations of students with learning disabilities in general education classrooms. *Exceptional Children*, 60, 249-261.
- McLeskey, J. & Waldron, N. (2000). *Inclusive schools in action: making differences ordinary*. Alexandria: VA: Association for Supervision and Curriculum Development (ASCD).
- Meyer, A., & Rose, D. H. (1998). *Learning to Read in the Computer Age*, 3. Cambridge, MA: Brookline Books.
- Miles, M., & Huberman, M. (1994). *Qualitative data analysis 2nd Edition*. Thousand Oaks, CA: Sage Publications, Inc.
- Mutch, A. (2003). Communities of Practices and Habitus: A Critique. *Organization Studies*, 24(3)383-401.
- Nanus, B. (1992). *Visionary leadership: Creating a compelling sense of direction for your organization*. San Francisco: Jossey-Bass.
- Nevin, A. Thousand, J., Parsons, S., & Lilly, S. (2000). "The kids keep me fresh!" results of a follow-up survey of graduates from two special education teacher education programs who are teaching. *Teacher Education Quarterly*, 27(1) 87-109.

- Noddings, N. (1984). *Caring, a feminine approach to ethics & moral education*. Berkeley, CA: University of California Press.
- Noddings, N. (2003). *Happiness and Education*. Cambridge: Cambridge University Press.
- Noddings, N. (2005) Caring in education the encyclopedia of informal education. Retrieved from www.infed.org/biblio/noddings_caring_in_education.htm.
- Olson, D. R., & Katz, S. (2001). The fourth folk pedagogy. In B. Torff & R. J. Sternberg (Eds.), *Understanding and teaching the intuitive mind: Student and teacher learning* (pp. 243-263). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Ontario College of Teachers. (2006, December). Teacher-education recommendations include longer programs, more practice teaching. *Professionally Speaking*, p.69.
- Ontario Ministry of Education (2005). *Education for all: The report of the expert panel on literacy and numeracy instruction for students with special education needs, kindergarten to grade 6*. Toronto, ON: Author
- Ontario Ministry of Education (1998). *Regulation 181/98*. Retrieved from <http://www.edu.gov.on.ca/eng/general/elemsec/spiced/hilites.html>
- Patton, M (1994). *Qualitative research and evaluation methods* (3rd ed.). Newbury Park, CA: Sage.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-332
- Pianta, R.C. & Stuhlman, M.W. (2004). Teacher-child relationships and children's success in the first years of school. *School Psychology Review*. 33(3), 444-458.
- Pianta, R.C. & Walsh, D.J. (1996). *High-risk children in schools: constructing sustaining Relationships*. New York: Routledge.
- Pugach, M., & Lilly, S. (1984). Reconceptualizing support services for classroom teachers: Implications for teacher education. *Journal of Teacher Education*, (35) 48-55.
- Rea, P., McLaughlin, V., & Walther-Thomas, C. (2002). Outcomes for students with learning disabilities in inclusive and pull-out programs. *Exceptional Children*, 68(2), 203-222.
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula, J., Buttery, T.J. & Guyton, E. (Eds.), *Handbook of research on teacher education* (2nd ed., pp. 102-119). New York: Simon & Schuster Macmillan.
- Robinson, P. (2008). *The characteristics of teacher expertise in inclusive elementary classrooms*. (Unpublished doctoral dissertation), University of Toronto, Toronto, ON.
- Rose, D. H., & Meyer, A. (2002). *Teaching every student in the Digital Age: Universal Design for Learning*. Alexandria, VA: ASCD.

- Rude, H. A., & Anderson, R. E. (1992). Administrator effectiveness in support of inclusive schools. *Case In Point*, 7(1), 31-37.
- Salend, J.S. (1999). So what's with our inclusion program? *Teaching Exceptional Children*. 32, (2) 46-55.
- Schuumm, J, Vaughn, S., Haager, D., McDowell, J. et al. (1995). General education teacher planning: What can students with learning disabilities expect? *Exceptional Children*. 61(4), 335-353.
- Scruggs, T., & Mastropieri, M. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. *Exceptional Children*, 63 (1), 59-74.
- Stanley, T., Kea, C., & Oh, K. (2008). Preparing preservice educators for cultural diversity: How far have we come? *Exceptional Children*. 74(3), 328-350.
- Stanovich, P., & Jordan, A. (1998). Canadian teachers' and principals' beliefs about inclusive education as predictors of effective teaching in heterogeneous classrooms. *The Elementary School Journal*, 98, 221-239.
- Stanovich, P., & Jordan, A. (2002). Preparing general educators to teach in inclusive classrooms: some food for thought. *The Teacher Educator*, 37(3), 173-185.
- Sternberg, R. J., Torff, B. & Grigorenko, E. (1998). Teaching for successful intelligence raises school achievement. *Phi Delta Kappan*, 79(9), 667-669.
- Stuart, C. & Thurlow, D. (2000). Making it their own: preservice teachers' experiences, beliefs, and classroom practices. *Journal of Teacher Education*, 51(2), 113-121.
- Swanson, H. L., Hoskyn, M., & Lee, C. (1999). *Interventions for students with learning disabilities: A meta-analysis of treatment outcomes*. New York: Guilford.
- Swanson, H. L. (1999). Reading research for students with LD: A meta-analysis of intervention outcomes. *Journal of Learning Disabilities*, 32(6), 504-532.
- Timmons, V., & Wagner, M. (2010). Inclusive education knowledge exchange initiative: An analysis of the statistics Canada participation and activity limitation survey: Final report. Retrieved from http://www.edu.uwo.ca/inclusive_education/PDFfiles/201009TimmonsInclusiveEducationFullReport.pdf.
- Tillema, H. H. (2000). Belief change towards self-directed learning in student teachers: Immersion in practice or reflection on action. *Teaching and Teacher Education*, 16 (5-6), 575-591.
- Tochterman, S., Cooner, D., and Lehmann, J. (2005). Stages of preservice development for teachers of students with emotional disabilities. *The Teacher Educator*, 41(2) 75-94.
- Tomlinson, C. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision and Curriculum Development.

- Tomlinson, C. A. (2001) Grading for success, *Educational Leadership*, 58(6), 12-15.
- Tomlinson, C. (2004). The mobius effect: Addressing learner variance in schools. *Journal of Learning Disabilities*, 37(6), 516-524.
- Tomlinson, C. (2004). Differentiation in diverse settings: A consultant's experience in diverse settings. *The School Administrator*, 7(61), 28-35.
- Tomlinson, C. A. and Allan, S. D. (2000) Reasons for optimism about differentiation: Its basis in theory and research. In Tomlinson and Allan. *Leadership for differentiating schools and classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C., Callahan, C., Tomchin, E., Eiss, N. et. al. (1997). Becoming architects of communities of learning addressing academic diversity in contemporary classrooms. *Exceptional Children*, 63(2), 269.
- Torff, B. (1999). Tacit knowledge in teaching: Folk pedagogy and teacher education. In R. Sternberg & J. Horvath (Eds.), *Tacit knowledge in professional practice* (pp. 195-214). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Torff, B. (2003). Developmental changes on teachers' use of higher order thinking and content knowledge. *Journal of Educational Psychology*, 95, 563-569.
- Torff, B., & Sternberg, R. (2001). Intuitive conceptions among learners and teachers. In B. Torff & R. Sternberg (Eds.), *Understanding and teaching the intuitive mind: Learner and teacher learning* (pp.3-26). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Tschannen-Moran, M. (2004). *Trust matters: Leadership for successful schools*. San Francisco: Jossey-Bass.
- Turnbull, R., Turnbull, A., Shank, M., Smith, S., & Leal, D. (2002). *Exceptional lives: Special education in today's schools*. Columbus, OH: Merrill.
- Wagner, M. & Timmons, V. (2008). Inclusive education: Analysis of the statistics from Canada participation and activity limitation survey. *Journal of Intellectual Disability, Research*, 52(8).
- Wagner, M., Newman, L., Cameto, R., Levine, P., and Marder, C. (2003). *Going to school: Instructional contexts, programs, and participation of secondary school students with disabilities*. Menlo Park, CA: SRI International. Retrieved from http://www.nlts2.org/reports/2003_12/index.html.
- Walther-Thomas, C.S., Korinek, L., McLaughlin, V.L. & Williams, B.T. (2000). *Collaboration for inclusive education: Developing successful programs*. Boston: Allyn & Bacon.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

- Wenger, E. (1998). Communities of practice: Learning as a social system. *Systems Thinker*, 9(5), 1-10.
- Wenger, E. (2006, June). Communities of practice: a brief introduction. Retrieved from http://www.ewenger.com/theory/communities_of_practice_intro.html.
- White, R. (2007). *Characteristics of classroom teachers which contribute to their professional growth in implementing inclusive practices*. (Unpublished master's thesis), University of Toronto, Toronto.
- Wilson, A.J. & Silverman, H. (1991). Teachers' assumptions and beliefs about the delivery of services to exceptional children. *Teacher Education and Special Education*, 14, 198-206.
- Williams, A., Specht, J. & Edmunds, A. (2006, April). *Preservice Teachers' Attitudes Towards Inclusion*. Presented at the annual meeting of the American Educational Research Association, San Francisco.
- Woloshyn, V., Bennett, S., & Berrill, D. (2003). Working with students who have learning disabilities- teacher candidates speak out: Issues and concerns in preservice education and professional development. *Exceptionality Education Canada*. 13(1) 7-28.
- Yellin, P., Yellin, D., et al. (2003) "I'm not sure I can handle the kids, especially the uh you , know special ed kids," *Action in Teacher Education*, XXV(1)19-29.
- Ysseldyke, J.E. & Thurlow, M.L. (1984). Assessment practices in special education: adequacy and appropriateness. *Educational Psychologist*, 19, 123-136.
- Zeichner, Kenneth M. and Liston, Daniel P (1996). *Reflective teaching: An introduction*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Zimmerman, M.A. & Rappaport, J. (1988). Citizen participation, perceived control, and psychological empowerment. *American Journal of Community Psychology*, 16(5)725-751.

APPENDICES

Appendix A

Pathognomonic-Interventionist Teacher Interview

(Stanovich & Jordan, 1998)

A. At Risk Pupils

1. Are there any students that are at risk that you are concerned about?

What is the nature of their learning difficulties? Are there particular subjects with which they have difficulty? [*The interviewer selects two specific students around whom to focus the remainder of the questions – but the students are not named*]

2. Tell me what first caused you to become concerned about these students?
 - a) Where did you go for information? (e.g. Ontario Student Record, previous teachers, resource teacher, school psychologist, other sources)?
 - b) Whom have you contacted (e.g., teaching staff, support staff, principals, parents, guardians?).
 - c) What other steps have you taken?
3. Did you do anything special to accommodate the child prior to seeking help from others (e.g., classroom organization, instructional adaptations or modifications)?
4. Have you referred any of these students to the school-based support team (SBST)?
 - a) How long did you wait before making the referral?
 - b) How does the SBST work together (e.g., when, where, and how often do they meet; who selects educational objectives for referred students, what has your role been?)
 - c) Have you been satisfied with the SBST process?
5. What steps have been taken to get the students with difficulties back on track?
6. What are your expectations and hopes for these students with difficulties?
7. What methods do you use for evaluating and monitoring students (with difficulties) progress? How often do you evaluate progress? How do you judge your success?

8. When were these students parents first contacted? How often do you have contact with parents of difficult students? How have you involved them in the students' program? Who does the reporting to parents (e.g., teacher alone or with support staff help)?

B. Identified Exceptional Pupils

1. Do you have any pupils in your class who have been identified as exceptional by an Identification, Placement and Review Committee? What is the nature of their learning difficulties? Are there particular subjects with which they have difficulty?[The interviewer selects 2 specific students around whom to focus the remainder of the questions, but no real names are mentioned]
2. What do you see your role with those students as being?
 - a) What goals and expectations do you have for them? For yourself?
 - b) What information have you sought (from whom and where)?
 - c) Has the information been useful?
3. With whom have you worked (e.g., school-based support teacher or team, itinerant staff, others)?
4. How have you worked with support staff? Have you attended a team meeting about the child? How often have you met? What roles have each of you played? How have goals and objectives been selected? How has information about students (2 identified ones) been shared and coordinated?
5. What are your feelings about collaboration?
6. Have you done anything special to accommodate the child (e.g. organize the class differently, adapt or modify instruction)?
7. What methods do you use for evaluating and monitoring students' progress? How often do you evaluate progress? How do you judge your success?
8. When were students' parents first contacted? How often do you have contact with them? How have you involved them in (students) program? Who does the reporting to parents? (e.g. teacher alone or with support staff help)?

Appendix B

Classroom Observation Checklist
(Stanovich & Jordan, 1998).

A. Classroom Management

1. Arranges physical space to maintain minimally disruptive traffic patterns and procedures.
2. Rules and procedures exist for non instructional events (e.g., movement about room, student talk, distributing materials, bathroom use, etc.) and for instructional events (e.g. getting ready for lessons, expected behaviour of instructional group, obtaining help, seatwork procedures, out-of-seat procedures, etc.).
3. Evidence of rules that involve respect for other members of class and/or provides verbal reminders to students about how to treat others.
4. Students are quickly disciplined for rule noncompliance; cites rule or procedure in responding to disruptive behaviour.
5. Positions self in room to provide high degree of visibility (e.g. can make eye contact with all students).
6. Scans class frequently
7. Uses nonverbal signals whenever possible to direct students in a non disruptive manner when teaching other groups of students.
8. Administers praise contingently and uses specific praise statements.

B. Time Management

1. Allocates generous amounts of time for instruction (limits time spent on behaviour management, recess, and non academic activities and talk, keeps transition time between lessons short).
2. States expectations for seatwork and transitions in advance (e.g., prepares students for transitions in advance by stating behavioral expectations and informing students that lesson is drawing to a close).
3. Establishes clear lesson routines that signal a clear beginning and end.

4. Gains students' attention at the beginning of the lesson and maintains attention during instruction at 90% level.
5. Monitors transitions by scanning and circulating among students.
6. Maintains students' attention during seatwork at 86% or higher.
7. Circulates frequently among seatwork to assist students and to monitor progress.
8. Provides active forms of seatwork practice clearly related to academic goals.

C. Lesson Presentation

1. Provides review of previous day's concepts at beginning of lesson; actively tests students' understanding and retention of previous day's lesson content.
2. Provides a clear overview of the lesson
 - a) Explains task in terms of teachers' and students' actions
 - b) States the purpose and objective of the lesson
 - c) Tells students what they will be accountable for knowing or doing
 - d) Introduces topic(s) of the learning task
 - e) Activates prior experiences and knowledge relevant to the topics, strategies, or skills to be learned.
3. Actively models and demonstrates concepts, learning strategies, and procedures related to effective problem solving in the content area.
 - a) Provides an organizational framework that will help students organize the lesson information (e.g., text structure genre, diagram of lesson topics and subtopics, concept maps, semantic web, etc.)
 - b) Points out distinctive features of new concepts and uses examples and non examples to show relevant and irrelevant features of the concept.
 - c) Points out organization, relationships, and clues in learning materials that elicit learning strategies.
 - d) Models task-specific learning strategies and self-talk that will help Students achieve (e.g., rehearsal strategies, retrieval strategies, etc.)
4. Maintains a brisk pace during the lesson
5. Provides frequent questions to evaluate students' mastery of lesson concepts
6. Evaluates students' understanding of seatwork tasks and cognitive processes

by asking students “what, how, when, why” questions related to the targeted skill or strategy”.

7. Maintains high accurate responding rate (70-80%) in teacher-led activities.
 - a) Repeats practice opportunities until students are not making errors
 - b) Delivers instructional cues and prompts
 - c) Provides error correction procedures
 - d) Uses prompting or modeling following errors rather than telling the answer
8. Provides error drill on missed concepts or review of difficult concepts during and at the end of each lesson.
9. Gives summary of the lesson content and integrates lesson content with content of other lessons or experiences.
10. Summarizes the lesson accomplishments of individuals and group.
11. Forecasts upcoming lesson content.

D. Adaptive Instruction

1. Are the mainstreamed students working on the same curriculum as the other students?
2. Are all the students sitting in the same seat arrangement or formation?
3. Are the mainstreamed students called on to answer questions in teacher-led activities?
4. Are the mainstreamed students regularly included in classroom routines and procedures?

Appendix C

Semi-Structured Interview Questions on the Development of “Effective” Inclusive Practice.

(Pompeo and Specht, 2008)

1. What are the elementary teacher’s current teaching practices for children with exceptionalities?
2. How did the elementary teacher come to learn these techniques?
3. How useful was preservice and other professional development in relation to classroom experiences of children with exceptionalities?
4. How would you describe your current school context in relation to instructing and including children with exceptionalities (probe: collaboration models, community of practice)?

Appendix D

**General Elementary Teachers' Perceptions of Developing
"Interventionist" Beliefs and Practices**

LETTER OF INFORMATION (Teacher)

Introduction

My name is Michelle N. Pompeo and I am a graduate student at the Faculty of Education at The University of Western Ontario. I am currently conducting research into the development of successful inclusionary practices of elementary teachers in junior and intermediate streams. If you believe that you have some successful stories to share around inclusion, I would like to invite you to participate in this study.

Purpose of the study

The aim of this study is to understand how general education elementary teachers have learned to successfully teach children with special education needs.

If you agree to participate

If you agree to participate in this study you will be asked to complete an interview consisting of 25 questions that may take anywhere from 30 minutes to an hour of your time. These interviews will take place at a mutually agreeable place and time and will be audio-recorded. Some teachers from this study will be invited to participate in observations of their daily classroom practices. These observations will occur 1-2 times a week for 6 weeks at different times of the day that are at a mutually convenient time. I plan to observe each classroom teacher for a total of 10 observations. Teachers who were observed will be asked to participate in another interview about the specific practices that they displayed in their classrooms. It is expected that this interview will last 30-60 minutes and will occur at an agreed upon time.

Confidentiality

The information collected will be used for research purposes only, and neither your name nor information which could identify you will be used in any publication or presentation of the study results. All information collected for the study will be kept confidential. All interview data will be transcribed verbatim but identifiable information will be removed. Pseudonyms will be used instead of real names. All recorded data will be

uploaded immediately into the computer on campus and erased off the digital recorders. The interview data will be saved on a secure network that is encrypted and requires passwords to enter. Only Michelle N. Pompeo will have access to this information. After 5 years of the completion of the study, I will destroy all information.

Risks & Benefits

There are no known risks to participating in this study.

Voluntary Participation

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on your employment status.

Questions

If you have any questions about the conduct of this study or your rights as a research participant you may contact the Manager, Office of Research Ethics, The University of Western Ontario. (contact information removed for privacy issues) If you have any questions about this study, please contact Michelle N. Pompeo (contact information removed for privacy issues), You may also contact my research supervisor, Dr. Jacqueline Specht (contact information removed for privacy issues),. You may also wish to refer to the Centre for Inclusive Education website for ongoing summaries of this research; www.edu.uwo.ca/inclusive_education.

This letter is yours to keep for future reference.

[Signature]

**General Elementary Teachers' Perceptions of Developing "Interventionist"
Beliefs and Practices**

Michelle N. Pompeo, Dr. Jacqueline Specht, and Dr. Wayne Martino

The University of Western Ontario

TEACHER CONSENT FORM

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate. All questions have been answered to my satisfaction.

Name (please print):

Signature:

Date:

Name of Person Obtaining Informed Consent:

Signature of Person Obtaining Informed Consent:

Date:

Appendix E

Glossary

Assistive Technology (AT)

Any technology that allows one to increase, maintain, or improve the functional capabilities of an individual with special learning needs. Its applications and adaptations can help open doors to previously inaccessible learning opportunities for many children with special needs. Assistive technology differs substantially from other types of technology that assist students. Instructional technology, for instance, uses innovative tools such as videotapes, computer-assisted instruction, projectors, multimedia effects, sound enhancement, and the Internet to expand the instructional modalities in the classroom, without regard to specific students' needs. Assistive technology also differs from assistance such as wheelchairs, hearing aids, and glasses for vision, which are, of course, essential to the students who require them. Some assistive technology changes the environment so that a person can function (adaptive technology); some technology adds qualities to the environment (augmentative technology) (Education for All Report, 2005).

Bill 82

In 1980, Ontario introduced a bill to amend the Ontario Education Act, known as Bill 82. This bill became law in 1985, coinciding with the signing of the repatriated Canadian Charter of Rights and Freedoms. Bill 82 gave parents or guardians, for the first time, the right to represent their children's interest in decisions made about the identification of their disability and their educational placement. Bill 82 also enshrined the rights of parents to appeal decisions about identification or placement of their children with which they disagreed. One of the features outlined in this piece of legislation; "continuous assessment" later became formalized as a series of standards for the design and implementation of IEPs in 2000 (Jordan, 2007).

Developmental Services Worker (DSW)

The DSW program is offered at Colleges in Ontario and tends to span approximately 2 years. It prepares individuals to support people who have learning disabilities, physical challenges, or other special needs, along with their families. Since the mid-1970s, when Ontario had 19 provincially operated residential institutions for people with a developmental disability, the province has moved more than 6,000 people to community-based settings. Career options in addition to developmental services worker include community support worker, educational assistant, classroom assistant in a daycare centre, counsellor in a seniors program, teaching assistant, adult protective service worker, and residential counsellor.

Education Assistant (EA)

The EA is sometimes referred to as a paraeducator. The EA may be assigned to a class or to a student for part or all of a day. The EA is seen as one of their greatest resource by teachers (Jordan, 2007). EAs work under the direction of the teacher. It is the teacher who has responsibility for the curriculum and progress of all the students. The role of the EA and the expectations that the teacher has for the role need to be fully worked out, understood, and agreed upon by both parties (Jordan, 2007).

Exceptionality

Exceptionality is defined as it is constructed for teachers based on the Ontario Ministry of Education's resource guide (2004); Behaviour, Autism, Deaf and hard-of-hearing, Language impairment, Speech impairment, Learning disability, Giftedness, Mild Intellectual disability, Developmental disability, Physical disability, Blind and low vision, Multiple exceptionalities. Teachers cannot choose which type, or combinations therein, of "exceptionality" their students may or may not have, since the Ministry states that "the IPRC should recommend placement in a regular class, with appropriate special education services whenever that meets the student's needs and the parents' preferences" (Ontario Ministry of Education, Regulation 181/98).

Individual Education Plan (IEP)

Some Canadian provinces and territories require that school systems implement a process of designing and delivering individualized programs and services for students with disabilities. These may be documented in a prescribed format that informs teachers, parents, and others how best to meet their student's needs (Jordan, 2007). It is a working document which is required for students receiving special education. It describes the strengths and needs of the individual student, the special education program and services prescribed to meet the student's needs, and how the program and services will be delivered. It also describes the student's progress (Jordan, 2007).

Interventionist

The belief that students' disabilities are not a condition of the individual person, but are in part the result of social restrictions in the world around the student, such as their interactions with a physical and social world designed for non-disabled living. These social restrictions create barriers that reduce the opportunities for these students to learn. Consequently, teachers with interventionist beliefs see themselves as responsible for removing barriers to students' access to learning, in order to facilitate their achievement (Jordan, 2007).

Individual Placement and Review Committee (IPRC)

Exceptional pupils are identified as such by an Identification, Placement, and Review Committee (IPRC). Upon receiving a written request from a student's

parent(s)/guardian(s), the principal of the school must refer the student to an IPRC. The IPRC will decide whether the student is an exceptional pupil and, if so, what type of educational placement is appropriate. The principal may also, on written notice to the parent(s)/guardian(s), refer the student to an IPRC. The parent(s)/guardian(s), as well as a student who is sixteen years of age or older, have the right to attend the IPRC meeting and may request that the IPRC discuss potential programs that would meet the student's needs. On the basis of these discussions, the IPRC can recommend the special education programs and/or services that it considers to be appropriate for the student (Ontario Ministry of Education, 2011).

The regulation governing the identification and placement of exceptional pupils directs the IPRC to consider the integration of exceptional pupils into regular classes. Before considering the option of placing a student in a special education class, the committee must first consider whether placement in a regular class, with appropriate special education programs and services, would meet the student's needs and be consistent with the parent's preferences. Where placement in a special education class is deemed most appropriate, the IPRC must provide written reasons for its decision (Ontario Ministry of Education, 2011 retrieved: <http://www.edu.gov.on.ca/eng/general/elemsec/speced/identifi.html>)

New Teacher Induction Program (NTIP)

The New Teacher Induction Program (NTIP) supports the growth and professional development of new teachers. It is a step in a continuum of professional learning for teachers to support effective teaching, learning, and assessment practices. It provides another full year of professional support so that new teachers can continue to develop the requisite skills and knowledge that will support increased success as teachers in Ontario.

The NTIP consists of the following induction elements: orientation for all new teachers to the school and school board mentoring for new teachers by experienced teachers professional development and training in areas such as: Literacy and Numeracy strategies, Student Success, Safe Schools, and Politique d'aménagement linguistique in French-language boards, Classroom management, effective parent communication skills, and instructional strategies that address the learning and culture of students with special needs and other diverse learners.

Pathognomonic

The belief, or tacit assumption, that disability is a stable, internal state of the individual, characterized by a medical-pathological condition, and therefore not amenable to instruction. The belief that disability can be reliably diagnosed through medical and related procedures and/or through norm based tests of behaviour and ability, such as IQ tests (Jordan, 2007).

Quality Daily Physical Activity (QDPA)

The QDPA is part of the active schools initiative and is designed to provide 20 minute sessions of physical activity on days when students do not have a regular physical education class. This is done by the class teacher in the regular class room, gym or other locations.

Regulation 181

Regulation 181 is Ontario policy which came into effect in 1997. It states that an Identification, Placement, and Review Committee (IPRC) should use the definitions provided by the Ministry of Education to identify a student's exceptionality. While avoiding the word inclusion, **it states that the IPRC should recommend placement in a "regular class, with appropriate special education services" whenever that meets the students' needs and the parents' preferences** (Ontario Ministry of Education, Regulation 181/98; <http://www.edu.gov.on.ca/eng/general/elemsec/speced/highlights.html>) (Hutchinson, 2002).

Teacher

For the purposes of this study, a GEN teacher is defined as certified by the Ontario College of Teachers (OCT) to teach in the stream and core subject areas they are qualified in. For the purpose of this study, and keeping consistent with current Ontario educational policy, students with "exceptionalities" are those children who have been identified by the Identification, Placement, and Review Committee (IPRC) based on definitions provided by the Ministry of Education (Ontario Ministry of Education, Regulation 181/98; <http://www.edu.gov.on.ca/eng/general/elemsec/speced/hilites.html>) to identify a student's exceptionality.

Interventionist Teachers

Hold inclusive beliefs and therefore inclusive practices. Interventionist teachers interact more will all students, both with and without exceptionalities, and are more effective than Pathognomonic teachers for instructional planning and social inclusion. They view exceptionality as something for which they are responsible. They, therefore, take responsibility, or *intervene*, for the learning of all their students. These definitions and distinctions were created by Jordan and Stanovich (1997) who observed teachers in multiple classrooms across Ontario and found marked patterns of behaviour, instructional strategies, teaching efficacy, and student achievement.

Appendix F

Curriculum Vitae

CURRICULUM VITAE

Michelle Nicole Pompeo

Website: http://www.edu.uwo.ca/inclusive_education/MPompeo.asp**EDUCATION**

- 2011** PhD in Education Studies, (Educational Psychology and Special Education),
The University of Western Ontario
- 2005** Bachelor of Education, (English, Individual & Society) Intermediate &
Secondary OISE, The University of Toronto
- 2004** Master of Education, York University
- 2002** Honours Bachelor of Arts (Majors: Sociology and English. Minor:
Criminology), University College, The University of Toronto

DISSERTATION AND THESIS

- Doctorate** General Education Elementary Teachers' Perceptions of Developing
"Interventionist" Beliefs and Practices.
- Masters** When Your "Problem" Becomes Mine: Siblings' Perspectives of
having a Brother with a Disability.

ACADEMIC AND PROFESSIONAL APPOINTMENTS

- 2009-2010** **Instructor**, 2 sections, EDUC 5005 (Bachelor of Education program)
"Educational Psychology and Special Education", The University of
Western Ontario.
- 2006-2010** **Research Assistant**, "School Roles Participation: perspectives of the
parent, child and the teacher", through a grant from (SSHRC) Social
Sciences and Humanities Research Council, Canada.
- 2005-2006** **Secondary English Teacher**, (Grades: 11 Academic English, 12
University & 12 College English, and ESL Level 1), "City Adult
Learning Centre", Toronto District School Board.

- 2005-2006** **English Tutor** to Gifted and ESL Student (Grade 11 Academic English).
- 2003-2004** **Teaching Assistant**, HUMA 1970A: “Worlds of Childhood” First year children’s literature course, Humanities, Vanier College, York University.
- 2002-2003** **Graduate Assistant**, “Canadian Children’s Culture Collection” (undergraduate library), Vanier College, York University.
- 2000-2001** **Employment Mediator**, York Support Services Network, Markham, Ontario.
- 2001-2006** **Elementary Teacher** (Language, Math and Social Studies), St. Francis Tutorial School, Markham, Ontario.

ACADEMIC AWARDS AND DISTINCTIONS

- 2010** Graduate Thesis Research Award, (\$500.00) University of Western Ontario
- 2009** Centre for Inclusive Education Research Award, (\$750.00) University of Western Ontario
- 2006-2010** Western Graduate Research Scholarship, University of Western Ontario
- 1998** York University Entrance Scholarship, York University (\$1,000) – *Offered*

PUBLISHED ARTICLES IN SCHOLARLY JOURNALS (*refereed)

Pompeo, M.N. (2009). When your “Problem” Becomes Mine: Adult Female Siblings’ Perspectives of Having a Brother with a Disability. *Exceptionality Education International*, 19(2). p.50-62.

Published Academic Conference Proceedings (*refereed)

Pompeo, M.N. (2010). *Acquiring Inclusive Beliefs and Practices: One “Exemplary” Elementary Teacher Reflects on his Development*. Canada International Conference on Education-Elementary and Primary Education (pp. 391-393). Toronto, Ontario: Infonomics Society.

PAPERS PRESENTED AT CONFERENCES refereed)

- 2010 Pompeo, M.** (2010, April). *Acquiring Inclusive Beliefs: One Highly Scoring “Interventionist” Teacher Reflects on his Development.* Paper Presented at the Canada International Conference on Education, Toronto, Ontario.
- Pompeo, M.** (2010, April). *General Elementary Teachers’ Perceptions on Developing “Interventionist” Beliefs and Practices Regarding their Students with Special Education Needs.* Division K: Teaching and Teacher Education/Section 4. Paper Presented at the Annual Meeting of the American Educational Research Association, Denver, CO.
- Pompeo, M.** (2010, May). *Including students with Exceptionalities in Language and Math: Examining the beliefs and practices of 5 highly scoring “Interventionist” J/I teachers.* Paper Presented at the Canadian Society for the Studies in Education. Montreal, QC.
- 2008 Specht, J., Spencer, T., Servais, M., Kertoy, M., Young, G, Pompeo, M., Cressman, C., & Puskarich, M.** (2008, November). *School participation: How educators can help.* Panel presentation at the Ontario Council For Exceptional Children Provincial Conference, London, Canada
- *Specht, J.A, Servais, M., Kertoy, M., Spencer, T., King, G.A., Cressman, C., **Pompeo, M.**, & Young, G. (2008, August). *School participation: Opportunities, enhancers, and limiters.* Presented at the Annual Meeting of the American Psychological Association, Boston, MA.
- ***Pompeo, M.** (2008, May). *The “new” sociological imagination for disability studies: a new way of looking at our students with disabilities.* Roundtable session presented at the annual meeting of Canadian Society for Studies in Education (CSSE)(CATE), Vancouver, B.C.
- ***Pompeo, M.** (2008, May). *Improving special education courses in teacher preparation programs-a work in progress.* Roundtable session presented at the annual meeting of the Canadian Society for Studies in Education (CSSE) (CCGSE), Vancouver, BC.
- *Specht, J.A., Servais, M., Kertoy, M., Spencer, T., King G.A., Cressman, C., **Pompeo, M.**, & Young, G. (2008, March). *School role participation: Perspectives of the child, the parent, and the teacher.* Presented at the 8th Annual Second City Conference on Disability Studies in Education. New York, NY.
- ***Pompeo, M.** (2008, April) *The “new” sociological imagination for disability studies: a new way of looking at our students with disabilities.* Lecture

presented at the annual convention and expo of the Council for Exceptional Children (CEC), Boston, MA.

Pompeo, M. (2008, March). *The “new” sociological imagination for disability studies: a new way of looking at our students with disabilities.* Lecture presented at Centre for Inclusive Education Research Hour, University of Western Ontario, Stevenson-Lawson Building, London, ON.

Pompeo, M. (2006, May). *When your "problem" becomes mine: Siblings' perspectives of having a brother with a disability.* Paper Presented at the annual meeting of the Canadian Society for Studies in Education (CSSE), Toronto, ON.

UNIVERSITY AND ACADEMIC SERVICE

- 2009-2010.** Reviewer of conference proposals, Division K-Teaching and Teacher Education/Section 4, Annual Meeting of the American Educational Research Association, Denver, CO.
- 2009-2010** Chair, “Approaches and Practices Aimed at Enhancing the Academic Potential of Nondominant Students”, Division K-Teaching and Teacher Education/Section 4, Annual Meeting of the American Educational Research Association, Denver, CO.
- 2008-2009.** “Master’s Information Sessions”, Co-Host and Organizer, Study and Support Group for Master’s Students in Educational Psychology and Counseling Psychology. The University of Western Ontario.
- 2008-2009** Chair, “Women Making Change” Conference, Brescia College, The University of Western Ontario.
- 2007-2008.** Society of Graduate Students, PhD rep in Education. The University of Western Ontario.
- 2006-2007.** Appointments Committee, PhD rep. The University of Western Ontario, Faculty of Education.

PROFESSIONAL AFFILIATIONS:

- OCT A Member in Good Standing with the Ontario College of Teachers

AERA	American Educational Research Association, <i>Division K: Teaching and Teacher Education</i>
CSSE	Canadian Society for Studies in Education.
CAEP	Canadian Association for Educational Psychology.
CEC	Council For Exceptional Children