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Interprofessional Collaboration on School Teams

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Abstract

Teams that help develop programs and supports for children with exceptional educational needs are required in some school boards in Canada and most school boards in the U.S (Andrews & Lupart, 2000; Truscott, Cohen, Sams, Sanborn, & Frank, 2005). Program Planning teams - or Prereferral Intervention Teams - often require a high degree of cooperation among people who may have very different training and perspectives (Hall, 2005; Jantsch, 1972). There is very little research on interprofessional collaboration on school teams and most of the research is out-dated (Margison & Shore, 2009). On school teams and teams in healthcare, the following have been found to influence the outcomes of interprofessional collaboration: communication, roles, status, attitude towards collaboration, and professionals' paradigms (Choi & Pak, 2007; Mostert, 1996). We need a better understanding of the influences on collaboration on school teams. The purpose of this thesis is to explore team members' perceptions of how they work together on interprofessional school teams, as well as their perceptions of barriers and facilitators to interprofessional collaboration.

Thirteen members of Program Planning Teams (PPTs) in a rural Nova Scotia school board participated in this study. Participants were: two principals, two vice principals, two classroom teachers, three resource teachers, two school psychologists, and two speech-language pathologists. Qualitative methodology was used for the research design and each participant completed a semi-structured interview. Grounded theory methods were used to analyze the data.

Three themes emerged from the data. These were: taking on the role of 'team member,' creating shared knowledge, and making decisions using shared knowledge. The

core concept identified was ‘transposing,’ a process by which team members transferred and adapted their roles and knowledge held in the school to establish roles and knowledge within the team. Taking on a team member role was influenced by one’s attitude towards collaboration. Creating shared knowledge was influenced by openness/reflectivity, the presence of a common goal, and communication. When creating shared knowledge, differences in professional perspective or paradigm created challenges. Decision-making using shared knowledge was influenced by factors including: the composition of the team, role clarity, and workload. Together, these three themes provide a way of conceptualizing how professionals worked together on the PPTs under study.

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Chapter 1: Introduction

In the last twenty five years, teams have been established in schools in order to help develop programs and supports for children with exceptional educational needs (Margison & Shore, 2009)**.** Although school teams composed of people from different professions (interprofessional teams) are currently required in some school boards in Canada and most boards in the United States, there has been relatively little study of these kinds of teams. Neither the efficacy nor the process of school teams is well documented or understood (Fleming & Monda-Amaya, 2001; Schrag & Kelly, 1996). Models of some school team processes for example, problem-solving (Burns et al., 2008) and teacher disengagement (Slonski-Fowler & Truscott, 2004) have been proposed, but there has been little examination of how team members on school teams work collaboratively, and the limited research is also generally out-dated.

A collaborative model is currently the most strongly recommended model of interaction on school teams (Rosenfield, 1995). When collaboration is working well, all parties are involved in implementing an intervention and all share responsibility for its outcome (Rosenfield, 1995). Interprofessional collaboration requires a high degree of cooperation among people who often have very different training and perspectives (Hall, 2005; Jantsch, 1972). In the literature on school teams and teams in healthcare, the most frequently-cited influences on the outcomes of interprofessional collaboration are: communication, roles, status, attitude towards collaboration, and the professionals' paradigms (Choi & Pak, 2007; Mostert, 1996). While these factors have been found to impact interprofessional collaboration in healthcare (San Martin-Rodriguez, Beaulieu,

D'Amour, & Ferrada-Videla, 2005), we need a better understanding of their impact on school teams.

This thesis will explore team members' perceptions of how they work together on interprofessional school teams, as well as their perceptions of barriers and facilitators to interprofessional collaboration. It is hoped that this research will help to expand knowledge and understanding of how interprofessional collaboration functions in school teams.

History of Professional Teams in the School

The Canadian Context.

In Canada, educational laws and policies must adhere to the part of the constitution known as the Canadian Charter of Rights and Freedoms, which was adopted by Canada in 1982 (Andrews & Lupart, 2000). Section 15(1) in the Charter relates to inclusion: "Every individual is equal before and under the law and has a right to the equal protection and equal benefit of the law without discrimination based on race, national or ethnic origin, colour, religion, sex, age, or mental or physical disability" (Government of Canada, 1982). Laws and policies governing education are made by school boards, provincial governments, and the federal government, but must all adhere to the Charter.

There had been over a decade of increasing support in the form of reports, studies, and public attitude for the inclusion of students with disabilities prior to the adoption of the Charter (Andrews & Lupart, 2000). For instance, in the late 1960s, a Commission on Emotional and Learning Disorders in Children (CELDRIC) was formed to address the needs of children in schools. The commission's report, described as a "primary force in the future of special education" (Andrews & Lupart, 2000 p. 35), supported the idea that

every child had a right to education allowing him or her to realize their full potential, and that students with exceptionalities should remain integrated for as long as possible. Academic achievement was found by some studies to be no different amongst students with exceptionalities who were placed in special education classes than those placed in regular classes (Andrews & Lupart). Furthermore, in the 1970s there was public support for inclusion, which contrasted with mid-century support for segregated special education classes and the earlier complete exclusion of students with special needs from public schools (Andrews & Lupart).

In the Charter, control over education is given to the provinces, resulting in educational policies that vary by province. For instance, students have the right to an appropriate education according to an IEP (Individualzed Education Plan) or IPP (Individualized Program Plan) in six of the thirteen provinces and territories (Andrews & Lupart, 2000). Laws on parental involvement in the IEP or IPP process also vary by province: in BC, a parent/guardian has the right to consult a teacher or administrator regarding the student's program whereas in Yukon policy, a parent/guardian can consult before the IEP is determined and can be on the school team that is established for their child (Andrews & Lupart, 2000).

In Nova Scotia, the key documents regulating the education of students with exceptionalities are the: Education Act (1996), Governor in Council Education Act Regulations (1995-1996), Ministerial Education Act Regulations (1995-1996), Handicapped Person's Education Act (1989), and the Human Rights Code (1989) (Andrews & Lupart, 2000). In these documents, the duties of teachers, support staff, students, parents, principals, school boards, and the minister of education are outlined.

Nova Scotia school boards must "develop and implement educational programs for students with special needs within regular instructional settings" (Education Act, 1996). In the Nova Scotia Special Education Policy (2008), school boards are instructed on how to accomplish this. A program planning process is outlined for students with special needs including: cognitive impairments, emotional/behavioural disorders, learning disabilities, physical and/or health impairments, speech impairment and/or communication disorders, sensory impairments, multiple disabilities, giftedness. This is similar to the definition of special needs that was used in the first U.S law that mandated inclusion, but in addition in includes behaviour disorders and giftedness.

In the Nova Scotia Special Education Policy (2008), two types of school teams are mentioned. The first is the Program Planning Team. This type of team is mandatory: school boards are explicitly instructed to ensure "that individual program planning teams are established at the school level to develop, implement, and monitor programming for students with special needs (Nova Scotia Department of Education, 2008, p. 29). According to the Special Education Policy, team membership should include the principal or vice principal and the parents, with additional members brought in as needed, and under both this policy and the Education Act (1996), teachers should be present on these teams.

Another type of school team is also described in the Special Education Policy. This type of team is portrayed as being a resource that some schools have the option of using before referring a student to the Program Planning Team: "In some boards there are school teams that provide peer support for problem solving and creative suggestions for meeting student needs. This team may also be involved in prioritizing referrals" (Nova

Scotia Department of Education, 2008, p.24). No guidelines are provided as to the recommended membership of this team.

Individual school boards have control over the process used to identify, assess, and plan for students with special needs (Nova Scotia Department of Education, 2008). As a result, board-level policies vary. Of the eight school boards in Nova Scotia, policy related to school teams is accessible on the internet for seven boards. The major responsibilities of school teams are to: decide whether the student needs an IPP (all 7 boards), refer the student for services (six boards), and generate new strategies to help the student or teacher (four boards). In most boards, the same team that does these things also designs and monitors the IPP. If the team *decides* whether a student needs an IPP *and implements* one, it is called a Program Planning Team. If it only *decides* whether an IPP is needed, it has a different name (School Planning Team, Halifax; Core Program Planning Team, South Shore) and a separate IPP team also exists. Whether the team only decides to implement an IPP or both decides and implements the IPP is not related to whether one of its stated responsibilities is generation of new strategies to help students and/or teachers. In this thesis, the term Program Planning Team (PPT) will be used to describe the type of team under study. Most boards use the membership given in the Nova Scotia Policy on Special Education.

In summary, the Canadian Charter of Rights and Freedoms mandates inclusion in all Canadian schools, but how inclusion is realized varies from province to province. In Nova Scotia, a Program Planning Team or team with similar duties is required to be in all schools to decide whether a student needs an IPP. In provincial and board policies, problem-solving and prioritization of referrals are not always among these teams'

responsibilities. The steps leading up to creation of an IPP (e.g. problem-solving, prioritization of referrals) appear in policy to be a more prominent part of the goal of American school teams, which are discussed next.

The United States context.

In 1975, the US congress passed the precursor to the Individuals with Disabilities Education Act (Zettel, 1977). Called Public Law 94-142, it differed from earlier laws on federal involvement in educating individuals with disabilities because it clearly established the right to a free, publicly supported education for children with disabilities (Zettel). 'Handicapped' children referred to those who through evaluation had been identified as being "mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf-blind, multi-handicapped, or as having specific learning disabilities" (Griffith-Sheriff & Walter, 1981, p. 4).

Under Public Law 94-142, schools could obtain funding for students with exceptionalities by following a specified set of reporting and evaluation procedures. These procedures included writing an Individualized Education Plan that described the student's level of functioning, short and long term goals for the student, services to be provided, duration of the plan, and methods of evaluating whether goals were met. The Law also called for states to educate children in the least restrictive environment possible: "to the maximum extent appropriate, handicapped children…are educated with children who are not handicapped" (Zettel, p. 6). Education in the least restrictive environment meant teachers assumed responsibility for programming for a wide range of students (Chalfant, Pysh, & Moultrie, 1979).

With the implementation of this law, schools were legally responsible for educating all students and creating school teams that developed individualized programming (Feldman & Kratochwill, 2003; Zettel, 1977). School teams were created not only to fulfill policy requirements, but also to enhance the skills and abilities of teachers and other school staff to educate students with learning and behavior problems (Burns & Symington, 2002; Chalfant et al., 1979; Flugum & Reschly, 1994; Rathvon, 2008; Schrag & Kelly, 1996; Welch, Brownell, & Sheridan, 1999). School teams were intended to help teachers work with children who had problems serious enough to interfere with education, but "not serious enough to warrant placement in special classes, schools, or institutions" (Chalfant et al., p. 85).

Most schools (85%) in the United States have school teams (Truscott, Cohen, Sams, Sanborn, & Frank, 2005). These teams are required or recommended by district education departments in the majority (86%) of states. A 1989 survey found that prereferral intervention teams were recommended or required in 71% of states (Carter & Sugai, 1989).

School teams can be divided into two categories based on membership (Rathvon, 2008). In one category, teams are composed exclusively of teachers; in the other, teams are composed of teachers and specialized school staff (e.g. speech-language pathologist, resource teacher). Teams composed only of teachers have been referred to as 'Teacher Assistance Teams', 'School Consultation Committees', and 'Peer Problem Solving Teams' (Rathvon; Sindelar & Griffin, 1992). This is the longest-standing type of school team and was pioneered by Chalfant et al. In Chalfant et al.'s model, three core team members were elected by their peers. One core member was rotated monthly to ensure

greater teacher participation, and any teacher who approached the team for help would become its fourth member.

When creating this model, Chalfant et al. (1979) surveyed teachers (n=138) and principals (n=8) to ask what competency areas they believed that they or members of their staff would need when working with children with learning and behavior problems. Based on the results, Chalfant et al. concluded that their model of school team should aim to do the following: meet teachers' individual needs, utilize teachers' preexisting knowledge and skill, provide them with immediate help, change how they selected students to be referred for special education, and help them obtain swift follow-up from special education personnel.

The other broad group of teams is composed of teachers as well as specialized personnel (e.g. school counselors, special educators, school psychologists). These kinds of teams have been called Prereferral Intervention Teams, Teacher Resource Teams, and Mainstream Assistance Teams (Rathvon, 2008; Sindelar & Griffin, 1992). Specialized personnel either act as consultants to general education teachers, or sit on teams that design, implement, and evaluate interventions for children with learning or behavior problems (Rathvon; Welch et al., 1999).

This format has its roots in the work of Graden, Casey, & Christenson (1985a). According to its developers, "The goals of the prereferral intervention model of service delivery are to reduce inappropriate referrals for testing, reduce inappropriate placements in special education, and provide relevant, needed intervention assistance to students and teachers in the least restrictive educational environment" (Graden et al., 1985a, p. 382). Traditionally, special education services have been delivered via what

some have called a 'test and place' method, in which a referral resulted in testing and labeling and/or placement in special education. Prereferral Intervention Teams were intended to intervene at the point of referral to conduct a more thorough analysis of the problem and avoid automatic testing (Graden et al., 1985a). Testing is not incompatible with this model, but it is used as a last step, taken only after the team has engaged in consultation and problem-solving (Graden et al., 1985a). The rationale behind this approach is that resources used to 'test and place' can be redirected to assist teachers in supporting students in the regular classroom (Graden et al., 1985a). For students who are tested, the Prereferral team works with the teacher to make test results relevant and help him or her plan for the student.

Despite differences in membership, these two types of school teams share a number of characteristics: they have similar reasons for development, engage in similar steps, and are both grounded in consultation. First, teams were developed to respond to the diverse student needs that resulted from mainstreaming. Traditional methods (inservices, refer-test-place) often left teachers without the in-depth information on a particular student that they needed in order to best instruct that student in the classroom; the school team was developed as an alternative way to provide teachers with support and instructional strategies.

Second, the steps that Teacher Assistance Teams undergo are quite similar to those of Prereferral Intervention Teams. Both processes begin with referral to the team, followed by collecting background information, defining and exploring the problem, then proposing interventions, trying the one that appears most promising, and evaluating its efficacy. When an intervention is ineffective, the paths of both teams are redirected back

to an earlier stage of the process at which point the team attempts to re-evaluate the intervention. Both team processes end in referral for testing if more information is needed.

Finally, consultation is the theoretical foundation of school based teams (Chalfant et al., 1979; Graden et al., 1985a). In consultation, a specialist (the consultant) advises a person who has sought help (the consultee). The consultant's goal is to help the consultee work more effectively and to equip the consultee with knowledge that will help him or her deal independently with similar problems in the future. Neither person holds more authority and each should demonstrate respect. Because the consultant has no administrative power over the consultee, the latter can choose to accept or reject the consultant's advice (Caplan & Caplan, 1993). Consultation has long been promoted in school psychology because consultants can have an impact on more students than if they worked individually with individual students (Feldman & Kratochwill, 2003; Graden et al., 1985a; Hyman, 1967). As well, if teachers apply skills learned through consultation to all students in their class, some students who did not appear to be at risk may nevertheless benefit (Feldman et al., 2003). Furthermore, different professionals can use their combined knowledge to serve students more effectively than either individual would be able to on their own (Feldman et al.; Graden et al., 1985a; Hyman). Thus, consultation has the potential to affect greater numbers of students, prevent problems, and promote student inclusion and staff teamwork.

Collaboration

More recently, there has been a shift away from a consultation model to a more collaborative model. Unlike consultation in which an expert consultant imparts

knowledge to a consultee, in collaboration all parties are involved in implementing an intervention and all share responsibility for its outcome (Rosenfield, 1995). There is a "growing consensus on the need to nurture a collaborative, problem-solving orientation toward student and teacher concerns" (Rosenfield, p. 319). Collaboration is a complex and frequently misunderstood concept and a consensus on how it is defined has not yet been reached (Welch, 1998).

The most widely-cited types of collaboration are: multidisciplinary, interdisciplinary, and transdisciplinary (D'Amour, Ferrada-Videla, San Martin-Rodriguez, & Beaulieu, 2005). These terms were originally used to refer to activity between academic disciplines in universities; because this proposal deals with the workplace, the term "interprofessional" will be used (as recommended by Mu and Royeen, 2004), in the remainder of this proposal. Multidisciplinary teams are those in which professionals from several different disciplines work on the same project independently or in parallel; possible relationships between the disciplines are not made explicit nor is there a defined group form at this level (D'Amour et al.; Jantsch, 1972; Shalinsky, 1989). In contrast, transdiscipinarity denotes the highest level of cooperation and coordination amongst team members. This level is typically reserved for larger systems such as universities and organizations. An 'organizational-level' goal directs multiple smaller systems that also interact with each other. Transcendence of professional boundaries characterizes this level (D'Amour et al.; Jantsch).

Intermediate between multi- and transdisciplinary teams in terms of level of cooperation is the interprofessional team. Members of an interprofessional team work towards a common goal using the same decision-making process (D'Amour et al., 2005;

Jantsch, 1972). Interprofessional teams should give equal weight to input from each discipline; no single discipline rigidly directs the functioning of the group (Jantsch). Team members also attempt to integrate knowledge from different professional perspectives (Epstein, 2005; O'Donnell & Derry, 2005). The assimilation of ideas created with other group members into one's own thinking is a hallmark of the best interprofessional collaborations (Epstein, p. 261). This incorporation 'reconfigures' team members' knowledge, which was formerly fragmented into different disciplines (Couturier, Gagnon, Carrier, & Etheridge, 2008). It is difficult to combine large ideas without diluting them, and because each discipline has its own set of beliefs and accepted practices, "… "true" interdisciplinarity is very difficult to achieve and more often than not remains an elusive goal" (Rogers, Scaife, & Rizzo, 2005, p. 266). Many groups that characterize themselves as interprofessional more closely resemble multidisciplinary groups (Shalinsky, 1989). Sometimes the term 'interprofessional' is used in the literature to refer to any sort of work that a professional must do with another professional regardless of whether they are from the same or different professions or how closely they are collaborating.

There has been more research on collaboration in fields such as health care and business than there has been in the context of school teams. In a review of the health care literature, D'Amour et al. (2005) identified the following five concepts as being most commonly mentioned in definitions of collaboration: sharing (of responsibilities, philosophies, decision-making), partnerships, interdependency, power (equal sharing of power among team members), and process (evolving, dynamic, interactive, interpersonal).

Sharing and interactive process were among the five most commonly-cited components of definitions of collaboration in definitions reviewed by Wood and Gray (1991).

In relation to school teams, collaboration is thought to improve teaching practices (Welch, 1998), school structure (Rosenfield, 1995; Welch), and teacher education programs (Welch). Collaboration is expected to generate a variety of ways of viewing problems, and a variety of high quality solutions (Welch). More collaboration does not necessarily equal more effective collaboration, however, as there are a number of factors that influence collaborative practice (e.g. Choi & Pak, 2007; San Martin Rodriguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005). These factors will be discussed in the section titled Barriers to, and Facilitators of, Collaboration on Interprofessional Teams.

Although collaboration is becoming increasingly common on school teams, its definition is not agreed upon nor has it been extensively studied in the context of school teams (Rathvon, 2008; Welch, 1998). Collaboration on healthcare teams has been the subject of more studies. To complement the literature on collaboration on school teams, in what follows, I will define and describe the dimensions of collaboration in teams by drawing on the literature about teams in education and healthcare.

Interprofessional Collaboration on School Teams

School teams can be multidisciplinary, interdisciplinary, or transdisciplinary (Margison & Shore, 2009), but ideally they act as interprofessional teams, because the aims of these kinds of teams are to solve practical or 'real world' problems and combine knowledge in new ways (Couturier, et al., 2008; Derry & Schunn, 2005; Kostoff, 2002; Thompson, 2009; Wear, 1999). It is also thought that interprofessional collaboration is needed to solve complex problems that cannot be understood with the tools and

perspectives of one discipline (Derry & Schunn). Interprofessional teams are thus well-suited to the school system because educational problems are complex, students are involved with people from many professions, and the people who work with students need a coordinated approach.

Goal Attainment as a Measure of Team Effectiveness

In the early 1990's, US researchers noted that few studies had been conducted on prereferral team effectiveness (Allen, 1991; Sindelair and Griffin, 1992). Nearly 20 years later, Rathvon (2008) wrote: "Despite the expansion of IATs [Intervention Assistance Teams, used to refer to all models of school teams], the body of empirical research evaluating their effectiveness is still relatively small" (p.9). In 2002, Burns and Symington identified only 25 articles relevant to school team effectiveness. Of these, nine articles - all of which had been published prior to 1996 - met inclusion criteria for their review, which were that the study had an outcome measure as the dependent variable, and presented data that could be used to calculate the difference between experimental group outcomes and control group outcomes, or, for within-group studies, pre- and post-implementation outcomes. Several reviews of the outcomes of US school teams have been conducted (Burns & Symington; Chalfant & Pysh, 1989; Nelson, Smith, Taylor, Dodd, & Reavis, 1991; Schrag & Kelly, 1996; Welch et al., 1999). Methods (e.g. types of teams studied, outcomes measured, analyses) differ from review to review, making it difficult to compare the reviews' results, and some studies are cited in several reviews. The body of research on school team effectiveness is small, and recent research is lacking.

In much of the team effectiveness literature, 'effectiveness' has not been clearly defined (Fleming & Monda-Amaya, 2001). Fleming & Monda-Amaya define

effectiveness as the extent to which a team attains its goals and satisfies team members' needs. Kostoff (2002) suggests that because of the challenges which interprofessional teams face, they should only be used if their potential effectiveness can be demonstrated. Based on these definitions, an 'effective' interprofessional team would be one that meets its goals, satisfies team members' needs, and achieves these things to a greater extent than other types of teams. Data comparing the effectiveness of different types of teams are rare, however, so in this section an effective team is taken to be one that achieves its goals and satisfy team members' needs. Goal achievement will be discussed in terms of school teams and then, to supplement the limited existing knowledge on these teams, in terms of interprofessional teams in other areas.

The original goals of Prereferral Intervention Teams: "to reduce inappropriate referrals for testing, reduce inappropriate placements in special education, and provide relevant, needed intervention assistance to students and teachers in the least restrictive educational environment" (Graden et al., 1985, p. 382). More recently, school teams have begun shifting to a focus on problem-solving to improve student functioning, and to working with all students rather than those suspected of having a disability (Rathvon, 2008). Consequently, more research exists on changes in referral rates than academic outcomes.

School team goals that have been studied reflect the original goals of school teams. The goals that have been studied are: changes in student academics, student behavior, and teacher tolerance and skills for working with students experiencing academic and behavioral difficulties (user outcomes); changes in the number and appropriateness of referrals for special education testing (system outcomes); and team

member satisfaction (satisfaction). The outcomes that have been studied for other interprofessional teams are analogous. They are: changes in patient health/disease and patient's subjective sense of quality of life (user outcomes); cost of services and length of stay (system outcomes); and the satisfaction of patients and professionals (satisfaction).

Goal for Users: Improved Student Behavior and Academic Performance

There are few rigorous studies of school team impact on student outcomes (Burns & Symington, 2002; Schrag & Kelly, 1996). Some studies on school team effectiveness collected informal data or no data (Schrag & Kelly), while other studies, such as those cited in the review by Chalfant & Pysh (1989), do not report pre-post assessment data. Most existing studies measure behavioral outcomes because in many cases, school teams focus more on behavior management than on academic performance (Schrag & Kelly).

In terms of behavior, researchers using case studies found that school teams improved disruptive behavior (Graebner & Dobbs, 1984) and aggressive behavior (Zins, Graden, & Ponti, 1988, cited by Nelson et al., 1991). Noncompliant behavior, measured only in the latter case study, was not found to decrease. Fuchs and Fuchs (1989) conducted a controlled experiment on the effectiveness of behavioral consultation combined with interprofessional team meetings on 'difficult to teach' students' behavior. Twenty-four teachers in each of four experimental and five control schools selected a most difficult to teach student (n = 184 students). Consultants met with teachers and used written scripts to identify and analyze the problem, plan an intervention, and provide feedback on the intervention. The behaviors teachers most often wanted to change, or 'target behaviors,' were off-task and inattentive behaviors (55% of students) and low quality work (23%). Teacher ratings of the severity of target behaviors following the

intervention only improved significantly in the experimental group. Consultant observations found the target behavior in the experimental group decreased in frequency while in the control group it actually increased, but the difference between groups was not significant. Thus, teacher ratings and consultant observations provide some evidence that the intervention altered student behavior but the improvement was only significant for teacher ratings. This could indicate a perceived rather than actual change in behavior, false reporting, or that both sources accurately provided complementary types of information (Fuchs & Fuchs). The study's external validity may be limited because consultants selected teachers who were willing to participate and with whom the consultant felt they would be able to work. Lastly, because the intervention consisted of consultation and a team meeting, it is difficult to tell whether outcomes were due to one or both components.

In lieu of discussing the findings of individual studies, Burns & Symington (2002) calculated effect sizes for the student outcomes of time on task, task completion, behavior scale ratings, and behavior observations. The inclusion criteria were that studies had to have an outcome measure (systemic outcomes were also analyzed) as the dependent variable, include at least one within- or between- schools comparison, and present quantitative data that could be used to calculate an effect size. Nine studies met these criteria but the authors did not specify how many dealt with student outcomes. All but two of these nine studies were cited in the reviews by Schrag & Kelly (1996) and Nelson et al. (1991), but Burns and Symington analyzed them differently. The authors found that school teams have a large effect (d = 1.15) on student outcomes. Thus, there appears to be some limited evidence that school teams improve student academics and behavior.

Goal for Users: Changed Teacher Attitudes and Skills

Changes in attitudes are taken to indicate effectiveness because improved teacher attitudes towards difficult to teach students is one goal of prereferral intervention teams (Fuchs & Fuchs, 1989; Schrag & Kelly, 1996). Tolerance for abilities and behaviors that deviate from the norm may influence how teachers interact with students (Fuchs & Fuchs) and make teachers more likely to accommodate the needs of students (Pugach & Johnson, 1988). The reviews cite three studies that include outcomes specific to teacher attitudes (Fuchs & Fuchs; Graden, 1983; Pugach & Johnson, 1988). One of these (Pugach & Johnson, 1988) will not be discussed because teachers in its experimental condition were divided into pairs and engaged in a problem-solving process called peer collaboration. The measure used in another (Fuchs & Fuchs) provides more information about a teacher's perception of a specific behavior rather than their perception of a student as a whole.

In the remaining study, Graden compared teachers' responses at the beginning and end of a school year to topics such as whether students with learning disabilities learned best in the regular classroom, and what teachers believed to be the most common sources of learning problems. The author had predicted that involvement with school teams would make teachers more likely to attribute learning/behavior problems to sources outside the student, such as the education system, and to believe that these students could be educated in the regular classroom if the teacher adapted their programming. Graden reported that there were "no clear trends in survey results assessing the extent to which teachers' beliefs, expectancies, and preferences … changed over the course of the year" (p. 21).

There is some positive evidence for teams' ability to change teachers' skills in teaching students with exceptionalities. In their review of school team effectiveness, Schrag and Kelly (1996) consistently found that skills to resolve classroom problems increased (Beck, 1993; McKay & Sullivan, 1990). For instance, after teacher assistance teams in eight schools had been in place for one year, teachers began to service student problems on their own initiative and learned to serve other students in their classrooms who exhibited similar problems (McKay & Sullivan).

Goal for System: Fewer and More Accurate Referrals

This goal refers to referrals made by the school team for students to be tested for disabilities or to receive special education services. If the implementation of a school team results in fewer referrals, it is assumed that the team effectively met students' needs without referral and/or was able to select for testing only those students likely to be found disabled. A decline in testing of non-disabled students is also seen as a positive thing because it allows special education personnel to spend more time on other activities, including consultation (Chalfant & Pysh, 1989; Graden, Casey, & Bonstrom, 1985b). It is also seen as a cost-saving measure: in their study of the implementation of teacher assistance teams in eight schools, McKay and Sullivan (1990) found the average team meeting "took 30 minutes and cost nothing. The average evaluation for special education services took from 30 to 35 man-hours to complete and cost $2000+." (p. 5). In reality, the salaries of school staff attending the meeting would not cost 'nothing,' but would probably cost substantially less than $2000.00.

All reviews (Burns & Symington, 2002; Chalfant & Pysh, 1989; Nelson et al, 1991; Schrag & Kelly, 1996) found that fewer students were referred for testing

following the implementation of school teams and that these teams made fewer inappropriate referrals. Talley (1998, cited in Chalfant & Pysh) compared the number of inappropriate referrals in nine schools in Kentucky before and after the implementation of a Teacher Assistance Team. During the four years preceding implementation, school referred an average of 22 students who were ineligible for special education services each year. After Teacher Assistance Teams had been in place for one year, eight ineligible students, on average, were referred annually which represents a 63.6% decrease in inappropriate referrals.

Goal: Team Member Satisfaction

Seven studies on team members' general levels of satisfaction were cited in the reviews (Bay, Bryan, & O'Connor, 1994; California State Department of Education, 1986; Chalfant & Pysh, 1989; Gerber & Miske, 1984; Harrington and Gibson, 1986; Kruger & Struzziero, 1995; Maher, 1991, all cited in Schrag & Kelly, 1996). Schrag and Kelly found that in all of these studies teachers were generally satisfied with school teams. For instance, responses to a questionnaire revealed "the majority of teachers were satisfied with the team itself and felt the team understood referral problem and was sensitive to their feelings" (Harrington and Gibson, cited in Schrag & Kelly, p. 12). On average, teachers rated their satisfaction as 4.45 out of 6 on a Likert scale (Kruger & Struzziero, 1995).

In the reviews, there was no information regarding other team members' satisfaction (e.g. administrators, speech language pathologists). School psychologists' satisfaction with teams was investigated by randomly selecting members of the National Association of School Psychologists to complete a questionnaire about their perceptions

of school teams (Huebner & Gould, 1991). In one question they were asked to indicate their overall level of satisfaction with typical team functioning during the current school year on a five-point scale with 5 representing 'very high,' and one 'very low'. On average, the psychologists (n = 177) rated their satisfaction to be 3.4, or 'average'.

To gain information about the specific ways in which teachers were satisfied/dissatisfied with school teams, Chalfant and Pysh (1989) administered an open-ended questionnaire that probed the ways in which teachers felt their teams had helped them and ways in which they were dissatisfied with their teams. Overall, teachers (n = 184) were satisfied with the teams. Teachers most frequently expressed satisfaction with the ability of group problem solving to generate useful strategies, the moral support provided by team members, and improvements in student performance and behavior. Areas over which teachers expressed dissatisfaction were insufficient time to meet, failure to generate useful interventions, deviation from the test-and-place model, lack of staff readiness to initiate the team, little or no impact of student outcomes, inefficient organization and management of team meetings, large volumes of paperwork, and confusion about the role of the team.

It is possible that teacher satisfaction varies depending on the format of the school team. Only one (Harrington & Gibson, 1986, cited in Schrag & Kelly, 1996) of the 15 studies reviewed by Schrag and Kelly focused on Prereferral Intervention Teams and although it reported that teachers were satisfied with school teams, those same teachers did not view the team's recommendations as successful. An ethnographic study on the satisfaction of teachers on interprofessional teams revealed teachers held negative perceptions of the team (Slonski-Fowler & Truscott, 2004). Teachers perceived that their

input was devalued or ignored by the team, that the team's intervention strategies were limited or unclear, and that the team provided little follow-up. When teachers experienced these perceptions, they disengaged either by not referring other students or no participating in problem solving and solution implementation.

In summary, reviews have found that school teams result in fewer referrals for testing, more appropriate referring practices, and an increase in teachers' skills. The evidence is mixed for teams' abilities to positively impact teacher attitudes, improve student outcomes, or increase team member satisfaction. Research in all these areas, however, is limited and dated. The lack of Canadian research on interprofessional teams makes it difficult to apply the results of research to teams such as those in Nova Scotia schools.

One possible reason for mixed results and results that indicate lack of efficacy might be that outcomes were measured before the effects of school teams began to materialize. In a study of the implementation of prereferral teams in all Pennsylvania school districts, the authors found that "the longer a school has been involved in the IST [Instructional Support Team] program, the more frequently teachers use the process" (Kovaleski, Tucker, Duffy, Lowery, & Gickling, 1995, p. 9). Graden (1983) writes: "As in all educational change, particularly that affecting long-standing practices, change is often slow and there often is resistance to new ideas that challenge existing practices" (p. 22).

Interprofessional Healthcare Teams' Goals

As mentioned above, because there has been relatively little study of goal attainment of school teams, research on the goal attainment of interprofessional

healthcare and research teams will also be cited. Goal attainment will be reported in three categories (similar to the categories for the school team effectiveness): changes in patient health/disease and patient's subjective sense of quality of life (user outcomes), decreased cost of services and length of stay (system outcomes), and the satisfaction of patients and professionals (satisfaction).

Goal for Users: Improved Patient Health and Quality of Life

Studies comparing direct measures of disease in patients who received interprofessional care to those of patients receiving 'care as usual' have mixed results. Ahlmen, Sullivan, and Bjelle (1988) found no difference in measures of arthritis between patients randomly assigned to a team of care providers and those assigned to a single physician. Liu et al. (2003) found that patients with depression assigned to team care experienced more depression-free days at three and nine-month follow-ups than patients assigned to a single care provider. These results, however, were not significant. Unützer et al. (2002) found significantly more patients with depression in a team condition than those receiving care as usual experienced at least a 50% decrease (relative to baseline) in number of symptoms at three-, six-, and twelve-month follow-ups. The study also found significantly more patients in the team condition had completely remitted at all follow-ups.

Some studies (Ahlmen et al., 1988; Unützer et al., 2002) have used patients' subjective scoring of their quality of life as an outcome. In these studies, quality of life was higher in the patients who were treated by a team than it was in those receiving care as usual or care from a single provider. Ahlmen et al. found scores on measures of emotional well-being and quality of life improved over time within the group of patients

assigned to team care, and were significantly higher than in the care as usual group. Unützer et al. did not conduct within-group analyses, but found at follow-up that patients in the team care group reported higher quality of life and less health-related functional impairment.

Goal for System: Decreased Cost of Services and Length of Stay

Some studies have used cost of services provided and length of hospital stay as measures of team effectiveness (Curley, McEachern, & Speroff, 1998; Liu et al., 2003; Wild, Nawaz, Chan, & Katz, 2004). There are no clear trends across these studies. Compared to care as usual, for patients cared for by interprofessional teams, length of stay was found to be shorter in the study by Curley et al. but no different in Wild et al. Cost of treatment was found to be lower in Curley et al. but higher in Liu et al. Lower costs are taken to indicate more effective care. They could, however, indicate provision of more comprehensive services (Curley et al.). Similarly, a shorter hospital stay is assumed to indicate more effective care, but longer stays could be accounted for by more complex diseases. It is difficult to summarize research that uses these outcome measures because they can be related to patient health in a variety of ways. Studies using these outcomes need to consider the ways in which money was spent and what contributed to longer hospital stays.

Goal: Professional and Patient Satisfaction

A number of studies reported professionals' and patients' satisfaction with interprofessional teamwork (Curley et al., 1998; Epstein, 2005; Tress, Tress, & Fry, 2005; Unützer et al., 2002; Wild et al., 2004). These studies have found that, overall, professionals and patients are satisfied with interprofessional teamwork. In research on

interprofessional environmental management teams and cognitive science research teams, members viewed their team experiences positively (Epstein; Tress et al.). Members were particularly satisfied with learning and gaining insights about new fields, acquiring skills, interpersonal relationships, and working in a team (Tress et al.), and they found the teams intellectually stimulating and enriching (Epstein). Professionals perceived communication to be more effective on an interprofessional hospital team than on a care as usual team, but this was measured with an un-tested, un-validated survey (Curley et al.). Hospital staff also reported that an interprofessional team improved communication, but this perception was not compared to the perceptions of members on a care as usual team (Wild et al.). With the exception of Tress et al., these studies did not collect data on staff dissatisfaction. Tress et al. found that some members of interprofessional environmental planning teams reported that projects were poorly managed and organized.

One study measured patient satisfaction with interprofessional team care for depression and found it to be higher than that for care as usual (Unützer et al., 2002). The percentage of patients who rated care as 'good' or 'excellent' was also significantly higher in the team condition at all follow-up points (Unützer et al.).

In summary, interprofessional care achieves some goals more effectively than other formats of health care: patients are more satisfied with care and report higher quality of life, and professionals tend to view interprofessional care favorably. Neither superior patient outcomes, however, nor decreases in cost or length of stay were demonstrated across studies. These patterns are consistent with those observed by Curley et al. 12 years ago (1998): "Overall, the literature on interprofessional teamwork shows

improved patient and team member satisfaction, few if any cost savings, and no clear improvement in patient outcomes" (p. AS10).

Across health and educational settings, the effectiveness of interprofessional teams has not been established. With the exception of improvements in teachers' skills (investigated in very few studies), the recipients of teams' services were shown to benefit from team involvement in some studies but not in others. Systemic outcomes such as cost of services showed improvement as a result of school but not health teams. Evidence for team member and service recipient satisfaction was mixed for school teams and strong for healthcare teams.

Barriers to, and Facilitators of, Collaboration on Interprofessional Teams

Researchers have called for more research identifying the process of school teams and the factors that affect the functioning of these teams (Iverson, 2002; Fleming & Monda-Amaya, 2001; Nelson et al., 1991). The presence of people from different professions on school teams adds another layer of complexity to the definition and process of collaboration. There have been very few studies of the determinants of interprofessional collaboration on teams in general (San Martin-Rodriguez et al., 2005) and, to my knowledge, no studies focussed on school teams. Since there has been relatively little study of how collaboration works and what contributes to or detracts from its success on school teams, I also reviewed the literature on collaboration on interprofessional teams in general.

The chart below shows the effects certain variables have been found to have on collaboration by studies in healthcare and education. A dot indicates the variable was found facilitate collaboration, 'no' indicates the variable was not found to influence

collaboration, 'mixed' indicates the study presented evidence that the variable could act as a facilitator or a barrier, and a blank cell indicates the study did not report findings concerning that variable. Five variables were most often found to facilitate effective team performance: good communication, clear roles, a willingness to collaborate, equal status of team members, and an understanding of professional paradigms. Each of these is discussed at greater length below.

Table 1
Factors Found to Facilitate Interprofessional Collaboration

Study (see Table 2 for author names)	Communication	Roles	Status	Attitude	Paradigm	Composition	Leadership	Logistics	Evaluation	Shared Goal	Training
1	•	•		•				•			
2		•									
3						•					
4		•							•		
5				•		•	•				•
6	•	•	•	•	•	•	•	•	•	•	
7	•			•			•	•			
8	•										
9	•	•	•	•	no	•	•	no	•	no	no
10	•		•			•		•			•
11		•	•		•						
12					•						
13	•	•		•	•			•			
14			•		•						
15	•	•	•	•	•			•			
16		•									
17	•	Mixed	•	•	•	•	•			•	
18	•	•									
18	•										
20	•										

Table 2

Studies of Influences on Interprofessional Collaboration

Study (* indicates study in field of education)	Author(s)
1	Baggs & Schmitt, 1997
2	Brown, Crawford, & Darongkamas, 2000
3*	Burns, 1999
4*	Burns, Wiley, & Viglietta, 2008
5*	Chalfant & Pysh, 1989
6	Choi & Pak, 2007
7	Epstein, 2005
8*	Esquivel, Ryan, & Bonner, 2008
9*	Fleming & Monda-Amaya, 2001
10*	Gallagher & Malone, 2005
11	Hall, 2005
12	Maruyama, 1974
13*	Mostert, 1996
14	O'Donnell & Derry, 2005
15	San Martin-Rodriguez et al., 2005
16	Sawyer, 1992
17	Shalinsky, 1989
18	Suter et al., 2009
19	Thompson, 2009
20	Wear, 1999

Communication

In the studies, "good communication" was variously used to refer to a style of communication that incorporated active listening and conveyed things such as respect and openness (Esquivel et al., 2008; Thompson, 2009), to strong conflict resolution skills (Suter et al., 2009), to sharing of information (e.g. Choi & Pak, 2007), and to adequate opportunities to speak and listen (Fleming & Monda-Amaya, 2001). Some authors (e.g. San Martin-Rodriguez et al., 2005) noted that communication was the vehicle that expressed other facilitators of collaboration. Some sources (e.g. Epstein, 2005; Wear, 1999) equated good communication to speaking without jargon. Jargon is "the undetected, specialized use of the same words" (Epstein, p. 249). Wear notes that although team members draw from a common pool of language, the words they use may have deeper meanings which are only clear to practitioners with experience in that discipline.

To mitigate communication barriers, it is recommended that team members define terms early on and review terms regularly (Epstein, 2005, p. 249; Thompson, 2009). Ways of achieving this include making a written list of potentially-problematic terms and their definitions (Epstein) and explicitly raising the issue of specialized language interfering with communication, for instance by saying "Can we find ways to exchange ideas and insight that transcend traditional language, or at least the jargon of our discipline?" (Thompson, p. 286).

Roles

A professional role defines "who is responsible for doing what, when, and how" (Sawyer, 1992, p. 246). 'Role blurring' or 'boundary blurring' occurs when it is not clear how each professional's contribution should be different (Suter et al., 2009). Some authors (Brown et al. , 2000; Shalinsky, 1989) argue that role boundaries are outdated remnants of institutional practices. Other authors contend that role boundaries engender efficiency and prevent burnout and conflict because: clear definitions of team member roles prevent members from needlessly duplicating their efforts and facilitate delegation (Mostert, 1996; San Martin-Rodriguez et al., 2005); role blurring causes "confusion as to where one's practice boundaries begin and end" (Hall, 2005, p. 192) which can leave team members feeling undervalued or as though they need to do everything (Hall; Suter et al.); and team members may become territorial in an attempt to clarify poorly defined roles (Suter et al.).

In one study, team members valued having clearly defined roles: in interviews designed to elicit healthcare providers' and administrators' (n = 60) views on the competencies needed for collaborative practice, respondents identified understanding

professional roles and responsibilities as one of two core competencies (Suter et al., 2009). In another study, team members expressed little preference, however, as to whether roles should be rotated, explicitly defined, assigned vs. chosen or assigned based on expertise vs. skill (Fleming & Monda-Amaya).

Attitude Towards Collaboration

Attitude towards collaboration or willingness to collaborate has also been found to influence the outcomes of collaboration (e.g. Chalfant & Pysh, 1989; Hall, 2005). Resistance to collaboration can be found at the level of individual team members, the administration, or the institution. At the individual level, "…not everyone wants or likes to work in interprofessional groups…" (Shalinsky, p. 208). This could be because different disciplines attract people with different inclinations towards interdependent work (Hall; Shalinsky), because collaboration requires a great degree of receptivity to others' ideas, or because people vary in the degree to which they see collaboration as valuable (Epstein, 2005; San Martin-Rodriguez et al., 2005). An administration that facilitates collaboration allows collaborators the necessary time to work, motivates people to collaborate, and sets realistic objectives (San Martin-Rodriguez et al.; Shalinsky). In the school, administrative support cited by teachers included releasing teachers from class for meetings, having an enthusiastic and positive attitude about the team, publicizing and praising the team, and providing resources (Chalfant & Pysh, 1989). Finally, the institution can facilitate collaboration by valuing interdependence (San Martin-Rodriguez et al.) and by encouraging people "to organize themselves around a problem rather than around a discipline or subdiscipline" (Epstein, p. 253).

Status

Another characteristic of effective interprofessional collaboration is equal sharing of power among disciplines (D'Amour et al., 2005). In survey studies (Fleming & Monda-Amaya, 2001; Gallagher & Malone, 2005), team members strongly endorsed items such as "each team member should have as much decision-making power as any other team member" (Gallagher & Malone, p. 211) and "members (especially parents) feel equally empowered" (Fleming & Monda-Amaya, p. 165).

Traditionally, different disciplines have had different amounts of power and the resulting hierarchy can impede interprofessional practice (Choi & Pak, 2007; Hall, 2005; O'Donnell & Derry, 2005; Shalinsky, 1989). According to Choi and Pak, one discipline will dominate and this can lead to rivalry among disciplines. These status differences may stem from status assigned to gender, race, and other factors (O'Donnell & Derry; San Martin-Rodriguez et al., 2005).

Status barriers can be reduced by giving professionals opportunities to spend time together, learn, and work together in meaningful ways (Hall, 2009). This can also reduce paradigm barriers and is best accomplished by early interprofessional education (Hall). Equal sharing of power and responsibility is also facilitated if team members have respect for one another's disciplines (Choi & Pak, 2007; Shalinsky, 1989), and if team leaders provide all team members with constructive feedback (Choi & Pak).

Paradigms

It appears that differences in professional paradigms can hinder interprofessional practice (Choi & Pak, 2007; Hall, 2005; Maruyama, 1974; O'Donnell & Derry, 2005; Shalinsky, 1989). Paradigms have been called structures of reasoning, logics,

epistemologies, professional orientations, worldviews, and styles of inquiry (Maruyama). Although paradigms vary from person to person, generally particular paradigms dominate within a profession (Maruyama). Members of different professions might understand the problem differently, give preference to certain methods, or choose to answer different parts of a question (Choi & Pak; O'Donnell & Derry).

Paradigm acquisition is "part of the process of professional or discipline initiation" (Shalinsky, p. 210). Professional education, which is usually tailored to the already-pervasive thinking style held by members of a profession, further contributes to 'professional silos' or 'paradigm blinders' (Hall; San Martin-Rodriguez et al., 2005; Shalinsky). According to Maruyama (1974):

> If communicating parties remain *unaware* that they are using different structures of reasoning… each party tends to perceive the communication difficulties as resulting from other parties' illogicality, lack of intelligence, or even deceptiveness and insincerity….or all communicating parties may fall into a collective illusion of mutual understanding. (p. 3).

Communicating effectively with professionals who hold different paradigms is facilitated by recognizing that there are paradigms other than one's own, attempting to understand and think in others' paradigms, and allowing others to explore one's own paradigm (Maruyama, 1974). 'Cross-paradigmatic' communication can be improved if each team member realizes that others may be using different paradigms, can free themselves from their own paradigm, and can think in other paradigms (Maruyama, p. 26). Having a clear, shared goal also facilitates working with people who hold different professional paradigms (Choi & Pak, 2007; Hall, 2009; Shalinsky, 1989). A shared goal

"allows each member to shift from his/her specific professional focus to one requiring understanding of another's observations and interpretations" (Hall, p. 194). Superordinate goals are also important because they provide motivation for people to "expend the effort necessary to work together" (Shalinsky, p. 215).

In summary, many of the influences on interprofessional school teams that received the most citations - good communication, clear roles, attitude towards collaboration, and equal status - are also frequently cited in the interprofessional literature in other fields. Despite its prominence in literature on teams in non-school settings, value differences amongst school-based professionals have received very little attention and are not cited as a barrier to collaboration on school teams. In the only study that investigated this, team members rated the item "Members have a common set of norms and values" as somewhat important (2 on a 4-point scale) to the team process (Fleming & Monda-Amaya, 2001, p. 163). Team members ranked this item lowest of all the questionnaire items associated with team goals.

Purpose of Study

Neither the structure and practices, nor the efficacy and process of school teams are well documented or understood (Carter & Sugai, 1989; Fleming & Monda-Amaya, 2001; Schrag & Kelly, 1996). The limited research is also generally out-dated. Models of some school team processes for example, problem-solving (Burns et al., 2008) and teacher disengagement (Slonski-Fowler & Truscott, 2004) exist, but there has been little examination of the team process, or *how* team members on interprofessional school teams work collaboratively. Although various factors have been found to impact collaboration we need a better understanding of these factors (San Martin-Rodriguez et al., 2005). In

particular, there has been very little exploration of professional paradigms as they relate to school teams. The purpose of this study is to explore team members' perceptions of how they work together on interprofessional school teams, including their perceptions of barriers and facilitators to interprofessional collaboration. It is hoped that this research will help to expand knowledge and understanding of how interprofessional collaboration functions in school teams, and ultimately contribute to the improvement of services for children with learning and/or behaviour challenges.

Chapter 2: Method

Context of the Study

A school board was recruited through convenience sampling. The school board spanned rural areas in Nova Scotia. In the policy for the school board in which I collected data, the duties of the PPT and responsibilities of staff members are outlined. The duties of the PPT include: receiving referrals, discussing all available information about the student's strengths and challenges, brainstorming ideas to enhance student success, exploring with the referring teacher strategies to meet the referred student's needs, providing support to teachers, recommending students for support services and coordinating these services, ensuring that IPP teams are formed and that they are carrying out their duties, and performing documentation. Student services are intended to support students' cognitive, emotional, social, and physical development.

At the elementary school level, the PPT should include a school administrator, at least one classroom teacher, at least one resource teacher, and the school counselor (if available). There is a board-wide referral form used to refer students to the PPT. The general process following a referral is to explore additional strategies then perform ongoing monitoring/evaluation or refer for further assessment and possibly re-refer to the PPT to begin the process again. It is written that the PPT should meet at least once per month.

The principal and the classroom teacher who is making a referral have roles and responsibilities that are directly related to the PPT. For example, the principal must establish the team and make referrals from the PPT to other services, and the classroom teacher must attend the PPT meeting when strategies are being discussed for their

students. The resource teacher has responsibilities related to program planning teams in general, and must support students who have been identified by the PPT. The Speech Language Pathologist (SLP) and Severe Learning Disabilities teacher must work with the PPT to develop or review their caseloads, and the school counselor should participate on the PPT when required. The School Psychologist does not have to have any explicit role on the PPT, however they are to provide indirect services through consultation and collaborate with program planning teams to develop adaptations, both of which could involve participating on the PPT. There is no description of the roles and responsibilities of the Vice Princial (VP).

Participant and Team Characteristics

Thirteen members of Program Planning Teams participated. They were: two principals, two vice principals, two classroom teachers, three resource teachers, two school psychologists, and two speech-language pathologists. Two or more members of each position were recruited to increase the richness of the data. Having two people from each position helped protect participants' anonymity. Administrators, classroom teachers, and resource teachers were recruited because they are mandatory members of the school team (Nova Scotia Department of Education, 2008). I decided to recruit School Psychologists and Speech Language Pathologists because they are listed in the Nova Scotia Special Education Policy (2008) as optional members of the team and in my experience, people from these professions are more frequently represented at school team meetings than are other optional members e.g. guidance councilors, community agency members.

To recruit participants, I worked with a contact in the school board to identify schools that would likely be interested in participating. I contacted the principals of these schools by phone to explain the study. When appropriate, I sent them an information letter (see Appendix A) to distribute to the members of their PPT. If one or more team members expressed interest in participating, I met with them to carry out the informed consent process (see Appendices B and C for participant consent forms).

I used interview questions to gather demographic information about participants' work experience, the length of time they had been a member of the current PPT, team logistics and composition, and what participants saw as the main purpose or goal of the team. Participants indicated that their PPTs typically consisted of the following 'core' members: a principal or vice principal, one or more classroom teachers, and one or more resource teachers. On some teams, a school psychologist, speech-language pathologist, guidance counselor, or student support worker were also mentioned but as participants who were involved only occasionally. Parents/guardians or students did not participate on any PPT teams. Participants indicated that the principal was automatically a member of the PPT and resource and classroom teachers volunteered to participate.

The 'core' members in this study were from four different elementary schools and the specialists serviced up to seven elementary to high schools each (some of these overlapped with the schools in which 'core' members worked). If a participant had been on several PPTs, their answers could have been based on any of these teams. Therefore, the information on team characteristics and logistics below is likely a more precise reflection of schools in which 'core' members worked than in schools in which specialists worked.

There is information for length of time on the team for all but two participants. The average length of time participants had been involved with their current team(s) was 2.8 years (SD = 2.8, range: 0 - 9). On average, participants had been working for nearly twenty years at the time of interview (*M* = 19.9 years, *SD* = 11.6, range: 1 - 38). In Table three, the length of time that participants had worked at the time of the study is shown.

Table 3

Years Worked in Education

Years	Participants
1 – 5	2
6 – 10	1
11- 15	2
16 – 20	1
21- 25	2
26 – 30	2
31 – 35	2
36 – 40	1

Teams met between once per week and once every two months. Most participants indicated that there was flexibility in meeting frequency such that more meetings were held at busier times of the year. Several participants also indicated that the duration of meetings was flexible and could range from 30 to 90 minutes.

To gain a better understanding of what school teams' goals currently are, I asked 'core' team members what the purpose or goal of the PPT was (the question was not relevant in the four specialist interviews). Participants reported that the goals of their team were to:

- support teachers (five participants)
- prioritize testing and program planning (five participants)
- meet every student's needs (two participants)

- meet academic, behavioural, and social needs (two participants)
- make 'the best decision' for the referred student (two participants)
- determine the resource teacher caseload (one participant)
- share knowledge and learn from one another (one participant)

Ten of the thirteen interviews contained information about various aspects of the referral process. Although one participant reported that the referring person "doesn't have to be a classroom teacher," the seven participants who touched on this subject mentioned classroom teachers only when giving examples of who made referrals. The referring teacher was responsible for completing a standard, board-wide form with the referred student's demographic information, strengths, problem areas, strategies that had already been tried and whether they were successful, communication at home, and what the teacher wanted the team to investigate or do. The classroom teacher directly involved with the student usually, but not always, attended the PPT meeting. In response to the referral, the team engaged in several actions which are described in the results section under the heading 'Deciding How to Meet Students' Needs'. In practice, participants indicated that the referring teacher's request/expectation was not always appropriate or clear, that referees sometimes attempted to discuss an issue with the team without completing the necessary referral form, and that the referring teacher had not always attempted several strategies or adjustments before making a referral.

Methodology

I conducted this study using qualitative methods (Strauss & Corbin, 1990). I chose a qualitative approach for two major reasons. First, in a qualitative study the goal of data analysis is usually to identify any themes present in the data. It is important to

take this type of open-ended approach in the present study because so little research has been conducted on interprofessional collaboration in a school setting. If the present study were conducted by testing a hypothesis or a set of hypotheses that had been formulated based on this limited literature, the study might focus on irrelevant areas or focus on unimportant aspects of relevant areas. The study could easily 'miss' what actually constitutes interprofessional collaboration on school teams, or what is important in this type of collaboration. "Put bluntly, if you don't know what you are likely to find, your project requires methods that will allow you to learn what the question is from the data" (Richards & Morse, 2007, p. 29).

The second major reason for using a qualitative approach is that the research problem is well-suited to it. A qualitative approach can allow one to understand complex phenomena deeply and in great detail (Richards & Morse, 2007; Strauss & Corbin, 1990). The human interactions involved in collaboration are likely complex and data on these interactions would be difficult to collect and to analyze using quantitative methods.

A variety of methods fall under the umbrella of qualitative research. What differentiates these methods is "the way in which the researcher thinks about the data and subsequently conceptualizes … data" (Richards & Morse, 2007, p. 48). The three most common qualitative methods are: phenomenology (which addresses questions about the essence of experiences from the participants' perspectives), ethnography (observational and descriptive questions about values, beliefs, and practices of a cultural group), and grounded theory (questions about process) (Richards & Morse). The choice of which qualitative method to use is based on compatibility with the research question(s). The present study was conducted using grounded theory, which is used to study social or

psychological processes within a social setting (Charmaz, 2006). I chose this method because the research topic – how people collaborate – has to do with a social process. The aim of the study was to understand the properties of collaboration and its conditions and outcomes, and interactions amongst these properties. If the purpose of the study was to understand what collaboration meant to participants or to understand the culture of the school team as a unit, phenomenology or ethnography might be more appropriate. As with qualitative methods in general, grounded theory is particularly useful when little is known about the area to be studied or when what is known does not satisfactorily explain the phenomenon (Wuest, 2007).

Grounded theory was developed by sociologists Barney Glaser and Anselm Strauss. Glaser's contributions to grounded theory reflect his quantitative training at Columbia University. He specified an explicit set of procedures for conducting research and advocated building middle-range theories based on systematically-analyzed data. Strauss studied in a qualitative tradition at the University of Chicago. He viewed human beings as having active roles in shaping the worlds in which they lived and as creating subjective meanings through social interactions. His contributions to grounded theory include emphases on process and on the interrelationships among conditions, meanings, and actions. In the 1960's, Glaser and Strauss worked together to explore issues related to deaths of seriously ill, hospitalized patients. Glaser's empirical approach combined with Strauss' interpretive perspective resulted in a set of rigorous coding methods that could be used to identify social or social psychological processes within social settings or particular experiences.

Over the 1970's and 1980's Glaser and Strauss independently developed their own grounded theory techniques. In Glaser's approach, theories were understood to emerge directly from the data while in Strauss' approach (developed with Juliet Corbin), theories were created by considering every possible interpretation of the data (Richards & Morse, 2007). More recently, some researchers (e.g. Charmaz, 2006) have moved towards constructivist grounded theory, in which multiple subjective realities are thought to exist and data are viewed as jointly created between the participant and researcher. I adopted the latter approach because I believe that reality is subjective, and because the guidelines for a constructivist approach are more flexible than those provided by objectivist researchers. Specifically, the axial coding framework described by objectivist researchers can "limit what and how researchers learn about their studied worlds" (Charmaz, p. 62).

Data Collection

I used interviews as the primary data source because they allow participants to share their perspectives directly (see Appendix D for interview questions). This is important because much of what constitutes collaboration may be subject to the participant's interpretation and thus invisible to one who collects data through methods such as observation or the study of written documents. I interviewed each participant individually for roughly forty minutes. Interview questions were designed to elicit information about: demographics, such as professional/work experience, team composition, and referral process (six questions); team members' roles (four questions); collaboration in general including barriers to and facilitators of collaboration (three questions), and interprofessional collaboration (four questions).

Interviews were semi-structured so as to allow flexibility to discuss topics raised during the interview. This is important because the goal of data collection in grounded theory is discovery and the method of data collection should reflect this (Strauss & Corbin, 1990). As well, while interviewing the researcher can adjust his or her questions so as to decide immediately on the focus. This is a form of theoretical sensitivity that amounts to "theoretical sampling on-site" (Strauss & Corbin, 1990, p. 183). This type of sampling requires a capable interviewer who knows how to probe without unconsciously signaling the participants to reply in certain ways (Strauss & Corbin, 1990).

Each participant was interviewed individually in a single interview that lasted roughly 40 minutes. With the exception of specialist interviews, all interviews were conducted in the schools in which participants worked. Specialist interviews were conducted in a location that was convenient for them. Interviews were held in late spring of the year the study was conducted. A digital recorder was used to record the interviews. A professional transcriptionist transcribed the audio recordings onto a password-protected laptop and the researcher reviewed transcripts for accuracy.

Prompts were used to help participants elaborate on their responses. Some prompts appear in brackets next to the above questions, but general prompts such as "tell me more about that" were also used. Prompts were used to contribute to "theoretical sampling on site". Participants were given the option to review their transcript for accuracy. Most participants verbally expressed that they did not wish to review their transcript. Transcripts were sent to the remaining six participants. One participant returned the transcript and wrote that they did not wish to make any changes to it. None

of the other participants returned their transcript. Ten participants indicated that they wished to receive a summary of the results.

Data Analysis

Grounded theory is so named because theory is 'grounded' in data. Grounded theory involves concurrent data collection and analysis, analysis beginning as soon as the first interview has been conducted. Analysis proceeded as outlined by Charmaz (2006). In this, a constructivist approach, it is assumed that, "any theoretical rendering offers and *interpretative* portrayal of the studied world, not an exact picture of it" (Charmaz, p. 10). The resulting theory is constructed from my interactions with participants and my own perceptions and past experiences. The three increasingly abstract stages of this type of analysis are: initial coding, focused coding, and theoretical coding.

Very briefly, in initial coding, each line or small segment of raw data was examined and assigned one or more words (codes) that described what was going on in that segment. My supervisor coded two transcripts with me to ensure my initial coding was appropriate. Initially, I was analyzing very small segments of text but this proved impractical because participants' meaning often spanned larger segments of text. To assign codes, I carefully examined the data and assigned a code to groups of words or phrases that contained a single unit of meaning. This generated codes that represented actions, feelings, relationships, and purposes, among other things. The aim of coding was to generate as many codes as possible to fit the data, setting the stage for all possible later interpretations of the data. I used diagramming throughout this and the later stages of coding to represent emerging ideas and as a way of reflecting on the data.

In focused coding, codes were compared to each other for similarities and differences and frequency of occurrence. I began to notice similarities and differences between initial codes as I was doing initial coding and made memos to document these ideas. The most frequently occurring and/or the most significant codes that 'fit' together were collapsed into categories. These categories were compared to the data and were refined. The reflexive process of abstracting from the data is termed constant comparison (Strauss & Corbin, 1990). During focused coding, I identified 19 categories, each of which had subcategories.

Finally, possible relationships between categories were labeled in theoretical coding. Theoretical codes lend form to focused codes and are integrated into a final theory. Charmaz warns that theoretical codes should not be seen as objective and that the researcher should be careful not to allow them to impose a framework on analysis. At this stage of coding, I thought hard about possible relationships between categories. I frequently reviewed the coding I had done earlier to decide whether the relationships really fit with the data. By the end of this stage, I had identified a core category (transposing) that I thought explained much of the data.

Reliability and Validity

Many qualitative researchers argue that the concepts of reliability and validity are rooted in quantitative research and "do not match the specific philosophical assumptions and aims that underscore qualitative work" (Thorne, 2008, p. 101). In quantitative research, a reliable study is one whose findings can be repeated in an identical fashion. In grounded theory, by contrast, findings are difficult to replicate because data stem from

complex, invisible, and situation-dependent interactions; theories represent social or psychological processes in a specific situation(s) (Strauss & Corbin, 1990).

Nevertheless, it is important that some criteria guide data collection and analysis in qualitative research and that outcomes be justifiable and appropriate (Richards & Morse, 2007; Thorne, 2008). Evaluative criteria allow readers to have confidence that findings of credible studies are based on recognized ways of reasoning rather than on opinion (Thorne). Evaluative criteria are tools with which the reader can evaluate a study's quality thereby avoiding risks associated with uncritically accepting any findings.

Researchers have taken two approaches to evaluating reliability in qualitative research (Cohen & Crabtree, 2008). In the first, a reliable study is one in which data have been gathered in order to view the topic from different angles. Ways of gathering a broad range of data include asking study participants for feedback on the researcher's analysis (member checking), and directly comparing findings from different sources in order to clarify, extend, and verify these findings (triangulation). In the second approach, reliability depends on how well the researcher can convey his or her thinking; reliability is considered to be a process in which researchers report information that allows readers to discern for themselves the patterns identified and verify the analysis and interpretation of the data (Cohen & Crabtree). To enhance reliability, I will create a project history or 'audit trail' (Richards & Morse, 2007) detailing the decisions made in data analysis. The audit trail will expose my interpretation of the data and the thinking that led me to identify the themes that I identified.

To achieve internal validity, there must be good 'fit' between the research problem, research question, and methods of data collection and analysis (Richards &

Morse, 2007). Internal validity also depends on how accurately the researcher can infer and code the meaning of participants' statements. The ability to recognize subtleties in meaning in data is termed 'theoretical sensitivity' and it is acquired through professional and personal experience and exposure to the literature and through techniques employed in the analytic process (Strauss & Corbin, 1990). These techniques are designed to help the researcher avoid standard ways of thinking about phenomena and to explore and clarify the possible meanings of concepts. They include asking questions of the data, analyzing a word, phrase, or sentence, and comparing two or more phenomena (Strauss & Corbin).

Regarding external validity, or generalizability, qualitative research is more concerned with the unique features of a certain group than with making generalizations to a larger population (Taggart, 1973). Rather than make generalizations, grounded theory researchers attempt to "specify the conditions under which our phenomena exist, the action/interactions that pertains to them, and the associated outcomes or consequences" (Strauss & Corbin, 1990, p.191).

Chapter 3: Results

Becoming a Team Member

Each professional who participates on an PPT enters the team with a role in the school that has been established through policy, precedent, and their own activity. Their role on the PPT may be associated with different responsibilities than their role in other school environments. In this section, I will describe the roles of PPT members and the ways in which team members perceive each others' roles. I will also explore status differences amongst team members and how willingness to collaborate allows team members to transpose their role from a role within the school to a role on the team.

Role Content

The resource teacher's role often included taking notes, chairing or facilitating the meeting, providing peer support, and contributing knowledge of the student. Knowledge of strategies that the classroom teacher could try and knowledge of the program planning process were precursors to being able to do the resource teacher's role.

Like the resource teacher's role, the classroom teacher's role often included taking notes and contributing knowledge of the student. The classroom teacher's role was, "*to be at meetings and give her opinion of what we should be doing…she really doesn't have any role after the meeting*". They could also raise the team's awareness of what was going on in the classroom and which students needed help.

The referring teacher was responsible for explaining their referral but beyond this participants did not describe the referring teacher's role. Two participants spoke about previous experiences as a referring teacher. They had conflicting expectations of the

team: one approached the team "*looking for answers*" while the other did not have "*a real set of expectations*" of what the team would do for her.

The VPs role contained both teaching and administrative duties. One participant remarked that, "*they sort of wear two hats*". The VP was also seen as a "*mediator*" and as a "*veteran teacher*" who used their knowledge and experience to support resource and classroom teachers. They also held decision-making power, but this was more frequently attributed to the principal.

The principal held the most diverse role. Their duties ranged from creating the agenda and taking minutes to making final decisions and ensuring follow-up. The principal's role was unique in that it could require knowledge of policy and school-wide needs, and could involve acting as a contact person for the board. The role also stood out because it was associated with the greatest decision-making power.

Of the principals, VPs, resource teachers, and classroom teachers interviewed, none saw Speech Language Pathologists as having an identifiable role on their PPTs. Because of the similarities in their roles on the PPT, in much of this thesis, School Psychologists and Speech Language Pathologists are jointly referred to as 'specialists'. There were some differences in their role, however, and these differences are described below.

Speech Language Pathologists were seen as being more involved than School Psychologists. Some team members gave examples of specialists sharing test results with or providing consultation but beyond this their roles were not described. The SLPs themselves reported that their participation ranged from never attending PPT meetings to attending four per year when invited. The SLP who participated on the PPT reported that

they had been given a pre-determined caseload and as a result they had the feeling of being a fairly passive participant.

The School Psychologists interviewed reported that their participation ranged from attending four meetings a year to participating regularly on some of the teams within their circuit. They described their roles as being a consultant who brainstormed ideas and engaging in problem-solving on difficult cases through information sharing and research.

It was difficult for specialists to attend PPT meetings due to their caseloads and the geographical distance between the multiple schools on their circuits. Logistically, it was very difficult to coordinate two specialists attending the same meeting. Lack of specialists and frequent changes in staffing were reported to have been barriers to specialist participation in previous years. On the whole, both 'core' members and specialists welcomed the idea of increasing the participation of specialists because of their skills and knowledge, but stipulated that specialists should only come if it was really necessary out of respect for their caseloads and distance travelled.

Role Clarity

Role clarity refers to how clearly team members understood each role on the team and the ways in which each role and the ways in which each role was unique. Some roles were described more clearly than others. The principal's and resource teacher's roles were described in the greatest detail, the VP role and the classroom teacher role were less well-defined, and the specialist and referring teacher had very poorly defined roles. In some cases, there was an element of lack of knowledge both among PPT 'core' members and specialists as to what each other's role was:

- *…I don't know enough of their background? Like of their profession, so sometimes I'm not really sure what they can do for me, like for the student we're talking about.*
- *…I don't know what other things they talk about at school planning team meetings. I don't know really what's being discussed…*

While there was some overlap in responsibilities across teams, within each team responsibilities were clearly divided. One participant reported that it could be difficult to distinguish whether the VP was engaged in work related to teaching vs. administration.

To determine how team members saw their own roles vs. how those roles were seen by others, I compared the number of different responsibilities that team members attributed to their own position to the number that all other team members attributed to it. Resource teachers and teachers identified fewer aspects of their roles than did other team members. The resource teachers saw their role as mainly contributing knowledge and taking notes, while others noted that it also included providing peer support and following-up on team actions. Teachers saw their role as giving input while others saw it as additionally including raising awareness of student needs and providing knowledge of teaching strategies. Principals and other team members identified many aspects of this role and these aspects were similar. The VP role, however, was described in greater detail by VPs themselves than by other team members. VPs described their role as contributing knowledge, decision-making, mediation, and providing peer support; others portrayed it as being a fairly general role.

Attitude Towards Collaboration

For many administrators and for specialists who act as consultants rather than collaborators, becoming a collaborative team member would require relinquishing a certain amount of power. Even teachers and resource teachers, particularly those who do not participate in team teaching or other collaborative practices, may have to adjust to working with their peers in a collaborative environment. How do professionals make the switch from exercising power and working somewhat independently in the school to being immersed in a team environment? Their attitude towards collaboration can influence what sort of role they take on within the team.

The principal's attitude contributed to collaboration. In reference to the principal, participants said:

- *...they do not make you feel like, you know, sit there and don't say anything. You can, you know, say whatever you want to…*
- *I think the principal needs to be a, like a cheerleader almost, to encourage people to speak their mind and be honest about what's happening…*
- *I see myself, what's the term I want, as a, an enabler*

The specialists' attitudes also influenced their role on the team. Some of the specialists on PPTs intentionally tried to be seen as an approachable equal in order to encourage communication:

> *I try to go out of my way to be seen as a staff member and not a specialist that just comes in once in a while. And that makes a big difference because the teachers are more comfortable to approach me and ask me questions, and I think it makes*

them more comfortable to bring up ideas that they think might be helpful at the meetings.

The Specch Language Pathologist and School Psychologist who participated more regularly made participation on the PPT a priority. For instance, one spoke about altering their schedule so as to allow more time to attend meetings. Being invited by the team could also facilitate specialists' collaboration.

…because sometimes I think specialists want to come and they feel like they could contribute, but because we're often not regular members of a program planning team sometimes we may feel like we're stepping on somebody's toes if we ask to come to a meeting

Only the Principal, a resource teacher, and a classroom teacher were required to particiapate on the PPT. Other members usually had the choice of whether or not to participate. People who volunteered to participate were seen as having conviction that the team was effective, as valuing students' best interests as well as the team's interests and those of the school, and as genuinely wanting to contribute to the team. Volunteers demonstrated a willingness to collaborate and a personal commitment to collaboration. A willingness to collaborate would be needed in order to alter one's role and to share and integrate individual knowledge with the knowledge of others in the group.

Status

Seven participants reported that principals had decision-making power, but most did not seem to attribute any positive or negative meaning to it. Principals and other participants reported that administrators would not force a decision upon the team; they

would make the final decision because "*somebody has to*" but much preferred to discuss and come to a group consensus on an issue.

Two participants indicated that it was beneficial for the principal to have the final say. One mentioned that the principal was able to think more objectively than teachers about decisions such as PSA support. Another felt that status differences were necessary:

> *there's a different walk that they should be walking because, just as I walk differently than my students walk. I am setting a role model for them, and they set a role model for us, and if they're going to be my assessment people, who they do have the right, they're supposed to come in and assess me, and give me advice and stuff, then I'm expecting a strong role model to be able to do that.*

Another two participants did not perceive power differences among team members. On working with administration on the team, one reported, "*When we're at the meeting, I still see it as equal*". An administrator stated, "*I feel everyone in the school is equal…I don't feel my say is any more important than anyone else's say*".

The principal's decision-making power came from their role in the school:

- *…the principal often becomes the veto or, like the go to person to break the tie, because of their role in the school.*
- *Not as chair of the team, but as administrator I would…*

The principal's role in the school did not always affect their role on the team. Sometimes, administrators' roles were described in terms that conveyed relatively little power, for instance they were described as "*just there to oversee everything*" or as having "*just another leadership role*".

Some team members appeared to feel free expressing themselves in front of team members who may have been endowed, in other roles in the school, with higher status. In one case, a team member felt comfortable disagreeing with the administrators on the team but not with a fellow teacher who had referred a student to the team. The referring staff member had greater seniority than the team member, however, and the team member saw the principal as very approachable. In this case, seniority and the administrator's personality seemed to be more powerful influences on collaboration than the status inherent in a position. In another case, a team member referred to the team as supporting them within a staff meeting. In both cases, team members felt support from their team that overrode differences in status that might be present amongst other staff.

The two previous incidents could be seen as an indication that the team takes on a role of its own within the school. Each person on it may experience a feeling of being a team member that overrides some of the differences in position and/or status that may be present in other contexts. If the effect of being on the team was felt very strongly, it would be possible that team members would see themselves predominantly as 'team members' rather than 'note takers' or 'mediators' etc. Two participants expressed the view that being a contributing team member was the most central feature of their role:

- *I don't know if anyone has any particular role, it's just working together as a team and we would all have some input.*
- *I don't see my role as being anything specific except for the fact that when I have something to say when something is brought to the table, then I simply contribute and tell what I feel about the situation…*

In summary, responsibilities were often divided similarly across teams. For instance, note taking was often shared between the resource and classroom teachers and chairing the meeting usually fell to either a resource teacher or the principal. Team members felt that they held equal status despite some reports that the principal and VP had decision-making power. This may be related to defining oneself primarily as a team member. Team members' attitude towards collaboration also influenced their role on the team.

Creating Shared Knowledge

Sharing and interaction are important aspects of collaboration (D'Amour et al., 2005). Interprofessional collaboration is characterized by integrating knowledge from different professional perspectives with one's own knowledge (Epstein, 2005; O'Donnell & Derry, 2005). In this section, I will explore how individual knowledge is transposed into a collective environment through a sharing and integration of individual perceptions. Team members' initial perceptions of a student's issues are shaped by several factors including the context in which they see the student. Establishing a shared understanding of the student's needs was facilitated by having had similar past experiences, being receptive and open, and having a common goal.

Perceiving and Sharing Information

How team members perceived information was influenced by several factors. These factors shaped the type of information team members were able to contribute to the team, and how they perceived information presented by other team members. First, there was a great difference in the type of information that each position contributed to the team. Job context narrowed the type of information each professional had about the

student, and it could determine which recommendations they saw as most desirable. For instance, classroom teachers saw how the child was interacting with other students, resource teachers saw how they interacted one-on-one with an adult, and administrators had knowledge of student behaviour.

Most members of the PPTs had similar training and therefore did not feel that their education gave them a unique perspective on the issues that were discussed. Specialized training such as a Master's degree or advanced training in assessment, however, was seen as influential. Participants with specialized training stated that they employed specific ways of thinking, had a default hypothesis, asked certain types of questions, or tended to focus on certain topics. This is consistent with the idea of 'professional paradigms,' or styles of thinking that are unique to certain professions (Maruyama, 1972).

One of the more experienced participants identified some differences in general approach across the disciplines that are involved with some school teams:

> *The social work tends to be much more focused on family dynamics, that kind of perspective you know, like looking at the big picture of the family and parenting skills. Psychology in my experience is very much the test results, you know, like looking at the numbers. Functional behavioural analysis, that kind of stuff is important from that perspective. Speech tends to look at communication overall, articulation issues, language issues, those kinds of things, and then you've got the educational, the classroom stuff. I mean, what's the curriculum, how do we modify the curriculum to meet this kid's needs, how do we get there? And the resource teacher comes from the perspective of the individual program plan, what do we*

need to implement, what sorts of modifications do we need to make. So they all come with a different slant on looking at the kid.

One specific way in which several participants' views differed was whether they saw the student primarily as an individual or as part of a group. This was related to the nature of their work and to their training:

… [teachers] are trained to look at a whole group, and then the individual. I am trained to look at the individual, who I now have to fit into the whole group. I said, so we're coming to this process from diametrically opposed positions. And I said, maybe that's the problem. Because all the teacher is saying is, but I have this whole group of kids. How am I supposed to do this when I have this whole group of kids? And I'm saying, but you have this kid, he's in your room!

Participants also saw the student differently depending on their previous personal and work experiences. Being able to relate personally to the student, being a parent, being a parent of a child with a disability were all seen as influential. One team member reported that the sex of a team member could influence his or her perspective but did not elaborate on how or why. One participant reported that being able to see themselves in the student could give them "*insight*" into what the student was experiencing. Several participants mentioned that being a parent and/or being the parent of a child who had a disability allowed them to understand parents' reactions and made them appreciate the need to advocate for one's child. One participant noted "*Ah so with those five to seven people, you have five to seven different sets of life experiences, which all come into play*". It seems that personal experiences can give participants empathy towards the student and/or the students' parents.

In addition to personal experiences, having a similar professional background was seen as helpful by two participants. One described the advantages of discussing things with team members who previously worked in their position and the other described how their experiences in other positions helped them in the team setting. In both cases, having similar professional experiences led to greater understanding of the information that other team members shared:

> *I find it really works well because, I think it works better than if she didn't have a background, because she knows everything we're discussing. You know, how students struggle and the [position], what she needs to do, and she has a good background with all the paperwork, and so that helps a lot.*

Having a similar background helped the professional relate to the other team member and better understand their responsibilities. This is similar to the effect of having a similar personal experience.

On the other hand, participants could have very different perspectives and this presented challenges.

- *It can be difficult if you've got this professional telling you, well you've got to try this and you've got to try that, and it's like they haven't thought about how that is going to fit in your world?*
- *I don't know if I see it [working with people on the school team who are from different professions] as easier or harder, to tell you the honest truth. [E: ok] Because when people don't think the same way you do because they don't do the same thing you do, it's not always easy… I would say people being from different places can sometimes make explaining things,*

or advocating for kids more difficult than easy at times. Because you need to make everybody understand, you know, where you're coming from with a specific student.

Despite these challenges, participants saw collaboration as a positive thing because it allowed them to gain a more accurate understanding of the student:

- *So if we didn't have the [position], if we didn't have the [position] and we were only looking at what we see in classrooms, then we would only have the one viewpoint on the child. We could be missing it altogether.*
- *…I think in order to see the whole picture you have to have as many backgrounds as you can on the team in order to get the experiences that you need, so that everyone is hopefully represented in some way.*

Integrating Information

Participants spoke about ways they attempted to work around differences in perspective and how they made differences more visible. Participants spoke about recognizing the limits of one's own knowledge and attempting to understand others' paradigms.

- *Education is definitely not a me thing, we have to work together, and I just know that for myself, I teach what I teach you know, and I look at that, and I have to be very careful that I look at other things as well.*
- *So they might have things to think about that wouldn't really occur to me? Like they have to think of … things like that, that might not always occur to us.*

In addition to being open and reflective, having a common goal and good communication were also important in integrating knowledge. Team members repeatedly referred to 'student centered' goals. One stated:

> *We're all there as a team and we're trying to make ah whatever works best for the student so, just, you know, knowing that whoever we're talking to, this particular person in whatever field they're in, may have more knowledge and so forth. So I guess just trusting and believing in one another, and that we're all there for the same reason…just everyone working together to try to do what's best for the child.*

Participants in the current study described numerous types of communication that support collaboration. These were: sharing and seeking information, having opportunities to speak, listening to others, and attending to nonverbal cues. Participants made few references to jargon and did so only when talking about communicating with specialists. Team members indicated that asking for clarification of confusing terms or information required some rapport or familiarity with the specialist. Communicating in a style that conveys respect and openness were seen as important. In this type of atmosphere, *"…we're not afraid to say what we think, or we're not afraid to give a suggestion thinking, oh, somebody might not think that's a good idea...*". Communicating in a style that conveys respect is critical because it facilitates the first step of creating shared knowledge, which is sharing one's own specific knowledge. Validating the concern, respect, familiarity with team members, and getting along/cohesiveness all helped create an open and accepting atmosphere.

Lastly, shared knowledge could be created in different settings. Sharing information could occur before, during, or after the meeting, over e-mail or in person, in

a meeting setting or informally in the halls of the school. On informal communication, one participant stated:

> *…if a teacher has mentioned if they're doing a referral, then chances are for the most part, that teacher has already talked to, if it's behaviour, they've already talked to the VP, if it's language arts, they would have talked to one of the resource teachers that deal with the language arts component…*

Informal communication amongst staff before meetings was described as "*very powerful and beneficial*". Informal communication between staff and specialists was also seen as valuable: "*I think it really is that informal relationship and communication that happens between teachers, other people, psychology, speech, that really makes a difference*." Informal communication helped create a shared understanding of the student; it also reflected a level of comfort that staff had in being able to approach each other informally. Being in a smaller school facilitated informal communication, and some specialists noted that they felt that having a presence in the school promoted informal communication between themselves and staff.

In summary, in order to collaborate, team members must transform their unique knowledge (which varied depending on their training, the context of their job, and their personal and professional experiences) into shared knowledge. A number of things facilitate this process. These are: having similar backgrounds, being open to others' perspectives, having a common goal, and communicating clearly and respectfully.

Making Decisions Using Shared Knowledge

The team engaged in a number of actions in response to referrals. Many of these actions related to deciding how to meet students' needs with available resources. In the

first part of this section, I describe how team members interacted to make decisions. Following this, I describe how attitude, composition, resources, workload, and team dynamics influenced these team member interactions.

When making decisions about a student's needs and resource allocation, team members would engage in discussion, consider what had already been tried, gather more information, brainstorm, make suggestions, and come up with alternative solutions. As a first step, sometimes the team needed to clarify the referring teacher's request:

> *…you know is it really psycho-educational testing you want or do you just want to know what grade level they're at? In which case you could do a level B test, or do you just want them to get some resource, or what, you know, we try to fine tune the problem to see what it is they really want. Or really need.*

Some participants spoke about the recursive nature of some of the team's activity e.g. attempting a recommendation then modifying it, or going away from a meeting and returning with ideas.

If deciding whether to place a student on an IPP, refer for psycho-educational testing, or pursue another such intervention, participants often mentioned consideration of informal 'criteria' such as the grade of the student, their academic achievement, how strongly they were strongly suspected of having a learning disability, and whether or not they 'really needed' the service.

Resource teachers were active in discussions about how to allocate resources: they knew which students would work well together in group resource, identified and prioritized students who would benefit from resource support, and updated the team on students' progress.

In general, PPT members reported that they had few conflicts or disagreements and that team members got along well. Expressing differences of opinion was described as "*a healthy part of being comfortable with a group*". When disagreeing, "…*nobody wants to jeopardize any professionalism or any professional relationships within the group*" and team members interacted "*civilly*".

Most of the issues on which team members disagreed concerned limited or intensive resources, such as division of Program Support Assistant time, creation of IPPs, and prioritization of students for psycho-educational testing. Complex behaviour issues for which several interventions had been unsuccessful could also make it difficult to come to a consensus because, "*it's just hard to know what to do*." Two participants mentioned that personality conflicts acted as barriers to collaboration. They reported that stating the problem aloud and resolving the conflict prior to the meeting were helpful. In general, the following helped resolve or prevent disagreements: respect, listening to others' ideas, discussing the pros and cons of competing options, communication, understanding, and flexibility. Explanation and clarification also helped resolve disagreement:

> *…I guess if we don't agree, we just try to explain the situation a bit better to make it more clear, and then that might, you know change her mind. Or sometimes there's something that you know, I don't think of at all and then someone brings it up, and oh, okay, now I see...*

Decisions about prioritization for services could be clouded by having a sense of ownership over the student's success:

…everybody kind of has emotional stuff in there too, because when it's your student or when that student's been on someone's caseload, sometimes emotions get involved there…"

Not having seen the student (having "*fresh eyes*") or sharing the problem with people not directly involved helped generate solutions, although the solutions risked being inappropriate due to lack of knowledge of the student. Having a negative attitude towards the student or blaming him or her was seen as a barrier to generating and implementing solutions.

Aggressive, accusatory statements and domination of the discussion impeded teamwork and led to dissatisfaction. In the case of aggressive utterances, one participant felt that a team member had not understood the reasoning behind their position and so further explanation of their position reduced the aggression. Making suggestions or attempting to draw a team members' attention to a problem were seen as useful alternatives to accusation, and inviting others' opinions was seen as a means of creating discussion when one team member had very dominant opinions.

Influences on Collaboration

Composition

Having a mix of different professionals was seen as a major facilitator of deciding how to help the student. Most participants strongly advocated for having a mixture of positions because it allowed them to generate more appropriate recommendations.

But if you have same-minded people and the same perspective, then you generally have a channel of one line of thinking. Where if you have more people in more

different positions, then I think you get a better scope, a better answer for that child or whatever the situation is.

It also allowed teams to make their recommendations more feasible:

…we're not really aware of how it would work in the classroom, that's why we need to have classroom teachers to say, well I don't know if that would work or not because, getting their – I keep saying the word perspective, perspective, but it's just, one perspective to make a decision is not enough. You have to have a range of backgrounds and ideas…

Having a mix of different positions also increased the number of viewpoints, opinions, and perspectives about the issue at hand. The presence of different positions could also promote a more fulsome exploration of the problem, and generate new ideas. Having multiple positions was seen as more important for complex cases and for transition planning.

Participants indicated that the team needs to contain the right number and mix of participants. One participant found that with too few people it was difficult to generate ideas while another said "…*sometimes I don't think you need that many people because you end up just generating some of the same ideas sometimes*." One participant strongly advocated for a more flexible composition, in which someone would be responsible for inviting whichever staff and specialists would be most appropriate for a given case.

Workload

Participants found it difficult to work effectively when their workloads were high. High workload led to fatigue, which made it difficult to generate ideas in the PPT meeting. Simply finding the time to attend meetings was also a challenge. In the

healthcare and education literature, adequate time to meet was cited as a facilitator of collaboration. Several participants reported that it was helpful that their team attempted to schedule meetings at a convenient time and allowed team members to leave early or miss a meeting if necessary.

In the present study, workload affected all positions, but was mentioned most often in reference to classroom teachers and specialists. Participants suspected that workload led teachers to feel overwhelmed: "*in education in general, with all the downloading that has come down, and the various things that are going on, I think the classroom teachers are becoming more overwhelmed with a lot of the new initiatives*". One participant suspected this feeling caused teachers to resist implementing team suggestions. Two participants thought it led teachers and resource teachers to attempt to 'offload' responsibility for a team suggestion onto each other. More often, however, participants mentioned that team members volunteered to take on responsibility and this facilitated the team's work.

Other

Three participants referred to a good team "*dynamic*". When speaking about things that facilitated teamwork, these participants said things such as, "*We have good rapport. I think just the fact that, I guess just the dynamics…*" and "*…it's very collegial and we work well together…*". Another participant highlighted the importance of having a sense of humour. Following a predictable framework each meeting and specifying a goal for meetings about complex cases were also seen as facilitating collaboration but each was mentioned by only one participant.

In summary, one of an PPT's main purposes is to make decisions about how to meet students' needs. Team members accomplished this by clarifying the referring teachers request, engaging in discussion, and attempting then refining recommendations. Having a negative attitude towards to the student and lack of resources were barriers to decision-making. It was beneficial to have a mix of positions because this allowed teams to create more accurate and feasible recommendations, and to generate more ideas. Workload and team dynamics also influenced collaboration.

Summary of Key Concept

I attempted to describe the commonality between themes using several other words and concepts before finally settling on the concept of 'transposing'. I considered using the words 'redefining,' or 'shedding,' but these create the impression that an individual on the team bears no relation to him or herself in other settings. To capture how team members interacted, I considered using the metaphor of a sports team. This metaphor was inappropriate because of its simplicity: the goal of a sports team is to win, players have very clearly defined roles, set plays are practiced and so forth and none of these things apply to teamwork in a school setting. The linking concept had to reflect modification within an individual and individuals' influences on each other.

The concept of transposing conveys these relationships. In order to illustrate this I invite the reader to consider the idea of transposition in a piece of music. When a piece is transposed to a new key, the actual notes (role, knowledge) change, but their relation to each other in the new key gives them a holistic, recognizable sound. The overall sound is different due to the new musical rules, or key signature (setting) that govern the piece.

At one moment in time, the meaning of a note really only exists relative to previous notes and others played simultaneously. Just as a single note may sound out then be silent, an individual team member might make a prominent contribution at one moment then recede into silence the next. Just as a note played as part of a harmony will sound different than when it is played alone, other team members change how individuals act on the team. Thus, the word 'transposing' captures the transformation within individuals and the relation of individuals to each other.

Chapter 4: Discussion

PPTs in Relation to Board Policy

There were three ways in which participants' reports of the logistics of the team diverged from board policy. In the policy of the participating school board, it is written that teams should meet at least once per month; teams met between once per week and once every two months. One of the responsibilities of the referred student's teacher is to participate in the PPT meeting; the classroom teacher directly involved with the student usually, but not always, attended the PPT meeting. Despite being listed in school board policy as one of their responsibilities, according to one participant the referring teacher had not always attempted several strategies or adjustments before making a referral.

The goals that team members listed reflect board policy fairly closely. Several of the activities mentioned were also similar to prereferrral intervention teams' original goals of reducing inappropriate referrals for testing and providing relevant, needed intervention assistance to students and teachers (Graden et al., 1985). More recently, school teams have begun shifting to a focus on problem-solving to improve student functioning, and to working with all students rather than those suspected of having a disability (Rathvon, 2008). There were differences in the extent to which teams had made the shift to working with all students:

- *…a lot of it is around the needs - not just the high needs students, but all students… generally it's all in the spirit of helping every student who needs the assistance.*

- *…primarily at this point, I see the children that have high needs are the primary students that we are focusing on … again, I hope that we see more enrichment ideas, but that's not what I have seen come across that table.*

In the board policy, school teams are described as being for all students. It is written that student services are to support children "with or without exceptionalities" and that "any student" may be referred to the school team.

PPTs in Relation to the Literature

Composition

There are differences in the composition of the PPT compared to some of the teams in the literature review. In the general literature on school teams there are a variety of types of teams. In the U.S, Teacher Assistance Teams are composed of teachers while others Prereferral Intervention Teams are composed of teachers and specialized staff. In Nova Scotia, IPP teams are composed of teachers, the parent(s)/guardian(s), and/or the student themselves. For others, such as the PPT, there are no provincial guidelines for membership. The PPTs in this study were slightly more diverse than teams that follow the Teacher Assistance Team model, but much less diverse than some of the interprofessional teams found in research or healthcare. Participants on the PPT actually referred to regular members as being from the same profession:

- *Again you know, we're all educators in the end.*
- *…we're all from the same profession obviously…*
- *…profession makes you think like engineer and doctor, and they're not that distinct, but they do each have their own set of skills.*

The data, then, are about teams that may function occasionally as interprofessional but that more often function as teams composed of people from the same profession. This likely accounts for some of the differences in influences on these team and teams in the literature.

As in the literature (Derry & Schunn, 2005; Epstein, 2005), participants saw interprofessional collaboration as beneficial because it could provide different perspectives on a problem. Most participants strongly advocated for having a mixture of positions because it allowed them to generate more appropriate recommendations. This is consistent with the literature on interprofessional collaboration, in which an interprofessional composition is thought to allow groups to answer questions that cannot be understood with the tools and perspectives of one discipline (Derry & Schunn, 2005; Epstein, 2005). Having a mix of different positions also increased the number of viewpoints, opinions, and perspectives about the issue at hand. This was also cited in the literature as a primary reason for conducting interprofessional work (Epstein, 2005). Not every project requires an interprofessional approach, and one must be careful to identify the professions and people within each profession who would be most useful (Choi & Pak, 2007).

Participants indicated that the team needs to contain the right number and mix of participants. Several participants referred to successful 'mutidisciplinary consults' in which team members were selected from throughout the board; another participant advocated for a flexible approach, in which a team would be selected specifically for each student. In the literature on interprofessional research teams, authors emphasize that the composition of the team must be appropriate for the research problem (Choi & Pak,

2007; Kostoff, 2002) and perhaps the same would prove to be true for school teams approaching a given case. It would be challenging, however, to implement such a system in schools. It would require that the person or people who selected team members be familiar with a very large number of staff, be unbiased, and be able to select the most appropriate people for a given case. It would also be difficult for team members to develop collaborative relationships if they only work together for a short period of time.

Communication

Communication was the most major influence on collaboration amongst PPT members and in the literature it was also one of the most frequently-cited influences (e.g. Choi & Pak, 2007; Esquivel et al., 2008; Fleming & Monda-Amaya, 2001; San Martin-Rodriguez et al., 2005; Suter et al., 2009). Participants in the current study described numerous types of communication that support collaboration. These were: sharing and seeking information, having opportunities to speak, listening to others, and attending to nonverbal cues. All of these appeared in the literature (e.g. Fleming & Monda-Amaya; Thompson, 2009). In the literature on interprofessional teams in other fields, one type of communication that facilitated teamwork was speaking without jargon (e.g. Derry & Schunn, 2005; Wear, 1999). In the data I collected, participants rarely mentioned jargon. This is likely because PPTs are often composed of people from the same profession while interprofessional healthcare teams are more diverse. Participants only referred to jargon when talking about communicating with specialists. Team members indicated that asking for clarification of confusing terms or information required some rapport or familiarity with the specialist. Being able to clarify confusing terms is important because doing so

early on helps prevent or remediate misunderstandings caused by the use of jargon (Epstein, 2005; Thompson, 2009).

As in the literature (e.g. San-Martin Rodriguez et al., 2005), communicating in a style that conveys respect and openness were seen as important. One participant highlighted the importance of having a sense of humour and in the literature, a sense of humour can relieve stress, increase a group's cohesiveness, and lead the team to "engage in open communication and trust-building interactions" (p. 289, Thompson, 2009). Three participants referred to a good team "*dynamic*". Interacting well together and having good relationships with other team members has been found to facilitate collaboration (Chalfant & Pysh, 1989).

Roles

In order to work efficiently, team members need to have a clear understanding of each other's roles and how each role differs (Hall, 2005; Mostert, 1996; San Martin-Rodriguez et al., 2005; Suter et al., 2009). Core team members clearly defined the roles of resource teachers and principals but they gave fairly vague descriptions of the roles of specialists, probably because these members were not very involved with the teams. There was a lack of understanding on the part of some specialists as to what other team members' roles were and people from all positions had a poor understanding of the role of the referring teacher. When a mutual lack of understanding of each other's roles exists, it can be more difficult to communicate meaningfully and team members risk underutilizing each other's professional expertise (Suter et al., 2009).

The VP role was defined in greater detail by the VPs themselves than by others; this could lead to the VPs feeling underappreciated, or to others not knowing what

responsibilities to expect that a VP will assume on an PPT. As mentioned above, in the school board policy there is no description of the VP role on an PPT. Although team members could clearly distinguish the roles on the team, there was some blurring of responsibility within the VP role and between the principal's role in the school and their role on the team. Role blurring between professionals creates the risk of conflict amongst team members and burnout (Suter et al., 2009). Consequences of having blurring within one's own role were not discussed in the literature.

Attitude Towards Collaboration

Several team members indicated that voluntary membership supported collaboration. In the literature, willingness to collaborate and a personal commitment to collaboration have both been cited as facilitators of collaboration on teams in healthcare and education (Choi & Pak, 2007; Mostert, 1996). Attitude to collaboration is important at the individual level but also the level of the organization in which a group is carrying out its activities (e.g. San Martin-Rodriguez et al.). On the PPTs, one participant stated that administrators were able to encourage collaboration: "…*an administrator can encourage that collaboration, you know not that the teacher has to deal with the problem by themselves, that there is a place that they can come to and it can be tossed around.*". Overall, however, few references were made to influences on collaboration at the organizational level.

Status

On PPTs, team members rarely alluded to status issues and when they did, they almost always expressed that they felt equal to other team members. This contrasts with the literature, in which status differences are more frequently cited. Status differences act

as barriers to collaboration on healthcare teams because they can result in one profession being more dominant (Choi & Pak, 2007; Hall, 2005; O'Donnell & Derry, 2005; Shalinsky, 1989). Members of PPTs did not speak negatively about power differences on the team and this also contrasts with survey studies on school teams in which respondents strongly endorsed the importance of equal empowerment and decision-making power (Fleming & Monda-Amaya, 2001; Gallagher & Malone, 2005).

Although the principal ultimately had the power to accept or reject decisions, team members still reported feeling equal. This is a surprising finding and raises questions about what consititutes status and to what extent members of school teams are aware of power differences. Although in the literature it was found that status differences interfered with collaboration, 'power' and 'status' were not operationalized. What do team members believe constitutes power on a school team? Is it having a final say? Deciding when meetings are held or how long they run? Having the opportunity to share an opinion? Feeling respected? Making contributions towards a shared goal? This concept needs to be operationalized.

Depending on how team members interpret 'power,' status differences may or may not be appartent to them. For instance, if a participant defined power as having their voice heard in a respectful atmostphere, they may have felt equal despite not having the final say. If a participant thought that making contributions towards a shared goal was a form of power, then they could feel equal regardless of whether they had the final say.

Supposing that status differences did exist on the PPTs, to what extent were team members aware of them? Two team members reported feeling equal and several did not discuss status; only one perceived differences in status. Could it be that status differences

amongst professionals were so ingrained that team members did not perceive them to be a negative thing, or did not even notice that they existed? Perhaps team members had become used to a hierarchy in the school setting and thought nothing of it being replicated on the team. Whether or not there really were status differences on PPTs, school team members' perceptions on this issue need to be explored further to learn what they think constitutes power and who holds it on the school team.

Paradigms

Professional paradigms were repeatedly cited in the literature on interprofessional collaboration in healthcare but had not been investigated in relation to the school setting. It seems that school team members had differences in paradigm that are based more on differences in job context than professional values and beliefs that are thought to be associated with specific professions. In healthcare, nurses may value relationships and the patient's story and rely less on objective data than physicians, who may place more value on action and outcome (Hall, 2005). On the school team, participants were most likely to differ in terms of whether they viewed the student primarily as an individual or as a member of a group. This was primarily a function of the type of work they needed to do with the student rather than their professional values. Participants' views on the child also varied depending on their training and their personal experiences. For instance, participants with specialized training stated that they employed specific ways of thinking, had a default hypothesis, asked certain types of questions, or tended to focus on certain topics.

School team members' differences in viewing the child are examples of differences in paradigm, some of which were differences in professional paradigm and

others of which were differences in paradigm in a more general sense. Although most commonly used in the literature to describe differences between professions, "paradigms" can vary "from culture to culture, and sometimes even from individual to individual" (Maruyama, 1974, p. 4). As in the literature, these differences can create obstacles which remain invisible until one's reasoning is made apparent to all professionals involved (Hall, 2005).

Participants spoke about several ways to overcome differences in perspective that also appear in the literature. These were: recognizing the limits of one's own knowledge and attempting to understand others' paradigms (Hall, 2009; Maruyama, 1974) and having a common goal (Choi & Pak, 2007; Shalinsky, 1989). A common goal is said to allow team members to think outside of their professional paradigm. Although team members did not draw explicit links between having a common goal, they repeatedly referred to 'student centered' goals and it is possible that focusing on the student helped them overcome differences in perspective.

Other

There were several barriers to decision making. Participants noted that decisions about referrals for specialist services were constrained by limited resources. This contrasts to the literature, in which lack of funding is absent from papers on school teams. In the literature on interprofessional collaboration in research and healthcare, however, lack of funding was cited as a barrier to interprofessional collaboration (Choi & Pak, 2007; Epstein, 2005).

Participants found it difficult to work effectively when their workloads were high. High workload led to fatigue, which made it difficult to generate ideas in the PPT

meeting. Simply finding the time to attend meetings was also a challenge. In the healthcare and education literature, adequate time to meet was cited as a facilitator of collaboration. This is especially relevant because interprofessional collaboration can require more time to carry out than collaboration amongst the same profession (Choi & Pak, 2007; Epstein, 2005, Mostert, 1996; Shalinsky, 1989). Mostert (1996) noted that finding the time to meet poses a "major problem in almost all collaborative work in schools" (p. 137). Although participants in a study by Chalfant and Pysh (1989) reported that providing release time was one way in which the administration could support collaboration, one participant in the current study pointed out that, "…*taking me out of my class to do that is not going to help me because now I need a plan for the person that's coming into my class*". Ways in which to overcome heavy workloads are needed.

Summary of Theory

When a professional joins the PPT, they begin a process of transposing their role within the school and their individual knowledge to a role on the team and new, shared knowledge. Becoming a team member is influenced by attitude towards collaboration. Transposing knowledge is influenced by openness/reflectivity, the presence of a common goal, and communication. Communicating in a style that conveys respect was particularly important. Subsequent interactions between team members that results in decisions or the accomplishment of team actions are influenced by factors including: the composition of the team, role clarity, and workload. Together, these three themes help explain how professionals collaborated on the PPTs under study.

Although I presented them separately, influences on collaboration are not really separable. These factors interacted in several ways: e.g. team members' roles on the

team were intricately related to their status within the school, attitude towards collaboration can influence how status is expressed, and communication helps team members overcome differences in paradigm. The findings of previous work indicate that there is a need for more research on how the influences on collaboration interact (San Martin-Rodriguez et al., 2005). Indeed, it seems that there is a continued need for research on how influences interact. Other areas for future research are discussed below.

Limitations

This study had several limitations. These were: lack of sampling until saturation, lack of theoretical sampling, over-reliance on the prepared questions, limitations of the theory, and interviewer bias.

Firstly, I did not sample until the data were saturated. Theoretical saturation occurs when "gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of your core theoretical categories" (Charmaz, 2006, p. 113). Theoretical saturation is recommended for grounded theory (Charmaz, 2006; Strauss & Corbin, 1990). The data I collected were probably not saturated because in the final interviews, new information about categories continued to be revealed. Sampling until the data are saturated is difficult because ethics applications typically require the researcher to specify how many and what sort of participants they will recruit (Wuest, 2007), but these variables cannot be known ahead of time because, "you cannot know which ideas you will need to sample before you begin analysis" (Charmaz, 2006, p. 104).

A hypothetical next step towards achieving saturation would be to select participants using theoretical sampling. Theoretical sampling is deliberately seeking out participants according to the emerging theory (Charmaz, 2006; Richards & Morse, 2007;

Strauss & Corbin, 1990). This allows the researcher to expand on and further refine existing categories. For instance, to explore in more depth how professionals on school teams overcome differences in professional paradigm I might have sought out teams on which a greater variety of professions participated more regularly. In order to better understand how teams make decisions regarding limited resources, I could have recruited teams from boards that provided more or less funding for services that were difficult to make decisions about.

The researcher can also explore emerging theory by making adjustments to their planned interview questions. During the initial interviews, I tried to pose all the interview questions to ensure that the resulting data could be compared to the literature. I refined the questions for later interviews but still adhered fairly rigidly to the interview guide. This may have limited the depth of theory that could emerge.

The final theory in this study focuses on individual team members. A theory from this perspective does not take into account processes at the level of the organization or external systems. The theory is also limited because its components are presented as being unidirectional. In reality, a theory accounting for how team members collaborate would probably involve movement from the team to within the school. It would be interesting to expand this study by collecting data about the organization or larger educational system. This could be done by delving into policy documents and interviewing members of the school board or government.

Lastly, the final theory was shaped by my biases and by interactions between me and the participants. While this is not a limitation for a constructivist grounded theory, the interviewer should still attempt to become aware of their views and reflect on how

these may have influenced the resulting theory (Charmaz, 2006). Having a school psychology background probably led me to focus on different aspects of school teams than an educator or administrator might have - even the choice of research topic was driven by my background. My own beliefs may have influenced participant responses: if participants recognized that I believed PPTs to be beneficial, they may have tended to focus more on the positive aspects of their PPT. As this research was for a thesis, participants related to me as a student rather than a professional. This was likely beneficial because team members had probably not had previous experiences with students that could have influenced their interactions with me as an interviewer. Being seen as a student may have made participants feel more at ease expressing dissatisfaction with specialists or revealing ways in which they felt their PPT was not working well.

Implications of Results and Directions for Future Research

Despite the above-mentioned limitations, the findings of this study still have a number of implications for policy, professional development, and future research.

The first of these implications were suggested by participants themselves. Seven participants expressed directions for future research. These centered around a desire to work as efficiently as possible. One participant wanted to know if having a specialist present would make the team more effective; another wondered what prevents PPTs from working effectively; and one was curious as to how other teams approached various situations. 'Core' team members wanted to learn more about how the PPTs in other schools function and adopt techniques that worked well:

- *…it would be interesting to see how other PPT teams at schools, what they do that we're not doing that would make ours better… I'd be interested in knowing, okay, we're not doing that. We should be doing that.*
- *It would be cool to be able to sit on, because I believe if you go look in, I love going to other people's buildings and schools, and you learn so much from that. So if I actually saw another team operating…*
- *I know in talking with some of my colleagues in other schools, some program planning teams meet once a week, and depending on what goes on, or how they have it set up. So I guess it would be interesting to go to some other schools and observe…*

Given the research support for the value of interprofessional education (e.g. Hall, 2005), it would be proactive to conduct any PD about PPTs in such a way that people from different professions could come together to learn and interact.

Another issue that emerged from the data concerns the role of referring teachers and specialists. Among the PPTs in this study, neither of these professions seemed to have collaborative relationships with the team. For the referring teacher, the absence of such a relationship would leave the teacher solely responsible for implementing the team's suggestions, possibly without further support or follow-up from the team. This would partially defeat the purpose of an PPT, which involves providing support to teachers. Future research is needed to gain insight into what sort of role PPTs think the referring teacher should have and vice versa. The findings could be used to guide policy or professional development that would clarify the role of the referring teacher.

The consequences to specialists of not having a role on the PPT are less direct. Specialists seem to desire ways to increase their communication and relationships with schools and participating on the PPT allowed them to accomplish this. For those who do not participate on the PPT, it might be useful to encourage specialists to create a presence in schools and create opportunities for communication.

When participants had difficulty coming to a consensus, they were usually attempting to make a decision about placing a student on an IPP, make a referral for testing, or allocate PSA support. Ultimately, decisions about these services were contentious because the services are resource-consuming. Regardless, it seems that teams lacked objective criteria to assist them in objectively making these decisions. More research is needed on how PPTs make decisions about these services. This could be used to guide professional development. From the current data, it seems that there is a need for additional professional development on how best to identify students who should be referred for psycho-educational testing and how to decide whether a student should be placed on an IPP.

Time constraints were one of the main barriers to teamwork that participants identified. To improve collaboration on school teams it might be beneficial to explore creative ways to get around time constraints – particularly those of the classroom teachers and specialists as they seem to be most affected.

All participants in this study identified advantages of having different positions on the team, but this does not necessarily mean that a mixed composition is most effective. Research comparing the effectiveness of different types of healthcare teams does not conclusively demonstrate that interprofessional teams are more effective than teams

composed of one profession: patient health outcomes are no better nor are patients released from hospital sooner under the care of interprofessional teams (Liu et al., 2003; Wild, Nawaz, Chan, & Katz, 2004). There has been very little empirical research investigating the effectiveness of different types of school teams, however, there is some support for having an interprofessional composition (Burns, 1999). More research is needed on the effectiveness of school teams and the effectiveness of different team compositions.

In terms of how these are implications might be used, one participant identified several ideas for professional development then qualified their response with the following statement:

> *And what we don't want is, 'here's another whole plan,' you know, we have been doing this for five years or 10 years, and here's another one. Because that's what's happening in the school system; you just get used to something and they give you another one.*

Most participants expressed satisfaction with team functioning, saying things such as:

- *Really, lately we've been working very well. I think.*
- *Yeah, but for the most part, I feel that it's an effective team and we're doing what we really can do to help the students, and the teachers I guess, the best we can.*
- *…the team or the meetings and so forth tend to run smoothly.*

In summary, a number of directions for further research and implications arose from the study results. Firstly, participants indicated that they wanted to learn more

about how other PPTs functioned. The roles of referring teachers and specialists need to be explored and perhaps clarified. As well, teams seemed to need more objective criteria on which to base decisions about certain resources. Finally, factors outside of the team, such as policies about team composition and how team members are selected are possible areas for further study.

Conclusion

Overall, participants had a positive response to working on interprofessional teams. Despite occasional challenges, they felt that having a mixed composition allowed the team to generate recommendations that were more appropriate and feasible. The core concept in these data was found to be 'transposing': participants went through a process of transposing their knowledge and role within the school to shared knowledge and a role on the PPT. Communication, attitude to collaboration, and paradigms mediated this process.

A number of comparisons can be made between these results and other research. As in the literature on healthcare teams, professional training could influence school team members' perspectives on the student, however, the perspectives of PPT members were shaped primarily by the demands of their job. It appears that communication plays a critical role in collaboration both on PPTs and on teams in the literature. Unlike the literature on interprofessional teams, status differences were rarely influential on PPTs; team members tended to see each other as equals and this was related to participants' attitude to collaboration.

Conducting a study of teamwork is not an easy task. While the results of this thesis provide some initial directions and a preliminary exploration of school teams,

further study is needed both on how school teams carry out their work and on how effective these teams are. This will provide the basis for establishing best practices with the aim of making services for children with learning and/or behaviour problems as effective as possible.

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Appendix A

Information Letter

Dear Staff member,

I am a student in the Master of Arts in School Psychology program at Mount St Vincent University. I am conducting research for my thesis under the supervision of Dr. Mary Jane Harkins, who is an Associate Professor of Education at Mount Saint Vincent University. I am inviting your participation because you are a member of the site-based team in your school. This research does not involve the participation of students.

You are invited to participate in a study about how the members of school teams collaborate. Although many schools have school teams (sometimes called site-based or program planning teams), there has been little Canadian research on school teams and how they can work together most effectively. In my study, I plan to examine school team members' perceptions of collaborating with other professionals – what they think contributes to or detracts from the team's success, what facilitates collaboration and what hinders it, and what is important when it comes to working with people from different professional backgrounds.

I will interview each study participant once. The interview is expected to last no more than forty minutes. The interview will be audiotaped and conducted in the school or office in which participants work, or in a location that is convenient for them. I will offer participants an opportunity to view and change the transcripts of their interview to ensure transcripts reflect what the participant had intended to convey. Upon study completion, I will e-mail interested participants a summary of my findings with instructions on how to view the full thesis electronically. I will also send a copy of my thesis to the Tricounty Regional School Board.

In order to protect participants' anonymity, no identifying information (e.g. participant or institution names) will appear in the completed research. Password-protected computers will be used to store and analyze transcripts, and the transcripts and the consent forms will be stored separately. At the completion of the study, I will securely store one electronic copy of the data analysis and transcripts and one hard copy of the raw transcripts for 7 years at which point I will destroy them. All audio files and other copies of the data or analysis will be erased or shredded. My thesis will be stored electronically in the Mount Saint Vincent University library archives. The results of this study will be used for future presentations at conferences and submission to peer reviewed journals for publication.

I hope that this research will lead to a better understanding of how site-based teams work, and ultimately to making services for children with learning and/or behaviour challenges as effective as possible. There are no foreseeable risks associated with participation.

I will be meeting with interested potential participants to explain the study in more detail. If you have any questions, I would be happy to talk with you about the study. You can contact me at [redacted] or evelyn.stern@msvu.ca or Dr. Mary Jane Harkins at (902) 457-6595 or maryjane.harkins@msvu.ca.

Thank you for your consideration.

Sincerely,

Evelyn Stern
Master of Arts in School Psychology student
Mount Saint Vincent University

Appendix B

Consent Form

Although many schools have school teams (sometimes called site-based or program planning teams), there has been little Canadian research on school teams and how they can work together most effectively. You are invited to participate in a study about how the members of school teams collaborate. If you decide to participate, you will be asked for your opinion on topics such as: what contributes to or detracts from your team's success, what facilitates collaboration and what hinders it, and what is important when it comes to working with people from different professional backgrounds. Participants will be asked to complete one interview. Participation is expected to take no more than forty minutes in total.

The interview will be held at the participant's school or a location that is convenient for the participant. The interview will be conducted and audiotaped by me (see audiotape consent form). Either I or an assistant will transcribe each interview. I will review each transcript for accuracy. Using a set of procedures for analyzing interviews, I will identify the key elements across all responses and the relationships among these elements. I will offer participants an opportunity to view and change the transcripts of their individual interviews to ensure transcripts reflect what the participant had intended to convey. Upon study completion, I will e-mail interested participants a summary of my findings with instructions on how to view the full thesis electronically. I will also send a copy of my thesis to the Tricounty Regional School Board.

I hope that this research will lead to a better understanding of how site-based teams work, and ultimately to making services for children with learning and/or behaviour challenges as effective as possible. There are no foreseeable risks associated with participation.

All participant responses will be confidential. Information gathered during individual interviews will not be shared with other participants. The only instance where I would need to break confidentiality is if a participant discloses during an interview that a student is at risk of being harmed or harming him or herself or of harming someone else. In this situation, I would need to take the appropriate reporting steps.

Identifying information, such as participant and school names, will be removed from transcripts and will not appear in results. To protect student confidentiality, please do not refer to specific students by name. Only I will know the identity of participants. My supervisor will view transcripts only once identifying information has been removed. Transcribed interviews will be stored and analyzed on password-protected computers. I will store transcripts and consent forms separately. At the completion of the study, I will securely store one electronic copy of the data analysis and transcripts and one hard copy of the raw transcripts for 7 years at which point I will destroy them. All audio files and other copies of the data or analysis will be erased or shredded. My thesis will be stored electronically in the Mount Saint Vincent University library archives. The results of this

study will be used for future presentations at conferences and submission to peer reviewed journals for publication.

This study is for research purposes only, and your decision to participate or not to participate will have no impact on your status as a professional or team member at your school. At any time and without penalty, you may refuse to answer a question, refuse to be audio-taped, review and/or edit transcripts, or terminate your involvement entirely.

If you have any questions about the study, please contact me at [redacted] or evelyn.stern@msvu.ca or Dr. Mary Jane Harkins at (902) 457-6595 or maryjane.harkins@msvu.ca.

If you have questions about how this study is being conducted and wish to speak with someone not involved in the study, you may contact the Chair of the University Research Ethics Board (UREB) at Mount Saint Vincent University, c/o MSVU Research Office, at 457-6350 or via e-mail at research@msvu.ca.

Signing below indicates you understand the information on this form, have considered the implications of participating, and are willing to participate.

_____ _____

Participant Signature Researcher Signature

_____ _____

Date (day/month/year) Date (day/month/year)

Please check one of the following:

_____ Please send me a summary of the results at the end of the study

_____ Do not send me a summary of the results at the end of the study

Name:_____

Email address: _____

Appendix C

Audiotape Consent Form

Your individual interview will be audiotaped to allow me to make an accurate transcription of each interview that I can then use in analysis. Identifying information such as participant and school names will be removed from transcripts and will not appear in results. My supervisor will view transcripts only once identifying information has been removed. Transcribed interviews will be stored and analyzed on password-protected computers. I will store transcripts and consent forms separately. At the completion of the study, I will securely store one electronic copy of the data analysis and transcripts and one hard copy of the raw transcripts for 7 years at which point I will destroy them. All audio files and other copies of the data or analysis will be erased or shredded. My thesis will be stored electronically in the Mount Saint Vincent University library archives. The results of this study will be used for future presentations at conferences and submission to peer reviewed journals for publication.

Your signature indicates that you consent to be audiotaped during the interview for this study. At any point, you may refuse to be audiotaped for part of an interview or the remainder of an interview, and you have the right to view and/or edit the transcripts of the interviews in which you participated.

_____	_____
Participant's Signature	Researcher's Signature
_____	_____
Date (day/month/year)	Date (day/month/year)

Appendix D

Interview Guide

Demographic Questions

Q: What is your professional background? How long have you been on this team? What kinds of other experiences have you had on other interprofessional teams?

Q: Who else is on the team? What are their professional backgrounds?

Q: How many people are usually present at a team meeting? How frequently do meetings occur?

Q: How are team members selected? (Prompts: Is membership mandatory or voluntary? Are there certain criteria for being on the team? If so, what are they?)

Q: How does the referral process work at your school? Walk me through the process.

Q: What is the purpose or goal of the team?

Content Questions

Q: Describe a typical team meeting. (Prompts: Walk me through what usually happens at a meeting. What kinds of things does the team usually talk about? If different team members have conflicting ideas about an issue, how does the team usually reach a decision on the issue? Does anyone have the final say?)

Q: Think back to a time when the team was working particularly well. Tell me about that time. (Prompts: What was working well? What contributed to the team working well?). Follow-up: How were people interacting at that time?

Q: Tell me about a time when the team was having difficulty working well. (Prompts: What was not working? What was preventing the team from working well?). Follow-up: How were people interacting at that time? Follow-up: What happened next? What did you do to navigate that situation?

Q: What is your role on the team? (Prompt: What are you expected to do/responsible for doing? What contribution do you usually make?)

Q: What is the role of the [profession a, profession b etc.]?

Q: When do you think you are most effective in your role on the team? (Prompts: What helps make you most effective in your role? What do you need in order to perform your role?)

Q: When do you think other professionals on the team are most effective on the team? (Prompts: What helps make them most effective in their roles? What do they need in order to perform their roles?)

Q: Your school team is composed of people from a variety of professions. If the team were only made up of one profession, how do you think it would function differently? (Prompt: How would things be different in terms of the topics you focused on? How meetings were carried out? How you felt about being on the team? Communication amongst team members? How the team solved problems?)

Q: What types of things help you work with people on your school team who are from different professions? (Prompts: what is important in terms of communication/the relationship that you have with the other members/your understanding of their responsibilities/what things do you bring to the table that makes it easier/what things does the school or board provide that makes it easier. If none of these prompts elicits and answer: do you think school teams should be composed of people from different professions? Why not?

Q: What types of things make it difficult to work with people on your school team who are from different professions? (Prompts: in terms of communication/the relationship that you have with the other members/your understanding of their responsibilities)

Q: How do you think your training and experience as a [profession] affects how you see the issues that the team discusses?

Q: Is there anything else you want to add to any of this? (Prompt: Have we missed anything that's important to how the team functions? Does anything else come to mind about what helps or what makes it harder for your team to work?)

Appendix E

Table of Abbreviations

Abbreviation	Expansion
IPP	Individual Program Plan
PPT	Program Planning Team
PSA	Program Support Assistant
SLP	Speech-Language Pathologist
VP	Vice Principal