

## ABSTRACT

Title of dissertation:           COMMUNITIES OF PRACTICE: STUDY OF ONE  
  SCHOOL'S FIRST YEAR OF IMPLEMENTATION OF  
  A NEW PROBLEM-SOLVING MODEL

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The current study used the communities of practice theoretical perspective, an example of a sociocultural learning theory, to examine one school's first year implementation of a new problem-solving model. The grade-level and building-level teams that participated in the program were understood to represent communities of practice, as they worked together to address the learning and behavioral needs of students who were not performing successfully. Program implementation was conceptualized as a manifestation of the communities' understandings about the program and a creative act that further developed this meaning. In addition, the communities' process of collective sensemaking was informed by the individual members' educational beliefs, educational perspectives, and their previous understandings about supporting students. The qualitative research methods used in this study involved the researcher functioning as a

participant-observer in the school, conducting reflective interviews with referring teachers, and conducting a document review. The findings from this study indicated that while teachers were invited to refer any student to the program regarding whom they wanted to consult, they overwhelmingly referred students who they perceived to be struggling academically, needed intensive resources, and were not participating in other school-based services. In addition, the teams did not adhere to the structure of the model's stages and attempted to resolve student problems using a more fluid referral process that did not necessarily involve problem solving. The team members supported each other in their negotiated meaning of how to provide student support by adapting the model to their understanding of its purpose, preventing them from enacting the desired change. Additional dynamics were observed in these communities of practice that have not been articulated in previous research on problem-solving teams; they include the practices of gatekeeping, distorting conceptual weaknesses in models to favor deficit attributions of student problems, and creating shared meaning that further entrench the communities in their current practice. Implications from this study address the importance of initial training and ongoing technical support for program implementation. Recommendations include qualitatively studying communities of practices that promote change and their educational beliefs and reflective practice.

COMMUNITIES OF PRACTICE: STUDY OF ONE SCHOOL'S FIRST YEAR OF  
IMPLEMENTATION OF A NEW PROBLEM-SOLVING  
MODEL

by

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Dissertation submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
2004

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## Dedication

This study is dedicated to the memory of my grandmother, Natalie Blum, Nechama bat Raiza. As the intellectual pioneer of the family, she was the first family member to attend college. She traveled far from her home in Chicago to attend UCLA and graduated three years later in the summer of 1948. Her interest in world events motivated her to enroll in graduate-level political science courses as a 20 year-old, before she was even allowed to vote.

My grandmother was always interested in my academic pursuits, particularly this dissertation. She regularly inquired about my progress with the study, the university regulations for dissertations, and my anticipated defense and graduation dates. Unfortunately, she passed away shortly before my defense and could not watch me reach these milestones.

May her memory be a blessing and continue to inspire me to set and achieve high goals.

## Acknowledgments

I would like to thank a few of the many individuals who supported and assisted me in completing both graduate school and this dissertation.

My entire committee contributed to the quality of this study through their thoughtful, constructive comments. I would like to extend a very warm, personal thank you to Sylvia Rosenfield for advising me on this dissertation and supervising and training me to be a school psychologist. Her timely responses to my drafts and thoughtful reviews enabled me to ponder the findings in more enlightening ways. Her critiques of this study and supervision of my school-based experiences helped me reconceptualize my understanding of school psychology. She has been an excellent role model exemplifying the scientist-practitioner paradigm as one engaged in research and ideas while also serving students and schools. Hanne Mawhinney gave me guidance in qualitative research methods and introduced me to interesting and relevant research bodies in educational policy. Her assistance with my study design, analysis of findings, and the interpretations added theoretical dimensions to the conclusions. Patricia Alexander challenged and stimulated me when I was enrolled in her undergraduate and graduate courses. It was her reading selections and vibrant class discussions that inspired this study. Bill Strein has provided excellent editing advice and thoughtful commentary on the larger issues related to my study. Mindy Schuman provided a valuable practitioner perspective regarding problem-solving implementation.

I would like to thank the community of practice known as “Woods Terrace Elementary School” for their openness toward this research project and for being

wonderful colleagues. Their willingness to include me and share with me gave me endless opportunities to learn from them.

Douglas Yeuell, an amazing jazz dance instructor and the executive director of Joy of Motion Dance Center, enabled me to manage graduate school with flexibility and grace. Looking for a fulfilling hobby, Doug helped me discover neglected muscle groups, the fun of moving through space, and the thrill of performing before sold-out audiences. Doug and the other exceptional staff at Joy of Motion taught me how to achieve goals that require me to stop thinking and how to restore balance to my life.

My roommate, Miriam Gerver, tolerated my endless whining and complaining. As an excellent party co-hostess, she ensured that there was fun in our apartment at regular intervals.

Finally, and most importantly, I would like to thank my family. My parents, Howard and Rosanne, have loved me and helped me reach this goal. Without my parents' encouragement and their awareness of when to avoid discussing my dissertation, I'm not sure that I could have completed this without losing too much of my sanity. In addition, my frequent visits home to do laundry and eat dinner were always a pleasant, refreshing break. My sister Natasha was a wonderful caretaker whenever I was sick and she was my most loyal weekend guest; my sister Jenny was always available to talk and joke with me when I needed a study break; and, my sister Michelle provided me with a great excuse to travel to Israel during semester breaks.

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## Chapter One

### Framework for the Study

School-based consultation services and problem-solving models represent a current trend in special education related policy (Reschly, Tilly, & Grimes, 1999), and a change from the assessment practices of many schools (Oakland & Cunningham, 1999). Consultation and problem solving are approaches used by school staff to help students experience increased academic success (Rosenfield & Gravois, 1996), and involve professionals interacting with each other rather than specialists providing direct services to students (Gutkin & Curtis, 1999). Introducing and sustaining educational change, including consultation services, requires the school culture to be ready for change (Fullan, 2001a), and be congruent with the assumptions of the change model (Spillane, 1998). Otherwise, the reform effort will result in new protocol and new paperwork, without yielding the intended changes (Lipman, 1998).

Many schools use traditional assessment models to address concerns regarding student learning (Oakland & Cunningham, 1999). These models rely on the results of norm-referenced tests to sort students into categories and make decisions about special education placement and service provision (Lyon et al., 2001). Students are differentiated into categories so that they can receive interventions, often in homogeneous groupings, that are believed to be maximally effective for students with those particular learning needs (Ysseldyke & Marston, 1999).

The movement toward consultation and indirect service delivery is due to dissatisfaction with the traditional assessment approach and represents an effort to

change schools' practice in providing services to students (Sheridan & Gutkin, 2000). Consultation and problem-solving models are usually based on an ecological framework that supports intervening in the student's learning environment in order to elicit better performance (Bronfenbrenner, 1989; DuFour & Eaker, 1998), rather than locating the source of the problem within the child. Consultation aims to provide support to the general education environment, minimize referrals to special education, and reduce the use of special education and out-of-class resources. As shown by a series of meta-analyses conducted by Kavale and Forness (1999a), it is not the placement or location of instruction and services that enhances learning, but the quality of instruction and services.

Research about the outcomes of special education points to the need to strengthen the general education setting (Kavale & Forness, 1999b; Reschly et al., 1999). It is recommended that students who are experiencing learning difficulties continue to be taught in the mainstream classroom and benefit from improved instruction. School-based problem-solving models, a hallmark of primary prevention (Gutkin & Curtis, 1999), aim to change how schools provide services to their students who present with academic and behavioral needs. These models serve to improve instruction and services in the general education environment and help teachers address the diverse learning needs of their students (Rosenfield, 1987). Therefore, schools that practice problem solving effectively provide interventions and support to students who are experiencing difficulties within the setting of the general classroom.

Indicators of a school's successful implementation of a problem-solving model



include a reduction in referrals to special education, an increase in the ratio of students tested for special education who are found eligible (i.e., hit rate), and a decrease in the representation of minorities in special education (Oakland & Cunningham, 1999). Since school-based problem-solving models aim to improve the learning and behavior of all students, additional indicators of success include a decrease in office referrals, suspensions, and expulsions and an increase in academic achievement. School-based problem-solving models, however, have additional aims beyond changing the practice of schools regarding how they service students with learning needs. These models also seek to change how practitioners think about what they do (Rosenfield & Gravois, 1996).

The primary assumption of traditional assessment models is that children who have difficulty learning have a deficiency (Ysseldyke & Marston, 1999). When the problem is believed to lie within the child, general educators can perceive themselves as helpless and ill-equipped to effectively teach this child (Christenson, Ysseldyke, Wang, & Algozzine, 1983). While consultation models seek to change teachers' practice and support them in teaching students who present with challenges, they simultaneously seek to change teachers' beliefs about student learning and their powerful role in their students' learning environment. The desired change in teachers' beliefs and conceptualizations about student learning can be evidenced when there is a shift from the traditional model's child-deficit orientation to the problem-solving model's ecological orientation. Ultimately, school-based problem-solving models aim to empower teachers and make them feel capable of successfully teaching students who are not progressing at the rate of their peers.

School-based problem-solving models seek to change teachers' practice by asking them to solve students' learning difficulties with classroom-based interventions rather than making referrals to special education. They also seek to change teachers' beliefs about student learning and their own capacity for solving classroom-related problems. However, whether teachers' beliefs and practice actually changes when they participate in school-based problem-solving models has hardly been studied (e.g., Athanasiou, Geil, Hazel, & Copeland, 2002). Program evaluation studies often include the traditional features of implementation integrity and outcome data (Illback, Zins, & Maher, 1999), but they do not consider the "personal knowledge" of those responsible for implementing the program (Tharp & Gallimore, 1979) or their perceptions and expectations of the program (Hall & Hord, 2001). When studying the implementation of a school-based problem-solving model, teachers' beliefs and conceptualizations need to be examined in order to account for their understandings of the program as well as their practice.

#### Communities of Practice: Reflection and Learning

A reflective, constructivist approach to learning and change (e.g., Schön, 1983, 1987; Weick, 1995) is one that has yet to be applied to the practice of school-based problem-solving models. These theoretical approaches focus on the individuals' sensemaking of the task they are expected to accomplish and can address teachers' understandings of school-based problem-solving models and educational beliefs about student learning. By emphasizing teachers' personal and collective understandings of problem solving and their expectations for their students as well as explanations for their students' poor performance, the experience of practicing problem solving and the

anticipated belief change process can be explored.

When teachers are confronted with a student who presents with academic or behavioral concerns, they typically improvise or respond in an automatic fashion, what Schön (1983, 1987) called the “artistry” of their profession. For example, if a student is off-task, a teacher may automatically redirect the student’s focus by calling out his or her name. However, such automatic responses have limited effectiveness with problems that teachers confront infrequently, or “variations” of the predicted sequence. In non-routine situations that contain an element of “surprise,” teachers can ignore the event, selectively attend to the features of the event that are familiar, or reflect on the event in order to understand what happened and develop an intervention strategy.

When teachers engage in reflection after the event has transpired, they are creating personal meaning and understanding (Schön, 1983, 1987). This meaning-making process, or “problem-setting,” precedes the response or development of a solution. While an automatic response suffices for simpler and more common occurrences, teachers must first clarify the problem and its parameters before intervening with more challenging or unusual problems. The purpose of reflection, a thought process that often cannot be verbalized, is to make sense of a real event that did not have the clarity or neatness of a textbook case that easily lends itself to intervention. Because the events encountered in daily practice are more confused and muddled than those described in textbooks and manuals, reflection is needed in order to reconceptualize the problem so that targeted and reasonable interventions can be developed.

Schön’s (1983, 1987) reflective practitioner epistemology is helpful for analyzing

individual teachers' reflections on cases they referred for problem solving. Their reflections are an indication of their understanding of the referred case, their role as teachers in resolving the problem, and the problem-solving process in general. The reflections of referring teachers and staff can clarify their understandings and how these understandings might have been influenced by their participation in the problem-solving process.

Another theoretical perspective, collective sensemaking, is useful for studying the organizational level of interpretation and adaptation of a new program (Weick, 1995; Yanow, 1996). Collective sensemaking can account for the meanings school-based teams and staff negotiate about an innovation and how they implement it (Spillane & Jennings, 1997). Beyond the personalized understandings individual teachers construct through their reflections about the program, they also construct a collective understanding through their social interactions as team members and members of the same organization, or school (Coburn, 2001). Through formal team discussions and informal encounters with colleagues, new understandings of the programs and referred cases can develop (Kruse, 1997). This process of collective reflection seems to be fundamentally similar to Schön's (1983, 1987) model of the individual practitioner's reflection.

Examining the collective sensemaking of school personnel implementing a school-based problem-solving model involves observing the discussions at team meetings and reviewing how cases are handled and resolved. The teams' understandings of the model will structure the discussions at meetings and guide how they attempt to resolve

the referred cases. As teachers participate in the problem-solving process, their comments during team discussions and the interventions they propose provide an indication of how they understand the problem-solving process, the referred problem, and how they believe learning concerns should be addressed.

Implementation of team-based problem-solving models is guided by social and individual forces. The primary social force is the team, the setting where discussions are held and decisions are made regarding referred cases. Comments and decisions made at team meetings can highlight a group dynamic and a possible convergence of opinions among the members. For example, Coburn (2001) documented a case of teachers who mutually influenced each other through meetings and less formal interactions as they tried to implement a new statewide reading initiative. During problem-solving meetings, teachers receive confirmation, support, or challenges to their ideas, and a new conceptualization of the referred case may emerge from the team as a result of the discussion.

In addition to the social forces that guide implementation, teachers and team members represent an important individual element in the reflective and meaning-making process. Referrals to the problem-solving process are made by individual teachers who bear independent responsibility for the student's learning. Therefore, teachers' personal understandings about student learning and the school-based problem-solving model are likely to be a factor in the group's sensemaking processes. The relation between the introduction of school-based problem-solving models, teachers' individual beliefs about learning, and a school or team's collective sensemaking about problem solving is unclear.

It is possible that teachers' individual reflections and a group's collective sensemaking processes interact to construct a negotiated meaning about a school-based problem-solving model that has variations across teachers. In order to understand how sensemaking might account for teachers' learning and change as they implement a school-based problem-solving model further research is needed.

A third theoretical framework, communities of practice (Wenger, 1998), integrates the concepts of collective sensemaking and reflective practitioner. It should be acknowledged that Wenger calls this approach a "theory." However, communities of practice might better be described as a "theoretical perspective" or "framework," as one could argue that it is not robust or developed enough to constitute theory. Whether communities of practice is in fact a theory or theoretical perspective is not the focus of the study and will not be debated here. Nonetheless, the reader should note that while Wenger calls it a theory, it will be primarily referred to as a framework or perspective throughout this study.

Communities of practice is a sociocultural theoretical perspective that accounts for the social and individual components involved when a group creates meaning about an initiative as they begin to implement it. Communities of practice are defined as, "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott, & Snyder, 2002, p. 4). This theoretical framework focuses on the social experience of learning and participating, while simultaneously recognizing the individual's role within the community. The social and individual forces are

conceptualized as developments that enhance each other in the learning and meaning-making processes, rather than conflicting dichotomies. Communities of practice approach has previously been established as a useful analytic framework to understand the learning and practice among groups and teams of teachers (Gallucci, 2003; Printy, 2002, 2004).

The communities of practice framework (Wenger, 1998) can account for the implementation of a school-based problem-solving model from a school-level perspective by integrating individual teacher data with team and school-wide data. Team meeting discussions, individual teacher interviews, and case-documentation can be compared across teams and teachers in order to draw inferences about school-wide understanding and organizational meaning attributed to the school-based problem-solving model. For example, the types of referral concerns submitted to the problem-solving team indicate what teachers judge to be appropriate referrals. In addition, the types of data that are collected for individual cases and the proposed interventions provide insight into the teachers' understandings of the school-based problem-solving model and their students' learning experiences (Coburn, 2001).

#### Statement of the Problem

The present study sought to understand how the staff at one school interpreted a new school-based problem-solving model in its first year of implementation. A study about the first year of implementation of a school-based problem-solving model must address the meaning teachers attribute to this process and to student learning in order to interpret their practice of the program. Nearly all school-based problem-solving models

share the same general assumptions and goals. The ultimate goal is to help students experience increased academic success in the general education classroom, with success typically measured by a reduction in referrals to special education (Rosenfield & Gravois, 1996). Related goals include fostering collaborative, working relationships among teachers and school staff.

How teams and schools actually achieve these universally desirable goals remains unclear. The research on school-based problem-solving models rarely addresses the change process, and when it is addressed, it is often through a statement that describes changes in teachers' viewpoints and orientations as necessary (Rosenfield, 1987; Wickstrom & Witt, 1993). However, these statements do not provide an explanation of the change process; instead they reference and offer partial explanations of global and amorphous concepts. Examining one school's first-year effort to implement a school-based problem-solving model illuminates how a school goes about achieving the elusive goals of improved academic achievement and proportionate representation of minorities in special education. The following concepts are summarized below in order to provide a context for the current study: school-based problem-solving models, program implementation, treatment integrity, reflective practice, and teacher collaboration.

### School-Based Problem-Solving Models

School-based problem-solving models are a type of indirect service delivery that school staff can engage in to address school-related needs (Gutkin & Curtis, 1999).

Indirect service and school-based consultation are services that involve professionals interacting and developing interventions for a student or classroom, rather than



specialists working directly with the student or personally implementing the intervention (Schein, 1999). School-based problem-solving models represent one variation of the typical prereferral and intervention teams used at most schools to support students with special needs (Rosenfield & Gravois, 1999). Most school-based problem-solving models belong to the ecobehavioral category of consultation. This type of consultation addresses both proximal and distal environmental causes of a child's behavior as a means to arrive at interventions. By examining the child's environment, the referring teacher and problem-solving team consider how to modify the environment in order to elicit behavioral change and improved performance.

There is growing consensus on the components that define best practice in school-based problem solving teams. They are stage-based and involve defining the problem precisely using direct measures of behaviors, analyzing the problem by identifying the requisite skills needed to complete the task in question, collecting baseline data, designing an intervention that is functionally related to the problem, and monitoring the student's progress by collecting ongoing data (Martens, 1993; Tilly, Reschly, & Grimes, 1999). Progress monitoring and evaluation of the outcomes is used to determine how the case should proceed, if it needs to be continued, revised, or terminated (Miltenberger, 1997). The goal of school-based problem-solving models is to provide support to the referring teacher and help her or him effectively teach all students within the general classroom (Chalfant & Pysh, 1989).

### Program Implementation

In addition to the inadequate description of the intended change process meant to

be caused by school-based problem-solving models, the prevailing conceptualization of program implementation in the body of research on problem solving is also limiting. Within school-based consultation research, program implementation is considered to be “the process of putting into practice an idea, program, or set of activities and structures new to the people attempting or expected to change” (Fullan, 2001a, p. 69). Fullan elaborated on this view by stating that implementation is the means, or an independent step, to reaching the program’s goals. This position recognizes those responsible for implementing the program as independent or distinct from the implementation process. According to this view, the implementors are the individuals who are conveniently present and expected to be responsible for seeing the program become functional and operational. When a program is evaluated to have high implementation, the implementors may be praised for their hard work. However, they are viewed as instrumental and not inherently integral to the program’s success.

Alternative positions regarding program implementation that have been developed are not acknowledged in the problem solving literature. According to the interpretive paradigm, a more active, constructivist role is assigned to the program implementors (Yanow, 1996). In this paradigm, the implementors develop a personal meaning about the initiative and their implementation efforts represent the understanding they created. Consequently, the implementors cannot be legitimately separated from the implementation process.

Learning about a new initiative can create change within the implementors as well as within the initiative itself. For example, how a problem-solving model is functioning

in a school represents the meaning the school-based staff negotiated about the program and the personal reflections and educational beliefs of the staff, which may have changed through their participation in the program. Program implementation is not simply the sterile act of putting a program into place. A learning-based and change-focused conceptualization of program implementation, that is discussed in the context of educational policy but has yet to enter the research on school-based problem-solving models, requires different methods to evaluate the functioning and implementation of a program.

### Treatment Integrity

The standard conceptualization of program implementation found in the consultation literature has also historically been applied to the concept of treatment integrity for individual, referred cases. Elliott and Busse (1993) define treatment integrity as, “the degree to which treatments are implemented as intended...[t]wo forms of treatment integrity...[are] the integrity of the consultation process and the integrity of the intervention program” (p. 183). The integrity of interventions is commonly evaluated based on the presence of characteristics that have been associated with effective interventions, such as a behavioral definition of the problem and ongoing data collection (e.g., Flugum & Reschly, 1994; Telzrow, McNamara, & Hollinger, 2000). The oft-demonstrated relation between treatment integrity and a successful case resolution is invariably attributed to the presence of particular, desirable elements in the intervention (e.g., Ehrhardt, Barnett, Lentz, Stollar, & Reifin, 1996). In this view of treatment integrity, the individual responsible for implementing the treatment is seen as merely

carrying out his or her responsibilities, and not as an integral, creative dimension to the implementation process.

When an intervention is implemented differently than planned, the program or treatment is judged to have low implementation or poor fidelity. However, this designation is of limited helpfulness in ascertaining the obstacles to improved implementation. Applying a sensemaking interpretation to these same cases can highlight the role and contribution of the service provider whose theoretical orientation and beliefs may facilitate or challenge the treatment delivery. Instead of exclusively considering the characteristics that were included in the case when evaluating its effectiveness, the teacher's understanding and learning can provide a useful accounting of the case's outcome. If an intervention represents the service provider's educational beliefs its delivery is likely to have more "integrity." Therefore, the level of implementation and outcome of the case should be primarily attributed to the teacher's sensemaking and not to the intervention's features that are associated with higher fidelity.

Within school-based consultation research, the standard perspective regarding program implementation and treatment integrity is the one held by Fullan (2001a): Implementation is a distinct entity from the implementors or the intended outcomes of the program. However, the conceptualization of implementation as a social learning experience for those responsible for the program allows for a much richer interpretation. The theories associated with the interpretive paradigm, such as collective sensemaking and communities of practice, can account for the learning and the processes involved that enable implementation to become a reality. Identifying the meaning constructed by the

school staff about the program can clarify their understandings that guided their implementation efforts (Coburn, 2001; Yanow, 1996).

Within the interpretive paradigm, implementation of a school-based problem-solving model is not an independent event that will result in changed teachers' beliefs once they achieve high implementation. Rather, implementation is a dynamic phenomenon that involves teachers and staff negotiating and creating meaning about problem solving and student concerns. As they participate in this meaning-making process, the teachers' and staff's beliefs may change, in any number of directions. Alternatively, the group may conclude that the new model represents their current practice and that change is not warranted. The conclusion that the staff's current practice corresponds to the newly introduced model may be correct, or it may indicate that the meaning they constructed about problem solving is different from what the developers intended.

According to the communities of practice framework, only when a group's interpretation of the school-based problem-solving model is close to the intended meaning can they reach the program's goals; otherwise, implementation of the model will appear compromised. Poor implementation, however, should be not attributed to certain features that are "coincidentally" missing. Instead, poor implementation represents a difference in meaning and beliefs between the intended meaning of the model and those responsible for its implementation. This difference in meaning may be due to an absence of learning and change or learning that resulted in a constructed meaning that was not intended.

### Reflective Practice

The concept of reflective practice is described by Schön (1983, 1987) as teachers' interpretations of the problems they encounter in their work. When they are presented with a difficult situation, they must first reflect on it in order to clarify what constitutes the problem and then pursue a solution. This type of knowledge is highly contextualized and practical, in that the situation and experience of the problem are judged to be highly relevant components to the presenting concern. As teachers reflect on their dilemmas and practice, they are modifying and enhancing their previous understandings about the newly-framed problem.

As school-based problem-solving models attempt to change teachers' beliefs, increasing their reflection is a simultaneous goal. The experience of resolving cases through a problem-solving process is expected to encourage teachers to adopt the educational beliefs associated with the school-based problem-solving model. Through personal and collective reflection, teachers can influence each other and arrive at new understandings about school-based problem-solving models, student-based concerns, and student learning.

### Teacher Collaboration

A second major claim of school-based problem-solving models within the literature is that they promote collaborative, working relationships among teachers and staff. Service delivery in the context of problem solving involves teachers consulting with each other, and sometimes with specialists, and the teacher delivers the intervention to the student rather than a specialist directly serving the student. Implicit in this

assertion is that teachers, not specialists, are desirable consultants due to their knowledge about the curriculum and classroom structure. Through consultation sessions and meetings, teachers are presumed to support each other in their efforts to create an effective, successful learning environment for all students. How teachers actually support each other in this fashion, understand their role as consultant, and understand the larger purposes of consultation as they try to improve student learning remains unclear. The first year of implementation of a school-based problem-solving model provides the opportunity to inquire how teachers create meaning about such programs and understand their respective roles.

One predominant setting of collective meaning-making in some school-based problem-solving models is the grade-level team, the primary level of analysis for the current study. Elementary school teachers typically work and interact most closely with those who teach the same grade level. Hence, they comprise a “community of practice” independent of the introduction of a school-based problem-solving model (Gallucci, 2003). School-based problem-solving models often capitalize on this grade-level team structure and designate them as the setting for receiving case referrals and engaging in problem solving (Chalfant & Pysh, 1989). By studying what is said and what transpires at the grade-level team meetings, one can begin to understand teachers’ perspectives about their role as consultant and problem-solver and if they perceive themselves as empowered and able to teach all students. These perspectives are expected to evolve through continued participation in a problem-solving process, and whether and how this change happens needs to be studied.

As the grade-level teams are constructing meaning about the school-based problem-solving model through their participation, they are receiving explicit directives and implicit messages from their environment. School-based problem-solving models that use this teaming structure do not have six freelance grade-level teams that problem-solve independently. Rather, there are six teams that function with guidance and support from a building-level team that also influences the sensemaking process. The building-level team's functioning and conceptualization of the program is another level of analysis that can account for the grade-level teams' implementation of the problem-solving process. The building-level problem-solving team and the school culture provide a broader context within which the program functions, as they influence the individual teachers and grade-level teams.

Another contextual layer that can influence problem solving implementation is the school system. Student support initiatives and other programs proposed by the school system can be assumed to indirectly influence the teams' meanings, the individuals' beliefs and reflections, and the whole school's understanding and implementation of the school-based problem-solving model. The grade-level teams, building-level team, and programs and messages from the school system each have the potential to promote teacher collaboration or to stifle it, influencing the possibility of problem-solving teams enhancing teacher collaboration.

### Summary and Research Questions

School-based problem-solving models' primary mission involves helping individual students experience increased academic success. Ultimately, this



responsibility falls to the student's teacher who is expected to provide classroom-based interventions and refer fewer students to special education. Creating such a change in teachers' practice requires changing individual teachers' reflections and educational beliefs. By asking teachers to implement a school-based problem-solving model, they are being asked to conceptualize their work and role differently and become more reflective about their practice. In order to create more opportunities for success for their students, they are supposed to reject certain educational beliefs and perspectives and espouse others. Exploring teachers' prior educational beliefs and any evolution in their beliefs and reflections as they implement a school-based problem-solving model will clarify if the intended change took place and how they experienced the change.

As teachers refer cases to the school-based problem-solving model and when they help their colleagues problem-solve cases in grade-level meetings, they are continuing to learn about the process and participate in it. Through participation, the members are learning and changing and adapting the model. The individuals' perspectives contribute to the group process of collective sensemaking and can modify others' individual conceptualizations. To understand this learning experience inherent to implementing a new school-based problem-solving model, the following two research questions were posed:

- 1) What meaning is negotiated among teachers about the problem-solving process that influences their implementation of a school-based problem-solving model?
- 2) What are individual teachers' beliefs about student learning that contribute to their understandings about problem solving?

To answer these research questions, qualitative methods were used. I functioned as a participant-observer in one school, where I served as a coach for one grade-level team and a member of the building level problem-solving team. These roles helped me observe the model's school-wide functioning and continuously reflect on the school's culture and the teachers' evolving experiences with the school-based problem-solving model. To address the first question of collective sensemaking, I relied on my observations of the grade-level team I coached, the building level team, and other grade-level teams I observed.

To answer the second research question, I conducted individual, reflective interviews with a sample of teachers who referred cases, their fellow team members, and specialists. Referring teachers were interviewed twice. The first interview involved reflecting on the case's reason for referral and its current progress. The second interview addressed any developments since the first interview and a review of the prior interview's transcript, providing an additional opportunity to reflect. The interviews also enabled me to ask teachers about their experiences with the grade-level team, providing additional data for the first research question. The third research method involved a document review that included completed forms, agendas for meetings, and relevant written correspondence. The document review assisted in supporting and challenging themes that emerged from the preliminary data analysis.

### Significance of Study

One purpose of this study was to clarify the purposes of school-based problem-solving models, the factors that are seen to contribute to school-based problem-solving

models' effectiveness, and how these factors have traditionally been understood to create the program's effectiveness. The second purpose was to demonstrate that the communities of practice framework provides a useful framework for understanding the dynamic phenomenon of program implementation. Analyzing program implementation through the lens of learning, participation, and sensemaking, the staff's reflections and beliefs were highlighted. Recognizing their beliefs and experiences with the program provided a new perspective on the relation between school-based problem-solving models and teachers' educational beliefs and reflections. This study is distinguished from most problem solving implementation studies by its focus on teachers' beliefs and personal reactions to the model rather than program outcomes or program fidelity.

In order to understand how a school implemented a new school-based problem-solving model, the theories of collective sensemaking and communities of practice were used for analysis and interpretation. As a team-based process, the teachers and other staff were recognized as collectively negotiating the meaning that represented the model. Their mutual understandings influenced their participation and their perceptions of their roles. Participation in the program and new case referrals created ongoing opportunities for learning and meaning-making. Embedded in the meaning that was created about the school-based problem-solving model were the understandings teachers and staff held about student learning. These prior beliefs contributed to how they conceptualized the purpose and function of problem solving. Identifying the meaning that was created within the school about problem solving as well as exploring prior beliefs about student learning helped explain how the school staff approached, understood, and used the

model, which explained how it was implemented.

The research questions of this study helped explain the experience of first year implementation of a school-based problem-solving model and identify how teachers and staff interpret the use and meaning of the program. These questions were answered using qualitative methods that include participant-observation, reflective interviews, and document review. The school-based problem-solving model's goal of inviting reflection about student learning and its relation to multiple, ecological factors were studied by analyzing a sample of teachers' reflections.

Multiple parties are expected to find this study's interpretations to be valuable. The participating school and school district can use the interpretations to facilitate continued implementation. Researchers interested in school-based consultation traditionally examine implementation of school-based problem-solving models and individual cases from a quantitative, instrumental perspective. This study should be of interest to these researchers, as it presents an interpretive analysis of program implementation and functioning that has been established in other policy and program areas, but not school-based problem-solving models.

In addition, researchers interested in professional development and policy implementation should find this analysis based on the interpretive paradigm valuable as well. To date, the interpretive paradigm, including the communities of practice framework that has only recently been applied to the school setting, has been used to research broad and state-level initiatives. Instead of developing community centers or revising an entire curriculum, school-based problem-solving models focus on an

individual student. Using a paradigm that has historically examined programs that address macro-issues to a program that addresses individual student's learning is a new application of this approach. This study offers interpretations of potential value to those working at the school-level, school-based consultation researchers, and researchers interested in professional development and program and policy implementation.

The next chapter begins with a discussion of school-based problem-solving models, the practices they attempt to change, and the reflections and beliefs they attempt to modify.

## Chapter Two

### Review of Related Literature

This study examined how the staff at one school implemented a new school-based problem-solving model in its first year. The goal of school-based problem-solving models is to help students experience increased academic success. The anticipated, improved student performance is expected to result from teachers' heightened reflection, modified educational beliefs, and change in classroom practice due to their participation in the school-based problem-solving model. Analyzing teachers' understandings about student learning and their educational beliefs can identify if the school-based problem-solving model is in fact providing the intended opportunities for reflection.

The program implementation of school-based problem-solving models was analyzed from a social constructivist perspective, a perspective that emphasizes the creative and interpretive role of the implementors as they attempt to put the program into practice in their school. While the social constructivist perspective is not a new research paradigm, it has been applied to school settings relatively recently (Jennings, 1996; Spillane, 1998) and has only recently been applied to analyze the implementation of school-based problem-solving models (e.g., Athanasiou et al., 2001; Knotek, Rosenfield, Gravois, & Babinski, 2003). These initial studies, however, emphasized the individual's conceptual understanding in the context of dyadic problem solving and not the social dimension that can be more pronounced in team-based problem solving.

In order to better understand these concepts, the related literature will be reviewed. An overview of the research about school-based problem-solving models is

presented first. This is followed by a discussion of reflective practice, individual and collective sensemaking, and educational beliefs and perspectives. The communities of practice framework and the recent research applying it to school settings is reviewed next. The final section reviews school-based implementation research and program implementation studies analyzed from a sensemaking perspective.

### School-Based Problem-Solving Models

When a school district decides to adopt a school-based problem-solving model as its means for addressing student learning needs, this represents a major educational change (Rosenfield & Gravois, 1996). School-based problem-solving models are a type of indirect service delivery that school staff can engage in to address school-based needs (Gutkin & Curtis, 1999). Indirect service and school-based consultation refer to an approach of serving teacher and student needs through professionals interacting, rather than specialists directly serving the student or personally implementing the intervention (Schein, 1999). Gutkin and Curtis identify and describe three categories of school-based consultation, one of which is ecobehavioral consultation. This category of consultation, to which most school-based problem-solving models belong, addresses both proximal and distal environmental causes of a child's behavior as a means to arrive at interventions. By examining the child's environment, the referring teacher and problem-solving team consider how to modify the environment in order to elicit behavioral change and improved performance.

### Rationale for Change

Special education eligibility determination. The problem-solving approach

emerged from an effort to provide appropriate educational services to students who are not successfully learning (Chalfant, & Pysh, 1989; Sheridan & Gutkin, 2000). This approach grew from dissatisfaction with the traditional approach that determines students' eligibility for special education based on norm-referenced tests (Zins, Kratochwill, & Elliott, 1993). The traditional approach relies on standardized testing to label and differentiate students into disability categories so that they can receive interventions that are assumed to be particularly effective for those with their same disability (Horn & Tynan, 2001).

Ysseldyke and Marston (1999) challenge the validity of using the categorical approach for special education placement and list four assumptions implicit in the traditional testing approach. The first assumption of the traditional model is that individuals with a particular disability share at least one feature in common (universality), and that there is at least one feature or trait that is specific to that disability (specificity). The second assumption is that tests can be used to reliably and validly identify who has a disability, differentiate these students from students who have a different disability, and differentiate disabled students from those who have low achievement but are not disabled. The third assumption is that students with comparable disabilities will benefit from homogenous grouping and instruction by a teacher specifically trained to teach those with the condition. Finally, the fourth assumption is that students with different conditions will learn best when taught with different methods that address their condition.

Despite the heavy reliance on psychometric testing to determine eligibility for



special education services, the test results have not been found to be reliable in differentiating students between learning disabled, low achieving, and mildly mentally retarded groups (Reschly, 1997). Canivez and Watkins (2001) demonstrated that a commonly administered intelligence test, the WISC-III, yielded unstable individual subtest scores for 15% of the students who were classified with one of the three most common disability groups: specific learning disability, serious emotional disability and mental retardation. Eleven and one-half percent (11.5%) of the sample were reclassified as having another disability upon their triennial special education reevaluation. The similarity of cognitive scores across disability types and the instability of subtest scores resulting in changes in disability determination directly challenge the assumption that a particular disability can be validly differentiated from other disabilities and low achievement.

In addition, the evidence does not support the notion that specific instructional strategies work uniquely with students who are diagnosed with specific disabilities and “processing weaknesses,” referred to as aptitude treatment interactions (ATI)-based interventions (Cronbach, 1975; Good, Vollmer, Creek, Katz, & Chowdri, 1993). Instructional practices that have been successful with students with disabilities have also been shown to be successful across disability categories as well with low achieving students who are not diagnosed with a disability (Kavale & Forness, 1999b; Lyon et al., 2001). Therefore, the traditional testing process is limited in the useful information it provides for instruction and intervention design (Cunningham & Oakland, 1999; King-Sears, 1994).

Additional arguments have been posed against the traditional, categorical approach to special education eligibility determination and service provision. They include the stigmatizing effect of disability labels and disproportionate minority representation in special education (Reschly & Tilly, 1999). To avoid the potentially stigmatizing effects of disability labeling, Reschly and Tilly encourage a classification system that is based on specific skill deficits and the services needed, not on internal attributes that imply a global trait. Ysseldyke and Marston (1999) also argue that the traditional assessment model ignores the student-environment instructional match and removes the burden of proof from the teacher by ascribing the student's difficulties to within-student traits, rather than environmental or ecological influences. The overrepresentation of minorities in special education further challenges the validity of the categorical sorting process (Ladner & Hammons, 2001), as the premise that minorities are disproportionately disabled is seen as discriminatory (Valencia & Solorzano, 1997). Indeed, the well-documented 15-point gap in IQ scores between Whites and African-Americans has puzzled many scholars (Flynn, 1999), and Helms (1997, 2002) and others disapprove of the use of standardized tests with racial and cultural minorities for important decision-making.

Special education service provision. Another source of dissatisfaction with special education, beyond the disability determination process, is how interventions and services for students are conceptualized and delivered. Wolf and Hassel (2001) characterize special education as a program that is process-focused and highly procedural. Since special education programs are expected to provide an accurate and

clear accounting of what they accomplish with public funds, Wolf and Hassel call it an “accountability program.” Specifically, accountability programs are, “organizations [that] are held responsible for the operation and effectiveness of programs and institutions under their control” (p. 54). They identify three models of accountability programs, the compliance model, the competition model, and the community model. They fit special education into the category of compliance models.

Wolf and Hassel (2001) elaborate on the compliance model and explain that it emphasizes activities and processes over outcomes. Compliance models’ documentation lists what service providers plan to do, how much or often they will do it, and how they will deliver the services. In addition, the service providers or agents are expected to have certification before they are allowed to provide services. Compliance models have a strong emphasis on rules and regulations, and they are typically reviewed through the mode of audits, hearings, and examinations of paperwork. Rewards for successful operation include continued funding and operation with minimal oversight; sanctions can include written warnings, a lack of promotion, or decertification. Compliance models, including special education, stress the “input” or the processes undertaken in order to reach the stated goals and implicitly assume that if the input is handled correctly, the outcomes will be successful.

The other two accountability models Wolf and Hassel (2001) describe are free-market models, in which outcomes and results are emphasized, and community models, in which relationships guide the functioning of the organization. Free-market model are more product or outcome-focused, and are held accountable through consumer choice.

Rewards include increased salary and operation, while sanctions include loss of revenue or bankruptcy. The community model relies on values, norms, and relationships, not necessarily regulations or outcomes to keep the organization functioning. Rewards and sanctions are of an intangible nature, such as praise and role enhancement, or a reprimand and possibly banishment from the community. This clan-like model can be representative of a Catholic school or other small, private organization in which the members are largely homogeneous and share one culture. The community model is not seen as adaptable for a large, diverse constituency.

Wolf and Hassel (2001) argue that special education can be considered a compliance model because of its heavy emphasis on paperwork, procedures, and the responsibilities of multiple individuals. The results or outcomes of student learning are implicit and assumed to materialize if the procedures are followed correctly; the emphasis on the outcomes is secondary to documenting and affirming that the student will receive services. Wolf and Hassel support their argument by noting that when parents challenge a school for not successfully providing for their child, the hearing officer reviews the documentation of the special education process. If there are procedural errors the parent wins the case. However, if the school has complied with all of the regulations the parent is much less likely to win the case, regardless of the student's learning progress. In the current paradigm of special education as a compliance model they argue that there is no public accounting of the student's learning and the burden of the required, extensive paperwork limits the availability of the service providers for the students.

School-based problem-solving models represent a contrast from special education's paperwork-heavy process that emphasizes procedures and timelines. These models emphasize data collection, intervention development, and intervention monitoring; the focus of problem solving is on the student's current level of performance and classroom-based interventions, not direct services from specialists. School-based problem-solving models are not "accountability programs," so they do not fit into Wolf and Hassel's (2001) typology of the three models. However, unlike special education, in problem-solving procedures and paperwork are secondary to the learning outcomes that are monitored during the intervention evaluation stage.

Summary. School-based problem-solving models are being adopted by many school districts in an effort to address the flaws of the traditional assessment approach (Gutkin & Curtis, 1999). Current school-based problem-solving models are being developed to replace prereferral models that were not effectively serving teachers and students. The preceding prereferral models did little beyond recommend stock interventions and refer students for special education testing (Oakland & Cunningham, 1999). Therefore, while the traditional model for identifying special education disability remains in place at most schools that adopt school-based problem-solving models, the aim for the school-based problem-solving model is to reduce referrals to special education and enhance regular education's capacity to meet the needs of more students.

#### Structure and Types of School-Based Problem-Solving Models

Nezu and Nezu (1989) are among the first to present the application of stage-based school-based problem-solving models to the process of clinical decision-making.

They articulate the steps and questions a behavioral clinician should use when planning for psychotherapy or another direct service when treating a patient. Within this approach, the clinician is conceptualized as a problem-solver who identifies the problem in specific, clear terms and develops an intervention plan that directly addresses the problem definition. The model's structured stages are intended to reduce the clinician's judgment bias and facilitate data collection that is sensitive to changes in the defined problem and not global impressions.

Comparison of a sample of school-based problem-solving models. Multiple indirect service delivery consultation models have since been developed that are variations of Nezu and Nezu's (1989) prototypical stage-based model (e.g., Fuchs & Fuchs, 1989; Whitten & Dieker, 1993). They are similar in their goals of serving students in the general education classroom and their stage-based structure (Gutkin & Curtis, 1999). Many models also emphasize the voluntary and collaborative nature of the consultation relationship between the referring teacher and consultants (Rosenfield, 1987). However, these models differ based on team composition and the setting and focus of the problem solving (Meyers, 1995). See Table 1 for a brief comparison of the school-based problem-solving models reviewed here.

Common to all of the ecobehavioral consultation and school-based problem-solving models is a stage-based approach that involves defining the problem precisely using direct measures of behaviors, analyzing a problem into its component skills, collecting baseline data, designing an intervention that is functionally related to the problem, and monitoring the student's progress by collecting ongoing data (Martens,

1993; Tilly et al., 1999). Progress monitoring and evaluation of the outcomes is used to determine how the case should proceed: if the intervention is successful, it should be

Table 1

Comparison of Problem-Solving Team Models

Model	Team composition	Problem-solving setting	Focus of problem solving
Instructional Consultation (Rosenfield & Gravois, 1996)	School principal; Special education teacher; School psychologist; General education teachers; Other specialty staff	Hybrid of dyadic between referring teacher and one team member and whole team	Required to consider academic; Behavioral; School-wide issues
Intervention Assistance Teams (Whitten & Dieker, 1993)	3 school professionals	Whole team	Behavioral; Academic (optional)
Mainstream Assistance Teams (Fuchs & Fuchs, 1989; Fuchs et al., 1990)	Special education teacher; School psychologist	Hybrid of dyadic between referring teacher and one team member and whole team	Behavioral; Academic (optional)
Peer Intervention Team (Saver & Downer, 1991)	Specialty teacher (e.g., art, music); Support staff	Whole team	Behavioral; Academic (optional)
Prereferral Intervention Teams (Curtis et al., 1988)	Consultant (e.g., school psychologist, consulting teacher); Additional staff appropriate to area of concern	Hybrid of dyadic between referring teacher and one team member and whole team	Required to consider academic; Behavioral
Teacher Assistance Teams (Chalfant et al., 1979)	General educators; School principal (optional)	Whole team	Behavioral; School-wide issues

systematically faded; otherwise, intervention revision is needed (Miltenberger, 1997).

The multiple school-based problem-solving models conform to the experimental tradition in psychology in that data are collected around an operationally defined concern and the outcomes can be used to further refine the intervention (Reschly & Tilly, 1999).

In every school-based problem-solving model the referring teacher is a member of the team, while participation from support staff (e.g., reading specialist, school psychologist) can vary. For example, a special education teacher and school psychologist are required members of the Mainstream Assistance Teams (Fuchs & Fuchs, 1989; Fuchs, Fuchs, Bahr, Fernstrom, & Stecker, 1990) and the Instructional Consultation Teams (Rosenfield & Gravois, 1996). The school principal is an optional member of the Teacher Assistance Teams (Chalfant, Pysh, & Moultrie, 1979), while she or he is a required member of the Instructional Consultation Team. However, the Peer Intervention Team (Saver & Downes, 1991) requires the participation of a non-specified support staff team member. In addition, only the Teacher Assistance Teams and Instructional Consultation Team requires the membership of at least one general educator.

The setting for the problem solving varies across models as well. One type of model relies exclusively on group problem solving, such as the Teacher Assistance Teams (Chalfant et al., 1979), Peer Intervention Teams (Saver & Downes, 1991), and Intervention Assistance Teams (Whitten & Dieker, 1993). In some models, there is one problem-solving team in the school and the referring teacher becomes a member of the team exclusively for that case. In other models, there is a problem-solving team at every grade level and perhaps a building-level problem-solving team as well. In yet other



models, the referring teacher is assigned to work individually with a team member who serves as the case manager. The referring teacher and case manager can access the larger team for additional support or resources, but their problem solving occurs primarily in the context of their dyad. The Prereferral Intervention Teams (Curtis, Curtis, & Graden, 1988), Mainstream Assistance Teams (Fuchs et al., 1990) and the Instructional Consultation Team (Rosenfield & Gravois, 1996) rely on this hybrid structure of dyadic and team-based problem solving.

Lastly, the focus of the problem solving can vary across models. In all models academic and behavioral difficulties can be raised. However, few models, such as the Instructional Consultation Team (Rosenfield & Gravois, 1996) and the Prereferral Intervention Team (Curtis et al., 1988), require an examination of the child's academic skills relative to the teacher's instruction regardless of the referral concern. In addition to individual student concerns, few models, such as the Teacher Assistance Teams (Chalfant et al., 1979) and Instructional Consultation Teams (Rosenfield & Gravois, 1996), provide the structure to enable the team to examine school-level issues such as school-wide discipline or instructional techniques for a whole classroom or grade level.

General goals of school-based problem-solving models. The goal of school-based problem-solving models is to provide support to the referring teacher or staff member on a wide range of issues (Chalfant & Pysh, 1989). This process is described as “teacher oriented,” as its purpose is to provide a “general education consultation alternative” (p. 50) to consultation that is often exclusively available for special education students. As opposed to the “child-oriented” multidisciplinary teams that oversee the special education

referral, testing and placement of students, problem-solving teams seek to empower teachers by helping them resolve their own referrals. As demonstrated by Morrison, Walker, Wakefield, and Solberg (1994) many teachers report a preference for working collaboratively with other staff regarding student-related concerns, as opposed to referring the problem to an expert or resolving the problem independently. School-based problem-solving models provide a forum for teachers to pursue collaborative support in resolving student concerns.

Despite the prevalence of school-based problem-solving models and their primary reliance on team-based consultation, there is a limited understanding about the process of group consultation (Gutkin & Nemeth, 1997). Gutkin and Nemeth reviewed principles from social psychology research about group functioning that they believed to be relevant to the team functioning and decision-making of problem-solving teams. However, how the principles of the *power of the majority* and *shared norms*, among others, operate in the context of school-based teams has yet to be studied. The current study seeks to address the void in the research about how school-based problem-solving models enable teachers to work together collaboratively to develop classroom-based interventions. Exploring teachers' individual understandings about student learning and the process of how problem-solving teams collectively construct understandings about student learning is a first step in researching how team-based consultation and school-based problem-solving models attempt to fulfill their goals.

The discussion of school-based problem-solving models and the evaluation of their effectiveness is often presented in the context of special education (Zins, Heron, &

Goddard, 1999; Reschly et al., 1999). Typically, the effectiveness of the school-based problem-solving model is evaluated based on appropriate referrals to special education and the proportionate representation of minorities. These student-based goals, however, are dependent on the realization of teacher-related goals that facilitate student achievement and enhanced functioning (Pugach & Johnson, 1990). If the goal is to refer and place fewer students in special education, then collaboration among general education teachers must improve so that they can accommodate diverse learning needs and support students experiencing difficulty (Rosenfield & Gravois, 1996). Therefore, in addition to the goal of improving student performance, school-based problem-solving models aim to increase teachers' skills in adapting the classroom environment and changing their classroom practice (Henning-Stout, Lucas, & McCary, 1993), as well as increasing their problem-solving skills (Curtis & Watson, 1980).

#### The Reflective Practitioner and Collective Sensemaking

School-based problem-solving models represent a change in how a school addresses the learning needs and behavior problems presented by students. The current study examined how one school attempted to implement a new problem-solving program. The paradigm of the reflective practitioner (Schön, 1983, 1987) was used to analyze individual teachers' perspectives and understandings about student learning, and the collective sensemaking approach (Weick, 1995) was used to analyze how the teams constructed meaning about problem solving and how they implemented the model. The interpretive paradigm of program implementation (Yanow, 1996) was used to guide the data analysis regarding the relation between the school's understanding and

implementation of the program.

### The Reflective Practitioner

Embedded in the goal of increasing teachers' problem-solving skills regarding student concerns is promoting teacher reflection (Idol, 1993). The explicit connection between problem solving and heightened teacher reflection is not made in the literature. However, one could easily argue that increased reflection is included in the goal of asking teachers to, "respond more effectively to similar [referred] problems in the future" (Idol, 1993, p. 352). Problem solving aims to help teachers reframe the problem so that it becomes manageable and solvable and they can rely on this new understanding for future, similar concerns (Hylander, 2003). This characterization of problem solving represents a good match for Schön's (1983, 1987) definition of reflective practice.

The concept of reflective practice is presented by Schön (1983) in his discussion of a "crisis of confidence in professional knowledge" (p. 3). This crisis refers to the predominance of one research paradigm, that of "technical rationality," while Schön argued that "reflective practice" is a more useful and meaningful paradigm to understand professional knowledge. The model of technical rationality values theoretical knowledge and experimental rigor, while reflective practice emphasizes the relevance of context and a professional's practical needs.

Schein's (1974) model of professional knowledge represents what Schön labeled "technical rationality" and consists of three elements. The first component, basic science, refers to an underlying discipline from which a profession and its systematic,

research-based theories and knowledge is developed. Applied science, the second component, is the basis for daily procedures and solutions to problems. The third component includes the technical skills and attitudes involved in delivering service to clients derived from the underlying basic and applied knowledge. In this view, professional knowledge is seen as the application of research-based strategies to everyday practice.

Schön (1983, 1987) argued that research and knowledge developed through technical rationality and experimental rigor lacks the relevance and realistic constraints experienced by professionals. He maintained that well-trained teachers do not encounter a problem and determine which research-based strategy to apply to the situation, because they rarely encounter clearly defined problems. Rather, teachers are faced with complex, ambiguous problems that they must interpret before devising a solution. When addressing a problem, practitioners first reflect on it in order to make sense of it. Through reflection they select the relevant factors to frame the problem and organize the factors based on prior knowledge and an appreciation for the direction of the solution.

Schön (1983) re-introduced the concept of reflection in professional training and education, and it has since become a highly popular and much-discussed theme in teacher education (Newman, 1999). Dewey (1933) is credited with first introducing this construct to teacher education, and described five phases of reflective thought that involve clarifying a puzzling or surprising situation. In Schön's definition of reflection, the action taken in response to the initial reflection is emphasized (Grimmett, 1989). Beyond merely clarifying a confusing situation, reflection according to Schön involves

reframing and reconstructing the experience, bringing new meaning and perspectives into practice.

Schön's definition of reflection includes multiple levels of awareness and thoughtfulness. "Knowing-in-action" is Schön's term for the simplest, or least transforming, form of reflection (1983, p. 50). Knowing-in-action refers to a dynamic process in which individuals reveal their knowledge by skillfully performing activities, without necessarily being able to verbally explain their activity. Schön offered an example of catching a ball, in which awareness, adjustment, and anticipation are all involved in successfully catching the ball. The catcher spontaneously makes adjustments as the ball approaches but may not be able to provide a verbal account of how the ball was caught.

The experience of knowing-in-action refers to how individuals respond to their typical tasks, responding and adjusting their responses automatically without much conscious thought (Schön, 1987). However, if the routine does not produce the typical result, the process has been interrupted and there is an aspect of "surprise" (p. 29). Following a surprise, individuals can respond to the event by ignoring it altogether, selectively attending to features of the event, or reflecting on the event. Reflecting may occur after the event has transpired, but if it occurs while the event is still in progress it is called "reflection-in-action." When one is engaged in a multi-step process, reflecting at each stage prepares for and shapes the next stages. Reflection-in-action contributes to the execution of the action in question and builds one's professional knowledge. One's accumulated reflections create the tacit knowledge, or knowing-in-action, which

influences the spontaneous reactions to variations in events and cases. Another layer of reflection that can shape future action involves reflecting on the prior verbal descriptions and reflections.

Knowing-in-action and reflection-in-action are similar concepts and can occur simultaneous to an action being performed. The distinction between them addresses the extent of the “interruption” (Schön, 1987, p. 29). Schön explained that knowing-in-action refers to instances when there is minor variation in the action, such as when a tennis player executes variations in the volley on a minute-by-minute basis. In contrast, reflection-in-action occurs when the variation is great enough to produce a surprise. For example, jazz musicians collectively make music by improvising, varying, and recombining musical sets. Both processes are somewhat spontaneous and can occur without the individual being able to provide an adequate verbal description of what transpired. Verbal descriptions represent constructions that attempt to explain tacit knowledge and re-create the spontaneous responses that are rarely articulated.

Reflection and problem solving. Schön (2001) called the process of addressing problems through reflection as “problem-setting” (p. 186) and not “problem solving.” The term “problem solving” would imply to him that one can rely on training and established research to apply a solution to a clearly defined problem. However, he considered professionals’ work to lie in the “problem-setting,” the phase where they first have to determine the parameters and scope of the problem. If professionals do encounter clearly defined problems, Schön dismissed these problems as the ones on the “high ground,” those that are not truly relevant or important (p. 191). The complex, ill-

defined problems are in the “swampy lowland...in confusing but crucially important situations” (p. 192).

Schön (1983, 1987) argued that the problems encountered by practitioners are the worthwhile ones, and they are not neat and tidy. Rather, they are uncertain and unique, with the potential for a conflict of values. Such problems are outside the domain of technical rationality and interventions that were researched with the appropriate experimental rigor. Instead, the practitioner’s problems reside in “indeterminate zones of practice” (1987, p. 6) where the practitioner must interpret and reflect on the situation in order to define the problem.

Schön (2001) would rename the problem identification stage of the school-based problem-solving models that many schools are adopting to enhance teacher support and service delivery to students as the “problem-setting” stage. The problem identification stage of the school-based problem-solving model is usually considered to be the most important stage (e.g., Bergan & Tombari, 1976; Martens, 1993). It is during the problem identification stage that the team is charged with the task of reframing the presenting problem and defining an initially amorphous problem into observable and measurable terms. If a teacher refers an “inattentive” or “poorly motivated” student to the problem-solving team, the team’s role is to define the inattention or motivation as observable behaviors and identify the setting and cause for the behaviors so that a functionally related intervention can be developed (Tilly et al., 1999; Miltenberger, 1997).

Relying on technical expertise to apply a solution to a clearly-presented problem is not realistic or desirable, according to Schön (1983, 1987). The team must first define



and analyze the problem and reflect on the student's learning environment. This process helps the team clarify the problem and increase the chances of designing a targeted, effective intervention. Problem-solving, or problem-setting, models are essentially asking teachers to reflect on their practice as a means to improve their instruction and increase their use of best practices, or as Schön would argue, their "reflection-in-action" (1983, p. 49).

Reflective practice as research methodology. Schön (1983, 1987) considered reflective practice to be the preferred epistemology for researching issues in professional practice because it emphasizes the context of the concern. Practitioners' tacit knowledge, which is based on prior experience, and reflections-in-action guide their behavior and are embedded in the event. Therefore, in order to understand professional practice, he argued for a research program that studies practitioners' reflections in the context of relevant situations that will inevitably lack the experimental rigor traditionally seen as valuable in the technical rationality paradigm.

Schön's discussion of the reflective practice "epistemology" or paradigm has generated much discussion and debate (e.g., Grimmett, 1988; Newman, 1999). Shulman (1988) raised exception to Schön's dichotomy of two research paradigms, technical rationality and reflective practice, and his dismissal of technical rationality. Shulman noted that a teacher's professional artistry exists within the context of a curriculum and established knowledge that were developed from the paradigm of technical rationality. The "surprise" that triggers reflection-in-action occurs because the teacher was expecting the event to unfold in a particular way, based on expectations that were borne out of the

paradigm of technical rationality. Shulman described these two paradigms not as dichotomous, but as complementary principles that inform each other, research and practice.

Fenstermacher (1988) also challenged Schön's polarization of science and practice and questioned whether reflective practice is really an epistemology and a strand of research. He agreed that there is a tension between science and practice, but did not see the solution as divorcing them. Rather, results from scientific inquiry, or technical rationality, can help clarify and address the realistic, messy situations encountered by professionals. Fenstermacher did not recognize the two areas as being incapable of contributing to each other.

Reflective practice research, unlike technical rationality, is appropriately conducted using the case study methodology, in which cases are defined as a profession's meaningful unit of work (Creswell, 1998; Schön, 1983, 1987). Shulman (1988) elaborated on this definition and described a case not as, "a well-written anecdote" but an opportunity to go beyond one's individual professional experience and reflect on the, "theoretically interesting problems" of others (p. 36). Case method learning is a process of drawing on one's technical and artistic expertise to address a problem and reflect on it (Schön, 1983, 1987).

School-based problem-solving models are similarly case-based: teachers refer a concern to the problem-solving team and the ensuing discussion and interventions constitute a "case." With the help of the team, the concern and its parameters are defined (i.e., problem-setting), and then a targeted intervention is developed and monitored. The

experience of addressing and resolving a referred case in a team setting is expected to promote teacher reflection and encourage teachers to shift their conceptualizations of their role as teacher. Identifying whether teachers become more reflective through practicing problem solving and if these reflections inspire a new understanding about their work is best researched using Schön's (1983, 1987) reflective practice paradigm. Since school-based problem-solving models aim to make teachers more reflective and to alter their practice due to their reflections, Schön's model provides a useful paradigm for examining teachers' response to the introduction of problem-solving teams and their efforts to implement them.

Summary. Newman (1999) observed the popularity of the concept of reflection, and the emphasis placed on reflection in North American and British teacher education programs. However, he feared that the proliferation of the term "reflection" could lead to its dilution and that multiple, additional meanings have already been associated with the concept. In fact, when Schön identified the reflective practice model as an "implicit epistemology of practice" (2001, p. 186), he was accused of misusing the term "epistemology" (Fenstermacher, 1988). Nonetheless, Schön's discussion about practice, reflection-in-action, and rigor versus relevance is considered to have advanced discussions about the roles and identities of professionals and desirable methods for researching these issues (Fenstermacher, 1988).

Schön's (1983, 1987) framework of reflective practice is a useful method for studying school-based problem-solving teams. Just as Schön emphasized context and the action component of reflection, problem-solving teams seek to develop classroom-based

interventions to resolve students' academic and behavior problems. The team discussions revolve around referred cases, situating the process in an action context. Without entertaining the debate regarding the superiority of technical rationality or reflective practice, reflective practice is a useful analytic framework for studying teachers' understandings about problem solving and student learning. Teachers' reflections are the verbal articulations and mental reconstructions of their understandings about the problem-solving process and the concerns they choose to refer in a naturalistic setting. Finally, studying teachers' reflections can provide an indication as to whether the school-based problem-solving model had its desired effect of promoting reflection.

#### The Sensemaking Approach

Schön's (1983, 1987) approach of the reflective practitioner highlights the role of the professional within her or his relevant work context. In school-based problem-solving models, the teacher engages in "problem-setting" and reframes the problem in order to define it, limit its scope, and develop a targeted intervention. Sensemaking (Weick, 1995; Yanow, 1996) is another approach within the interpretive paradigm that has much in common with Schön's model of the reflective practitioner. Sensemaking also recognizes the creative and interpretive role of the practitioner in understanding and implementing a new program or policy. While both models are similar, sensemaking is a broader concept that places more emphasis on social and external forces beyond the individual that influence the individual's interpretation of the program.

Weick (1995) defines sensemaking as the, "placement of items into frameworks, comprehending, redressing surprise, constructing meaning, interacting in pursuit of

mutual understanding, and patterning” (p. 6). Sensemaking is similar to interpretation in that both involve paying attention to cues, inferring the meaning of the cues, and externalizing and linking the cues to behavior. However, sensemaking adds to this definition by accounting for how the cues are selected amidst a flow of information and experiences in order to be interpreted and how the interpretations might change following a behavior or concrete activity. Therefore, sensemaking is a broad, recursive process in which individuals identify relevant information in order to construct meaning about the event or process in question.

Analysis from a sensemaking perspective is useful when trying to understand policy implementation and the meanings about the policy constructed by those responsible for its implementation (Jennings, 1996; Yanow, 1996). This type of analysis focuses on the, “meanings of policy, on the values, feelings, and/or beliefs which [the policy implementors] express, and on the process by which those meanings are communicated...” (Yanow, 1996, pp. 8-9). Those responsible for implementing policy are believed to attribute more than rational cognitions and beliefs to the meanings of a policy, but also values and feelings.

The sensemaking approach emphasizes the human capacity for creating and communicating meaning, rather than identifying universal, objective laws (Yanow, 1996). With the emphasis on the human meaning and interpretation, there is the possibility for multiple understandings and interpretations of an event or policy. Instead of attempting to distill the results into a set of positivist, discoverable laws about human behavior, interpretative analysis involves a researcher, who through her or his own lens,

searches to identify the multiple meanings held at the different layers of the policy and their mutual influences on each other.

Collective sensemaking. In addition to an individual's sensemaking process about a program or policy, there can also be a collective or organizational sensemaking process (Weick, 1995; Yanow, 1996). Collective sensemaking, a variation of sensemaking, has been used to interpret policy implementation and organizational actions (Yanow, 1996), including educational policy (Coburn, 2001). Collective sensemaking is similar to an individual's sensemaking, or reflection, in that it relies on interpretive analysis.

School staff who participate in school-based problem-solving models, particularly the referring teachers, are the "street-level bureaucrats" (Yanow, 1996, p. 18), the ones who actively interpret the stages and tasks of the model, without having designed the process themselves. Even though training typically precedes the implementation of a school-based problem-solving model and there is often a reference manual, the implementors are presumed to assign additional, personal meanings to the process in order to make it useful (Spillane & Jennings, 1997). The sensemaking process involves filtering and selecting information based on current beliefs, policies, and debates (i.e., a combination of individual and social influences) and constructing understandings about the procedures and purposes of the new policy.

The variety of meanings attached to problem solving can be influenced by the educational beliefs and teaching practice of individual participants as well as team discussions. Ongoing participation in problem solving creates new learning opportunities

that contribute to the meaning-making process. Variations in level of implementation across teams and individual cases is not simply interpreted as weaknesses in program implementation. Instead, these variations represent the multiple meanings and understandings held by participants about the process. Weaknesses in implementation are not a lack or void, but an indication of an understanding or interpretation held by the “street-level bureaucrats.”

Collective sensemaking can account for a potential unevenness in program implementation throughout a school (Coburn, 2001). Because elementary school teachers typically work with their same grade colleagues most closely, their prior educational beliefs and personal reflections can influence these closest colleagues’ sensemaking. The reflective practitioner approach emphasizes the actions individual teachers take as a result of their reflections, whereas collective sensemaking is a process in which the reflections of other teachers and team members mutually influence each other. This process can produce multiple understandings across different teams and subgroups within the same school.

Sensemaking in education. The interpretive paradigm and sensemaking approach have been extended beyond organizational and social policy, and have also been applied to educational policy (e.g., Coburn, 2001; Jennings, 1996). Educational researchers have found the sensemaking approach to be helpful to study the meanings and understandings that school staff actively construct when reforms and innovations were introduced and implemented. For example, Coburn (2001) examined one urban California elementary school that implemented a new policy to improve reading instruction. Included in her

research methods, she observed grade level meetings and reading instruction to understand the relation between teachers' conversations and their reading practices. She relied on sensemaking theory in order to account for how teachers understood and implemented the new reading program, and argued that the networks and alliances among the staff shaped the meaning the individual teachers constructed. Rather than focusing on the sensemaking of an individual teacher, she found that the social perspective of collective sensemaking better explained the data.

During the team discussions, Coburn (2001) found that teachers, "framed, reframed, and elaborated their various conceptions until they were able to...link this idea with what they knew and believed..." (p. 153). She identified the team meetings as crucial for creating and sharing meaning, which then influenced teaching practice. Coburn also observed that resources and suggestions were rejected in groups of teachers that included divergent views, due to their philosophical opposition. However, philosophical opposition was not consistently observed throughout the multiple groups of the school: ideas that were rejected by some teams were accepted by others. Furthermore, as will be discussed in the "Learning and Program Implementation" section, Jennings (1996) and Spillane (1998) consistently found that teachers' prior beliefs and schools' organizational cultures influenced their interpretation of new policy yielding not uniform practice but a range of practices in which all of the participants were convinced they were implementing the policy as intended.

In team-based problem solving the differences in prior educational beliefs and individual reflections within a team are likely to influence development of a referred



case. Teachers' understandings of student learning as well as the purposes of problem solving will undoubtedly affect how they think a presenting problem should be resolved. Like Coburn's (2001) observations, heterogeneity of beliefs within a team may result in a dismissal of problem definitions and proposed interventions. Conversely, teams with homogeneous educational beliefs and understandings of problem solving may accept certain descriptions and assertions from a referring teacher without asking for clarification. Such similarity of thought can reinforce existing beliefs and interpretations, regardless of how they correspond to the model's assumptions. In this way, social influence and negotiation can shape the progress of the case and the understanding and reflection of the referring teacher.

The educational research to date that has used sensemaking to analyze policy changes and reforms examined broad curriculum changes (Coburn, 2001; Jennings, 1996). In these reforms, the whole school or an entire subject area were the targets of the new policy. School-based problem-solving models, while a school-based reform, primarily address the learning needs of individual students or small groups of students (Gutkin & Curtis, 1999). Schools that use problem solving do not ask teachers, for example, to revise the reading curriculum for all students but to differentiate the reading program for one student. A challenge of school-based problem-solving models is to agree with its primary assumption, that "all children can learn," while addressing the needs of a single student. Once a student is singled out for an intervention, teachers may be tempted to see that student as having a "deficit" and not simply in need of an adjustment to his or her learning environment. Simultaneously supporting the student

and maintaining an ecological perspective can present a challenge to referring teachers. This study used collective sensemaking to interpret teachers' meanings about an educational policy that addresses their practice toward individual students, rather than a comprehensive curriculum.

Summary. Sensemaking refers to the meaning-making process individuals and groups engage in to arrive at an understanding about a new policy. Individuals' educational beliefs can guide their personal sensemaking, or reflective practice, while colleagues can influence each other as they try to implement the policy as a group or team, or collective sensemaking. Examining individuals' reflections and collective sensemaking can explain how the implementors constructed their understandings about the policy and the beliefs related to the policy. Homogeneity and variation in conceptualizations about problem solving and the referred cases is anticipated, based on Coburn's (2001) results. She found that differences in worldviews and shared understandings across groups influenced how each group framed the presenting issues. The difference in policy implementation in schools within a district (Spillane, 1998) and groups within a school (Coburn, 2001) can be attributed to the personalized sensemaking that occurs both on an individual and collective level.

### Educational Beliefs and Belief Change

#### Educational Beliefs Supporting Problem Solving

School-based problem-solving models aim to change more than how schools serve students experiencing learning difficulties (Noell & Witt, 1996). As stage-based models they provide a structure for consultation regarding student concerns and

developing classroom-based interventions. This change in practice, from a reliance on testing for special education determination to individualized classroom-based interventions, is expected to be accompanied by a change in educational beliefs, particularly teacher attribution regarding the cause of student-related problems (Zins & Ponti, 1996). The traditional assessment models are associated with a child-deficit orientation, in which the source of the problem is identified as within the child and proposed interventions involve remediating the weakness or somehow “fixing” the child (Ysseldyke & Martson, 1999). Conversely, school-based problem-solving models are associated with an ecological framework that emphasizes the child’s learning environment (Henning-Stout, 1993).

As demonstrated by Knotek et al.’s qualitative study (2003), the structure and stages of school-based problem-solving models can be unfamiliar and uncomfortable to teachers. These stages require an alternative conceptualization about student learning and progress from the teachers, and the sample of participating, referring teachers initially resisted the structure of the problem identification and problem analysis stages. They were concerned that they were being requested to oversimplify the student’s problems that they perceived as, “multifaceted, intertwined, and global” into “narrow, data based, and instructionally focused problems” (p. 314). Rather than develop problem definitions that were concrete and behavioral, the teachers preferred to conceptualize the student as a “whole child” in a “global” fashion. Teachers’ educational beliefs that involve understanding the student as a whole, complex child are conducive toward the special education paradigm of disability status and service provision, but not the stage-

based, behavioral paradigm of school-based problem-solving models.

As school-based problem-solving models represent a “paradigm shift” in service delivery (Noell, Duhon, Gatti, & Connell, 2002), a corresponding paradigm shift in teachers’ educational beliefs is anticipated by some researchers (Brown & Nagle, 2003; Rosenfield & Gravois, 1996). Indeed, successful school-based innovations have been credited to changes in teachers’ beliefs, and failed school programs have been blamed for not forcing school staff to reexamine their pre-existing beliefs (Brookhart & Freeman, 1992; Lipman, 1998). It is not unreasonable to concur that if school staff do not change their conceptualizations about struggling students and the process of learning, school improvement efforts, including problem-solving teams, will result in reshuffling or reorganizing school infrastructure without achieving the stated goals. Examining teachers’ prior beliefs and reflections and their understandings about the program in question can clarify if any of these beliefs changed through their participation in the program.

#### Educational Beliefs Regarding Referred Students

Despite the importance of educational beliefs, this construct is rarely researched in the context of consultation. Teacher-focused research in consultation typically addresses teachers’ perceptions regarding the characteristics of effective consultants (e.g., Knoff, Sullivan, & Liu, 1995), intervention acceptability (e.g., Hyatt, & Tingstrom, 1993; Reimers, Wacker, & Koepl, 1987), teachers’ attributions of the referred problem (e.g., Christenson et al., 1983), and teachers’ self-efficacy for resolving the referred problem independently (Hughes, Barker, Kemenoff, & Hart, 1993). Among these topics,

only teachers' attributions and self-efficacy would fit into the category of "educational beliefs" (Calderhead, 1996). However, the current research regarding teachers' attributions of the referred problem are too contextualized to be included in the research category of educational beliefs.

Despite the general lack in research about educational beliefs in the context of consultation, a few very recent studies have begun to address this construct. Knotek et al. (2003), for example, conducted a qualitative study in order to understand the experience of 13 case managers and 5 referring teachers who participated in a school-based problem-solving model. Athanasiou et al. (2002) used qualitative methods to explore the beliefs and practices of school psychologists and teachers who participated in consultation. Athanasiou note that the quantitative research tradition in school-based consultation has established the desirable practices of consultation, but does not capture the nuanced beliefs and practices of those engaged in school-based problem-solving models in schools. They consider their qualitative study to provide important, initial answers to questions about the attributions teachers and school psychologists make about students' learning and behavior problems, the relation between these attributions and the developed interventions, and the interpretations the consultants and consultees drew about the cases' success or failure.

Athanasiou et al.'s (2002) study contributed to the understanding about beliefs and practices within school-based consultation. However, their study focused on four-session consultation cases between four consultant-consultee dyads and not the larger school context and community. Indeed, the study's narrow focus did not acknowledge

the topics of sociocultural learning or individual or collective sensemaking, which can influence the beliefs and practices being studied. The current study takes a broader look at teachers' and school staff's attributions by focusing on team-based consultation from an organic, school-wide perspective.

While some school-based problem-solving models claim to have the goal of changing teachers' beliefs, this construct is conceptualized simplistically as a child-deficit orientation or an ecological orientation (Zins & Ponti, 1996). Indeed, few school-based problem-solving models discuss teachers' beliefs and those that do limit the discussion to describing their orientation as an ecological framework (Meyers & Nastasi, 1999) without elaborating on which educational beliefs are acceptable and which are contradictory. Consultation's discussion of educational beliefs is often broad and sweeping, addressing global worldviews without articulating nuanced educational beliefs or a belief change process (e.g., Wilson & Silverman, 1991). While a subset of studies address teachers' self-efficacy, they are limited in number and limited to self-efficacy regarding the particular problem of the consultation case (e.g., Gutkin & Hickman, 1988). The discussions about teachers' beliefs in the context of consultation remain vague, and have not yet examined if teachers modify their educational beliefs through participating in consultation and how this change might occur.

Pajares (1992) offered a clarification that is useful for the current discussion: he recommended replacing the popular term "teacher beliefs" with "educational beliefs." Since the construct of interest is the beliefs about learning and knowledge and not the role of the practitioner who holds them, "educational beliefs" is a more inclusive and

accurate term. This point of clarification is relevant for consultation and problem solving as well. While teachers refer the majority of cases to the problem-solving process, school specialists often serve as consultants and problem-solving team members. Therefore, school-based problem-solving models seek to change the educational beliefs of all school staff who participate in consultation and serve children, not only teachers. Nonetheless, teachers are often highlighted as the target population for belief change by consultation models.

### Educational Beliefs about Student Learning

The limited research about teachers' educational beliefs in the context of school-based problem-solving models notwithstanding, the domain of educational beliefs is well-developed and well-researched (e.g., Calderhead, 1996). Included in the research body of educational beliefs are teachers' concerns about school-based programs and initiatives (Hall & Hord, 2001), global educational perspectives about student learning (Lipman, 1998), and nuanced educational beliefs about learning and knowledge (Brookhart & Freeman, 1992; Pajares, 1992). Within the scholarly discussion about educational beliefs, distinctions are posed between knowledge and beliefs (e.g., Roehler, Duffy, Herrmann, Conley, & Johnson, 1988) and types of educational beliefs (e.g., Kagan, 1990). The distinctions and categories, however, do not enjoy consensus (Alexander & Dochy, 1995), and there has not been agreement to date regarding their definitions and how to best study the influence of knowledge and beliefs on educational decisions (Nespor, 1987; Pintrich, 2002).

This long-standing and involved research body about educational beliefs does not

seem to have entered consultation researchers' discussion about educational belief change. Despite the relatively simplistic conceptualization of educational beliefs in the context of consultation as two dichotomous orientations, either child-deficit or ecological, the construct of educational beliefs is in fact much more broad and complex. Kagan (1992) defined educational beliefs as, "tacit, often unconsciously held assumptions about students, classrooms, and the academic material to be taught" (p. 65). Educational beliefs refer to beliefs about the nature and source of knowledge (i.e., epistemological beliefs), beliefs about teachers' abilities to influence students' learning and teachers' self-perceived competence (i.e., teacher efficacy), and explanations about teachers' or students' performance (i.e., including attributions, locus of controls, motivation, writing apprehension, and math anxiety) (Pajares, 1992). Among all of the different types of educational beliefs, teacher trainers have not agreed as to what constitutes "desirable" educational beliefs (Brousseau & Freeman, 1988) nor how to ascertain which beliefs influence teacher judgments and practice (Munby, 1986).

The subset of educational beliefs one would expect consultation researchers to find particularly relevant is epistemological beliefs. Epistemological beliefs address the nature of knowledge and the process of knowing (Hofer & Pintrich, 1997). Hofer (2002) defined epistemology as "how the individual develops conceptions of knowledge and knowing and utilizes them in developing understanding of the world. This includes beliefs about the definition of knowledge, how knowledge is constructed, how knowledge is evaluated, where knowledge resides, and how knowing occurs" (p. 4). Elbaz (1983) conducted a case study and described how a teacher's beliefs about knowledge and the



learning process influenced her teaching and classroom practices. Personal epistemological theories, similar to educational beliefs, do not require a formal awareness on the part of the individual in order to be inclined toward a theory.

Despite the relevance of the well-established research domains of educational beliefs and epistemological beliefs to school-based problem-solving models, they do not provide a useful research framework for belief change in the context of consultation. The research on educational beliefs has produced many taxonomies and theoretical structures that characterize beliefs in a highly-nuanced and static fashion that minimally varies with the situation. School-based problem-solving models, however, present a participatory, dynamic forum for teachers to discuss students' learning and develop interventions. A more fluid model that addresses the reflective nature of problem solving (e.g., Schön, 1983, 1987) and the social dimension of team problem solving (e.g., Yanow, 1996) can better capture the learning and change process that school-based problem-solving models hope to create. In addition, because educational beliefs in the consultation literature are conceptualized as global frameworks, a process-oriented approach provides a better research framework than the well-developed domain of educational beliefs.

### Educational Perspectives

Models of educational approaches (e.g., Lipman, 1998) and educational frameworks (e.g., Pearl, 1997) are broad understandings, perspectives, and even worldviews that involve conceptualizations about learning and achievement. While the research methods used to examine educational beliefs and epistemologies are mostly quantitative and often rely on self-report (e.g., Calderhead, 1996), qualitative research

methods are typically used to study educational perspectives (e.g., Clandinin, 1985).

Participant-observation and open-ended interviews are common methods used to research broad educational approaches, and the data are interpreted independent from the established taxonomies and definitions of knowledge and beliefs.

Educational perspectives and school reform. One compelling example of a qualitative study that examined the educational approaches of school staff in the context of a new program is presented by Lipman (1998). Lipman examined two neighboring schools' restructuring programs and attributed the programs' lack of success to the unchanged educational perspectives of the staff. The goal of the restructuring was to integrate the low-achieving African American student population into the successful mainstream of the school. Through functioning as a participant-observer, attending meetings, and interviewing teachers, Lipman found that the reform did not confront the teachers' underlying beliefs about the educability of their poorly performing students. Lipman concluded that without challenging teachers' prior educational beliefs, the reform could not produce the desired outcomes.

The restructuring reform that Lipman (1998) researched was not successful in improving the target students' academic and behavioral performance, as the staff did not become more reflective about their teaching practice or systemic inequities in the school. Rather, they adapted and modified the reform to fit their pre-existing beliefs and understandings about student learning. The restructuring reform created an external appearance of change, because the staff were participating in related meetings and activities. However, by adapting the reform to fit their educational beliefs instead of the

reform changing their conceptualizations about student learning and effective interventions, the status quo continued.

Within the two schools Lipman (1998) inferred four explanatory models, or categories, articulated by teachers that accounted for the low achievement and high discipline rate of African American students. These four models are the deficit model, social relations model, critique of racism, and educational critique. Teachers who supported the deficit model attributed the students' school failures to their social and economic condition and the perceived weaknesses in their family structure and culture. These teachers regularly labeled the African American students as "at-risk" because of their racial and class status. Teachers who ascribed to the social relations model presumed that students who were not successful did not experience a sense of belonging and positive relationships with the adults in the school. These teachers were in favor of establishing a mentoring program that involved teachers building relationships with the students to improve the school climate. Teachers who identified racism as the explanation for the African American students' poor performance perceived there to be racial inequality and racism throughout the school and they believed that a feeling of powerlessness alienated these students. Teachers who espoused the fourth model, educational critique, emphasized the need for an appropriate curriculum, instruction and school policies in order to improve the success of struggling students.

Lipman's (1998) description of these four models of beliefs indicate a link between perspectives and actions, proposed and actualized interventions. The interventions were logical extensions of the belief models that the teachers held and the

implementation of these interventions created a superficial change but did not produce the intended results. For example, teachers who ascribed to the deficit model believed that the students came from deprived and inadequate home environments. They sought to invite the parents to the school and attempted to encourage them to be more involved as a means to improve the home environment. This gesture to strengthen the home was inspired by the restructuring and expected to improve “at-risk” students’ academic performance and behavior. The students, however, continued to experience problems at school.

The flaw of the deficit-based intervention that attempted to welcome parents into the school was that it did not address the underlying problem of differential treatment of African-American students at school (Lipman, 1998). Rather than recognizing the racial inequity in the schools as the source of the African American students’ low grades and behavior problems and addressing their status as second-class citizens, the students themselves were identified as the reason for their poor performance. Because the restructuring reform did not force the teachers to reexamine their prior educational approaches, the deficit-oriented interventions were off-target. Without fundamentally changing their practice, which needs to be accompanied by a change in beliefs, the teachers will be unable to integrate the African American students into the successful mainstream of the school.

Those who felt that the school was racist did not perceive the restructuring efforts as addressing the African American students’ second-class status in the school. Instead, they felt that the school culture conveyed a double standard for the students of color by

setting lower academic standards for the African American students and disciplining their misbehavior more punitively. Lipman documented that these teachers' beliefs influenced their classroom practice, another example of the relation between educational beliefs and practice. However, the teachers who attributed the African American students' poor grades and high suspension rate to a systemic problem of racism were in the minority and did not have the support of the administration. They were not empowered to address the school's racism, so their individual beliefs did not enable them to effect change at the school level.

The different interventions and changes that emerged from the restructuring effort did not address what Lipman assessed as the real problem: that the African-American students were receiving sub-par instruction and unreasonably punitive consequences for behavioral infractions. Since the reform did not require the teachers to address this directly, the proposed interventions did not yield meaningful change. While the teachers participated in the motions of the reform effort, Lipman attributed its failure to the staff not adopting matching beliefs that could support it. This poignant example illustrates the importance of studying teachers' reflections as a means to understand the process and eventual outcomes associated with an innovation.

Other research supports this same claim: that teachers' beliefs about students, learning, and the curriculum influence their implementation of new programs (e.g., Darling-Hammond, 1990; Spillane & Jennings, 1997). Jennings (1996) compared three teachers who were expected to adopt a new reading curriculum. She concluded that, "even though [the teachers'] existing practices and beliefs were very distinct, the policy

made its way into all of their classrooms without fundamentally disrupting them” (p. 83). Each teacher adopted the parts of the policy that made sense to them and fit into their existing beliefs and classroom practices. However, some of their beliefs were modified as they continued to be engaged in policy implementation and were exposed to new ideas in other realms. In addition, each teacher claimed to be implementing the policy as designed despite the variation in their classroom practices. Such studies strengthen the case for studying the educational beliefs of those responsible for implementing a school-based problem-solving model, as these beliefs can shape their interpretation and implementation of the model as well as the likelihood of their beliefs changing through continued participation.

Variations of the deficit model. School-based problem-solving models that do discuss their assumptions and beliefs consistently reject the deficit model (Rosenfield, 1987). The deficit model locates blame for a problem on the individual, not the external or school structure (Valencia, 1997) and does not recognize that environmental factors may perpetuate or exacerbate the problem. In the deficit model, students are seen as lacking needed skills, unable to cope with demands made on them, and are unable to master higher-order concepts until their weaknesses are sufficiently remediated (Elbaz, 1983). This view is the equivalent of “blaming the victim” (Valencia, 1997, p. x), and ignores important contributions from the environment that are influencing the student’s performance. As compared to teachers who believe they can “make a difference” and accept responsibility for student failure and success (Kagan, 1992), teachers who espouse the deficit model do not feel empowered to help the student and do not accept

responsibility for the student's struggles (Christenson et al., 1983).

Christenson et al. (1983) verified the prevalence of the deficit model in teachers' attributions toward the students they referred for special education testing. Among the sample of 105 elementary school teachers who referred students for psychoeducational evaluations, 89.3% of the reasons were attributed to within-student deficits or the student's home. More than half of the student-symptoms were stable traits that the teacher could not easily address, such as birth defects and low academic potential. Similarly, the most common home causes were concerns that could not be easily addressed through school-based interventions. These results underscore the frequency and convenience of attributing a student's learning problems to internal deficits or causes outside the teacher's control. This orientation, however, is not so generic that all teachers conceptualize it identically.

There are variations of the deficit model that acknowledge environmental factors, for example the "degradation approach" (McDermott, 1993). While the deficit model assumes a static quality-- the child's disability will remain even if there are successful interventions-- the degradation approach emphasizes the tasks that the child is asked to perform. The degradation involves a child, "not only do[ing] the wrong thing, but exactly the wrong thing that everyone is looking for someone to do and then at just the right time" (p. 286). Even though the child's weaknesses are acknowledged as being embedded in a context, instead of attempting to build on the child's current skills and strengths, his or her weaknesses are emphasized. According to this model, a referring teacher or problem-solving team would emphasize what the child cannot do and develop

interventions that attempt to remediate these weaknesses without trying to advance the student in the curriculum.

In a case study that followed Adam, a child identified with a learning disability, the researchers found that his teachers and peers paid more attention to his disability than to him as a person (McDermott, 1993). It seemed that Adam's teachers and peers were on the lookout to identify his mistakes and expose his weaknesses. The degradation approach accounts for contextual variables, which feature prominently in school-based problem-solving models, but the child's needs may be highlighted to the point of her or his embarrassment. In consultation, the student's performance is examined in the context of the environment. The developed interventions in most models, however, are supposed to be based on what the child can do and the child's strengths in order to formulate realistic short-term goals and promote success.

Another variation of the deficit model, the "accumulated environmental deficit thesis," is discussed by Pearl (1997). This model dominated government policy and practice in the 1960s and identified cultural deprivation as the source of lower-class children's woes. Without the necessary intellectual stimulation and adequate socialization that white middle-class children receive, according to this position, children of cultural minorities will not grow or develop properly. Those who endorsed this view assumed that through language interventions a deprived student's cognitive development could be improved. Pearl considered this version of the deficit model to be more limited in scope than the classic deficit model, in that it historically addressed language development and resulted in beneficial social interventions, such as enriched preschool



and focused school interventions (e.g., Head Start, the Elementary and Secondary Education Act of 1965).

A major flaw with the accumulated deficit model was the lack of deficits observed in the poor children who were categorized as in need of the social services (Pearl, 1997). Significant deficits were not necessarily apparent in the population designated as requiring these interventions when they first entered school. When “deficits” did appear years later, for example in the fourth grade, the preschool enrichment program was judged to be ineffective in preventing the deficits from “accumulating.” “Accumulation” was added to the generic deficit model to explain the late emergence of the anticipated deficits. While it would be more logical to look to the child’s current environmental influences, such as recent school experiences, to account for underachievement, those who support this model prefer to identify the lack of stimulation and supervision in the home environment as the culprit for the child’s “deficits.”

Wilson and Silverman (1991) present a defense of the deficit approach regarding “exceptional students” that should be acknowledged, as it is held by many educators. They refer to it as a “comprehensive and coherent viewpoint about the needs and treatment of exceptional pupils, compatible with their duties as educators” (p. 205). While they note that the deficit approach is often disparaged in the research literature, they cast it in a more benign light. They note that teachers with this perspective recognize their students’ needs as requiring that they be educated separately from students without exceptional needs but are not “antagonistic” toward them. This

characterization of the deficit approach in which students can be legitimately recognized as the source of their own problems highlights the ambiguity and tension teachers must resolve when they refer a student to problem solving and identify the cause of the referred problem.

Summary. The subset of broad educational perspectives summarized here present an alternative conceptualization of educational beliefs. In contrast to the detailed, explicit constructs of educational beliefs that are subdivided into domains, educational approaches are more holistic and embedded in the school setting. For example, Lipman (1998) and McDermott (1993) conducted individual case studies and inferred how their participants understood their students' learning experience from the naturalistic context. They confirmed that the deficit model and its variations hold intuitive and tempting appeal when teachers attempt to solve school-wide and individual student problems.

#### Discussion of Educational Beliefs within Problem Solving

When school-based problem-solving models claim to modify the beliefs of teachers and consultants, the beliefs in question are often characterized as global orientations that are best researched *in situ* and qualitatively, not the micro-level educational beliefs and epistemologies examined through self-report measures and pre and post-test assessments. However, while school-based problem-solving models clearly represent a change in practice and service delivery for students in need of extra support, the change they represent in educational beliefs is less clear. The educational perspectives that will be examined in the current study will be inferred through qualitative methods in the naturalistic context of a school in the first year implementation

of a school-based problem-solving model.

Most discussions regarding school-based problem-solving models are limited to descriptions of the practice of a particular model (e.g., Fuchs et al., 1990) or an implicit or explicit acknowledgment of the ecological framework (e.g., Noell & Witt, 1996). In fact much of the discussion about consultation's assumptions can be found in theoretical articles (e.g., Meyers, 1995) and not the ones that present specific models. Discussions about the underlying assumptions of consultation models typically reject the deficit attributions of students' difficulties without considering the variations of deficit thinking (Rosenfield & Gravois, 1996). As suggested by Valencia (1997), beyond the simplistic deficit model, there are adapted, more sophisticated versions of deficit thinking that continue to blame the victim for the presenting problem.

In fact, among the six school-based problem-solving models summarized in Table 1, only three address educational beliefs and to varying degrees. Chalfant et al. (1979) are one of the first to present a school-based problem-solving model, Teacher Assistance Teams. They identify the model as having eight purposes, two of which are, "a) Helping teachers conceptualize and understand the nature of individual handicapped children's learning and behavior problems...f) Creating a more positive attitude among regular teachers and administrators with respect to working with handicapped children who learn differently..." (p. 94). While these purposes are not overtly deficit-based, Valencia (1997) and Lipman (1998) would be critical of the implicit recognition that the referred children's problems are innate that require new attitudes and understandings on the part of their teachers.

Similarly, Curtis et al. (1988) summarize the Prereferral Intervention Teams and offer a limited discussion about educational beliefs. In the introduction they state

It is important to emphasize that intervention assistance programs are *not* intended to preclude or even delay services for students who are handicapped and can be served most effectively through special education. In those cases where a handicapping condition is suspected, a multifaceted psychoeducational evaluation relating to special education eligibility is appropriate (p. 259).

This comment suggests that Intervention Assistance Teams are conceptualized as an alternative practice to serve students experiencing difficulty, regardless of the cause of the problem. This premise, however, allows for the possibility that a deficit attribution is a legitimate explanation for some students' difficulties.

Unlike the other models' lack of discussion regarding assumptions or brief statement that requires interpretation, Rosenfield and Gravois (1996) name and describe Instructional Consultation's three critical assumptions. They are: "All students are learners; Focus on instructional match, not place; Build a problem-solving learning community in the school" (p. 16). This discussion of assumptions is more elaborate and detailed than the other models' and appears to reject all variations of deficit thinking. Nonetheless, this discussion is relatively simplistic in that its discussion of assumptions remains at the macro-level without addressing educational beliefs or conceptual change.

Some models' lack of discussion about problem attributions and educational beliefs coupled with other models' lack of complete rejection of the deficit attribution offers a theoretically complicated picture. The association of school-based problem-

solving models with an ecological framework is not consistently stated across models and is not adequately developed (Gutkin & Hickman, 1988; Hughes et al., 1993). This undeveloped discussion about the ecological framework as well as statements encouraging partial deficit thinking suggest that some types of deficit attributions are acceptable within particular consultation models. It seems from this overview of different school-based problem-solving models that if referring teachers assign a deficit attribution to a student's problem, they may not be contradicting the assumptions of the model their school is using.

### Belief Change

Importance of beliefs. While beliefs are commonly recognized as the underlying basis for action, their relation to action and the process by which they can be influenced or changed is elusive. Regardless of the theoretical structure of educational beliefs, be it global and overarching (Pajares, 1992), discipline-specific (Hofer, 2000), inter-related (Hofer & Pintrich, 1997), independent of one another (Bunting, 1984), or varying with context (Schommer-Aikins, 2002), beliefs are recognized as stable and resistant to change. Most belief change models are stage-based and focus on the individual, similar to the structure of Perry's (1970) prototypical model of intellectual development. However, these individualist, developmental models of belief change are less appropriate for analyzing a classroom-oriented, action-based process of problem solving that is meant to foster belief change. As teachers attempt to implement a new initiative that attempts to change their practice and beliefs, a dynamic, socially-based model of belief change may be more useful.

Inherent in the premise that educational beliefs are worthy of study and that these beliefs impact students' educational experiences is the idea that beliefs have the potential to be changed. Most research on educational belief change focuses on pre-service and beginning teachers (e.g., Brosseau & Freeman, 1988; Weinstein, 1988), and few studies involve a direct effort to influence teachers' beliefs about learning and instruction (e.g., Florio-Ruane & Lensmire, 1990). Brosseau and Freeman argue that teacher education programs have a limited impact on the educational beliefs of pre-service teachers, and that they do not challenge inappropriate beliefs or encourage the development of new beliefs. In addition, most studies that examine belief change primarily use a pre- and post-test design. This methodology, however, merely documents a difference in responses to a survey after a period of time as passed, without an account for the mechanism or process of change.

Belief change process. Belief change models have been proposed that directly address the change process (Bendixen, 2002; Pintrich, Marx, & Boyle, 1993). However, these models focus on the individual and explain the process in a developmental, stage-based fashion. They attempt to explain a dramatic shift in a person's beliefs, and involve a series of stages that are stimulated by a new experience or startling new information. This approach may not best account for a change process that capitalizes on the activity-filled classroom experience, involves ongoing collaboration with colleagues, and can involve small, incremental change, not necessarily major, fundamental change. In addition, because most school-based problem-solving models are team-based and collaborative, the social experience of discussing cases and factors that influence learning

in groups can stimulate belief change that cannot be sufficiently explained by an individually-based theory (Kelly & Green, 1998).

Selected school-based problem-solving models claim that they aim to change teachers' beliefs and the remaining models arguably hold this principle implicitly. However, this claim or implicit assumption is without an articulated or referenced belief change model. In a very recent article, Sandoval (2003) discusses the conceptual change the teacher is expected to undergo when participating in consultee-centered consultation, a category of consultation that emphasizes the active role of the consultee, or the referring teacher, that would include some but probably not most of the school-based problem-solving models. Sandoval presents a neo-Piagetian explanation in which a teacher's theories about student learning and behavior do not adequately account for a particular student, explaining the need for the referral to the school's problem-solving process. With the help of the consultant, the teacher experiences conceptual change and concludes the consultation with an, "intelligible, coherent, and internally consistent [theory that] must seem like a plausible explanation" (p. 257) and will be expected to work with the current referred student as well as future students and problems.

This account of conceptual change, however, is relatively simplistic in addition to being limited to dyadic consultation. Sandoval does not include data in his discussion and does not allow for the possibility that teachers might enter and exit consultation with partial or incoherent theories of student learning and behavior. Hylander (2003) offers another account of conceptual change within consultee-centered consultation based on her qualitative research, grounded theory. She explains consultation as a process of both

the consultant and consultee talking and influencing each other's verbal presentations and mental representations of the referred problem. When one member of the pair has a change in the representation of the problem, or a conceptual change, this person has experienced a "turning." Turnings indicate that there has been a change without dictating the type or depth of the change.

This recent discussion of conceptual change does not seem to have permeated the problem solving literature yet. In addition, since most school-based problem-solving models fit in the category of behavioral consultation it is not clear how these newly suggested change process in consultee-centered consultation would apply to most models used in school settings. In fact, while belief change is essentially never discussed in the school-based consultation literature, a third process can be inferred as the presumed belief change mechanism. The lack of discussion about beliefs and belief change and the extensive discussion about problem-solving practices and implementation studies suggest an interpretation that high program implementation, or a change in practice, will inspire a change in beliefs.

According to this process, the problem-solving team should emphasize their skill development and problem-solving practices. This will enable their referred cases to be resolved successfully. Their experience of high implementation and successful outcomes will stimulate them to reconsider their beliefs and adopt new educational beliefs that align with indirect service delivery and consultation. This process of belief change, although inferred from a lack of discussion, seems to be the intention of most model developers, in contrast to the coherent, comprehensive theories about student learning



(Sandoval, 2003) or “turnings” in consultee’s mental representations about referred problems (Hylander, 2003). A process of changed beliefs resulting from changed practice corresponds to Fullan’s (2001a) position on program implementation. After the implementors achieve success with problem solving they will be able to evaluate its perceived usefulness and feel encouraged to adopt the assumptions associated with indirect service delivery.

However, the approaches of the reflective practitioner (Schön, 1983, 1987) and collective sensemaking (Yanow, 1996) would argue that change in practice can only follow a change in beliefs and not precede it. A team or group cannot have high implementation with a program if they don’t first understand and identify with the supporting assumptions of the model. Given these mutually exclusive positions regarding changed practice and belief change, it is important to study both implementation of a school-based problem-solving model as well as the educational approaches of those responsible for implementation to clarify the relation between these two constructs.

### Summary

Due to the complex and discrete nature of the taxonomies and distinctions between types of educational beliefs, they will not be used as the organizing construct to interpret this study’s data. Such distinctions are more appropriate for quantitative research that emphasizes clear categories, definitions, and the static aspect of beliefs, not teachers’ general conceptualizations about problem solving and referred cases that may be influenced through discussions with their colleagues. Similarly, there is a lack of fit

between the design methods commonly used to study belief change (pre- and post-test designs and individual, stage-based models) and the dynamic experience of responding to student behavior and collecting intervention data on an ongoing basis. For these reasons, a social constructivist approach, such as communities of practice (Wenger, 1998), is the most suitable theoretical frame to organize and interpret teachers' experience with the first year implementation of a problem-solving process.

### Communities of Practice

The communities of practice framework (Wenger, 1998) offers a coherent blend of the individual, reflective practice approach (Schön, 1983, 1987) and the social, collective sensemaking approach (Yanow, 1996). In the communities of practice framework, the naturalistic context is highlighted as a prominent factor in understanding the learning and practice of community members. Identifying a professional team, or community of practice, as the locus of learning represents an extension beyond the individualistic sensemaking or reflective paradigms (e.g., Jennings, 1996; Spillane 1999). Rather than focus on the reflection, mental reconstruction, and resulting action of an individual practitioner, meaning-making is conceptualized as a group process in which a collective meaning emerges as the members influence each other through their individual perspectives.

### Communities of Practice and Sociocultural Learning

While the communities of practice framework (Wenger, 1998) does not make explicit reference to either the model of reflective practice (Schön, 1983, 1987) or collective sensemaking (Yanow, 1996), the approaches are fundamentally similar in their

emphasis on contextually based learning and de-emphasis on generalized or abstract knowledge. Communities of practice aligns best with collective sensemaking as the unit of analysis, or the primary location of meaning-making and reflection, is the group. However, the sensemaking of the individual and her or his reflection and practice provides an important contribution to the group's meaning-making process.

Communities of practice is a sociocultural learning approach in which the individual's role as an independent decision-maker is diminished and his or her role as group member is emphasized (Wenger et al., 2002). Learning occurs as a collective experience as individuals engage and participate in a group and its activities, mutually informing and influencing each other (Lave & Wenger, 1991). Learning, according to sociocultural theory, does not indicate a particular method of pedagogy, but highlights that learning is an ongoing process inherent to the social nature of humans and involves the whole person. According to sociocultural theory, learning and cognition are not understood as acquiring generalized or abstract knowledge, but as developing knowledge and skills that are embedded in their context (Rogoff, 1984).

In this conceptualization of learning, the context and social dimension are emphasized (Wenger, 1998). Lave (1993) characterizes learning as, "the construction of present versions of past experience for several persons acting together" (p. 8). Learning is not a designated activity or an objective, but is the, "process of being engaged in, and participating in developing, an ongoing process" (Wenger, 1998, p. 95). Abstract and concrete knowledge and knowing and doing are not acknowledged as legitimate dichotomies in this approach. Rather, through the social experience of engagement in

action and interaction one develops social knowledge as well as a transformed personal identity that transcends the distinctions implied between different types of knowledge.

#### Assumptions of Communities of Practice Framework

The concept of communities of practice was first introduced by Lave and Wenger (1991). They indicated that the term “community” refers to multiple individuals participating at different levels in an activity system, although the members do not necessarily comprise a well-defined group with clear affiliation boundaries. Across the multiple levels of participation, different interests, and varied viewpoints, members of a community, “share understandings concerning what they are doing and what that means in their lives and for their communities” (p. 98). A group of individuals with a common, bonding interest comprise a loosely-formed community that negotiates meaning through its practice and establishes norms through its activity and participation. The group then becomes the mediating force that acts as a filter for the individual member’s learning experiences.

Wenger (1998) listed four assumptions of the communities of practice framework. The first assumption is, “we are social beings” (p. 4), the primary feature of all sociocultural learning theories. The second assumption, “knowledge is a matter of competence with respect to valued enterprises” (p. 4), identifies knowledge as socially valued. Wenger’s examples of knowledge include singing in tune, fixing machines, and being convivial. The third assumption emphasizes participation and the practice dimensions of learning: “knowing is a matter of participating in the pursuit of...active engagement in the world” (p. 4). The fourth and final assumption, “meaning- our ability

to experience the work and our engagement with it as meaningful- is ultimately what learning is to produce” (p. 4), thus considers learning to involve creating personal meaning about our environment and actions.

These assumptions about learning and knowledge are embedded in the social context of a community, where members define the knowledge and activities that are valued as a group (Wenger, 1998). The community provides an ongoing opportunity for engagement and interaction among its full participants who renegotiate meaning as new directives and innovations are introduced. In contrast, the entering members, the peripheral participants, are focused on learning the meaning and practice of the established community. The peripheral participants are said to be in a state of “legitimate peripheral participation,” or in the process of gaining entry into the community as they acclimate themselves to the norms and practices of the community (Lave & Wenger, 1991). The role of peripheral participant is a positive one, as these members are moving toward full participation through their initial learning. Full participation in a community is the activity that represents engagement and learning among all members. As participation levels can vary across members, legitimate peripheral participation accounts for how entering members understand the functioning and practices of the community, which they will shape further as they become full participants themselves.

### Communities of Practice in Educational Settings

According to the sensemaking and social constructivist theories, teachers’ variation in practice develops from their individual beliefs, professional experiences and learning histories (Little & McLaughlin, 1993; Jennings, 1996). All teachers represent a

unique blend of experiences and beliefs, which colors their understandings of instructional policy and results in differences in practice (Cohen & Ball, 1990; Jennings, 1996). However, despite teachers' individualized backgrounds and beliefs that influence their current practices, they are not truly solitary in their work environment (Printy, 2002). Teachers remain responsible for managing individual classrooms and teaching particular students, but they are also engaged in multiple contexts that influence their thinking and inform their practice (Talbert & McLaughlin, 1994). For example, teachers may share regular, collegial interactions with others in their department, the school-wide culture may promote professional growth and interaction, and teachers may belong to teacher networks outside the school context that support innovation. These and other contexts can be understood as loosely-bounded communities, and each membership teachers hold represents their participation in a "community of practice" (Lave & Wenger, 1998).

In school-based research, communities of practice have been conceptualized as groups, teams, and departments of teachers (Gallucci, 2003; Printy, 2002). In the capacity of "professional community", the group is a unit that mediates the learning experiences and practices of the individual members, typically teachers and specialists. As teachers regularly interact with their colleagues, they shape each other's understandings of new initiatives and subsequently their practice (Brown & Duguid, 1996). This is a "learning-in-working" approach in which teachers experience a "fluid evolution of learning through practice" (Brown & Duguid, p. 59). Their working and learning as a group involves a collective effort of interpreting innovations and developing

supporting practices. Through working together, consulting with each other, and participating in professional development together, collective interpretations and practice can emerge from within the group (Darling-Hammond & McLaughlin, 1995).

Applying the label of “communities of practice” to groups of teachers and staff in schools does not connote a positive or negative value. This construct does not imply that the group is productive, efficient, or open-minded. This label also does not imply that the teachers work well together nor that they are more successful or accomplished by virtue of their being members of a community of practice. Communities can reinforce negative stereotypes about students or ineffective instructional practices (e.g., Lipman, 1998). The implication of labeling a group of teachers a “community of practice” is restricted to the expectation that they work together around a common issue, and that they bear influence over each other’s understandings and practices (Printy, 2002). Individual communities need to be studied prior to drawing conclusions about the extent of their collaboration and the quality of their collective endeavors.

### Shared Reality

A concept related to the sociocultural learning experience of communities of practice members is that of “shared reality” (Higgins, 1999). According to this concept, when an individual is uncertain about new information, is contemplating ambiguous information, or is trying to decide on a position, the experience of discussing it with others creates a “shared reality” in which the situation assumes a new clarity. While someone might be hesitant or reluctant in an initial assessment of a situation, after discussing the situation with others the initial ambiguity and tentativeness is replaced

with conclusions that enjoy confidence and conviction. The shared reality that emerges from the group discussion is more powerful and convincing than the private opinions held by the respective individuals.

Higgins' (1999) concept of shared reality is similar to Wenger's (1998) concept of communities' of practice collectively negotiated meaning. According to both, individuals modify their initial understanding through their membership and participation in a group. When teachers refer students to school-based problem-solving models for support, they invariably have preliminary problem definitions and attributions of the problem before they present the case at a team meeting. While their participation in team meetings can promote teacher reflection and challenge them to consider new interpretations and explanations of the problem, if the team members agree with the referring teachers' suggestions by offering similar examples or nod approvingly, the initial interpretations can be reinforced and reflection will be suppressed.

For example, referring teachers may enter team meetings ambivalent about their initial descriptions and attributions of the student's problem. However, once the team meeting is concluded, the teachers have created a "shared reality" (Higgins, 1999) or negotiated a "collective meaning" (Wenger, 1998) in which they established consensus about the problem as a group. If one team member were to not be in agreement with the team's consensus, this person would have the extremely difficult challenge of debating the shared reality. Once there is a shared reality within the community, the information is no longer ambiguous and less susceptible to reflection and modification.

### Summary



Communities of practice is a sociocultural learning framework that highlights the social valuation of knowledge and the contextual nature of the knowledge and learning (Wenger, 1998). The community is a social configuration of participating and engaged members who experience their shared interests and tasks as meaningful through their mutually constructed meaning, or their shared reality. Participation in the community leads to a shared practice, as the members share resources, perspectives, and understandings about their interests in common. Beyond the members' experience of community, their membership also shapes their individual identities, how they understand their personal roles as individuals and community members.

#### Learning and Program Implementation

Implementing and sustaining educational change in an individual school and especially throughout a school system is extremely difficult (Illback et al., 1999). Change is typically preceded by a sense of urgency and accompanied by impatience with the predicted timeline of three to five years before the change takes full effect (Fullan, 2001a). School staff may have difficulty continuing to participate in a program if they do not see the desired results quickly enough. A second obstacle to creating lasting change involves the relative ease with which the hard work and investment can be erased with the departure of one staff member or addition of a new administrator (Curtis & Stollar, 2002). The presence of select individuals, however, becomes less important when the school culture and a majority of the staff support the change. When the school culture is ready and congruent with the proposed change, the likelihood of creating and sustaining educational change is greatly enhanced (DuFour & Eaker, 1998).

The communities of practice framework explains implementation not as an event, but a learning and change phenomenon, particularly when the policy involves teams and groups working together. As a sociocultural learning theory, communities of practice integrates the individual and collective components of a learning experience and can account for the members' practice. When practice is identified as the result of learning, the premise is that the group's negotiated meaning about the new policy guides their implementation efforts. This perspective is in contrast to the assumption that implementation of the program fosters new beliefs and understandings.

Examples of the relation between learning and implementation are provided by Jennings (1996), Spillane and Jennings (1997), and Spillane (1998) in their studies about state-initiated reform efforts that required teachers to change their instruction. Their studies highlight the complexity of the change process and that teachers' implementation of the reforms was dependent on their interpretation of the policy. Depending on the teachers' prior beliefs and teaching experiences, they came to different conclusions about the meaning of the new policy. Their implementation of the particular policies did not result in a homogenization of practice, but a range of practices. This is despite that all the teachers were convinced that they were following the new policy (Jennings, 1996).

Jennings (1996) conducted a case study that involved observing the reading instruction and interviewing three teachers who were implementing a new state-mandated reading curriculum. The new reading policy asked teachers to discontinue their "traditional" reading instruction and conduct literature-based reading instruction and teach the "writing process" instead of discrete writing skills. Among the teachers,

Jennings found that one retained many features of traditional reading instruction, including basal readers, ability groups, and isolated skill lessons. The second teacher included many innovative features in her reading instruction, such as writer's workshop, literature-based reading instruction, and skill lessons embedded in literature. The third teacher practiced a combination of innovative and traditional reading instruction, such as literature-based reading, integrated writing and reading instruction, and isolated skill lessons. As indicated by the full-length descriptions, the teachers' policy-inspired instructional practices were remarkably diverse from one another. However, each claimed in their interviews to be following the new policy and felt that the policy did not call for drastic change from their previous practice.

Without the policy representing a drastic change to any of the teachers Jennings (1996) studied, it had crept into their respective teaching practices to varying degrees. The first and third teachers attended a district workshop to learn about the new reading policy; the second teacher had recently graduated from a teacher's education program that was aligned with the state's new reading policy. While each of the teachers was exposed to the same concepts and two attended the same training about the new reading curriculum, Jennings concluded that the teachers subjectively determined whether the policy actually represented new opportunities, concepts, or messages. It was not the training opportunities that accounted for the differences among teachers' instructional practice, but the personal interpretations the teachers made about the meaning of the policy. Their interpretations of the policy were a "dynamic interaction" (p. 98) of their prior understandings, their interpretation of the policy's messages, and the context of

their training.

Spillane and Jennings (1997) further challenged the notion that teachers change their teaching practice if the district office sends them a coherent instructional policy, regardless of their beliefs and knowledge. In their study on reading policy, they noted superficial changes in the teachers' practice that were consistent with the policy, such as teaching from literature rather than traditional basal readers, the integration of reading in writing lessons and emphasizing the "writing process." However, despite that all of the teachers believed that they were implementing the policy, there were substantive differences across teaching practices beyond these initial similarities.

For example, all of the teachers in this study were teaching literature-based reading. However, students in some classrooms were expected to form an opinion based on the text while students in other classrooms were expected to find textual support to justify their opinions (Spillane & Jennings, 1997). Similarly, all students assigned writing tasks that involved drafting and editing text. However, some teachers expected their students to form opinions about their peers' writing while other teachers, "posed questions that pushed [their] students to offer substantive feedback on their peers' work" (p. 471). This study supports the relation between learning and implementation in which implementation is an indication of the teacher's learning and not an event that precedes the learning and belief change. Teachers' beliefs, experiences, and community memberships, are all seen as forces that influence their interpretations of policy, which results in variation of practice, or policy implementation.

Spillane (1998) reached similar conclusions about the relation between the

teachers' personalized learning about policy and its implementation when he studied implementation at the district-level. He argued that most implementation studies of state policy examine teacher-level or between-district implementation, possibly concealing within district differences. Relying on the premise that implementation of the policy represents an interaction between the beliefs, knowledge, and disposition, the variation of practice at the within-district schools across two districts did not constitute surprise findings.

One feature that accounted for the within-district variation in implementation of the instructional policy was the organizational segmentation of the district office (Spillane, 1998). The district office subunits worked independently from each other and sent mixed messages to the schools. This enabled the schools to choose from multiple interpretations of the policy and pursue the one that made the most sense to them. Another feature that encouraged the lack of homogeneity in the schools' response to the policy was the additional organizational memberships, or communities, to which the teachers and administrators belonged. The educators' connections to professional associations and reform movements outside of the school building provided additional ideas and resources that influenced their interpretation of the policy. Similar to Talbert and McLaughlin's (1994) findings, membership in professional organizations represents additional communities of practice in which teachers participate. These additional communities provide resources and opportunities to reflect and renegotiate meaning that contributes to variation in policy interpretation and practice.

## Conclusion

School-based problem-solving models claim to help schools achieve student-related and teacher-related goals. The student-related goals are reducing identification rates for special education, reducing minority representation in special education, and improving student achievement; the teacher-related goals are improving their problem-solving skills and instructional practice. While the school-based problem-solving models do not articulate the mechanism by which these goals are accomplished, the implied relation involves teachers experiencing collaborative, working relationships with their colleagues that foster new conceptualizations about student learning and the teacher's powerful role in student learning. This relation implies that school-based problem-solving models should be studied from the program fidelity research paradigm: problem-solving cases that evidence a high level of implementation will yield successful outcomes and modify teachers' educational beliefs.

However, sociocultural learning theories and recent research about program implementation would suggest an alternative approach to understanding and studying school-based problem-solving models (Coburn, 2001; Weick, 1995). The related, but disconnected, bodies of research reviewed in this chapter (i.e., school-based problem-solving models, reflective practice, collective sensemaking, educational beliefs, belief change, and communities of practice) identify many possible, related factors that can influence school-based problem-solving model implementation and how the model's goals may be achieved. Sensemaking theories, individual and collective, present learning as a socially-based, ongoing activity embedded in the naturalistic context (Schön, 1983; Yanow, 1996). By extension, implementation of school-based problem-solving models

would be guided by the understandings teachers and staff construct about the policy, and not that implementation creates new perspectives and beliefs within the teachers and staff. Implementation is conceptualized as a function of the participants' learning, and not a discrete entity that promotes learning or belief change.

How the different concepts reviewed interact to explain a school's implementation of a school-based problem-solving model will be explored in the current study. It is possible that Schön's (1983, 1987) paradigm of the reflective practitioner relates to the research on educational beliefs and perspectives, as teachers reflect on learning and their educational beliefs as they engage in the problem-solving process. The communities of practice framework is expected to account for the team enterprise of problem solving and negotiation of the meaning of individually-referred cases and the overall program. This combination of theories with an emphasis on reflection and communities of practice provides a new lens for studying the implementation of school-based problem-solving models.

From the sensemaking perspective, problem solving implementation is best studied by identifying the meaning program implementors attribute to the program in addition to their reflections and underlying educational beliefs. The meaning staff hold about the school-based problem-solving model is expected to be negotiated among them as a group (Wenger, 1998). The communities of practice framework suggests that the teachers and staff are not considering the model independently from each other; but as they work in teams, they negotiate a collective meaning about the model. The grade-level teams represent individual communities of practice and the school represents the

larger community of practice to which teachers belong and participate in as they share ideas, perspectives, and resources among each other. This group experience of sensemaking may influence the teams' and the school's practice of problem solving and how individual teachers understand the model.

The group experience of negotiating meaning about school-based problem-solving models may reflect a composite of individual teachers' reflections and beliefs about student learning (Coburn, 2001; Schön, 1983). Perhaps school-based problem-solving models influence teachers' educational beliefs by increasing their reflections through case referrals. Once a teacher refers a case to the problem-solving team, the ensuing discussion may promote reflection such that the referring teacher and the problem-solving team reconsider their prior educational beliefs and modify them. If school-based problem-solving models encourage teachers to reflect about student learning, the teachers may shift their conceptualizations about student learning, the teacher's role in that learning, and the role of problem solving in causing improved student performance.

Another possible source of teachers' enhanced reflections and changed educational beliefs are the consultative relationships developed through problem solving and the increased opportunities for consultation. Teachers and teams are expected to develop working, collaborative relationships among each other, enabling specialists to serve the general student body through consultation as opposed to directly serving a small subset of students. These relationships may increase teacher support and foster teacher confidence and competence, which can result in improved student performance.



In addition, if fewer students are identified as requiring direct special education services from specialists, the specialists may be able to serve more students through consultation with teachers, providing another mechanism for improving student performance.

Based on the multiple bodies of research reviewed, proficient practice of problem solving does not appear to represent implementation of the aggregate of discrete program elements. Instead, a school's practice of problem solving seems to represent their learning and collective sensemaking about the model, guided by their individual reflections and educational beliefs. Rather than study problem solving implementation from a program fidelity perspective, implementation of the model should be studied from a collective and individual sensemaking perspective in order to identify a possible interaction between social learning and individual reflection.

## Chapter Three

### Method of Inquiry

A qualitative approach was used for this study. Since the collective sensemaking of school staff regarding a new school-based problem-solving model and their individual reflections and educational beliefs are the topics of interest, this research project is conceptualized as an ethnographic-style case study (Creswell, 1998). Ethnographies seek to describe and interpret the behavior, language, and perspective of a social group (Hammersley & Atkinson, 1995). The “case” refers to a bounded system (Stake, 1998), which in this study is one school’s effort to implement a new school-based problem-solving model, the Teacher Assistance Program (TAP)<sup>1</sup>. Therefore, the practices, reflections, and perspectives of school staff who participated in the TAP school-based problem-solving model during its first year of implementation were examined.

This case study is classified specifically as a within-site, instrumental case study (Stake, 1998). The case is “within-site” because only one school-based problem-solving model, TAP, is being used to study the sensemaking process and reflections of school staff who participate in the model. Despite the reliance on a single school-based problem-solving model, the multiple participants and data collection methods offer a richness and complexity to the phenomenon being studied. An “instrumental” case study refers to the case serving an illustrative point regarding a larger issue. The introduction of TAP provides an ecologically valid context for studying the reflections and

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The names of the school-based problem-solving model and the preceding student support model have been assigned pseudonyms in order to protect the study participants.

educational beliefs of those responsible for implementing a school-based problem-solving model (Henning-Stout, 1999; Kagan, 1992; Lipman, 1998).

While qualitative research is a recursive process (Creswell, 1998), the sequence of the data collection methods and analysis is outlined here. Data collection methods included my functioning in the role of participant-observer, conducting reflective interviews, and analyzing collected documents. Nearly all school staff were considered participants in the study, although only a sample of teachers participated in reflective interviews, which consisted of two semi-structured interviews that invited referring teachers to articulate their reflections about the case. The interviews provided the teachers with the opportunity to verbalize their reflections, their expectations for the case, and their beliefs about its progress. The second interview occurred after the case was terminated, giving participants an opportunity to reflect on the case further as well as review their transcripts from the previous interview. Thick description of my observations of the school's culture and their experience implementing TAP, the individual reflective interviews, and the document review will help the reader assess the validity of the interpretations.

In the remainder of this chapter the design of the study is described. This chapter begins with an explanation of my role as researcher, an overview of qualitative methods is presented next, and the chapter ends with a discussion of the research methods that were used. The research methods that are addressed are the ones recommended by Marshall and Rossman (1999). These methods are: (a) research strategies, (b) managing data, (c) site entry, ethics, and reciprocity, and (d) data analysis strategies.

## Researcher Role and Biases

### Researcher Role

The data collection period spanned the 2002-2003 school year when I worked for the participating school system as a school psychology intern. One of my roles as a school psychologist intern was to support a Phase One Teacher Assistance Program (TAP) school in their first year of implementation of the model, as first year implementation of any process is often difficult (Knoff, 2002). My general assignment included three schools, one of which was in its first year of implementing the Teacher Assistance Program (TAP), Woods Terrace<sup>2</sup>.

My role as a TAP resource evolved throughout the school year, beginning with serving as a member of the building-level TAP team, the team of grade-level TAP coaches who were expected to discuss difficult cases and resolve general TAP issues. I also served as the TAP coach for the third grade, which involved running and facilitating the bi-weekly TAP meetings and helping the third-grade teachers with their TAP referrals and other student-based concerns. As the school year continued, I attended grade-level TAP team meetings of other grades and received invitations from individual teachers for consultation services. My role diminished at the end of the year due to the common decrease in referrals and requests for services once the end of the year approaches. My role at Woods Terrace involved exclusively supporting TAP and providing consultation

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All participants, including the school's name, have been assigned pseudonyms in order to protect their identities. In addition, I refer to specialists by first name and teachers and administrators by last name. This represents how the specialists addressed each other and the teachers when working together.

to teachers, which I fulfilled the two mornings every week I visited the school.

While my role as a support to TAP did not preclude my participation in special education and Individualized Education Plan (IEP) meetings, I intentionally did not go to these meetings. My avoidance of the IEP meetings represented my effort to draw boundaries around my role and reinforce that I was at the school exclusively to facilitate TAP implementation. The second reason I avoided the IEP meetings was out of respect for the school psychologist, Helen. As a psychologist new to the school and school system, she was working to establish herself and be seen as the psychological resource in the building. However, she was only at Woods Terrace once a week and half of that time was spent in meetings. As the school psychologist she appeared to feel that she was competing for visibility between myself and Kim, another TAP support who was also a psychologist. Because my role as TAP support did not require my attendance at the IEP meetings and I suspected that Helen did not want the company of a second psychologist, I did not attend these meetings.

Woods Terrace was the participating school for this research study, and being a staff member there greatly facilitated my entry into the role of researcher. I obtained consents for participation across the staff relatively easily and it was convenient for me to function as a participant-observer due to my TAP-related responsibilities. My role as a staff member enabled me to build relationships and establish trust with the school staff. In addition, this study was supported by the school system's psychological services unit, as they expect the findings to help them continue the system-wide TAP implementation. Perhaps, once I began soliciting informed consent from school staff in April 2003, I was

not perceived as a graduate student collecting dissertation data, but as a colleague interested in TAP who was looking to complete her degree requirements.

My intern role as a supporter of TAP implementation was a continuation of my graduate training with school-based problem-solving models and consultation with school staff. My experience with TAP was limited because it is a recently developed model. However, I was not new to consultation and school-based problem-solving models. In my training, I served as a consultant for teachers in a dyadic context who were referring cases to their school's problem-solving team. In addition, I participated in an ongoing research study that involved co-interviewing school staff who were participating in a problem-solving process with assumptions and stages similar to TAP. Observing the primary researcher conduct individual, semi-structured interviews as well as having him supervise me as I conducted interviews, gave me initial interviewing experience.

Qualitative methods and tape recording interviews can potentially feel intrusive to research participants (Bogdan & Biklen 1992; Tannen, 1984). However, my insider status as a school psychologist intern prepared me for the researcher role by enabling me to form productive, working relationships with the staff. In addition, the school culture appeared to support innovation and research, as evidenced by their self-nomination to participate in Phase One of TAP implementation. Finally, the school system's support for the research project probably facilitated the research process as well. These factors are the most likely reasons why the staff accepted my study and appeared to feel comfortable participating in a study about TAP.

### Addressing One's Values

Bogdan and Biklen (1992) have noted the importance of the researcher addressing her or his biases and values that are related to the study. Since one cannot expect to conduct value-free research, it is incumbent upon the researcher to attempt to identify the values that may affect the study and regularly consider their influence. In fact, my use of the first person when discussing data collection methods and findings is a reflection of my direct involvement in the school's practice of TAP and the likely influence my role as a TAP resource had on the findings I report.

My primary bias is that through my graduate training I have regularly reflected on the influence of the classroom environment on student learning and analyzed instructional tasks into their component skills. My own awareness and previous reflection enabled me to feel comfortable with TAP. This bias, however, did not predict the outcomes of the cases that I coached, the data I helped collect, or the assistance I gave to other cases. In the context of collaboration, the teachers are the one who provided information about the individual student and were responsible for implementing and monitoring the intervention, with help from the coach or other supports. Therefore, despite my bias towards an ecological framework, the teachers retained their autonomy and preferences when stating a problem definition and engaging in the process.

While I recognize my personal bias toward the ecological framework, TAP is a team-based process of which I am only one member. Perhaps I could influence a team's sensemaking through my contributions, but I could not conceivably dominate a team and

coerce them into adopting my values. McLaughlin (1993) and Spillane (1998) noted that each professional's role within a school can be connected to her or his outlooks and approaches to problem solving. This would suggest that even as teachers mutually influence each other through discussions and interactions, they retain their own basic values and approaches as they engage in new programs.

My roles and values as a school psychologist intern and TAP resource should not have posed a major challenge to the research study. Just as TAP seeks to increase problem analysis, reflection, and "problem-forming" (Schön, 2001), the study examined the participants' sensemaking and reflections about the referred cases and the model. The study's research methods that included eliciting the referring teachers' reflections about a case while it is in progress and after it is terminated and enabling teachers' to review their own interview transcripts, corresponded with the general goals of the model itself. The methods may have enhanced the teachers' reflections about the cases, but this would have only been a slight extension of the model's goals and not a substantive shift in the teachers' practices or understandings.

### Qualitative Methods

A qualitative approach was chosen for this study based on some of the reasons discussed by Creswell (1998) and Miles and Huberman (1994). Since a variety of problem-solving practices may be found among TAP participants and reflection and data collection for individual cases can take multiple forms, qualitative methods are desirable to capture the range and depth of the participants' experiences. Qualitative methods allow for the focusing on the experience of a few participants. Due to the limited



research that directly addresses the sensemaking and educational perspectives of school staff who participate in a new problem-solving process, there are no hypotheses for this study. Instead of hypotheses, there are open, exploratory research questions that can best be studied through qualitative methods.

There is a growing understanding of the value of qualitative research methods in school psychology, as noted by Polkinghorne and Gribbons' (1999). The rich description required by these methods "allow[s] school psychologists to recognize aspects and to notice relationships and organizational patterns that are not readily evident..." (p. 130). There has also been a similar call to use qualitative methods for indirect service delivery and consultation models (Gutkin, 1993; Henning-Stout, 1999; Hylander, 2003) and reflection in practitioners (Schön, 1987). In fact, the Division 16 (school psychology) Task Force for evidence-based interventions includes qualitative research methodology as one approach to conducting research and evaluating interventions (Kratochwill & Stoiber, 2002). The support of qualitative research was considered controversial, particularly because the Division 12 (clinical psychology) Task Force for evidence-based interventions endorsed only experimental research methods that are associated with the positivist tradition.

While the results are not generalizable, qualitative methods enable the researcher to fully examine the experiences of those who participate in a new program, including school-based problem-solving models, and integrate the data with its organizational context (Marshall & Rossman, 1999). In addition, while this study is not a program evaluation (Bogdan & Biklen, 1992), understanding teachers' beliefs and sensemaking

about a school-based problem-solving model can help facilitate future implementation of similar models.

## Research Methods

### Research Strategies

The methods that were used for data collection are described below. The major data sources were fieldnotes recorded through my participant-observation, reflective interviews, and document review. As a participant-observer, I was a member of the participating school's building-level TAP team, served as a TAP coach for one grade level team, and observed the school-wide experience with TAP and the general school culture. I recorded my observations after each visit to the school in a "researcher's reflective journal."

The interview component of the data involved conducting reflective interviews with a sample of four referring teachers. The interview invited teachers to reflect on the referred concern and developed intervention of the case. In three of the interviewed cases, the first interview was conducted while the referred case was in progress and a second interview was conducted after the case was terminated. The fourth interviewed case involved a single interview session as the case had essentially been terminated prior to the initial interview. The document review involved analyzing the TAP-related documents from the four interviewed cases, agendas from building-level TAP meetings, meeting summaries, and other TAP-related documents. In addition, my observational and reflective notes on the interviews and the school's change process assisted in the data analysis and interpretation.

Participant-observation fieldnotes. In the role of participant-observer, I observed the school-wide experience with TAP and the general school culture (Creswell, 1998). My observations were primarily of team meetings. By participating in nearly all building-level TAP team meetings and a sample of grade-level TAP team meetings, I heard the discussions about the referred problem and observed teachers navigate TAP. Observing and participating in these discussions across multiple teams over a period of time helped me understand more about the meaning TAP held for the school as an organization (Yanow, 1996).

Observations took place informally throughout the school year, and my impressions and thoughts were recorded as fieldnotes in the “researcher’s reflective journal.” As an intern facilitating TAP implementation, I was a participant-observer of the building-level TAP team meetings. During these meetings, grade-level TAP cases were to be discussed among the TAP coaches, with the coaches reporting on the progress and challenges their respective teams were experiencing. This format provided coaches with the opportunity to solicit advice to improve their respective cases and teams’ functioning. Observations of the discussions at these meetings helped me understand TAP understanding and functioning from each grade-level and the school-level perspective. I participated in and observed every third-grade TAP team meeting in the role of coach, and I observed and participated in other grade-level’s team meetings when invited as a TAP resource. My participation in these many and varied meetings enabled me to get a broad view of TAP functioning throughout and across the entire school.

My role as a participant-observer helped me interpret the mass of data I collected,

including the interview data and the TAP-related documents. For example, differences in the grade-level teams' functioning could be attributed to the teams' composition of the individual members as well as the leadership role the coach assumed. Functioning as a participant-observer in the building-level team and becoming acquainted with the coaches helped me develop inferences about the individual grade-level teams' sensemaking processes. In addition, my observations about school-wide functioning of TAP pointed me toward a sample of teachers who would be suitable participants for the reflective interviews, and I was able to personalize the interview questions in light of what I knew about their cases and that grade's TAP functioning.

However, a risk of participant-observation is becoming too much of an insider and losing the desired critical stance (Bogdan & Biklen, 1992). In order to ensure that I maintained a critical stance, the school psychologist assigned to the participating school functioned as a "critical friend." As someone who was familiar with the school personnel and TAP, she provided a valuable perspective. We discussed my observations and initial interpretations from the data, and she challenged me with alternative explanations and interpretations that facilitated my analysis. For example, we discussed individual cases and our interpretation of that coach's understanding of TAP. In addition, we also debriefed together following building-level team meetings and TAP trainings, enabling me to broaden my perspective by considering her reaction.

What I learned as a participant-observer was recorded as fieldnotes in a reflective journal. This helped me keep track of TAP's development at the school as well as the school's general culture. The notes were written or taped as soon as possible after my

visit to the school, usually on the same day. These notes also served as an anchor for data analysis from the teachers' reflective interviews. I had convenient access to documents that were included in the document review, as I received copies of meeting agendas and case updates through my role as a building-level TAP team member and TAP coach.

The experience of being integrated in TAP at the school helped me interpret the data, and my observations on the change process recorded as fieldnotes facilitated this process. My observations helped me frame the larger cultural context of the school and understand the implementation and functioning of TAP, as well as refine my methods and research questions. As a participant-observer, I both observed and facilitated the school's experience with a school-based problem-solving model.

Reflective interviews. By interviewing individual participants engaged in the problem-solving process, more can be learned about their developing reflections regarding their referred case and their understandings of problem solving. For example, in the problem analysis stage, an array of factors that influence behavior and learning are to be considered. Points that are raised, revisited, elaborated upon, or dismissed offer a window into the teachers' interpretation of TAP and the issues it is supposed to address (Coburn, 2001; Lipman, 1998). Through interviews the teachers' perceptions of TAP, perceptions of the referred students' problems, and the development of their reflections can be better understood.

I invited individual teachers to participate in the reflective interviews based on the coaches' or team leader's recommendations. The criterion for participating in the

interview segment of the study was that teachers needed to have an active TAP case. The method of opportunistic sampling was used, in that all those who were known to have active TAP cases could participate in the interviews. The success or progress of the case was not a precondition for participation. In fact, interviewing teachers about cases with varying levels of success provided a richer description of reflection and sensemaking across teachers and teams about TAP.

The interviews occurred during May and June 2003, due to the delay in receiving approval for data collection from the school system's research approval committee. In three of the four cases interviewed, the first reflective interview was conducted while the TAP case was in progress. During this interview I asked the teachers to verbalize their reflections by asking open-ended questions. At least three general questions were asked that included: "What is the referral concern? What story does the data collected thus far tell? How do you think the case will be resolved?" In the second and final interview, I asked these same questions and also asked, "How is the case different from the last time we spoke?" This question encouraged the teacher to discuss any change. Based on the referral concern and progress of the case, I asked additional personalized questions that addressed the specific features of the case and the teacher's responses in the previous interview. Revisiting these same points provided multiple points of reference and enabled me to observe a possible change process that occurred in the cases as well as the teachers' reflections about the cases.

The second interview also constituted a member check, as the participants were asked to reflect on the TAP case with the assistance of their transcripts from the prior

interview. During this interview, teachers were asked to articulate their conceptualization about the case again and what they may be doing differently in their teaching or problem solving due to their experience with the case under discussion. In addition, with their transcripts in front of them from the previous interview, they were asked to reflect on their initial commentary and expectations regarding the case. I prepared for this interview by highlighting segments of the teachers' reflections and asking them to clarify or elaborate on the excerpts.

There is concern about a potential reactivity effect induced by the reflective interview conducted while the TAP case is in progress. One can argue that a mid-case interview enhances teachers' reflections and requires them to engage in a process that supplements TAP, thereby transforming it. However, this concern contradicts Schön's (1983, 1987) definition of the reflective practitioner. According to Schön, teachers are always in a state of reflection, and when they experience a surprise or a problem they reflect as they arrive at definitions of the problem and possible solutions. Such reflection is a circular process, as they reflect anew each time there is new information to consider. The non-intrusive nature of the interview questions should not exaggerate the reflection encouraged by TAP, which asks teachers to continuously reflect on student learning using data as a guide.

Additional advantages to conducting a mid-case reflective interview include documenting the teachers' learning process. As teams move through the stages of the referred case, they are continuously reflecting and learning. This learning can best be captured by conducting interviews while teachers are in their moment of learning about

the case's current data. This learning gleaned from teacher verbalizations offers a benchmark for the post-case interview, and a way to document the learning and progress that has transpired. In addition, conducting a mid-case interview makes the interview sequence more organic and diminishes the risk of reactivity that would exist if there were only a post-case interview. A single interview at the end of the case can prevent trust from being established between the teacher and interviewer and the teacher from having an investment in the interview process. Without a point of reference to use as a basis for interview questions, the data from the final interview can be difficult to interpret and may not capture an occurring change.

Lastly, conducting mid-case interviews reduces the risk for potential sampling problems. By initiating the interview process while the case is in progress, its outcome is unknown. Cases that do not terminate successfully are also of interest for this study. However, a teacher may not agree to participate in an interview regarding a case that has already ended unsuccessfully or prematurely. Instead of limiting the interview data to cases that go through the whole process, the approach of "opportunistic sampling" increases the chance of documenting a wider range of cases with a variety of outcomes.

The interview questions were open and general in nature, were clarified when necessary, and were directly connected to the case and its progress. The participants appeared to feel comfortable with the interviewing process, most likely due to my insider status at the school and my roles as a coach and support for TAP; the participants did not appear to feel threatened or evaluated by the interview. Had participants appeared uncomfortable with a question, they would have been reminded that they were not



obligated to answer all questions. In fact, during one post-case interview a teacher requested that an excerpt from her mid-case interview be expunged from the data set. This indicated her recognition of her own power within the research process. Conversely, there was the potential risk that the participants would attempt to embellish their positive experience with TAP because of my obvious involvement with TAP. However, I did not interview teachers to whom I provided support, and the interview questions focused on the details and data from the case, diminishing this risk.

Each interview was audio-taped and transcribed, and three of the four teachers participated in two interview sessions. The fourth case involved only one interview, as I learned during the interview that the case was not actually in progress, contrary to the teacher's initial characterization of the case. In addition, supplemental reflective interviews were conducted with a referred student's homeroom teacher, the math specialist, the TAP chair, and the assistant principal. My personal reflections about each interview were included in that day's fieldnotes in my reflective journal. These notes were another data source that recorded my experience with the interview and my perception of the teacher's reflection, analytic skills, and new awareness that can be attributed to TAP.

Document review. The final major data source is the related documents that are part of general TAP functioning and individual TAP cases (Creswell, 1998). The document review involved analyzing the completed TAP forms, student work samples that were used to discuss and advance the case, TAP-related e-mail exchanges, team agendas, and other relevant documentation. A distinction was drawn between school

documents that were distributed via e-mail due to convenience and e-mail correspondence. The former were considered public documents to be included in the document review, while the latter was considered privileged and available for paraphrasing but not quoting. Even though the email correspondence was often made publicly available to school staff, and therefore appropriate to include in the data for this study, the participants did not necessarily have the intention that they would be quoted when composing the e-mail messages. In addition, while I asked those who I interviewed permission to record their words, when I explained the role of a participant-observer to the other participants I did not request their consent to quote them directly.

Analyzing the documents and written records that were used to make decisions about a case provide a helpful context for understanding the case's progress and teachers' reflections during the interviews. Since these documents were produced independent of the research study, they can verify or challenge the interpretations based on the participant-observation data and the interview data that are more likely to be influenced by the presence of the study (Merriam, 1988). Comparing documents from different points in the school year can facilitate identifying the emerging meaning the staff attributed to TAP while they were participating in the model.

These documents offer concrete evidence of how cases were processed beyond the initial referral concern, particularly if initial referral concerns seemed similar but the cases were operationalized differently and reached different outcomes. The stated problem definitions, types of data collected for the case, and the outcomes of the cases can be analyzed by reviewing the documents. These materials can also more fully

explain the case's resolution, if the intervention was terminated, faded, or continued, or if the case resulted in a referral to the core TAP team or special education. The document review can clarify the progress of the cases and the participants' explanations and reflections offered during the interviews.

### Data Management

Each reflective interview was audio-taped and transcribed verbatim. Tapes were labeled by date and code, and kept in a private office located a few miles away from the school. At the end of the study, all tapes will be erased in accordance with APA and UMCP-IRB policies.

Personal observations and impressions were recorded as fieldnotes after every visit to the school. The fieldnotes included my observations of meetings, initial thoughts about an interview session, and thoughts about other events and ideas that caught my attention. In the notes I focused on how the particular meeting or interview offered preliminary answers to the research questions. I also highlighted points that needed to be clarified, confirmed, or disconfirmed by other evidence. The notes facilitated decision-making about possible codes, coding categories, and further data collection (Miles & Huberman, 1994).

Interviews were transcribed with a paragraph break inserted each time there was a change in speaker and when the interviewee presented a new idea or a logical break. Transcripts were headed with the school's pseudonym, date, time, place, and any other relevant information. Fieldnotes were typed as paragraph-style journal entries. Documents from the document review were not retyped, but were organized with the

related case, and non-case related TAP documents were filed in chronological order.

### Site Entry, Ethics, Sampling and Informed Consent, and Reciprocity

In any study, the researcher must address site entry, ethics, and reciprocity. These issues often become highly sensitive in a qualitative study, as data collection can involve personal disclosure and an intense working relationship with the researcher (deMarrais, 1998). The research questions addressed teachers' collective sensemaking and educational beliefs regarding problem solving and did not attempt to evaluate the performance of individual participants. Nonetheless, the participants may feel that they are being personally evaluated by the research, despite assurances to the contrary, and feel uncomfortable sharing their perspectives.

Site entry. Woods Terrace was the Phase One TAP school that was selected to participate in this study based on my school assignment as a school psychologist intern. As a school psychologist intern hired by the school system, I was assigned to two elementary schools and one high school. My assignment included Woods Terrace, where my role was devoted to supporting TAP and providing related consultation services; I represented some of the "additional resources" promised to this Phase One TAP school to facilitate their TAP implementation. Woods Terrace was identified by the TAP developers as a school that could benefit from additional support, but had the potential to be reasonably successful with the model. Hence, I was assigned to work there as TAP support with the intention of this becoming the participating school for my study.

My first visit to Woods Terrace was on November 7, 2002. The grade-level

teams were holding their first TAP team meetings on this day in coordination with the visit of the TAP coach assigned to the school, who was also my supervisor at this school, and myself. During the morning the counselor was serving as the third-grade's interim coach, but by the end of the day I was assigned to serve as the third-grade coach. The role of the grade-level coach includes providing that team with assistance in TAP and participating on the building-level TAP team. Providing assistance at the grade-level includes meeting with the referring teacher individually to prepare the materials for the upcoming grade-level team meeting and guiding the team through the TAP stages when they address individual cases. As a member of the building-level team, one provides advice and support to other coaches to benefit their cases and grade-level teams.

By virtue of Woods Terrace participating in TAP as a Phase One school, it cannot be considered a "random" school. The principal's voluntary nomination for the school to implement TAP may reflect a commitment to innovation and change (Curtis & Stollar, 1996). Despite the nonrandom process of selecting a participating school for this study, the teachers' educational beliefs and the collective sensemaking process among the teams cannot be known in advance, nor how they compare to other schools. Nonetheless, willingness to be a Phase One TAP school may reflect educational beliefs that are relatively closely aligned with the school-based problem-solving model's assumptions and an interest in increased team-based problem solving. These possible characteristics could distinguish Woods Terrace and its implementation efforts from other elementary schools.

Working as a school psychologist intern at Woods Terrace enabled me to

establish relationships with the staff and facilitated my “entry” as a researcher. My role at Woods Terrace involved serving as a grade-level TAP coach for the third grade, serving as a member of the building-level TAP team, and being available to work with teachers and TAP coaches at other grade levels. Once I obtained the final authorization to begin formal data collection and solicit informed consent, it was late April. By that time teachers and staff had most of the school year to get to know me and work with me in a professional, non-research context. This familiarity and comfort with me seemed to facilitate their willingness to participate in the study, perhaps because teachers viewed their participation in the study as returning a favor to a colleague.

Ethics. Ethical and political considerations are important (Bogdan & Biklen, 1992) when studying a team-based problem-solving process. Common ethical concerns, such as voluntary participation and participant autonomy, are alleviated in this study because the school is participating in TAP separate from their participation in the study. My role as a TAP support was not directly tied to my research study: staff had the opportunity to decline consent while retaining the opportunity to work with me. I had been recording my observations as fieldnotes in a “researcher’s journal” when I began my assignment at Woods Terrace in November 2002. When I requested consent from school staff members in April 2003 to function as a participant-observer, I explained that I was asking for permission to keep these notes intact and continue recording my observations until the end of the school year. I began conducting interviews in mid-May, a point in the school calendar when teachers typically stop referring cases to TAP and stop seeking additional support for their TAP cases that are still active. Therefore, it is

highly doubtful that any participants felt coerced to grant consent in order to continue a working relationship with me. No staff member was required to participate in the study or answer all of the interview questions, if she or he granted an interview, and all participants were told that they were free to withdraw from the study at any time.

In order to increase participant confidentiality, pseudonyms were assigned to all individuals and the school. In the fieldnotes and transcripts of interviews, participants were referred to by their pseudonyms and not their real names. The interview tapes will be destroyed in accordance with APA/ UMCP-IRB policy. The collected documents contained the real names of participants. However, most these documents were public among school staff and were not particularly sensitive. The cross-list containing the names and pseudonyms was not stored near the fieldnotes or transcripts. The data, including the documents collected as part of the document review containing the participants real names, were stored in my office located a few miles from the school. None of the data were brought into the building of the participating school. However, on days when I conducted post-case interviews, I brought transcripts from the mid-case interview or relevant team meetings to school. This method of protecting the participants' privacy ensured that the ideas and concerns being discussed remain the emphasis of the study, and not the individual teachers or students who were involved in the cases.

Although participants were welcome to ask me about the interim results from data collection and analysis and were offered copies of their interview transcripts, few expressed this interest, possibly due to the late time in the school year. Only one teacher

wanted copies of her transcripts and the two administrators asked to see an abridged version of the final analysis, but were not concerned with the preliminary analysis. I only shared with participants their own data, in the context of the post-case interview, although I was prepared to give general responses that would preserve the confidentiality of other participants if asked about the progress of the study. Despite that most participants declined the opportunity to review their whole transcripts, I asked them during their post-case interview to review excerpts from their mid-case interview that I highlighted. This exercise addressed the ethical concern of obtaining valid data, as the participants were able to clarify or modify what they had said in their previous interview or in a meeting.

Informed consent and sampling. Obtaining informed consent is crucial ethically, and often delicate in a qualitative study (deMarrais, 1998). School staff were entitled to decline participation and withdraw from the study at any time they choose, neither of which could directly affect my role as a TAP resource for them.

The process of obtaining informed consent began when the TAP coach, who was my supervisor at Woods Terrace, contacted the principal in December 2002 about the possibility of my conducting a study regarding TAP in her school. The principal agreed. Shortly thereafter, the principal and I met informally and I explained the purpose and methods of the study to her. I shared a typed overview of the study with her as well as copies of the multiple versions of the letters of informed consent. The principal was both agreeable and pleased at the prospect of my conducting a study in her school. She told me about her unfinished doctorate, her support for research, and her preference for



qualitative studies because she finds the findings to be more relevant and useful than results from quantitative studies.

Following the conference with the principal, the study was submitted to the University of Maryland Institutional Review Board in December 2002. After they approved the proposal, it was submitted to the school system's office that reviews research proposals. The changes required by the school system involved editing the letters of informed consent and including a letter of consent for parents, despite that their children were not, in fact, participants of the study. Once all of these changes were finalized, I offered the principal copies of the revised letters, and I was authorized to approach the teachers for their informed consent. At this point it was late April 2003, the first week after Spring Break. I asked the TAP chair to allow me a few minutes on that morning's building-level team agenda to talk to the members about my study.

At the building level team meeting, I explained the purpose of the study, as well as its methods and the version of the informed consent letter relevant to them. I explained to the building-level team that they were my "secondary-level" participants and would not be asked to do anything extra if they agreed to participate. As specialists and coaches they did not refer cases that would enable them to participate in the reflective interviews. However, I needed their consent in order to keep the fieldnotes I had been taking since November 2002. Once I began working at Woods Terrace, I recorded my observations of the discussions at building-level team meetings, the discussions at the third-grade's team meetings, and my general observations of school-level TAP functioning through my role as a participant-observer in a "researcher's

journal.” Their unanimous consent enabled me to keep these fieldnotes, without having to purge comments or references made by or about an individual who did not grant consent.

I also explained to the building-level team members that as TAP coaches they were the “gatekeepers” to the teachers, and could tell me about potential cases for interviews or encourage the teachers on their team to participate in my study. I asked the TAP chair if she would collect the signed letters of consent on my behalf, to diminish the possibility of team members feeling coerced to participate due to my presence. However, everyone expressed willingness to participate and found it simpler to hand the signed letters directly to me, rather than to the TAP chair. When I finished explaining and answering questions, the TAP chair took the opportunity to express her gratitude for my “excellent” service at Woods Terrace and her pleasure in returning the favor by agreeing to participate in my study.

A method of “opportunistic sampling” or “flexible bounding” was used to identify a sample of teachers who might participate in the reflective interview segment of the study. I asked the TAP coaches and team leaders if there were “active TAP cases” on their teams that I should pursue as a possible interview lead. By asking the coaches and team leaders for recommendations, every teacher who referred a case to the TAP process was considered a possible participant. The opportunistic sampling enabled me to interview teachers across grade levels and helped me understand how their respective grade-level TAP team understood and implemented the process. This also eliminated the risk of interviewing only successful cases and interviewing teachers from the same grade-

level team, both of which would narrow my analysis and interpretation of the understandings and practice of TAP throughout the school.

When I asked for recommendations for interview leads, the TAP coach for the second grade suspected that the referring teachers on her team would be willing to participate. She suggested that I attend their grade-level TAP team meeting the next week and ask the teachers directly. The TAP coach for kindergarten, also the TAP chair, did not know when her team would be meeting next, but she suggested that I approach a particular referring teacher. The first-grade TAP co-coaches were absent from most building-level team meetings. When I chanced upon the first-grade team leader one afternoon in the work room, she recommended herself and another same-grade teacher as interview leads; she doubted that her team was going to have any more TAP meetings that year. There were no leads for possible interviews among the fourth and fifth-grades; as the third-grade TAP coach I did not consider the teachers on my team to be candidates for the interview due to my heavy involvement in the cases.

I attended the second-grade team meeting, and approached the particular kindergarten teacher and the first-grade teacher who was recommended by her team leader. I explained two of the components of the study, their participation in reflective interviews and my functioning as a participant-observer in their team meetings in which the case in question is being discussed. As indicated on the teacher's letters of consent, they can indicate that they are willing to participate in only one component of the study, reflective interviews and/or my participant-observation of their team meetings. Again, I was prepared to ask the second-grade TAP coach to collect the informed consents to

minimize the possibility that the staff would feel coerced into participating. However, all of these grade teachers granted their full consent, including having their meetings tape-recorded, and found it easier to hand the signed letters directly to me. The kindergarten and first-grade referring teachers agreed to be interviewed, but they doubted that their teams would have another TAP meeting before the school year finished. In fact, other than the second and third-grade teams, all the other teams had apparently stopped having regular grade-level TAP meetings by the end of April.

Once the referring teachers agreed to be interviewed about their cases, they sent home a parental letter of informed consent with the student. The interviews could not commence until the parental letter of consent was brought back to school signed. The parental letter of consent was translated into Spanish by a parent volunteer who did most of the Spanish translation for the school. This translated version was reviewed by another Spanish speaker who approved of the translation quality. Letters were sent to five parents and one declined consent, restricting my sample to four cases.

After my successful attempt at obtaining informed consent from potential interview participants, I sought out the other members of the school staff for their consent. As part of my role as participant-observer, I needed their consent to include them in my school-level observations of TAP implementation. Those I approached included the third-grade team, the team for whom I served as TAP coach, the math specialist, and the reading specialist, among others. Every individual from whom I sought consent very graciously granted it to me.

Reciprocity. Extending reciprocity to study participants is considered both ethical

and desirable from a research design perspective (Bogdan & Biklen, 1992). In exchange from my benefitting from their participation in the research study, the participants should receive some type of benefit, too. However, due to the late timing of the interviews, during May and June 2003, I was limited in what I could offer them. While I could offer to help them with a TAP case or help them out in their classroom, the TAP cases were fading and the teachers were eager to complete the curriculum as best they could with the end of the year approaching. I presented the interview participants with imported chocolate bars at the occasion of the second interview, or at the single interview for those who participated in one interview; I gave the second grade cookies as a token of gratitude for their allowing me to tape the last of their team meetings and I gave cookies to the parent volunteer who translated the letter of parental consent into Spanish. I brought cake and drinks to the final third-grade TAP meeting, but that was primarily in the role of TAP coach and not researcher.

In fact, it seemed that there was perceived reciprocity toward me on the part of the staff. As evidenced by the TAP chair's response when I asked the building-level team members to participate in my study, she thanked me for my contributions to the TAP teams and my support with school-level TAP functioning. Out of gratitude to me for my role in the school, she presented it as though she was offering me reciprocity by agreeing to participate. The other building-level TAP team members and interview participants expressed the same sentiment, that by agreeing to be interviewed they were helping out a colleague and that I did not need to extend reciprocity toward them.

### Data Analysis

Data analysis is a recursive process that occurs simultaneous to data collection, a recommended practice for qualitative research (Creswell, 1998; Miles & Huberman, 1994). In this section, the methods used for coding and interpreting the data are discussed.

Data analysis focused primarily on the perspectives and explanations of the school staff who were engaged in TAP, including the sample of interviewed teachers. Similar to the methods of Lipman (1998), the analysis involved listening to the nature and content of the concerns and thoughts expressed at meetings. Identification of metaphors (Schön, 1993), code-words (Knotek, 1999), concepts, and themes as well as changes in these linguistic devices assisted in the analysis of this study. In addition, the extent of the teachers' and coaches' reflection was of particular interest. McLaughlin (1993) and Schön (1983, 1987) both assert that ongoing reflection is connected to more effective problem solving, and the relation between reflection and practice of problem solving was a focus of this study.

The research questions were answered through an analysis of the fieldnotes, transcripts from the interview sessions, and supporting documents. Included in my regular fieldnotes and the fieldnotes on the days I conducted reflective interviews, I considered how that data collection session contributed answers to the research questions. These notes were used as the basis for analysis, as they helped generate hypotheses, plan the next interview questions, and develop an initial coding scheme.

Coding. The initial coding process identified emerging themes and highlighted areas in need of further data collection. For example, Bogdan and Biklen (1992) discuss

coding categories that distinguish perspectives held by subjects, subjects' ways of thinking about people and objects, and process codes. These are coding families that can be used to identify the multiple orientations the participants hold regarding aspects of a setting, understandings about each other and outsiders, and changes over time, respectively.

Coding is an analytic process in which labels are assigned to “chunks” of data, giving the data units meaning (Miles & Huberman, 1994). Patterns, or themes, are found in the data that describe and organize the information, and ultimately interpret the phenomenon under study. A descriptive code is a list of themes that requires little interpretation. Interpretive codes are a second class of codes that are more conceptual, and pattern codes, a third class of codes, are even more inferential and interpretive, and can involve an elaborate model that integrates themes, indicators, and exclusions into causal relations (Miles & Huberman, 1994). The method of coding that was used for the current study is referred to as data-driven coding, or inductive coding (Boyatzis, 1998). In this type of coding, the code is developed by analyzing the data, rather than applying codes used by other researchers. An open, inductive approach to analysis was preferred for this study, because the themes, reflections, educational beliefs, and possible change process among TAP team members cannot be anticipated in advance.

Prior to developing a code, a general set of categories were developed from the fieldnotes following initial data collection. Initial raw data was indexed to the general categories, the precursor to the data-driven code (Boyatzis, 1998). The code was continually developed and revised, as new data confirm, elaborate and challenge the

existing codes. Revision of the analysis code continued past the end of the data collection period, the end of the first year of TAP implementation. The code is considered final once its categories have been “saturated,” or when new data can be classified into the existing labels and a sufficient number of patterns have emerged (Miles & Huberman, 1994).

Boyatzis (1998) identified five elements that are part of a “good” code. They are a label or name for each theme; a definition of the theme’s issue or characteristic; an indication on how to know the theme occurs; a description of exclusions or qualifications to the theme; and positive and negative examples of the theme to avoid confusion. As codes were developed, they were written with the definition in a coding notebook, which documented the history of the coding process.

As the code was continually revised, it became easier to apply to the remaining raw data and minimize exclusions, or the rules of how to apply the code to new data (Boyatzis, 1998). This is done through the process of pattern coding (Miles & Huberman, 1994), developing a meta-code or inferential codes that group together the first level of descriptive codes. Pattern codes include interrelated themes, causes and explanations, relationships among people, and other emerging theoretical constructs. Recurring phrases and common themes among participants’ accounts and explanations often help to develop the pattern code. An analysis software package, N-Vivo, was used to organize the codings and help make decisions for more elaborate coding procedures.

Validity. Establishing the validity of the code is an important step in analysis (Boyatzis, 1998). This was done by applying the code to the remaining data, minimizing



bias by addressing representativeness of informants and activities, weighting the evidence in the favor of data that is most trustable, and conducting a member check with the participants (Miles & Huberman, 1994). Ensuring representativeness involves looking for contrasting cases, outliers, exceptions, and surprises so that generalizations are supported by the data set rather than dramatic events or elite informants. Understanding outliers and exceptions offers insight into the effectiveness and limits of the phenomenon under study.

Miles and Huberman (1994) consider checking the data with the participants a critical process to establishing the validity of the findings, and the “member check” was conducted primarily with the interview participants. For three of the four cases interviewed, a mid-case reflective interview was followed by a post-case reflective interview. This post-case interview included a review of the transcripts from the previous one. The teachers had the opportunity to comment further on the case, on their previous reflections, and could correct or modify what they said. This post-case interview constituted a member check because the participants could offer their interpretations and impressions of the data. It was also a gesture of reciprocity as I shared their data with them. In addition, I solicited the opinions of other TAP coaches about the progress of their cases and teams throughout the year, enabling me to establish the validity of my inferences from my participant-observation.

Representativeness was addressed by comparing discussions and comments across teams, identifying the differential levels of success across cases, and clarifying the similarity of the initial referral problem across teachers. These elements helped to

identify the development of the referred cases and the factors that could be associated with a case's success. Weighting the evidence was a process that compared the "strength" of different data and considered which data to emphasize in the analysis. Data collected after repeated contact, seen, or observed firsthand were favored as "stronger data" (Miles & Huberman, 1994). In addition, examining outliers, "surprises," negative evidence, and rival explanations, helped explain the phenomenon, its supports, and its limitations. The member check with participants provided a valuable perspective and check on the data and further clarified the phenomena and constructs under study, teams' collective sensemaking about problem solving and individual reflections of TAP participants.

In chapters four through eight the findings from the study are presented.

## Chapter Four

### Description of Woods Terrace and the Teacher Assistance Program (TAP)

In this chapter, the participating school system and school will be described. This will be followed by a description of TAP and an introduction to some of TAP's key players among the school staff, the full and peripheral participants. Chapters five through eight will present the findings regarding how Woods Terrace implemented TAP. The findings were divided into separate chapters in order to highlight the multiple themes that cluster around three broad macrocategories that emerged from the data.

Chapter five explores the types of cases that were referred to TAP; these patterns of referral were understood to represent a process I call *gatekeeping*. Teachers' gatekeeping reflected their sensemaking about the cases best suited for problem solving, as they referred cases to TAP according to their understanding about the purpose and support the model provides. Chapter six discusses the *teams' conceptions of TAP's stages* and their understandings of the features and tasks of each stage, which were manifest by the types of data they collected and the interventions they developed. Chapter seven addresses the teams' meanings that emerged about the totality of the *problem-solving process* and the varying interpretations of problem-solving as a phenomenon that included integrating subtle adjustments to their previous practices and practicing TAP as a compliance model. Chapter eight, the final chapter of the findings, reviews the *preliminary TAP outcomes results* and the context within which all of this existed, the *larger community of practice* known as Woods Terrace Elementary School. Chapter eight is intended to provide the broader context for the school's implementation

of TAP, facilitating the reader's interpretation of the findings.

The findings that I describe in chapters five through eight were identified by examining different data sources and using multiple collection methods. This enabled me to triangulate the data and verify the accuracy of my observations, thereby guiding the analysis. However, despite the careful collection methods and triangulation process, the analysis remains my own interpretation. My interpretive perspective was limited by certain constraints, including the time constraints of spending two mornings a week at the school over the span of one school year and my relatively limited experience as a school psychologist due to my role as intern. Perhaps a researcher who worked at the school five days a week or a psychologist with more seniority would have drawn different conclusions than the ones shared here. These findings and interpretations represent my analysis and another researcher may pose alternative interpretations. While acknowledging the limitations and constraints that are associated with the analysis developed by any researcher engaged in qualitative research, careful and thorough data collection accompanied by member checks can validate the legitimacy of the findings and interpretations.

#### Woods Terrace Elementary School

This study was conducted at an elementary school, termed for this study, "Woods Terrace." Woods Terrace was 1 of 13 "Phase One TAP" schools that nominated themselves and committed to implement TAP beginning in the 2002-2003 school year. Therefore, like all of the other Phase One TAP schools, Woods Terrace was participating voluntarily in TAP due to their principal's nomination; they were not mandated or

otherwise forced to participate. While every school is undoubtedly unique with its own school culture and particular characteristics, Woods Terrace presents as a typical Phase One TAP school in terms of its voluntary nature of its TAP participation and its special education data. The demographic data of the school system and Woods Terrace will be presented first, followed by a description of Woods Terrace's special education statistics.

### District Demographic Data

Woods Terrace is an elementary school located in a large and growing suburban school district in the Mid-Atlantic region. The school system's enrollment for the 2002-2003 school year was 138,879 students, and the projected enrollment for the 2008-2009 school year is 145,730 students.<sup>3</sup> These students attend 191 elementary, middle, high and special schools and represent a highly diverse population. Throughout the school system, 46% of the students are classified as white, 21% as African-American, 18% as Hispanic, 14% as Asian and 0.3% as American Indian. In this district, 8.5% of the students are learning English as a second language (ESOL), 22.5% participate in free and reduced meals (FARMS), the typical marker for student poverty, and the mobility rate, the sum of entrants and withdrawals, was 14.8%.<sup>4</sup>

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All demographic data are in reference to the 2002-2003 school year and were obtained from the school system's records that were posted on their website.

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While this school district has been designated by the state and federal governments as a suburban system, its demographic data represent the profile of an urban system. This is apparently a growing phenomenon in which suburban school systems are becoming increasingly similar to urban school systems, particularly along the dimensions of student behavior that include sexual activity, substance abuse, and delinquency (Greene & Foster, 2004).

The large presence of poor and non-English speaking students presents obvious challenges in providing every student with a quality education. Nonetheless, the school system had a 92.5% graduation rate, 76.9% of students pursued college educations, and the average SAT scores are higher in verbal and math than the national averages. The passing rates for the state functional reading, mathematics, and writing tests by the end of ninth grade were deemed by state standard to be excellent, satisfactory, and satisfactory, respectively.

These promising data, however, conceal issues of challenge and concern. While there is a lot of success and excellence within the school system, it is not evenly distributed. For example, 11.4% of the students in this school system have been identified as needing special education services, while 5.6%, or 7,981 students, receive more than 50% of their instruction through special education. According to the U.S. Department of Education's Office of Special Education Programs (OSEP) review of the state's compliance with the Individuals with Disabilities Education Act (IDEA) released in July 2001, this school system's special education rates are among the better ones in the state. Two other suburban school systems are named as having the smallest percent of students with disabilities, each reporting approximately 10%. However, as is commonly found throughout the country and this state as well, a disproportionate number of the students identified as needing special education services are minority students (Ladner & Hammons, 2001; OSEP, 2001). While African-Americans represent 21.4% of the school system's population, they represent 28.1% of the special education population. The overrepresentation of minorities, particularly African-Americans, in special education

presents a concern to the school system and was the primary motivation for developing and implementing a new school-based problem-solving model, TAP.

### School Demographic Data

Woods Terrace Elementary School is one of the poorer and more ethnically diverse among the 125 elementary schools in the school system. Their official student enrollment for the 2002-2003 school year was 486, slightly lower than the system's average elementary school enrollment of 511. There were 43.1 professional staff positions at Woods Terrace that included 1 principal and 1 assistant principal, 21.1 classroom teaching positions, 4 kindergarten teachers, 3 special education classroom teachers, and 1 resource program teacher. Other professional positions included 1.1 art teachers, 2 ESOL teachers, 1 staff development teacher, and 1 counselor. There were 21.9 supporting services positions that included regular and special education instructional assistants, 1 media assistant, and 2 secretaries.

Not included in this count of professionals is the school psychologist. The role of the school psychologist in TAP is particularly important, as she or he is expected to assume leadership in implementing and supporting the model. In addition to Woods Terrace, Helen, the school psychologist was assigned to a non-TAP elementary school and a middle school. Across the enrollments of all three schools, Helen was responsible for the psychological services of 2,073 students. Helen's caseload is less desirable than the national median ratio in which the average school psychologist is responsible for 1,750 students (Reschly, 2000). However, a study of regional differences in school psychology practice found that the average school psychologist in this district's region is

responsible for 2,329 students (Hosp & Reschly, 2002). These results would indicate that Helen's caseload is basically average.

Woods Terrace was originally constructed in 1955 and renovated in 1999. The building's site occupies 7.4 acres and is one of the 75% of district elementary schools to have a separate gym. Despite the recent renovation of the school, they had already exceeded capacity by occupying four "relocatable classrooms" or "learning cottages," colloquially referred to as "portables."

Woods Terrace's African-American population was comparable to the system's average at 21.8%. However, their Hispanic population was more than twice the average at 37.7%, their ESOL population was more than twice the school system average at 18.9%, their ratio of students who received FARMS was also nearly twice the general average at 42.8%, and their mobility rate was 20.1%, 1.4 times the general average. Woods Terrace's attendance rate of 94.9% was judged by the state standard to be "satisfactory." All students in the second and fourth-grades in the school system participated in standardized achievement testing, and Woods Terrace's students "did not meet local standard." However, they did meet Adequate Yearly Progress as indicated by the new federal legislation of No Child Left Behind in every category that they were eligible, including attendance and the Overall Adequate Yearly Progress.

Special programs held at Woods Terrace included Head Start, Title I, and Full Day Kindergarten, as well as two self-contained special education programs, the Vision and Learning Center programs. The full day kindergarten, in its second year during the 2002-2003 year, was an initiative placed in schools that were consistently performing



“below expectation,” typically the schools with the poorest students. By the 2007-2008 school year all schools in the state are expected to have full day kindergarten. Woods Terrace also participated in the “reduced-class size” initiative, in which the kindergarten through second-grade classes could not exceed 17 students.

One last noteworthy demographic feature of Woods Terrace was the diverse ethnic composition of its staff. While there is no comparative data available regarding the ethnic composition of the staff across the school system, 8 of Woods Terrace’s 21 general educators, or 38%, represented different ethnic minority groups. In addition, both the principal and assistant principal were AfricanAmerican, as was the full-time speech and language pathologist, the resource teacher, the primary ESOL teacher, and the reading specialist. The second ESOL teacher and the school psychologist were of Hispanic origin. The counselor, math specialist, and staff developer were white. While it is difficult to gauge the effect of having such a diverse staff, it is a distinctive feature that likely conveyed to minority parents that Woods Terrace was not a “white establishment” in which they would be unwelcome.

#### Special Education Statistics

As of September 2002, the percentage of students at Woods Terrace identified as having a special education disability was listed at 13.2%, higher than the school system’s elementary school average of 10.1%.<sup>5</sup> However, this high percentage is somewhat

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In this section, Woods Terrace’s special education data are compared to the data from the system’s elementary schools and not the entire school system. Since TAP was developed for elementary schools, the elementary school-wide data were deemed to be more relevant and useful than the system-wide data.

misleading. Woods Terrace housed two programs that serve students with severe disabilities, the Vision and Learning Center programs. The Vision program serves pre-kindergarten students who have severe visual impairments and the Learning Center program is a self-contained special education program that serves students who have severe speech and language disabilities in grades K-2; both programs serve students from neighboring schools. Among Woods Terrace's general student body, 6% are classified as having mild disabilities that require special education intervention. This is comparable to the system-wide elementary school average of 6% of students who receive less than half of their instruction through special education (i.e., those with mild disabilities). The aim of TAP, like other school-based problem-solving models, is to reduce the number of students identified with mild disabilities and provide intervention in the context of general education.

Just as Woods Terrace's rate of classifying students with mild disabilities was representative of the elementary schools throughout the system, their overidentification of minorities requiring special education was similarly representative. African American students comprise 21.4% of the system's elementary school students, but 24.8% of them receive special education services. At Woods Terrace, 21.8% of the students are African American, and 27.7% of them receive special education services. Based on these data, one can infer that Woods Terrace was a typical elementary school within the school system with regard to their ratio of students classified with mild special education disabilities and the overrepresentation of African Americans in special education.

Woods Terrace, like all other district schools, tracked the number of their students

classified with disabilities and the special education services they were receiving, and submitted these data to the district's central special education office. However, like all other district schools, before they began participating in TAP they did not track the types of cases referred for student support and how many students participated in psychoeducational evaluations for special education eligibility. The primary purpose in developing and implementing TAP was to reduce the number of inappropriate referrals for special education testing and representation of minorities in special education. However, one would have to sift through the data submitted to the district's central special education office and conduct retrospective interviews with the IEP team members in order to estimate schools' pre-TAP referral and placement rates. Without having these data reasonably and conveniently accessible, accurately identifying a reduction in special education rates following the introduction of TAP is difficult.

This lack of referral and testing data at Woods Terrace and other schools presents a challenge for evaluating the initial effectiveness of TAP. Without the prior comparative data from the participating schools, a correlation between TAP and the special education referral and placement rates cannot be definitively ascertained. In addition, estimated changes in Woods Terrace's special education referral and placement rates during the 2002-2003 school year cannot be automatically attributed to the implementation of TAP. Woods Terrace, like many other elementary schools, is a dynamic place where there are many programs and activities going on simultaneously. Nominating Woods Terrace to be a Phase One TAP school was only one of the initiatives and programs the new principal, Ms. Yvette Jackson, introduced to the school that year.

## Teacher Assistance Program (TAP) Model

### Initial Presentation of the Model

The Teacher Assistance Program (TAP) is a team-based school-based problem-solving model that was recently developed by this school system's office of psychological services. Like other school-based problem-solving models, TAP provides a structure for teachers to solve the problems of students and groups of students who are not learning or progressing successfully.<sup>6</sup> TAP was piloted at four elementary schools within the school system over the previous two years, beginning in September 2000, while it continued to be developed and refined. In Fall 2002 the Phase One TAP schools began implementation of the model.

Teams from schools were invited to attend an introductory to TAP meeting in Spring 2002. After this introduction to the model, principals were invited to nominate their schools to participate in the first wave of TAP implementation during the next school year, 2002-2003. They were told that TAP would be phased into the school system over the next few years and in exchange for volunteering to be a Phase One school, the schools would be offered extra support in the form of a "TAP coach." This coach was designated by the office of psychological services and would be available for questions and guidance. Schools that participated in the subsequent phases of implementation would also be offered support with implementation. However, it was

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The TAP manual describes the goals and explains the procedures of the model. All references and quotations regarding TAP are contained within the 2002 draft edition of the manual or the formal training presentations that were held on July 22 and 23, 2002 and March 18, 2003.

understood that the support extended to them would not be as intensive as what the Phase One schools were receiving. The TAP coach was expected to visit the school regularly, monitor the school's TAP implementation, and offer support in areas of continued need. The Phase One schools were told that their feedback would be used to refine and improve TAP.

There were 17 schools that volunteered to be TAP Phase One schools, 16 elementary and 1 middle school. Representatives from the 17 schools were present at the two-day summer training workshop in July 2002 where the model and its procedures were presented. By November 2002, 4 of the schools had withdrawn their participation while 13 elementary schools continued to be committed to TAP. One school was known to withdraw because of a change in personnel; the principal who nominated that school to participate in TAP was no longer working at that school once the year began. The reasons for the other three schools withdrawing were unknown.

#### Development and Purpose of the TAP Model

TAP was developed primarily by four school psychologists who worked for this school system's office of psychological services (i.e., the supervisor of psychological services and three other staff psychologists who were trained in indirect service delivery) and one school counselor. The TAP developers chose to integrate the features of multiple, established school-based problem-solving models instead of selecting an existing model. Apparently, they felt that TAP was better suited for the unique needs of their school system than any existing program in its current form. In the acknowledgments of the manual, "a team of dedicated [school system] professionals,

including administrators, psychologists, counselors, pupil personnel workers, teachers and support staff’ are credited with collaboratively developing the model. In addition, university-based trainers were consulted for their expertise in consultation and effective interventions.

Four pilot schools began TAP implementation in the 2000-2001 school year. They were selected based on their need for improved student academic performance and reduced suspensions and disciplinary referrals. According to one of the TAP developers, the schools initially implemented Project ACHIEVE, an educational reform program that has seven components, the central component of which is problem solving. Another component of Project ACHIEVE is the Stop and Think curriculum, a school-wide primary behavioral prevention program that addresses social skills. The problem solving component of Project ACHIEVE at these pilot schools evolved into TAP, a distinct program.

Outcome data are available from three of the four pilot schools.<sup>7</sup> The pilot schools’ referrals to special education decreased by an average of 42% and the out-of-school suspensions decreased by 27%. In addition, the second grade standardized achievement scores increased in the 2001-2002 school year from the 2000-2001 school year. One school reduced suspensions by 50% in one semester by implementing interventions that responded to the suspension data collected through TAP. This same

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The pre-TAP data for the pilot schools were collected by reviewing the statistics the schools submitted to the district’s central office and collecting anecdotal data regarding the students who were not determined to be eligible for special education, as there was no systematic data collection procedure in place. These data were presented in the manual and shared at the TAP trainings.

school also reduced referrals for special education evaluation by 32% and African American students' referrals by 19%. This reduction in inappropriate referrals increased the ratio of students who were evaluated for special education and met eligibility criteria from 38% to 76%. Teacher satisfaction survey data collected in January 2001 indicated mean responses of Satisfied to Very Satisfied, "for overall effectiveness of the problem-solving process and its enhancement of school climate" (p. 5).

The four TAP coaches for the 2002-2003 school year were two of the staff psychologists and the counselor who were involved in the development of the model and a newly-hired psychologist with training in school-based problem-solving models. In addition, three school psychology interns, myself included, were involved as TAP resources. This team of seven, occasionally joined by an eighth member who was a school-based school psychologist, met at approximately three to four week intervals to discuss and plan system-wide TAP implementation.

The broad goals of TAP are to improve the classroom environment and the school climate in order to enhance student performance. By addressing the "factors that influence behavior and learning" (p. 16), TAP intends to serve as ongoing professional development for school staff and provide them with, "more opportunities to learn and use best practices that target particular instructional needs" (p. 7). TAP is based on an ecological framework (Bronfenbrenner, 1989) and emphasizes the environment and the teacher's role in the student's learning to help elicit success without dwelling on the student's deficits or "cookbook interventions" (p. 11).

Essentially, TAP is a process that seeks to increase teachers' methods of analysis

and reflection in order to improve student outcomes. In this vein, TAP seeks to, “promote[s] preventive and more strategic measures schools can implement to maximize learning opportunities on an individual and building level” (p. 7). The roles of primary prevention and early intervention are highlighted as the means to reduce special education referrals and disproportionate representation of minorities in special education (Meyers & Nastasi, 1999). Meyers and Nastasi define “primary prevention” as delivering interventions to an entire population without identifying which individuals may be at greater risk for developing the target disorder and “early intervention” as delivering interventions to those who display the initial symptoms of the disorder with the goal of preventing its further development. However, many school-based problem-solving models, including TAP, use the term “prevention” when “early intervention” would be more accurate. Prevention, in these models, often reflects the concept that teachers who participate in consultation will learn new skills that they can generalize so that they can respond more effectively to other students (Meyers & Nastasi, 1999).

### Assumptions

The assumptions and values held by the TAP school-based problem-solving model are identified in the manual. The two primary assumptions are, “All students can learn and when they are not learning we must find out why; Learning is a unique interaction between the student and the instructional environment” (p. 10). The five remaining assumptions of TAP are:

Assessment must include the student and instructional environment. It should also be multidimensional; the focus is on solving the problems presented; the



process is needs-based rather than eligibility driven; assessment is functionally linked directly to intervention; and teacher participation is essential (p. 10-12). While TAP's assumptions are explicitly stated in the manual and were presented at the July 2002 training, it is difficult to estimate how many of the participants identified their personal reactions and thoughts to these assumptions.

A second formal training workshop was held mid-year, on March 18, 2003, for Phase One TAP schools entitled, "Teacher Assistance Program: Experiences shared and lessons learned." Included in this day-long training was another explicit discussion about TAP's assumptions. The assumptions were presented on a power point slide and the first two assumptions were identical to the ones in the manual. The five remaining assumptions were reformulated and presented as:

Our focus is on understanding and resolving the causes of problems- "why" learning is not occurring; passionately seeking authentic information about each child's unique skills and needs will result in academic/ behavioral improvement; assessment activities must be multidimensional and linked directly to intervention; all students are to be served; time during the school day is needed for teachers to meet, engage in inquiry, and positively reflect on and facilitate student learning (p. 1).

Following the review of TAP's assumptions during the training, there was a discussion about the "change process and TAP." This discussion acknowledged the complexity of change and how individuals and teams experience change. One purpose of the discussion was to reassure and comfort the participants regarding the challenges they

were experiencing in implementing TAP. In addition, a questionnaire was distributed that asked the participants about their thoughts about TAP and the change process in their school. However, without carefully analyzing the participants' responses and their reactions to the model's assumptions, it is difficult to clarify their educational beliefs, their commitment to the beliefs embedded in TAP, or their potential belief change process.

#### Assumptions Regarding TAP Implementation

While the program implementation theory aligned with TAP was not explicitly identified in the trainings or manual, Fullan's (2001a) model of incremental implementation best describes the program. Among the many indications that the model assumed incremental implementation, the delay in the use of the level of implementation checklists provide the most convincing association. A team functioning "rating worksheet" and a school-wide level of implementation of TAP checklist were drafted during the 2002-2003 school year and made available to participating TAP schools in Fall 2003, after the first year of implementation and after the data collection period for this study ended (see Appendixes A and B). The purpose of these checklists was to help the problem-solving teams identify which elements of TAP are present in their meetings, cases, and school. The teams can identify their level of TAP implementation based on the percent of items observed during the meetings. While the final draft of the checklist was not available to participating TAP schools during the data collection period of this study, the checklist provides compelling evidence that an incremental implementation approach guided the TAP developers thinking when they crafted, developed, monitored

the program. The worksheets are new data collection tools, and there has not yet been reliability or validity evaluation of the measures.

This incremental, linear approach highlights the perspective that implementation of TAP will unfold sequentially with certain program elements manifesting themselves before others. The vast majority of the elements on the checklist must be present in order for the team to have “high TAP implementation,” and any fraction of the elements represents partial implementation. As opposed to an interpretive, sensemaking perspective in which TAP implementation is guided by the teachers’ conceptual understandings and socially-based meaning making process, TAP is understood to be a series of discrete steps, the composite of which represents the TAP model. However, the larger question of how a team comes to practice some of the elements and not others and how they are expected to develop into a team that practices all elements is not explained.

In addition, how the participants are expected to reach agreement with TAP’s assumptions is not addressed. One possible belief change mechanism is that the explicit presentation of TAP’s assumptions is enough to persuade participants to adopt them. This possibility seems unlikely in light of the extensive research on educational beliefs and belief change that does not support such a simple change process (Hollingsworth, 1989; Vosniadou & Brewer, 1987). The consensus among the primary TAP developers regarding the expected belief change process appeared to be that program implementation would influence the participants’ beliefs. They assumed that once teams engage in TAP and its four stages, the referred cases will have successful outcomes. This success will help the teams recognize the superiority of stage-based problem solving to the preceding

model of student support and they will subsequently adopt TAP's assumptions.

This perspective on belief change corresponds with the classic view of incremental program implementation (e.g., Fullan, 2001a). The teachers' beliefs are not recognized as guiding implementation, influencing the integrity of the process, or determining the outcomes of the cases. Instead, implementation is understood to be an independent process largely unaffected by teachers' conceptualizations. After a few successful cases, teachers' educational beliefs are expected to be modified. Therefore, rather than acknowledge beliefs and conceptualizations as guiding the program implementation, the implementation practices are presumed to influence beliefs and conceptualizations. Accordingly, once program implementation is underway, teachers will be influenced by the implementation process and will modify their beliefs so that they are in alignment with TAP's assumptions.

#### Differences between TAP and Student Support Team (SST)

TAP replaced the Student Support Team (SST), a model that similarly intended to provide support and interventions to students in need outside the context of special education. While both models share the premise of student and teacher support, they differ in their assumptions, structure, role of specialists, types of cases referred to the models, types of interventions to be developed, and in special education referral and placement rates. The most essential difference between the models, their conceptual difference, involves the goal of the stages. The SST model is described as a two-step process that aims to remediate identified weaknesses located within the student. SST's two steps are problem identification and intervention recommendation. In contrast, TAP

is four-step model that emphasizes classroom-based early intervention and data collection. TAP's four steps are problem identification, problem analysis, intervention design, and intervention evaluation. TAP's structure corresponds to Reschly et al.'s (1999) description of the generic school-based problem-solving model.

A second major difference between the models is their difference in structure. The primary location for decision-making regarding students' needs in TAP is at grade-level team meetings in which classroom teachers meet with their same-grade colleagues as opposed to the referring teacher meeting with the school's specialists. TAP meetings are facilitated by a coach who is a member of the building level TAP team, typically a specialist, such as the resource teacher, the school psychologist, or the reading specialist. Since the vast majority of teachers have not participated in TAP training sessions, the coach's role is an important one in terms of providing guidance and support. It is preferred that the coaches attend their team's bi-monthly TAP meetings, or at least the TAP meetings held at the beginning of the school year. The grade-level TAP teams are expected to meet even if their coach cannot attend, and the coach is expected to be available for additional support and consultation outside the team meetings throughout the year. With the coach's guidance, the teams are supposed to collaborate using the four-stage process to solve the problems of referred students. The relationship among team members, coach included, is expected to be equal and collaborative in nature.

The role of specialists is a third difference between the TAP and SST models. The intention of assigning specialists to be TAP coaches for the grade-level teams is to increase their availability for consultation and classroom-based support, creating a

broader role for them. Students in schools that use SST often do not have access to specialists' services when they are not classified as having a special education disability, due to the specialists' heavy special education case load and disconnect from the classroom. The structure of TAP, in which specialists serve as coaches, links the specialists more closely to the classroom enabling them to be involved with more students and teachers. In addition, since the special education case load is expected to be reduced in TAP schools, specialists should have more time and be more available to serve a broader range of students.

In contrast to SST, TAP's assumptions, additional stages, and bi-weekly grade-level team meetings aim to increase situation-level analysis and heightened teacher reflection. Engaging classroom teachers as the primary problem-solvers is supposed to facilitate a change in intervention type and quality from the previously recommended interventions by the SST. These anticipated changes represent a shift from SST that was child-focused to TAP that is teacher-focused and has the goal of supporting teachers. If teachers perceive TAP to truly differ from SST, the cases they refer to TAP may differ from the cases they used to refer to SST by severity of concern and type of intervention. For example, referring cases less severe in nature to TAP would be consistent with its mission of primary prevention and providing classroom support to teachers.

A final difference between TAP and SST relates to the types of interventions that are developed. When cases are referred to SST, there is the expectation that specialists will recommend interventions. Conversely, interventions for referred TAP cases are supposed to be developed by classroom teachers through the grade-level team's problem

solving. SST emphasizes referral to special education and “quick fixes” (p. 6), but TAP emphasizes in-class prevention and monitoring and evaluating interventions. In TAP, the teacher’s role and contributions to the child’s instructional environment take on increased importance. The conceptual differences in assumptions and operational differences in terms of teachers’ ongoing engagement in problem solving and change in role of specialists represent a change in approach toward teacher and student support and resolution of student concerns. See Table 2 for a comparison between the models.

Table 2

Comparison between SST and TAP

Student Support Model (SST)	Teacher Assistance Model (TAP)
Two-stage process: Problem Identification and Intervention Recommendation	Four-stage process: Problem Identification, Problem Analysis, Intervention Design, and Plan Monitoring
Attempts to remediate weaknesses within student	Develops classroom-based early interventions through data collection
Decision-making unit is a building-level team comprised of specialists	Problem solving is conducted by grade-level teams with the coaching of a specialist
Specialists primarily serve the special education students	Specialists have a broader role that includes the general classroom
Interventions are recommended by specialists	Interventions are developed by classroom teachers
Emphasizes referral to special education and “quick fixes”	Emphasizes in-class prevention, intervention monitoring, and instructional environment

Ultimately, this list of differences between the models is also expected to yield differences in outcomes. A school that is engaged in TAP is expected to reduce the rates

of special education referral and testing, increase the problem-solving skills of teachers, and shift the prevailing conceptualizations about teacher and student support. A reduction in special education referrals, reduction in out of school suspensions, and an increase in standardized achievement scores have already been documented in the TAP pilot schools. Full realization of these ambitious goals was expected by the developers to be a lengthy and challenging process, and the participating TAP schools were told to expect a three- to five-year implementation period before they reach full implementation. Therefore, the TAP developers recommended TAP schools “retain SST” while they were learning about TAP, to avoid being overwhelmed<sup>8</sup>. Schools were encouraged to move to TAP entirely when they felt ready. However, this advice did not come with clarification regarding how to coordinate the programs while managing the transition period.

### TAP Procedures

The TAP process begins when a teacher chooses to refer a student or group of students as a TAP case. The teacher has decided at this point that she or he cannot independently resolve the concern and needs additional support. The teacher is then supposed to complete the “TAP Referral and Problem Identification Profile” (see Appendix C) prior to the team meeting where the case will be discussed. The team coach is expected to be available to help the teacher complete the form, which involves a record review. The completed forms and included work samples provide the team with initial data to begin the first stage of problem identification.

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It should be noted that Woods Terrace did not accept this advice and they completely replaced SST with TAP.



After the team agrees on a problem definition, that is supposed to be based on collected data, they move to the second stage of problem analysis. During problem analysis they consider factors related to the learning environment that might contribute to the problem definition. A list of “Factors that Influence Behavior and Learning” (see Appendix D) can be consulted as a reference. These factors include instructional or curricular factors, teacher/ teaching factors, student factors, school environment, and home and community factors. This stage of problem analysis involves more information gathering from multiple sources and a detailed examination of the problem in order to identify the function of the behavior and ensure that the intervention will be functionally related to the problem.

Collaborative effort during the problem analysis stage is essential, especially if the referring teacher needs assistance with data collection. Once the reasons for the problem are confirmed, the intervention planning and implementation stage begins. The team discussion at this point focuses on developing interventions that address the reasons for the problem. The interventions should be supported by the evidence collected during prior stages, and must be reasonably simple in order to promote consistency of treatment implementation.

The fourth stage, plan monitoring and evaluation, involves collecting further data on the behavior or academic skill to see if the student is making the desired progress. Once target expectations are met, the team identifies ways to maintain and generalize the attained success. In the absence of success, the process is revisited and the intervention may be revised or a referral to the building level TAP team can be made. The building-

level TAP team reviews the case, engages in additional problem solving, and proposes new interventions that can include recommending the child for special education testing.

### Training

In July 2002, the TAP developers hosted a two-day training for the Phase One TAP schools. The training was attended by teams chosen by the principals from Phase One TAP schools. According to one TAP developer, these teams included primarily classroom teachers and specialists, and school psychologists and pupil personnel workers (PPWs) were also in attendance. The participants who were not classroom teachers were prospective TAP coaches for the grade-level teams, although this training was not a prerequisite for becoming a coach. Another meeting was held with a random, small subset of the 13 participating TAP schools in September 2002 that targeted classroom teachers, the primary implementors of TAP. The goal of the school-wide meeting, that consisted of a one-hour presentation and included a question and answer period, was to introduce teachers to the language of TAP. Therefore, most teachers in TAP Phase One schools received all of their training from their respective coaches, who may or may not have attended the intensive two-day summer workshop. A follow-up one-day training was held in March for Phase One staff members.

Those from Woods Terrace who attended the summer training were Maria Ramirez, the speech and language pathologist, Jeanette Holmes, the resource teacher, Karen, the counselor, and Greg Nicholson, the third-grade team leader. Jeffrey Thomas, the PPW, also attended the training, although he did not know at the July 2002 training that he would be assigned to this school. Both Helen, the school psychologist assigned to

the school, and I missed this training, but we were trained in consultation models in our school psychology graduate programs. Neither of the first-grade TAP co-coaches, Renee King and Judy Wilkerson, participated in the July training, although one co-coach did participate in the one-day TAP training held in March.

Other than the third-grade team leader who attended the July training, none of Woods Terrace's teachers participated in any of the TAP in-services. This lack of TAP training among the teachers, who were the grade-level team members and the primary problem-solvers, left them to learn about TAP while they were practicing it: during the grade-level TAP meetings with guidance from their coaches, who had limited training themselves. The lack of formal TAP training among most of the school's staff, particularly among the classroom teachers, accentuated the social component of their learning experience about problem solving. Through their participation in the meetings, they engaged each other and navigated a new process as they created meaning about problem solving and improving student learning.

At the summer training, the structure of the model and its stages were explained. A sample individual case and a building-level case were presented to provide examples of how the process is meant to function. The schools were asked to bring a student's file to the training so that they could practice completing a record review. Participants broke up into school-based groups and engaged in exercises practicing TAP, including "strategically analyzing" their school by identifying staff assets and school resources. This was used to develop a needs assessment to prioritize concerns at the individual schools, build a "catalog of the resources in your building on which to base intervention

planning,” and acknowledge what the school was doing effectively.

The purpose of the one-day training held in March was to bring the Phase One TAP schools together so that they could update each other on their progress. The staff were told in advance that they would be able to share concerns and participate in additional, intensive training regarding communication skills and data collection. The training began by reviewing TAP’s assumptions and intended outcomes, briefly reviewing the model itself, and discussing the “change process and TAP.” The complexity and dynamics of change were highlighted, primarily to reassure participants that the difficulties and challenges they were facing in implementing TAP, in fact, represented progress.

Experiences about collaboration were discussed and communication skills were practiced, including paraphrasing, asking relevant probing questions, and requesting clarification. Both collaboration and communication were identified as the hallmarks of team-building. The final section of the presentation was called “using data based decision making” and addressed data collection for individual students, groups, and the whole school. A rationale for collecting data was first presented, followed by separate discussions devoted to academic cases and behavioral cases. Charting data were reviewed as well as how to analyze the data in order to make decisions. This training session ended with a review of the TAP pilot school’s outcome data regarding special education referrals, out of school suspensions, and standardized achievement scores.

It was recognized by the TAP developers that the primary participants of TAP, the grade-level teachers, did not participate in the TAP training. The coaches’ training

was too limited for them to become skilled in the model and capable of training teachers in the model. Therefore, all Phase One and TAP pilot schools were assigned a “TAP coach.” The TAP coaches represented the Office of Psychological Services and provided individualized support to their assigned schools based on their perceptions of the school’s needs. The four system-level TAP coaches recognized that the ongoing support and ad-hoc training they provided varied widely across them and the 17 pilot and Phase One schools. One consistent feature of the ongoing training provided by the TAP coaches was that most of the support was provided directly to the building-level TAP team who were then expected to share the training with their grade-level teams.

Kim, the TAP coach assigned to Woods Terrace, supplemented their training needs by visiting Woods Terrace approximately once a month and meeting with the coaches to support their continued implementation of the model. She also participated in some of the grade-level team meetings. While the teachers received little direct support from Kim, they did not perceive that they needed additional supervision in order to implement the model and I did not observe any team or coach, other than myself, ask Kim for additional help regarding a specific case or issue. I was not aware of her giving guidance to specific coaches or teams regarding particular cases, although she would comment on the cases whose meetings she attended. She did not formally evaluate the school’s implementation of TAP, the effectiveness of the teams’ problem solving, or the quality of the interventions for individual cases. Kim often spoke about conceptual, macro-level issues related to TAP and she scheduled her visits to the school so that they would coincide with building-level TAP meetings that she could observe.

## Summary

TAP asks team members to engage in a stage-based problem-solving process that can direct them to focus on the context of the referred problem. Teams carry a referral concern through four stages, and analyze the instructional environment and the student-environment fit to develop interventions. The four stages are problem identification, problem analysis, intervention planning and implementation, and intervention monitoring and evaluation. Conceptually, TAP is fundamentally different from its predecessor, SST, and involves more than adding two stages. Staff are asked to determine the problem in concrete, measurable terms and collect data to monitor the problem prior to and during the intervention.

### Levels of Participation within TAP

Community members' levels of participation refers to how engaged and active they are in the community's functioning and meaning-making process (Wenger, 1998). Lave and Wenger (1991) characterize participation as, "always based on situated negotiation and renegotiation of meaning in the world" (p. 51). They suggest that learning occurs within the relevant context of actual problems that are interpreted through others' perspectives and contributions. Classroom teachers at Woods Terrace learned about TAP as individual cases were referred and discussed at team meetings, an embodiment of this description of learning. Lave and Wenger's definition of participation, however, has much broader implications than grade-level TAP teams holding meetings. The individual community members are also creating a personal identity and contributing to a group that is transformed through their participation.

Participation in a group can shape the types of actions and experiences undertaken by members, their interpretation of those actions, and their understanding of their own identities.

Wenger (1998) identified four levels, or types of participation, that can be found within communities of practice. These levels are not permanent or static labels; rather, they are dynamic as an individual can have varying levels of participation at different points in time. At Woods Terrace, those who were active in TAP and engaged other staff in the model are considered *full participants*. Those who were less than full participants represent the levels of *peripheral*, *marginal*, or *full non-participation*.

The full participants of TAP at Woods Terrace were the team members who had the most influence over the collective sensemaking process and they were Maria Ramirez, the TAP chair and speech and language pathologist, Jeanette Holmes, the second-grade coach and resource teacher, and myself, the third-grade coach and school psychology intern whose role was dedicated to supporting TAP at the school. As the primary, full participants, we were most active in TAP among the staff at the school, although we each had differing levels of clout within the school. Two staff members are noted for not being full participants: Yvette Jackson, the principal, and Helen, the fifth-grade coach and school psychologist. In this section, these five individuals are introduced and their relation to TAP is described; their sensemaking about TAP is integrated throughout the chapter.

### Full Participants

Full participants of a community of practice are the established members who are actively engaged in the purposes and practices of the community. By virtue of their role within the community, their opinions carry more weight in the meaning-making process than other members' opinions. For example, members of the building-level TAP team, who were also the TAP coaches, were perceived in Woods Terrace as being the local experts on TAP. Therefore, their interpretation of TAP was seen as correct or authoritative and the grade-level team members took their cues from their coaches.

Maria Ramirez, TAP chair. Maria was a speech and language pathologist in her 18<sup>th</sup> year at Woods Terrace. A middle-aged, African American woman, she had the most longevity at the school by far and held the most authority regarding issues of student needs and special education. Typically, an administrator or resource teacher oversees the IEP and SST teams and not a speech and language pathologist. However, Maria held this role at Woods Terrace for many years. Due to her extensive tenure at a school with historically high staff turnover and the esteemed position she held at the school, she was asked by the principal in spring 2002 to assume the role of TAP chair beginning in the next school year. Ms. Jackson arrived as acting principal in November 2001 from out-of-state, and began her tenure as principal at Woods Terrace in the 2002-2003 school year. She delegated the role of TAP chair to Maria, because according to Maria:

I think when [Ms. Jackson] and I met at the end of last year [spring 2002] she felt with the knowledge that she knew about me, that I would be able to handle the transition [from SST to TAP]. She pretty much said, "I want you to do it." Not that she didn't want to be involved, but she felt that I was the person that would



be able to take on that responsibility and take the leadership in that role. And pretty much, as you can see, that's what it was [laughs]. For better or worse. When the principal had questions or thoughts about TAP that she wanted to share, she would seek out Maria and discuss them with her.

In addition to the confidence the principal had in Maria's skills as TAP chair, Maria was perceived among the teachers as an expert in students with special needs. During three of the reflective interviews I conducted for this study, I asked the teachers to identify their ideal consultant among the staff, and they unanimously named Maria. According to second-grade teacher Erica Marshall, "I respect Maria a lot. I think she's got years and years of experience in special ed and everything." First-grade teacher Penny Chen, said:

I usually go to Mrs. Ramirez, just because I know that she's been here so long and...Ms. Holmes, this is her first year...Mrs. Ramirez...[is] usually the one who sets up the agenda and...she's had more experience...And I'll pop my head next door [to] tell Mrs. Holmes.

Finally, Andrea Young, a kindergarten teacher said, "...we're still looking for other ways to serve Shane. I believe that the speech pathologist had a good point, and then I applaud her because she really was the kind of kingpin of the situation...She brought up ways that we can serve him..."

Maria eased smoothly into the role of TAP chair and she seemed to relish her new role. As TAP chair, she spent more time in teachers' classrooms providing "plug-in" support to students, rather than exclusively providing pull-out speech and language

services to the 58 special education students on her caseload. Maria's role change represented an achievement of one of TAP's goals. One of the stated goals of the model is that specialists will provide a broader range of services to the general student population, and not restrict their services to students classified as having disabilities. This goal of the model materialized for Maria and she clearly loved that she worked in a "TAP school" and not an "SST school."

Despite Maria's excitement and enthusiasm for TAP, she would regularly lament that she thought the new roles she acquired through TAP were in peril. Speech and language pathologists (SLP) in this school system were assigned to schools based on the number of students whose IEPs required direct speech and language services. As a Phase One TAP school, fewer of the general education students at Woods Terrace were being tested and placed in special education and the total number of students requiring speech services was diminishing. Maria was worried that these lowered "numbers" would result in Alene being assigned to a different school the next school year. Without support from Alene, Maria feared that her time would be dominated by providing direct speech services to special education students and she would be less available to support general education students in their classrooms.

Unfortunately, Maria's fears turned out to be justified. Kim assured Maria that the TAP developers negotiated an agreement with the school system's supervisor for SLP: the TAP schools' projected reduction in IEPs would not be penalized with restricted hours from specialists. However, by June 2003 it was known that Alene was reassigned to another school due to the fewer number of students at Woods Terrace who required

speech services on their IEPs.

Maria commented about once a month that she didn't know what she would do "next year when our numbers go down." These comments seemed to correspond in time with the meetings she attended with other SLP who serviced schools within the geographic cluster that Woods Terrace found itself. Woods Terrace was the only school in the cluster that was participating in TAP, and these meetings provided Maria with the opportunity to reflect on what she was doing as TAP chair in contrast to her colleagues who were exclusively servicing students with IEPs. Maria would often return energized and enthusiastic about TAP saying, "I really believe in TAP."

Maria's enthusiasm for TAP can be assumed to have contributed to the model's stability at the school. If Maria had grown frustrated or irritated with TAP, her lack of interest or support would clearly have sabotaged its presence in the school. As the well-respected leader, Maria's enthusiasm and effort can partly account for TAP's presence and stability at Woods Terrace.

Jeanette Holmes, second-grade coach. Jeanette, the resource teacher, was also at Woods Terrace five days a week. As a full-time staff member whose primary responsibility involved serving students with special needs, her role made her an obvious choice for assuming leadership within TAP, a model whose purpose is to provide support to students. However, Jeanette, like most of Woods Terrace's staff, was new to the school in the 2002-2003 school year and was also in her first year as a resource teacher. For the previous four years she was a middle school Learning Center teacher at one of the district's schools.

A relatively young, African American woman, Jeanette can be described as a friendly, approachable staff member who was establishing herself at the school during the first year of TAP implementation. As an available, though not-well-known staff person, she did not have the respected reputation that Maria had developed over the years. While her position made her a natural full participant of TAP, she was simultaneously working on making herself a full participant at the school and becoming accustomed to being a resource teacher.

School psychology intern, third-grade coach. As the school psychologist intern and researcher, I was the third primary, full participant of TAP. As a psychologist intern, my full-time responsibilities were divided among three schools and I spent two mornings a week at Woods Terrace. My restricted schedule at Woods Terrace of two mornings was in contrast to the other building-team members who were at the school five full days a week. A natural consequence of being in the building part-time was my reduced visibility and availability to teachers. However, my role at the school was exclusively to support TAP and my graduate training in school-based problem-solving models made me the best-trained staff member at Woods Terrace in TAP. This trade-off, of being in the building less than nearly all staff but being the most familiar with consultation models and not having competing responsibilities at Woods Terrace, made me a natural candidate for being a primary, full participant of TAP. While I was not full-time at the school, my twice weekly visits helped me be available to observe, participate, and contribute to the practice of problem solving.

As one of the principal, full participants of TAP, my own understanding of the

program undoubtedly influenced the school's collective sensemaking about TAP. While it would be difficult to identify my personal contributions to the school's sensemaking about TAP, it was clear that my presence at Woods Terrace and my assigned role of exclusively supporting TAP highlighted the program's visibility and importance. In contrast to most other programs, schools rarely receive additional personnel to support implementation. Maria affirmed that my presence created something of a "TAP conscience" in the school when she introduced me to the kindergarten team at a grade-level TAP team meeting on February 4. As part of my introduction she said, and it feels like Ms. Benn is always in the school; every time I turn around, she's there.

#### Peripheral Participants

Peripheral participation involves being engaged in the community, but from the sidelines. Lave and Wenger (1991) refer to this level of participation as "legitimate peripheral participation" and consider it to be the primary mode of learning within sociocultural theory. They characterize this level as an apprentice-like experience that enables new and partial members to observe and listen as they grow to learn more about the community and its practice. While these members are not yet contributing to the community, this learning experience enables them to establish themselves in the community and develop into active, engaged, full participants.

The positive connotation to peripheral participation is its temporary state and that members are not expected to languish at this level. The two peripheral participants described below were partially engaged in TAP throughout the year and contributed to the practice of the model from their vantage point at the sidelines. Had these individuals

developed into full participants, they would have made many more positive contributions to the school's sensemaking and practice of the model. However, the lack of interest and lack of flexibility prevented them from emerging from the state of peripheral participation into full participation.

Yvette Jackson, school principal. As principal, Ms. Jackson designed a new school schedule that facilitated grade-level TAP meetings, attended a sample of the building-level TAP team meetings including ones where Kim presented, and was available to teachers and parents who had concerns about students' learning. However, she delegated the administrative, TAP-related responsibilities to Maria, excusing herself from being a full participant. Maria was flattered by this honor, but she felt a bit helpless without an actively involved administrator. Maria did not have the power to demand that certain specialists be more active in TAP. Therefore, while Ms. Jackson did support TAP, her partial participation most closely resembled the semi-involved peripheral participant who is somewhat engaged but has limited influence over the community's understanding and practice of the model.

Helen, fifth-grade coach. The school psychologists were expected to assume leadership positions and be full participants within TAP. Helen completed her graduate training at a program that was known to emphasize consultation services and school-based problem-solving models, pleasing the TAP developers that she was assigned to a Phase One TAP school. However, since the 2002-2003 school year was her first year in the school system she, like Jeanette, was trying to situate herself within her role and become acquainted with her colleagues, limiting her influence.

In addition, Helen was assigned to three schools and only spent Tuesdays at Woods Terrace. Her limited availability and presence in the school, as well as her frequent conflicts in scheduling with fifth-grade TAP meetings were points of struggle for her. Her struggle was apparent in the following exchange: on May 6 Jeanette emailed notes from Kim's training earlier that morning to the TAP coaches and school specialists. She concluded the email by saying, if you have questions please see myself, Maria, or Ms. Benn.<sup>9</sup> Helen who had also attended Kim's session replied to the email the next day, Don't forget about me! I am the school psychologist who works at your school. I am also available and I usually come to Woods Terrace on Tuesdays... While Helen attended most building-level meetings with TAP coaches, she did not meet with her grade-level TAP team and was not known among the teachers. Despite her good intentions, her limited participation best represents the level of peripheral participation.

### Summary of Participants

The five participants described in this section highlight the importance of the individual within communities of practice. These individuals contributed to the sensemaking and practice of TAP through their professional role at the school, their collegial relationships with other staff members, and their level of participation in the model. Identifying the levels of participation among community members clarifies the context within which the model functioned and is expected to be implemented.

### Summary

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Only statements made during the reflective interviews or excerpts from school documents are quoted directly in the findings chapters. Participants' comments made outside the context of the interviews are referenced as paraphrases.

Woods Terrace can be described as a generally typical school within its school district, according to demographic and special education data. Since the large minority population within the district is not evenly distributed across individual schools, one might even speculate that Woods Terrace's high rates of minority enrollment would be associated with higher rates of special education referral and placement. However, their data do not support this and instead they present as being in equal need of the Teacher Assistance Program (TAP) to support students in the general education environment. The goal of TAP is to support teachers and help them problem solve and develop interventions so that students can perform successfully in their classrooms without requiring special education intervention. The roles of the full participants at Woods Terrace helped the school become engaged in the model and attempt to realize these goals; the limited participation from the peripheral participants prevented the school from becoming more immersed in the model and negotiate the desired meaning about the model.



## Chapter Five

### Findings: Gatekeeping

One window into teachers' sensemaking about problem solving and their educational beliefs is the cases they refer to TAP. Which students teachers choose to refer for problem solving can provide insight as to their understandings about the purpose and services TAP provides and the types of concerns they consider to be most suitable for problem solving. I refer to the process of case referral as "gatekeeping," because it is the referral that enables selected students to have access to team-based problem solving. If a teacher were to think that only students with poor reading skills or only students who misbehave in class should be referred to TAP, then only those students would have the opportunity to become TAP cases. Since TAP problem solving begins with a referral from teachers, the teachers are seen as the gatekeepers of the entire problem-solving process.

Through my participant-observation as a building-level TAP team member and the third-grade TAP coach as well as the reflective interviews I conducted, I was able to identify different gatekeeping practices. This helped me interpret the meanings the teachers constructed about which students were appropriate candidates for TAP and some of their underlying educational perspectives. In addition, teachers' initial understandings about TAP seemed to evolve as the year progressed; the TAP cases that came to my attention in May and June represented a broader array of concerns than the cases referred earlier in the year.

The label gatekeeping refers to a macro-category that contains the individual

themes and meanings that teachers constructed about TAP. These themes included referring students in need of preventive-level intervention, referring students in need of intensive-level intervention, referring students who were not receiving other supports, and referring students who are currently progressing adequately but are believed to be at-risk for failure during the next school year. These understandings were manifest through individual teachers' gatekeeping as well as sensemaking at the grade-level team. Therefore, the level of analysis for each gatekeeping theme may be at the teacher and case level or the grade-level.

#### Preventive-Level Intervention

One goal of TAP is to have teachers refer concerns that are relatively mild so that they can be resolved before the concerns escalate into larger problems. Karen, the counselor and fourth-grade coach, believed that this goal was being actualized, as she perceived the TAP referrals to represent concerns about students in need of preventive-level intervention. Karen was one of two building-level TAP team members who had been a regular member of the Student Support Team (SST). Due to the high rate of staff turnover, most teachers and specialists were new to Woods Terrace and did not have the perspective to compare case referrals between TAP and its predecessor, SST.

First grade, Ms. Haller. Karen felt that the structure of TAP encouraged teachers to engage in consultation, which enabled them to refer concerns of a more mild variety, while the referral concerns submitted to SST were more severe. Karen explained this to me on November 12, the occasion of my second visit to the school, in reference to a first-grade case that was presented at the building-level TAP team meeting that morning.

Sharon Haller, a first year teacher, referred a student who did not always follow directions and was disrespectful to the teacher. In individual consultation with Karen, they developed a time-out intervention that they wanted the building-level team to review and offer suggestions for improvement. Karen was convinced that this type of concern would not have been referred to the SST, since it was not serious enough. A student who got out of his seat too much, Karen elaborated, would be more likely to be referred to TAP than to SST.

Since the building-level SST meetings were not particularly convenient for teachers, teachers had to demonstrate more initiative in order to refer a case. This, Karen concluded, raised the threshold for the severity of the concern before a teacher would refer it as a case. The more convenient consultation structure of TAP encouraged teachers to refer more mild concerns, which was one reason why Karen preferred TAP to SST; TAP gave her more opportunities to work with and support teachers. (A second reason Karen preferred TAP to SST was that it expanded her role to helping teachers with in-class interventions and diminished the requests for her to conduct pull-out counseling.) Karen claimed that the teachers preferred TAP, too because they got to address “lower-level” concerns with colleagues and specialists more easily.

Kindergarten, Ms. Park. If first-grade teacher Ms. Haller was one example of Karen’s characterization that TAP offered consultation support to teachers and no problem is too small, then kindergarten teacher Margaret Park offered a more compelling case. According to Maria, the kindergarten coach, Ms. Park referred 3 of her 14 students to TAP. While there were no completed TAP forms to verify this, my involvement with

the kindergarten TAP team suggested that all grade-level TAP referrals came to Maria's attention, rendering her estimate to be correct. Among the four kindergarten teachers, nearly all of the TAP referrals were made by Ms. Park. On one occasion when she could not find Maria, she asked me to observe two of her students and serve as consultant. While she had specific concerns for each student, she was primarily concerned about their ability to follow directions. These referrals represented Ms. Park's desire to have collegial support and consultation for students who did not present with dire needs, but for whom she wanted assistance.

Third grade, Ms. Price. Roz Price, the part-time teacher for gifted and talented (GT) students who worked most closely with the third grade as a reading teacher, also believed that the structure of TAP was more conducive to collegial consultation than SST; she felt that more mild concerns were referred to TAP than SST. While Ms. Price was in her first year at Woods Terrace, her previous school was one of the TAP-pilot schools and she had been a teacher for 20 years. She felt that TAP enabled teachers to develop interventions with a classroom focus and involve parents only with serious concerns. In the SST model, if a teacher wanted support or advice from the team of specialists, the teacher would ask Maria to place the student on the SST agenda and the parents would be invited to the meeting through a letter at least ten days in advance. Ms. Price thought this formal procedure needlessly worried parents, as the teachers were seeking collegial support and the concern was not necessarily serious enough to warrant parent involvement.

Ms. Price assumed that the formal, elaborate proceedings of SST deterred

teachers from referring students. The concern needed to escalate to a larger problem before teachers would make an SST referral and invite the perceived ordeal of that process upon themselves. In TAP, however, teachers' thresholds for the type and magnitude of referred problem were lowered, and the teachers were able to discuss student concerns together without alarming the parents.

Comparison between TAP and SST. The comparisons Karen and Ms. Price made between TAP and SST were comparisons between the ongoing grade-level TAP team meetings and the scheduled building-level SST meetings. The grade-level meetings were understandably less formal than the building-level meetings that included the student's parents and an administrator. A more fair comparison would be between the building-level TAP team meetings and the SST meetings, as those were the more similar gatherings. However, this more appropriate comparison was overlooked, and it seemed that SST represented "building-level team meetings," while TAP represented "grade-level team meetings" without having reference to its own building-level team component.

The larger irony of this unequal comparison between the student support models was that specialists and same-grade colleagues did not seem to be available for informal consultation and support when the school was practicing SST. Presumably, teachers could have sought out each other and specialists for consultation regarding "low-level" or "preventive-type" cases, a more equivalent comparison to the grade-level TAP team meetings. These comparisons between the models, however, suggest that informal consultation did not take place while the school practiced SST. It took the introduction of TAP and its structure of grade-level team meetings to promote referrals of cases that

were not serious. The gatekeeping practice of referring students in need of preventive-level interventions changed, according to Karen and Ms. Price, with the introduction of TAP.

Summary. The relative ease of referring students to TAP in contrast to SST encouraged teachers to refer and “talk about” multiple students during TAP meetings. This created the perception that the students discussed during the TAP meeting time were legitimate TAP cases. However, engaging in problem solving is more intensive and requires more than a free-form discussion during a designated meeting time. Nonetheless, unlike SST, TAP’s simpler referral process and the safe environment at the grade-level TAP meetings encouraged teachers to raise more students’ names than the ones who presented with severe concerns. Students with more mild concerns were referred to TAP who apparently never would have been referred to SST.

#### Intensive-Level Interventions

The view that TAP referrals were more preventive-level cases was either not shared by most of the staff or short-lived. Karen offered her personal observations in November regarding teachers’ gatekeeping, when TAP was still in its infancy at Woods Terrace. Ms. Price offered her commentary in June, but she did not refer any students to TAP herself and participated irregularly in the third-grade team meetings; both characteristics are likely to be related to her status as a part-time teacher. While Ms. Price highlighted structural differences between TAP and SST, whether these differences actually yielded different referral patterns is not as clear.

Second-grade’s collective sensemaking. The second-grade team seemed to

collectively determine that the appropriate TAP cases were the ones that warranted intensive-level or out-of-class resources. This was supported by Ms. Marshall and Kay Mendelsohn's reflective interviews and the team's gatekeeping practices regarding students with articulation difficulties. Their common experiences and discussions at the second-grade team meetings may have influenced how they arrived at the same conclusion as to what constituted the most appropriate referrals to TAP. The team's negotiated meaning of valid TAP referrals is substantiated by the fact that the other two second-grade teachers, Jesse Blake and Shawna Massey who taught the two highest reading classes, did not refer any cases to TAP.

When I asked Ms. Massey and Mr. Blake why they did not refer cases to TAP, they replied that everything is fine in their classrooms. Ms. Massey and Mr. Blake may have had concerns about students they taught, but as a time management strategy, they probably resisted referring these students. Based on the team's regular complaint that there was not enough time to address the referrals, Ms. Marshall's and Ms. Mendelsohn's students took priority as they taught the lowest reading groups. As Mr. Blake commented to me, all of the referrals come from Ms. Marshall, because she has the lowest performance-based reading group. In contrast to Ms. Marshall's and Ms. Mendelsohn's cases, Ms. Massey and Mr. Blake seemed to conclude that, in fact, all of their students were fine and that their potential cases were too mild to warrant TAP referrals.

Second grade, Ms. Marshall. Erica Marshall, a second-grade teacher, participated in the reflective interviews regarding Veronica, an Hispanic student in her reading class.

On the TAP Problem Identification Form the reasons for referral are recorded as, “Not making academic progress in reading; continuing to read at a level eight; demonstrate more confidence in reading/ use strategies while reading; make connections between letters and sounds.” During the interviews Ms. Marshall elaborated on these reasons for referral, “...I feel like we were doing as much as we possibly could with interventions, so to speak, at the classroom team level. And that’s why it went to TAP, to get more support maybe from speech and ESOL-type things.”

Rather than refer a student in order to develop classroom-based interventions, she was referring Veronica to TAP because it represented the procedural mechanism for obtaining out-of-class support services for her. Ms. Marshall wanted to explore more intensive-level intervention for Veronica because, “...when she’s reading...she doesn’t transfer what she remembers from one page to another. A word, let’s say, she doesn’t transfer from one page to another. So processing issues like that...” Ms. Marshall summarized her referral concern by saying:

I wanted to rule out any learning issue...I was hoping to get more professional input using the TAP process. And I also want documentation that I had concerns about Veronica’s learning issues. I didn’t want the third-grade teachers or team to think, “What was done for Veronica?” I want it to be documented that there were concerns and these are some of the things we did for her.

Ms. Marshall’s explanation for referring Veronica to TAP stands in contrast to Karen’s characterization of TAP cases being “lower-level” or preventive problem solving. While Ms. Haller, the first year, first-grade teacher, wanted help with increasing



a student's in-seat behavior, Ms. Marshall referred a student in order to pursue additional out-of-class resources for her. Ms. Haller may have been looking for additional resources to enhance her classroom, the point of reference when Karen described TAP as more prevention-related, but Ms. Marshall felt that Veronica would no longer benefit from in-class resources. Having "processing problems" is typically a code-word for learning disability and refers to severe learning needs. When Ms. Marshall stated that, "I feel like we were doing as much as we possibly could with interventions, so to speak, at the classroom...level," she was clearly indicating that her classroom was as accommodating as it could be and Veronica was in need of support from other sources.

In fact, during Ms. Marshall's second interview she expressed regret for referring Veronica to TAP. During the first reflective interview on May 20, Ms. Marshall commented that Veronica's reading had improved recently and realized that it was due to the supplemental phonics instruction she was providing to the whole class. Ms. Marshall explained that she believed phonics instruction to be a crucial element in reading instruction. However, she felt discouraged by the administration from teaching phonics. After the students took the standardized reading test in March, Ms. Marshall decided to introduce a "phonics rule of the week." The eight weeks of phonics instruction included lessons in short vowel sounds, long vowel sounds, vowel blends, and silent letters for the first 15 minutes of every morning.

At the first reflective interview, Ms. Marshall expressed the wish that Veronica had made more reading progress, but she no longer had concerns about her. At the second interview on June 5, Ms. Marshall said:

So when I first referred her, which was months ago, I was thinking differently. But then once I realized [after our first interview] that...phonics was benefitting her, I think that she'll just need...to review some fundamental [phonics] skills. And I don't think it will have to come to the building level [TAP team], by that I mean the...specialists...I think I said to someone the other day, "I would have never TAPped her if I knew what would work for her."

Ms. Marshall's regret for referring Veronica to TAP is due to the progress she made since the time of the referral. Ms. Marshall did not attribute Veronica's success to problem solving or any interventions developed through TAP, but to the phonics instruction concurrently introduced. Since the outcome was favorable for Veronica, her reading had improved significantly and there was no suspicion of "learning or processing problems," Ms. Marshall judged this case to be unnecessary. If one were to understand the purpose of school-based problem-solving models as resolving referrals within the classroom through preventive-level interventions, students in need of supplemental phonics instruction would be considered ideal case referrals. However, Ms. Marshall's concluding thoughts about Veronica's case indicate that she considered the legitimate cases to be the ones that provide students with intensive or out-of-class interventions.

Second grade, Ms. Mendelsohn. Ms. Mendelsohn, another second-grade teacher, seemed to share Ms. Marshall's perspective that students in need of intensive-level intervention are the most suitable candidates for TAP. Ms. Mendelsohn participated in the reflective interviews regarding Pablo, an Hispanic student who was placed in her reading class and mathematics class for most of the mathematics units. Pablo was

referred to TAP by Ms. Marshall, his homeroom teacher, and once the second grade began participating in the performance-based grouping, Ms. Mendelsohn inherited this TAP case. Ms. Mendelsohn said that she agreed with the referral, and appreciated that the referral alerted her to Pablo's needs once he entered the class and enabled her to be more responsive to him.

Pablo was referred to TAP for multiple reasons. The reasons were recorded on the TAP Problem Identification form as, "Attentional issues. Pablo doesn't socialize with others and tends to be rude to adults. Has difficulty remaining focused and organized. Seen daily." Ms. Mendelsohn never observed Pablo's rudeness to adults, although she agreed that he had social-emotional difficulties as evidenced by his being a "loner" and his unwillingness to socialize with peers during class. Ms. Mendelsohn added that he was reading below grade level. When I asked her to rank-order the three referral concerns according to order of importance, she replied:

I would say...my greatest concerns were the attentional issues, because it was very hard for him to pay attention...And then...I think even the social-emotional [issues] are really important at this stage...he's definitely a loner, if you want to...put a label on it. And then...the reading level is a concern, but I think...if you can get a hold of the social-emotional [issues] and have a child who is emotionally healthy then a lot of this other stuff will tend to fall in place. So, I'd rather have a kid who's very well-adjusted emotionally and psychologically and is below grade level because then you can work on it.

Between the six months of November and May, Ms. Mendelsohn was no longer

concerned about Pablo's attention levels, as she had the chance to get to know him better and he had the opportunity to "mature." In addition, his reading had improved significantly and that was no longer a concern. Entering second-graders were supposed to be reading on a level 16 and then finish the year on a level 20. Pablo tested at level 7 in the beginning of the year and advanced to level 16 when I conducted the first interview. While he was finishing the year below grade level, his rate of progress was more than double of what is expected from an average student. Therefore, while Ms. Mendelsohn might have been disappointed that he was not yet at grade level, she was extremely pleased with his reading growth. However, she continued to be concerned regarding his social-emotional functioning.

It remains puzzling that a classroom teacher would be more worried about a student's social-emotional development than his reading. When I asked Ms. Mendelsohn to elaborate on this point, she clarified:

I guess as a teacher it's hardest to address social-emotional, because you're not on the playground. You can't force kids to play with him, you can't force him to play with other kids. You can put a book, and you can give him strategies and you coach them on how to be a good reader. You can do certain things to increase their attention, like sitting them in the front row, calling on them to participate, designating them as a leader to lead in the shared reading. There are certain things you do to...address [those] two...concerns, but social-emotional are things that I feel like it's harder to address as a teacher because of a lot of these other things.

Basically, Ms. Mendelsohn was saying that as a reading teacher, his reading concerns were “...manageable; I could do something about it.” She was not interested in developing classroom-level interventions or consulting with her colleagues regarding strategies to improve his reading skill; she felt that she was competently “managing” his academic progress and wanted his status as a TAP case to give him access to out-of-class resources for his other areas of development. According to Ms. Mendelsohn, Pablo’s severe needs, such as inadequate socialization, made him a good candidate for TAP.

Second grade referrals for speech services. Another indication that the second-grade team understood TAP to be the mechanism for pursuing intensive and out-of-class resources for their students was offered at their last grade-level team meeting. The team met on June 4, and their coach Jeanette wanted to see if there was any unfinished business left before the school year would end in two weeks. The rest of the meeting involved discussing two students who the teachers thought would benefit from speech services. As a team with two new teachers and a coach new to Woods Terrace and elementary schools in general, they did not seem to realize that they could bring speech concerns directly to the speech and language pathologist. Instead, they thought that they had to talk about the students first at their TAP meetings. The students they talked about at this grade-level meeting presented only with speech concerns. As non-urgent cases they were sent to the bottom of the TAP agenda and did not re-surface until two weeks before the school year ended.

Jeanette reported on Jamie, an Hispanic student who had a lisp, “[Maria] may decide to do consultation with the kid, but she said that it’s really just a lisp. And for a

lisp they don't do speech therapy." Ms. Mendelsohn did not understand why direct speech services are not offered to children who lisp, but Jeanette was not prepared to answer that. "Quite frankly, we'll have to ask Maria...I don't know because I'm not a speech pathologist. It's not something they...look at to remediate; it is something some kids grow out of over time." Jeanette went on to explain why a student with a lisp would not be considered to have a disability that requires special education classification and intervention. Ms. Mendelsohn replied:

I never wanted him to be an IEP kid. I just wanted him to get probably exactly what you're describing, some pull-out services so that...I just feel like, we have a speech pathologist in our school, why is it such a big deal? Maybe just even one hour a week...So, [what if] it does not exactly affect his reading?...I want to point out, [what about] when he's...13 and it's still not solved?...I guess my thing is as a public school with a speech pathologist, I would think there's something [we could offer him].

As evidenced by this conversation, it was being held between the wrong people. Ms. Mendelsohn felt strongly that Jamie would benefit from direct speech services, and she found herself debating this point with other second-grade teachers and her TAP coach, the resource teacher. The only individual who could have given her a satisfactory answer was the speech pathologist, who was not there.

The conversation then turned to another student, Michael, who also had speech difficulties. Mr. Blake described his speech as "unintelligible" and that, "it takes him two to three times to repeat himself [for me] to understand him." Ms. Marshall agreed

with Mr. Blake that the student was difficult to understand, while Ms. Massey did not. Jeanette responded to this exchange about Michael, who had speech problems, two weeks before the school year ended by saying:

I apologize. From my limited experience, I really can't say much...I'm just going to keep referring it to Maria. And I'll e-mail, as I always do I'll e-mail her once again with the student's name [and] cc you. And then just get on the dime.

This entire exchange about Jamie and Michael's speech needs seems misplaced. If this team had understood TAP to be a school-based problem-solving model, the referring teacher should have realized that the most efficient way to address articulation problems would be to contact the speech pathologist directly. However, if a team conceptualizes TAP as the bureaucratic protocol used to obtain intensive services for a student, then the case first needs to be referred to and addressed at the grade-level TAP team. These students' names were raised after the more urgent ones were addressed, and the referring teachers found themselves negotiating students' speech needs with their coach, not the speech pathologist.

During the interview I conducted with Maria, she commented on the second-grade children with speech needs who were referred to TAP but never came to her attention. She inferred that the second-grade team interpreted TAP to be a referral mechanism that must precede obtaining additional services, an extension beyond a collaborative school-based problem-solving model. However, as she noted, students with more urgent academic and behavioral needs took priority and the students with exclusively articulation difficulties were deferred.

I was talking to [Mr. Blake] and I was really taken aback...[H]e said, “There are some children that we talked about in [TAP]. But we talked about so many children...those [speech referrals] might shift down to the bottom and nothing would have happened.”...And I said...“you know, next year when you have a concern about speech you can go through the TAP process, but please include me in it.” And the teacher said, “I didn’t know I could go to you.” And I was like shocked. Because he thought that if the children were discussed in TAP, with their [grade-level] team...that everything should have been resolved right there. There are so many children that they were trying [to talk about] in so limited a space of time that the ones that really were behavior issues, attention issues, severe academic issues, those are the ones that were talked about and talked about repeatedly. Like over and over and over and over again. And the other children who were mild in terms of their needs or on a school level sort of got pushed to the wayside.

The second-grade team demonstrated that they understood that students in need of intensive services were the most suitable candidates for TAP. This was articulated by the two teachers who referred most of the students from that grade, supported by the other two teachers’ explanation for their lack of referrals, and the team’s approach to addressing speech referrals.

Kindergarten, Ms. Young. The gatekeeping practices of the second-grade TAP team indicated that they interpreted that intensive-level cases are the ones most appropriate for referral to TAP. This meaning, however, was not restricted to the second-



grade team. In fact, it was Ms. Young from the kindergarten team who seemed to hold this position most strongly. When I first asked her if she would participate in the reflective interviews for my study, she replied that she rarely refers students because she does not want to do anything so serious with kindergartners. They're still developing and I want to give them time. Only if it is an extreme case will I refer them. This comment does not represent the understanding of a model intended to provide teacher support through preventive-level interventions. Ms. Young explained that she referred Shane, an African American student, to TAP because:

I needed something beyond what I could afford...I refer [students] because I believe they need something, some outside testing or something beyond what I can do...I was looking for was what's happening to his brain or what's happening because of his history, what's going on there. And I'm not real familiar with brain research...I wanted more expertise. So that's basically the expertise, above and beyond the classroom teaching, the classroom setting, or 40 years of experience.

Ms. Young was extremely clear that she was not looking for teacher wisdom or classroom-based interventions when she referred Shane. She referred him so that he could be tested by an expert and she could learn "what's happening to his brain." She later added that she referred him to get, "some technical expertise; otherwise I wouldn't have even bothered." In addition, these are the only types of cases she refers because, "I don't usually worry about [i.e., refer] kids, because developmentally they're just, it's just so erratic, sporadic, they way they develop." To Ms. Young, making a referral to TAP

was the equivalent of directly requesting special education services for the student. She gave referrals a lot of weight and considered them seriously, not as though she were seeking preventive-level interventions for her own benefit as a teacher. Indeed, Ms. Young's worries about the long-term repercussions of referring a kindergarten student to TAP convey a sensemaking in which TAP is not independent from special education.

Kindergarten's grade-level sensemaking. If Ms. Young represented the perspective that the most appropriate TAP referral is one that yields technical expertise from an outside resource, then Ms. Park represented the perspective that no student concern is too small for TAP. Two opposite perspectives about TAP and two non-referring teachers were contained within the same kindergarten team; these team members did not seem to share a collective meaning about TAP. Maria explained that one non-referring teacher, Felicia, was "brand new" and did not make any referrals. Maria also commented that the fourth kindergarten teacher, Cindy, had a background in special education, and preferred to handle her concerns and develop interventions independently.

However, Maria's explanation is relatively puzzling. Being a new teacher and having training in special education should not preclude a teacher from wanting to collaborate with her colleagues regarding a student who presents her with challenges. In fact, Ms. Park would probably explain her TAP referrals as being due to her status as a first-year teacher and wanting the advice and support from colleagues, contradicting Felicia's reason for non-referral. Training in special education might make a teacher more likely to refer cases to TAP due to familiarity with data collection and problem

solving.

Maria's explanation of two teachers' non-referring patterns did not really clarify their understandings about TAP, but it suggested that the kindergarten team did not negotiate a collective meaning about TAP. Instead, they were a composite of individuals who came to their own independent conclusions about the purposes and meaning of TAP. The fact that this grade-level team did not have a shared meaning about TAP can be attributed to the small number of cases referred and the few meetings they held. Without the opportunities to deliberate together and influence each other, unlike the teams that met regularly, they did not arrive at a team-wide meaning of TAP.

First grade. The first-grade TAP team seemed to understand TAP just as the second-grade team did: that students in need of intensive-level intervention were the most suitable candidates. When Ms. Chen participated in the reflective interviews, she explained that her referral of Juanita, an Hispanic student, was in fact an aborted referral.

She was one of the first cases at the beginning of the year...Then we stopped [her case] because there were other kids who we were more concerned about. I know that there are always lots of kids on the agenda...So it's kind of like, "OK, we have this bunch of kids, which ones are you most concerned about?" And when Maria came to do her observations, those were the kids that she took further along the TAP process.

According to Ms. Chen, the first-grade team dropped TAP cases mid-year as more urgent ones were referred. As a time management strategy, since all referred cases could not be addressed, the ones that involved more intensive support took precedence and the

“preventive-level” cases were either not initiated or dropped mid-case. Assuming Ms. Chen’s summary of the first-grade TAP proceedings is accurate, it must be reconciled with Ms. Haller’s referrals of “preventive-level” cases.

The first-grade team had two co-coaches, Judy Wilkerson the reading specialist and Renee King the primary ESOL teacher, as neither were willing to accept independent responsibility for coaching a grade-level TAP team. Neither coach attended the building-level TAP team meetings regularly, unless they were a direct service provider to the student under discussion. In fact, when I sought consent from them for my study, they each told me that the other was the primary coach for the first grade. The building-level TAP team was aware of this gap in support, and Maria and Karen tried to fill the gap.

When I asked Ms. Chen to describe the first-grade TAP team meetings, she replied that the teachers discussed which students they wanted to refer to the building level team.

It wasn’t really meetings, it was more...“I’m worried about this, do you see the same thing when you have [this student]...?” “Yeah, like sometimes; let’s try that or possibly TAP. Take it to the table [building-level TAP].” And that was about it...Sometimes the coach was there, sometimes the coach wasn’t there. If the coach wasn’t there, then we just sent her the names. And she would get back to us, “OK, what were the concerns? Or who were you the most concerned about?”

However many students the first-grade team was concerned about, there were essentially no first-grade cases that came to the building-level TAP team after November. There was no problem solving at the grade-level and few cases were referred to the building-

level team. In Ms. Chen's words, TAP for the first grade involved, "...when Maria came to do her observations, those were the kids that she took further along the TAP process." Maria confirmed this characterization when she explained that she was pulling kids through TAP.

Therefore, as a non-functioning TAP team, the first grade would submit names of students who presented concerns to them to Maria. Ms. Haller's 'preventive-level' referral at the beginning of the year was her only case that came to the building-level team. According to Karen, they continued to work together throughout the year regarding other students who presented with challenges. The collective meaning the first-grade teachers negotiated about TAP seems to have been that you can only refer the students with the most severe needs, due to time constraints, and that TAP involves consulting with Maria who will observe the student.

Third grade. The third-grade team, like the first and second-grade teams, primarily referred cases to TAP that required intensive-level intervention. The third-grade team, like the second-grade team, had regular meetings, but they did not add meetings if they did not complete the agenda in time. As the coach of this team, I was familiar with the cases they referred and discussed at the team meetings. The cases referred were mostly of an academic nature, and the students were perceived to need intensive-level resources.

The first TAP referral from the third-grade team, Barbara, was a white student who occupied the team's agenda during the months of November, December, and January. She was referred to the building-level TAP team and that meeting was held in

April. Barbara was perceived by her teachers, particularly her homeroom teacher, Mr. Nicholson, as needing highly intensive resources. Mr. Nicholson was skeptical that Barbara could be successful in a mainstream school and thought she should be placed in a more restrictive school with comprehensive services.

Among the three third-grade teachers, most of the case referrals came from Mr. Nicholson who taught the lowest reading group. Lauren Hainer referred two cases herself, one was parent-initiated and the other case was a student who was one of the lowest readers in her reading class. Darlene Lyon referred one case in January. On one occasion she was expressing concerns about individual students and I asked her why she was not referring them to TAP. She responded that she thought TAP was for students with academic problems and these students were bright. (Ms. Lyon taught the higher reading and mathematics level classes.) Ms. Price, similarly, told me that while she had concerns about individual students' attention levels, she did not refer any cases to TAP because her students were in the Gifted and Talented group and the students already on the agenda seemed like more pressing cases.

Fourth grade. The gatekeeping practices of the fourth-grade team were unknown to me. Karen, the counselor, was the coach for the fourth-grade team. While Karen was a regular member of and contributor to the building-level TAP team, she did not seem to be active as a grade-level coach. I was interested in attending some of their grade-level meetings to observe their team functioning and understandings about TAP. However, on the occasions when I asked Karen if their next scheduled meeting was going to be held, she told me the meeting was canceled.

While I am certain that this team did meet at least a few times during the year, there were no meetings that I could attend and only one case was referred to the building-level TAP team. The meeting for this one case, however, was canceled when the parent indicated that she would not be able to attend. Karen said that the purpose of the building-level TAP team meeting was to communicate with the parent in the presence of multiple specialists. Without the parent present, she and the teacher saw no purpose in holding the meeting. The lack of grade-level meetings and case referrals to the building-level team within the fourth grade indicate that they were not truly participating in TAP, making it hard to infer the meanings they attributed to this process. However, a lack of meetings and cases can help explain the school-wide meaning and understanding of problem solving.

Fifth grade. The fifth-grade team did not have any referrals to the building-level TAP team, which is one less than the fourth-grade team that canceled its single meeting. The fifth-grade team seemed to meet even less often than the fourth-grade team did. Their assigned grade-level coach was the school psychologist, Helen. Helen regularly bemoaned that she was unable to attend the fifth-grade TAP team meetings and it was doubtful that they held many meetings in her absence. Because Helen was assigned to three schools, she was scheduled to be at Woods Terrace on Tuesdays. The fifth grade held their team meetings on Tuesdays during the late morning, when Helen should have been available. However, when the fifth grade was supposed to be having their TAP meetings, there were often IEP meetings scheduled. Faced with this conflict regularly, Helen attended the IEP meetings and missed the grade-level TAP meetings.

Helen had the impression that the fifth-grade team was meeting in her absence. This would be a plausible assumption, as the TAP manual mentions that teams are supposed to meet bi-monthly and coaches are encouraged but not required to attend. However, the fifth grade did not refer any of their cases to the building-level TAP team and my experiences with the fifth-grade teachers indicated to me that they were not meeting on a regular basis. Their lack of meetings and case referrals suggest that they were not really participating in TAP. While their partial participation offers rich data to interpret the school-level participation and meaning of TAP, identifying this team's meaning of TAP based on their limited gatekeeping practices is quite difficult.

Summary. Most teachers seemed to share the perspective that the appropriate TAP referrals were the ones that required intensive-level support for the students, and the second-grade team assumed that a student has to be discussed at TAP before any service provision can be pursued, such as speech. This understanding contradicted Karen and Ms. Price's perspective that TAP referrals provide preventive-level intervention for students who have more mild needs. It is possible that more mild cases were being referred in the first few months of the school year. In addition, teachers may have referred the same individuals to TAP who they would have referred to SST, but at an earlier point in the school year when the concern was more mild. The teachers may have felt more comfortable referring a case to TAP when they had the initial concern, while they would have waited longer and for more evidence of their concern before referring it to SST.

#### Equitable Distribution of Resources



The findings of teachers' gatekeeping practices indicate that most teachers referred students to TAP who they believed needed intensive-level support. While this was not necessarily true at the beginning of the school year, the majority of the cases discussed at the grade-level teams and referred to the building-level TAP team fit this description. In addition, the cases that were not referred to TAP can add to the interpretation of teachers' gatekeeping practices and the meaning they attributed to TAP.

Lack of referrals among students with Individualized Education Plans (IEPs). A major disqualifying criterion for a student to be referred to TAP was whether that student already had an IEP. If the student had already been identified with a disability that required special education intervention and an IEP, the probability of that student being referred to TAP was nearly zero. Even if the teacher was having difficulty instructing that student or if the student was not progressing satisfactorily, which might indicate that this case would be a good candidate for TAP, the case would not be referred. Instead, the teacher might mention the student to a grade-level colleague, bring the case directly to the IEP team, or discuss the student with a specialist outside the context of TAP.

While I did not attend the IEP-related meetings at Woods Terrace, I later learned that they were more closely connected to TAP than I initially assumed. For example, Helen complained to me that a particular third-grader had her third IEP meeting in April because the team wanted to change her disability coding from learning disability to mental retardation and move her to a more restrictive school with more resources. Helen was frustrated with the team because she felt that the student's cognitive and adaptive functioning was too high for her to be considered to have mental retardation. If the

student were not progressing in the classroom, Helen felt that more classroom interventions and instructional modifications needed to be provided.

As the coach of the third-grade team, I knew of this student because I observed and conducted assessments in the third-grade classrooms. However, I had no awareness of her lack of progress with the curriculum or the teachers' concerns. Indeed, if her teacher, Mr. Nicholson, had been looking for classroom-based interventions and instructional support, a referral to TAP would have been highly appropriate. Although students who have IEPs are not restricted from being referred to TAP, Mr. Nicholson's decision to side-step TAP represented a sentiment across teachers: referring students with IEPs to TAP was not appropriate and would be an unwise use of resources.

Lack of referrals among students with known obstacles. When Ms. Marshall discussed Veronica's case with me during her reflective interviews, she articulated the position that students with IEPs and other known needs ought not be referred to TAP.

[Veronica is] one of the higher...independently performing [students] in my reading class...I have 14 [students in the class]: seven...are ESOL, so...I could [only] refer them if I thought there was something beside ESOL, but they're making growth with their ESOL work; three IEP [students], so...they have their own special support...I...have [four] left who are not ESOL or IEP [and Veronica] is making the slowest amount of progress out of all of them.

While Veronica may be one of the "higher independently performing" readers in Ms. Marshall's class, she is the one who was referred to TAP. One might have expected Ms. Marshall to refer her weakest readers, the students who need the most intensive

interventions. However, of her 14 students, she disqualified 10 of them either because they have IEPs or because they are receiving English language support. Of Ms. Marshall's remaining four students, Veronica presented as the neediest. Ms. Marshall's unwillingness to entertain referring students who were experiencing difficulties but were already receiving support suggests that she would agree with Mr. Nicholson that TAP is only for students who are not receiving any services.

Exception to disqualified referrals. Ms. Chen, the first-grade teacher, did not seem to share Mr. Nicholson and Ms. Marshall's understanding that TAP should be restricted to students who need support and are not currently receiving any support. Ms. Chen described Juanita as the lowest reader in her lowest reading group until she was moved to a lower reading group in January. Ms. Chen taught one of the lower reading classes, but the first-grade performance-based reading groupings did not seem to be as stratified as other grades' performance-based reading groupings. When explaining how she chose to refer her, she said:

[When] we were doing guided reading groups, she had no... strategies. She didn't understand any of the strategies on how to decode a word, or any sight words. Her sight word vocabulary was very low, especially when we started doing the [district] reading testing. She tested very, very low. And I thought it was maybe an ESOL issue, so I talked to the ESOL teacher. She showed concerns also [for the ESOL teacher]. She was one of the lower ESOL kids in my class.

Ms. Chen elaborated on Juanita's reading skills, attention skills, and rate of progress in her homeroom and reading class. Unlike the older grades, first-grade teachers rarely

have students who enter their classrooms with IEPs. Nonetheless, Juanita was receiving ESOL services and the ESOL teacher told Ms. Chen that she was one of her lowest students. While this might have discouraged other teachers from referring her to TAP, Ms. Chen felt comfortable making the referral. The fact that Juanita's TAP case was aborted in the middle of the year was attributed to other, more severe cases arising. Ms. Chen did not offer any indication that Juanita's receiving ESOL services was a disqualifying criterion that made her case inappropriate.

Time limit on cases. Another indication that teachers were trying to allocate resources equitably was apparent in the length of time teachers were willing to spend on individual TAP cases. The third-grade team's first referral to TAP was Barbara who was considered to have "attention problems." Her homeroom teacher, Mr. Nicholson, and her reading teacher, Ms. Hainer, both felt that she was "spacey" and stated that she worked slowly and rarely completed her work. This case occupied a lot of time at the team meetings, as the proposed interventions were nominally successful. Without successful outcomes, the problem-solving process requires revisiting the problem definition and interventions.

However, on February 25, Mr. Nicholson complained to me that the contract intervention was not consistently effective. He commented, you can see all of the other needs in this class; I can't spend all of my time on her. While Barbara was seen as an appropriate TAP referral, she was also seen as consuming too many of the TAP and support resources. If the concern could not be resolved within some, unknown amount of time, then instead of revisiting it, it should be referred onto the experts so that the

teachers can return to their other students' needs. Mr. Nicholson conveyed the sentiment that cases are expected to be resolved within some unknown length of time, after which the case expires. After the allotted time the case is referred to the building-level team or it is abandoned.

Indeed, the third-grade team appeared to be frustrated with the amount of time Barbara was lingering on the agenda. They referred Barbara's case to the building-level TAP team, as the consensus within the third-grade team was that they had exhausted their resources. They wanted the building-level team to recommend a psychoeducational evaluation to determine if she had a learning disability. At the building-level team meeting in April, Barbara's mother shared that she had been recently diagnosed with sleep apnea and that she was going to have surgery in the summer to correct this health condition. Upon this revelation, the building-level team wanted to defer the question about a learning disability until after her surgery the next school year. Her low performance and productivity may have been due to her sleep deprivation.

While it would seem reasonable to dismiss the possibility of a learning disability when learning that a student's health can account for the poor school performance, no one on the team recognized that Barbara continued to struggle in her classes and that surgery in the summer would not address the immediate concern of her academic progress. Dismissing the suspicion of learning disability does not provide extra support or resources to her teachers. When I mentioned at the meeting that she would need new interventions to support her through the end of the school year, Maria suggested that the grade-level team revisit this case at the next TAP meeting. Mr. Nicholson and Ms.

Hainer did not protest, but after the meeting Mr. Nicholson made it clear to me that he had no intention of revisiting this case. His facial expression communicated that he was exhausted by this case and wanted to focus on his other students. He and Ms. Hainer were content continuing with their ineffective contracts so that they could say they were continuing with the intervention, even though they were creating minimal benefit for the student.

In June I invited the third-grade team to reflect on their experiences with TAP. Ms. Hainer mentioned that she thought the team spent too much time talking about too few students. This was a direct reference to Barbara's case. Mr. Nicholson also stated that in the middle of the year when things were very busy, he would have preferred to attend to classroom matters and not individual students. But in the same breath, I know that it is important that we talk about these kids and think of ways to help them out. And I think that they benefitted. Mr. Nicholson seemed to be commenting on TAP in general, perhaps Barbara's specific case.

When I asked Ms. Price at a later time for her end of the year reflections, she commented that, we spent too much time on too few kids at the beginning of the year. Like Ms. Hainer, she thought that using an egg or sand timer and encouraging teachers to be brief with their comments would alleviate this problem. Neither teacher, however, considered the possibility that Barbara's and other cases moved slowly because the problem solving for their cases was flawed, rendering the interventions ineffective. Rather than examine the quality of problem solving for those cases, they wanted to remove the case from discussion after it expired its allotted time limit, regardless of its

outcomes.

Summary. Identifying a pattern of referrals based on the absence of data is relatively difficult. Nonetheless, the second dimension of teachers' gatekeeping practices indicated that students who were not receiving other services were perceived as the preferred TAP candidates. There was no explicit rule or judgment that stated this. However, the lack of students with IEPs being referred, despite their being described as among the lowest students and the reluctance of teachers to refer students who were participating in ESOL services suggest that this was the practice. This practice emerged because teachers, as gatekeepers, were trying to allocate support services equitably among the students. They felt that a student receiving support should not be entitled to a second layer of support while there are other students who are not receiving anything extra. This practice also suggested that the grade-level teams were a resource for service allocation and not a place for problem solving.

The practice of allocating resources equitably was further substantiated by the third-grade team's impression that no case should be discussed at too many team meetings, regardless of its outcomes. There are other students who need to be discussed. This comment indicates an emphasis on allocating the quantity of TAP time spent on a student equitably without recognizing the importance of the quality of the problem solving at the team meetings.

#### Students At-Risk for Next Year

A third gatekeeping practice that was detected was the referring teacher's concern about the student's progress the next school year. Across multiple cases, teachers

expressed their satisfaction with the student's current progress, but were worried that the student would not be able to maintain the same rate of progress the next year. Rather than refer a student who was currently struggling and in need of classroom-based interventions, the teachers were using TAP as a paper trail to communicate with the next year's teachers.

Kindergarten, Ms. Young. Ms. Young explained her referral of Shane during the first reflective interview as follows:

I referred him because I felt that he was not making the progress that I was expecting him to make with all the input that we were giving him: the individualized instruction, the peer grouping, the one-on-one. It was the one-on-one that was making the difference only and...I was thinking of first grade, and what kind of supports do we need to put in place for him for first grade? That's basically why I referred him. Because I knew the rigor of the first-grade curriculum and how leisurely Shane was assimilating the kindergarten curriculum and I knew that there were going to be gaps. So that was really what I wanted to do...put a scaffold there for him in first grade.

Ms. Young elaborated on her perception of Shane's severe learning needs in the interview, and she connected her reason of the referral to the "rigor of the first-grade curriculum." One could infer from her explanation that if the first-grade curriculum were not particularly rigorous, she would not have bothered to refer Shane to TAP. However, one would think that his difficulty with the kindergarten curriculum would have warranted a TAP referral. Ms. Young's preoccupation with Shane's anticipated



academic challenges in the first grade seem peculiar in light of his current struggles and TAP's purpose of developing classroom-based interventions for the referring teacher's classroom.

Second grade, Ms. Marshall. The two teachers who participated in the reflective interviews from second grade, Ms. Marshall and Ms. Mendelsohn, both expressed concern over the difficulties they anticipated the students having in the future. Ms. Marshall was truly concerned about Veronica's reading level when she referred her to TAP and was certain that Veronica would still be a struggling reader in third grade. Instead of focusing on the current school year and curriculum as she engaged in TAP, she was anticipating that the interventions would not be successful and that Veronica would continue to be "at-risk" for failure the next school year. During the second interview, Ms. Marshall explained her referral concern as:

I just wanted more...support...Veronica did struggle for us and if she doesn't do something all summer, she can find herself back in the same place. In the third grade they might question, what was she doing in the second grade? What was her second grade experience like? So I...wanted documentation as well getting support from others.

Ms. Marshall's concern regarding "what the third-grade teachers would think?" seemed to represent an anxiety about the perception of her professionalism. Since she was convinced that Veronica's reading would not improve satisfactorily while she was in the second grade, she did not refer her for the purposes of developing classroom interventions. Instead, she wanted to document that the current accommodations she was

offering were not benefitting Veronica. This documentation would prove how difficult it is to teach her, and when the third-grade teachers inherit Veronica the next year they will know to blame her inevitable reading difficulties on her and not the second-grade teachers.

When I asked Ms. Marshall to speculate “how the case would turn out” at the second interview, she replied:

I don't think...Veronica will succeed in a [third-grade] classroom of 30...So when I first referred her, which was months ago, I was thinking differently. But then once I realized that...phonics was benefitting her, I think that she'll just need...to review some foundational skills. And I don't think it will have to come to the building level, by that I mean the [specialists].

Since Ms. Marshall did not target Veronica when she began implementing the “phonics rule of the week,” it was not until her first reflective interview that she realized that the onset of these lessons and Veronica's burst of improvement were not coincidental. After she reflected on Veronica's progress, she revised her description of Veronica's learning needs to she needs more exposure in phonics and reading and her worries about “what her third-grade teachers would think” were diminished. Ms. Marshall was initially convinced that there were no classroom-based interventions that would help Veronica; she was confident that Veronica would carry her reading problems into third grade with her. However, once Veronica was no longer at-risk for next year, Ms. Marshall did not see a need to continue her as a TAP case.

Second grade, Ms. Mendelsohn. While Ms. Mendelsohn did not refer Pablo to

TAP herself, she also seemed more concerned about his future growth than his current growth in second grade. Ms. Mendelsohn inherited this case from Ms. Marshall when the reading classes were reorganized through performance-based grouping. She explained that among the multiple reasons he was referred to TAP, including his below-grade reading level, she was most concerned about his social-emotional functioning. “Because a lot of times you’re not going to get anywhere with the academics with all these other emotional issues kind of acting as a roadblock.”

Since Ms. Mendelsohn’s premise was that a student who had social-emotional difficulties would not be a successful learner, I asked her to account for Pablo’s reading growth of nine levels. Second-grade students were expected to begin the year at reading level 16 and end at level 20. Pablo began the year at level 7 and as of May 27, he was at level 16. Despite the fact that Pablo was finishing the year “below grade level,” his progress could not be ignored, particularly because his rate of progress was more than twice that of the “average student.” Ms. Mendelsohn responded:

One is...I wonder how much further maybe he could have gone if there was more social development. And number two is, I wonder if this is going to catch up with him. I mean, because I think the older kids get, there’s so much more going on socially and emotionally. And it becomes much more of a factor, especially when kids start trying to develop their individuality and...identity formation. And you definitely see that in a lot of kids, they just kind of want to shut down...I guess right now I don’t see [Pablo having these problems]. It’s not a dire situation right now, but I feel like it could become [one].

Unlike Ms. Marshall, Ms. Mendelsohn was not prepared to revise her long-term projection based on her TAP student's unexpected success. While Ms. Marshall changed her mind about the services Veronica would need once she saw her reading improve, Ms. Mendelsohn doubted that Pablo's reading success matched his cognitive potential. She worried that his "social-emotional issues" continued to create obstacles for him. While she did express pleasure with Pablo's success, Ms. Mendelsohn predicted that his long-term social-emotional development would be affected by his current difficulties. This worry about his anticipated difficulties in the future without any genuine basis in his current functioning corresponds with the observed theme of teachers referring students who were perceived to be "at-risk" in the future. The referral concern was expected to worsen over time, as the referring teacher was seeing only the first hint of the problem that was predicted to become more serious in the future.

Third grade, Mr. Nicholson. Most of the third-grade cases involved students whose needs the teachers wanted to address immediately. However, at a grade-level TAP meeting on May 27, Mr. Nicholson referred one of his white reading students, Tracy. Mr. Nicholson explained during the meeting that he felt he was successfully addressing her needs as her teacher. When I asked him to clarify why he was referring a student whose progress was satisfactory he replied that he wanted to use TAP to communicate with her fourth-grade teachers regarding her learning needs. He was worried that she might fall far behind in the fourth grade.

Mr. Nicholson had no intention of conducting problem solving regarding Tracy's learning needs; he openly admitted that he was not referring Tracy to pursue problem

solving. Instead, he credited himself with successfully teaching her, but feared her teachers next year could not do the same. This is another example of teachers being content with their students' progress, but perceiving them as being at-risk for failure next year. Instead of completing a vertical articulation form, putting a note in the student's file, or talking to the fourth-grade teachers directly, TAP was Mr. Nicholson's mechanism of choice for communicating with next year's teachers regarding this year's students' anticipated needs. The likelihood of referring teachers conducting effective problem solving is limited when they are content with the student's progress but would like to communicate to next year's teachers that this student is "at-risk" for failure.

First grade, Ms. Chen. Ms. Chen, Juanita's homeroom teacher, referred Juanita to TAP early in the school year because she was her "lowest student" in reading. During her reflective interview in June, she supported retaining Juanita and having her repeat the first grade. Since Juanita had not made adequate progress over the year, despite being a TAP case, she thought retaining her would be an effective academic intervention.

I don't see her for [any subject areas anymore], but based on what I do see her do in here, and...I do see what level she's reading at, I would say retain her rather than sending her up to second grade where she's going to be even further behind and struggling...And if she's retained...she can be...a step ahead because she's been exposed to everything already.

Retention can be understood as a variation of anticipating the future failure of "at-risk" students. If Juanita was having difficulty learning to read in the first grade, then she should have benefitted from classroom-based interventions. While the performance-

based grouping facilitated individualized and differentiated instruction, it was apparently not sufficient for teaching Juanita to read. Ms. Chen's intervention of occasionally reading with Juanita during recess did not yield much academic progress either.

Since first-grade instruction with occasional supports were not sufficient in helping Juanita learn to read, it is unclear why Ms. Chen thought repeating the first grade would be an effective academic intervention. While repeating the first grade would undoubtedly be easier for Juanita than entering the second grade, it was not clear how retention would facilitate her academic success over her educational career, particularly if there are no systematic, classroom-based interventions in place for her. Rather than consider retention in the context of Juanita's developmental needs and educational career, Ms. Chen was looking to prevent Juanita from struggling and failing next year, in the second grade.

Summary. Another reason teachers referred students to TAP was their concern about their future performance and functioning, and not necessarily their current performance. Teachers who were satisfied with students' current work, but referred them out of fear that they would fail the next year, or teachers who focused more on future than current performance can claim to have a preventive-level orientation. They can argue that they are referring these students while their problems are small to prevent them from going unnoticed and developing into larger problems. However, if the referring teachers were truly prevention-oriented, then it would be more logical for them to develop ambitious interventions to accelerate the students' achievement and prevent next year's anticipated failure, not merely alert next year's teachers.

Teachers who had this future-orientation used TAP as a communication device to alert the next year's teachers to the referred students' "problems." One interpretation of this referral pattern is that the teachers wanted to avoid the perception that they were not responsive to these student's needs. By referring these students to TAP, perhaps they thought that the students presented with intensive, ongoing needs that could not be resolved by any single teacher, suggesting deficit thinking. Rather than consider that a school-based team could effectively address the concern, they seemed to believe that the problem represented a stable trait within the student that could not be resolved through TAP.

#### TAP Non-Cases

Another characteristic I observed among a subset of TAP referrals was their "non-case" status. These non-cases resembled Mr. Nicholson's referral of Tracy, a student who progressed this past year but might slip through the cracks next year. These referrals involved teachers labeling students as "TAP cases" without attempting problem solving or intervention design.

First grade. When I was soliciting participants for the reflective interviews, I asked the teachers if their cases were still active. Ms. Chen said that Juanita's case fit this criterion, but I learned during the interview that this case was not truly active nor was it truly a case. Perhaps due to the early point in the school year when the case was referred, before grade-level teams were expected to meet, Ms. Chen did not understand what a TAP case should involve. The case was heard directly by the building-level team during October and Ms. Chen did nothing afterwards except worry about Juanita. Ms.

Chen most likely assumed that this was a legitimate TAP case as no coach told her otherwise.

Because the “problem solving” for Juanita began and ended at that first building-level TAP team meeting, it would be misleading to describe this as a TAP case. Juanita was not discussed again at the building-level team, Ms. Chen said that she was not discussed at any grade-level team meetings (as they mentioned students names at meetings without holding discussions or having active coaches), and Ms. Chen did not implement any interventions for her. While I would characterize Juanita as a TAP non-case, Ms. Chen considered it an “active TAP case” that lasted the duration of nearly the whole school year.

Despite the legitimate reasons for Ms. Chen’s confusion about the quality and status of this case, it undoubtedly influenced how she understood the purpose and structure of the model. To Ms. Chen, referring students to TAP involved declaring their names and having a specialist accept responsibility for their academic needs. As she stated in her interview,

I think there were two kids I had concerns about...and I know that other...first-grade teachers also had kids they were concerned about. So it’s kind of like,

“OK, we have this bunch of kids, which ones are you most concerned about?”

According to Ms. Chen, Maria “took [the referred kids] further along the TAP process” as a way of acting on their case. However in the absence of any developed interventions and the lack of awareness that there should have been classroom interventions, these TAP referrals can hardly be considered “TAP cases.”



Maria mentioned to me that she was attempting to fill the role of TAP coach for the first-grade team. She was often in first-grade classrooms providing plug-in support and did her best to service those students who she felt needed extra support. In this role of pseudo-coach she saw herself as “pulling these kids through TAP.” The first-grade teachers appreciated her presence and support, and seemed to believe that her visiting their classrooms at least once a week, and often more regularly, constituted participating in TAP. Maria later clarified to me that she recognized that these students were not, in fact, TAP cases. Rather, since this team was without a TAP coach, she wanted to provide additional support to the teachers. However, the first-grade teachers did not seem as clear that their requests to Maria for help did not make these students TAP cases.

Third grade, LaToya. In addition to Mr. Nicholson’s referral of Tracy, two other examples of TAP non-cases emerged from the third-grade team. On May 13, LaToya, an African-American student, was scheduled for a building-level TAP team meeting. As the TAP coach of the third grade, I was surprised to see her name on the agenda as she was never discussed at the grade-level TAP team. While I knew of this student and her mood swings and sadness, she was not a TAP case and should not have been eligible for the building-level team’s meeting agenda. When I got to the meeting I learned that she was classified as a special education student with a speech disorder. The meeting was her “annual review,” the legally mandated meeting for all special education students, and the team wanted to share with LaToya’s mother that they suspected that she was depressed.

At the meeting, Helen, the school psychologist, asked if LaToya had ever been referred to TAP. I knew that Karen kept a watch on LaToya, which was relatively

convenient as her office was directly across the hall from LaToya's homeroom. She would greet LaToya regularly and sometimes chat with her during transitions when LaToya was essentially standing at her office door. Karen provided counseling to LaToya on an irregular basis and would occasionally call her mother.

Despite my awareness of the teachers' concerns about LaToya and Karen's involvement, I was surprised to hear Maria tell Helen that LaToya had been referred to TAP. She was never discussed at any of the third-grade TAP team meetings I attended (and the meetings were canceled when I could not attend), I doubted that TAP forms were completed on her behalf, and the team never engaged in problem solving regarding her "case." Even though LaToya's teachers tried to improve her mood and sent her to talk to Karen when they wanted her to participate in counseling, this should not have made her a "TAP case" as these efforts did not conform to the structure or purpose of a school-based problem-solving model.

LaToya represented a non-TAP case as none of the TAP procedures were attempted on her behalf. While Ms. Chen as a first-grade teacher may have been legitimately confused about TAP due to her grade-level TAP team's non-functioning, the third-grade team met regularly and attempted problem solving regarding the referred cases. The team and Maria should have recognized, at a minimum, that in order to be a legitimate TAP case the student needs to be referred to the grade-level team where they discuss the student's needs and possible interventions during a meeting. The lack of these minimalist characteristics in LaToya's case should have prevented it from being characterized as a "TAP case." A more accurate characterization, in light of the intermittent

counseling Karen provided to her, would have been to call her one of Karen's "counseling cases."

Third grade, Curtis. A second TAP non-case that emerged from the third-grade team was Curtis, one of Mr. Nicholson's African American reading students. On February 13, Curtis was referred to the grade-level TAP team and Mr. Nicholson listed five concerns he had about him during the meeting. When I asked Mr. Nicholson to prioritize the concerns, he stated that his attention problems were primary and he would like to address those first. Ms. Lyon offered Mr. Nicholson suggestions that she found helpful with her students who have attention problems. She suggested that he break down directions and tasks into smaller bits, rather than give lengthy directions for a multi-stage task. She also suggested that he teach Curtis how to use a highlighter so that he could highlight the most important words, enhancing his attention. Mr. Nicholson seemed appreciative of Ms. Lyon's comments and our meeting time was over.

Mr. Nicholson's referral of Curtis to TAP appeared to be sincere. He was engaged during the grade-level meeting and appeared interested in integrating Ms. Lyon's suggestions into his classroom instruction. Therefore, I was surprised to read two weeks later that Curtis's name was on the building-level TAP team's agenda for March 4. Two weeks is too short of a time for most interventions, regardless of their quality or appropriateness, to be effective. In addition, while the brief time of two calendar weeks passed, there had only been two full school days during that span of time due to severe winter weather. This led me to believe that Mr. Nicholson's referral was only a formality and that he would have preferred to bring the case directly to the building-level

team.

The meetings on March 4 were canceled due to the all of the schedule changes after nearly two weeks of snow days. Curtis was never rescheduled for a building-level TAP team meeting, and I later learned from someone other than Mr. Nicholson that there was a meeting in which a 504 plan was developed for Curtis. The participants at this meeting were Mr. Nicholson, Robert James, the assistant principal, and Curtis's mother; Helen, the school psychologist, was likely to have been there as well. Curtis's case is a second example of a TAP non-case, in which the teacher claims to refer the student to TAP but engages in few to none of the TAP stages and procedures.

Fifth grade. My exposure to the fifth-grade team was limited, in that they were hardly a functional grade-level TAP team. Helen did not meet with them, although she assumed that they met without her, and they did not refer cases to the building-level TAP team. (To my knowledge, she never verified whether they met as a grade-level team.) After my first day at Woods Terrace on November 7, when I attended all grade-level team meetings with the exception of one, my next encounter with the fifth grade did not happen until February 25. On this day Matt Johnson, one of the teachers, chanced upon me in the hallway and asked, "Are you the TAP person? Can you come to our meeting?" I assured him that either I or his coach would attend their grade-level team meeting that was going to begin shortly.

I wanted to defer to Helen, in case she was available to coach their meeting. She was obligated to attend an IEP meeting, and I told her to join the fifth-grade meeting if the IEP meeting ended first. Gayle Mayers, the team leader, opened the meeting by

saying that they had been meeting without their TAP coach and wanted assurance that they were doing TAP right. She asked me to clarify, “how the process works and what are the next steps.” Without any information about the individual cases they were referring, I offered a generic answer about the four stages of the model and described the building-level TAP team as the “next step” for those cases that are not successfully resolved at the grade-level team. I explained that when a case does not appear successful, the grade-level team should revisit the problem analysis stage to see if there are data that can explain the ineffective intervention. When a case is referred to the building-level team, the case is reviewed and the parents are invited to attend. I asked if she was satisfied with my generic answer, and she said that I did pretty well “off the cuff” without knowing the details of the cases.

The team wanted to refer and discuss three of Mr. Johnson’s students. He had completed the TAP problem identification forms in advance of the meeting, and began to read off the papers when I asked about the details of the referrals. I asked him to verbally paraphrase his written comments. I facilitated the discussion by asking questions that were intended to promote problem solving according to the stage-based model. Their responses to my questions indicated that they had neither met nor discussed these referrals among themselves before. These three referred students they started discussing on February 25 were essentially “non-cases” as they had no real semblance of TAP.

Summary on non-cases. A subset of TAP cases that became more apparent close to the end of the year involved “non-cases.” While the teachers and staff called these students “TAP cases” there was no evidence of problem solving or interventions

implemented. This observation does not address the quality of the attempted problem solving, but the lack of attempt. That Karen provided counseling to third-grader LaToya on occasion should not have qualified her as a TAP case, when she was never presented at a meeting. The building-level TAP team talked about first-grader Juanita at one meeting with no follow-up, but Ms. Chen interpreted this as a year-long, active TAP case. The complete or near-complete absence of TAP discussions and interventions for these students make them something else, like counseling cases or students of concern.

In other words, the teachers came to assume that if a student's name was raised at a TAP meeting, then this student had acquired the status of a TAP referral. The only criterion was that the student was "talked about" during a meeting or was of concern to multiple teachers. This was evident in mid-May when Mr. Nicholson referred Tracy to the grade-level TAP team with the preface that, we already talked about her at a meeting earlier in the year. Although her name had been mentioned, the team never engaged in a discussion regarding this student. The increased communication among the teachers and the increase in number of students who were "talked about" created an alternative meaning to TAP. Instead of being a school-based problem-solving model, it became a forum for "talking about" students without any placing any structure on the conversation or eliciting systematic data and short-term goals.

### Summary

As evidenced by the gatekeeping practices that I observed and identified, much can be learned about teachers' understandings about problem solving and student learning. For example, contrary to the model's goal of referring students in need of

preventive-level interventions, teachers referred students who they perceived to need intensive support from specialists. Teachers also perceived themselves as gatekeepers, as they utilized TAP to distribute the school's resources equitably across students. This was indicated by their reluctance to refer students to TAP who were already participating in resource programs. In addition, teachers referred some students to TAP for procedural reasons, without the intention of engaging in problem solving. Students who were suspected to be at-risk for next year and students whose cases had no semblance to TAP were referred, because there was apparently some perceived benefit to being a TAP case beyond being the subject of school-based problem solving.

## Chapter Six

### Findings: Teams' Conceptions of TAP's Stages

Referral practices among teachers to TAP, or gatekeeping, is the selection process by which certain students become cases for problem solving. While teachers' gatekeeping offers one perspective regarding how they understand the model and the student learning experience, how the teams engage in the problem-solving process for some cases and avoid it in their "non-cases" provides a clear indication of their collective sensemaking and understandings. The teams' conception of the school-based problem-solving model's stages refers to how they characterize TAP when they talk about it, their adherence to the model's four stages, the types of data they collect, and the interventions that are proposed.

Examining how the teams at Woods Terrace understood the stages of TAP offers a more direct means to observe and interpret their understandings about school-based problem-solving models and student learning. In this chapter, the coaches' understandings of the stages, and the problem identification stage in particular, is considered first, followed by the teams' understandings of the model's individual stages. The teams' sensemaking about the model's stages highlights their understanding about how student learning difficulties are best approached and resolved.

The hallmark of most school-based problem-solving models is that they are stage-based (e.g., Reschly et al., 1999). Each stage has a clear definition and tasks associated with it, and the stage must be completed before moving on to the next one. For example, the first stage of TAP and most school-based problem-solving models is "problem



identification.” This stage is described in the manual as, “initial questions, tasks, and methods at this step help clarify problems so that desired replacement behaviors and/or expected academic performance levels (which are observable and measurable) can be generated...” (p. 15). Flugum and Reschly (1994) define problem identification as, “defining the problem in observable terms and directly measuring the behavior” (p. 3). Only after a target behavior is defined with supporting baseline data evidence can the team move to the next stage. While a team can engage in the problem-solving stages recursively, such as revisiting problem analysis after intervention evaluation indicates that the intervention is not successful, the process is intended to be very structured.

The TAP teams at Woods Terrace, however, did not seem to think they needed to move through the stages in such a structured, proscribed way. Both the building-level team and the grade-level teams seemed to conceptualize TAP in a holistic, gestalt fashion in which they discussed a student, offered anecdotal observations to substantiate their impressions, and team members voluntarily spoke up and suggested possible interventions. This lack of adherence to the stages and their related tasks enabled TAP to metamorphose from a school-based problem-solving model into an amorphous student support model, or SST reenacted at the grade-level.

### Coaches’ Conceptions of TAP’s Stages

#### Group Supervision Among Coaches

A clear indication that the TAP teams at Woods Terrace did not see TAP as a stage-based model was presented on January 7. The preceding Thursday Maria sent an email to the building-level team stating that she had not received any TAP referrals from

grade-level teams, so she was going to cancel the upcoming building-level team meeting. Karen suggested via email that we use the meeting time to revisit cases that we had met about previously, even if the teachers are not invited, the coaches can discuss what's been done for the student and check on the student's progress. Maria replied that the building-level team should only discuss cases that the grade-level teams refer to the building-level team and want to recommend for a psychoeducational evaluation.

Maria's initial inclination to cancel the building-level team meeting highlighted that she believed that all teams were collaborating productively and efficiently. She did not consider that grade-level cases would benefit from building-level supervision and support, and she assumed that the building-level team did not have anything to contribute to a case until it was exhausted by the grade-level team. She did not seem to consider the possibility that discussion among coaches could enhance the outcomes of the cases or the efficacy of the problem-solving process, suggesting that she did not think the coaches needed such support and she did not feel that she needed it for herself, personally, as the kindergarten coach.

#### Coaches' Global, Amorphous Problem Conceptualizations

Recognizing the value of group supervision among the coaches, I agreed with Karen that the building-level team should meet even in the absence of grade-level referrals. I emailed Maria privately and articulated the advantages of having coaches update each other regarding their caseload. At such a meeting would could,

update each other on the progress of our team's cases...For example, coaches could simply summarize each case in two minutes by saying what stage they are

up to, what data they are collecting, what changes there have been in the data so far since intervention implementation...I think this would be a nice way to keep everyone abreast and stop each coach from re-inventing the wheel individually. Barbara's [third-grade] teachers, for example, really liked the way I designed her contract, and other coaches might want to see it. Or, if a new case comes up, and a team does not know what type of data is most helpful to collect, the coach can have more ideas to draw from based on other cases that were discussed at these updating meetings. The summarizing coach can also get feedback if another coach thinks of a way to tweak the intervention, etc. I would imagine that this type of check-in is helpful not only for cases that do emerge for special education consideration, but a way to keep TAP running smoothly and consistently across grade level teams. Perhaps at the next [building-level] meeting we can raise this possibility and see if the coaches would find it helpful.

Maria replied that these were "wonderful" suggestions, asked for further suggestions that could improve TAP functioning, and agreed to have this "catch-up" meeting as scheduled. The purpose of the meeting had now been changed from reviewing referrals from grade-level teams to coaches informing each other of their respective teams' cases and progress and providing support to each other so that they do not feel isolated. This type of group supervision and support is potentially more valuable while the cases are in progress rather than after they have been declared unsuccessful and in need of testing for special education.

The re-scheduled January 7 building-level "catch-up" TAP team meeting included

the “full participants” or primary leaders within TAP: Maria, Karen, and myself and Jeanette joined us in the middle. The coaches did not prepare their cases for presentation and we discussed them informally. In addition, many of the students under discussion were in the first and fifth-grades, who were not necessarily TAP cases and whose coaches were not present. The informality of the meeting, however, did not explain why there were no references to the problem-solving stages. Instead of saying, I think this first-grade case is still in the problem analysis stage, the problem was defined as X, and they are currently collecting this type of data, the students were discussed anecdotally. For example, this student is having trouble sitting still, so the teacher is using time-out.

These primary leaders within TAP, the only ones who participated in the formal TAP training<sup>10</sup>, demonstrated that they continued to conceptualize the cases as broad, ill-defined problems that are substantiated by anecdotal data. Such global, overarching problem conceptualizations rely on a “whole child” perspective and the multifaceted nature of the presenting concerns (Knotek et al., 2003). However, these large, unwieldy problem conceptualizations are not conducive to stage-based problem solving. If the coaches did not understand how to use the stages to guide the problem-solving process, then there could be no reasonable expectation that the teachers would adhere to a stage-based structure that required data beyond anecdotal observations.

A second example of coaches’ sweeping problem conceptualizations was demonstrated by Jeanette, the resource teacher and second-grade coach, arguably the

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Mr. Nicholson, the third-grade team leader, was the other staff member who participated in the July TAP training.

most organized of the coaches. Jeanette emailed her team the agenda for the May 6 meeting in advance. The agenda contained four items and the first two involved students who were discussed in the reflective interviews. Those items read as follows:

1) Update on Cases: Pablo-- We had a meeting with the parents; referred for summer school; parents will take behavior scales to the doctor; will need to have a follow-up meeting with the parents and teachers to follow-up on concerns about attention. Date: TBD.

2) New Cases to Discuss: Veronica and [a second student]...I have a questionnaire to complete to address the concerns about the student. I need your input. Also, King [ESOL teacher] will be present at the meeting to address concerns with progress in reading for students currently in ESOL and/or students who have exited ESOL.

The examples from the building-level “catch-up” meeting in January and the agenda that Jeanette emailed in May both suggested that the coaches conceptualized problems in a global, holistic context. The teams learned from their coaches and shared this outlook, as evidenced by the reflective interviews I conducted. Rather than identify particularly concerning behaviors or academic skills, the cases were conceptualized as one big whole that could not be broken down into target behaviors. My initial observations lead me to suspect that neither the grade-level nor the building-level teams were using the four TAP stages to structure the discussion about the cases or develop interventions.

## Renegotiated Meanings of TAP's Stages

### Problem Identification Stage

Problem identification is the first stage of TAP and most school-based problem-solving models. This stage is described in the manual as “initial questions, tasks, and methods at this step help clarify problems so that desired replacement behaviors and/or expected academic performance levels (which are observable and measurable) can be generated...” (p. 15). Flugum and Reschly (1994) define problem identification as “defining the problem in observable terms and directly measuring the behavior” (p. 3). The problem identification stage has been repeatedly documented as the most important stage in problem solving (e.g., Curtis & Watson, 1980; Telzrow et al., 2000). The target behavior the team identifies as the focus of the concern directs the rest of the case, in terms of proposed interventions and likelihood of intervention effectiveness.

Unfortunately, this important stage had the same name as the first stage in the SST model. The same label prevented the teams from realizing that these stages were not, in fact, the same between the two models and that they would have to change their practice substantively in order to implement TAP as intended. The quality of the defined problem varied with the referred cases and the teams. Some teams and cases developed explicit, concrete problem definitions that were conducive to classroom-based interventions, such as student does not arrive prepared with classroom materials; other problem definitions were vague, multifaceted, and essentially eliminated the teacher's responsibility for developing interventions. The problem definitions that conveyed severe student deficits were only loosely related to the classroom and portrayed the

student as needing extensive interventions beyond the teacher's means.

Instructional and behavior problems. The most common reasons for referring students to TAP were lack of academic progress followed by behavior concerns. Included in this range of problem definitions were the few first-grade cases that came to my attention that were defined as "reading below grade level" and "out-of-seat behavior." The third-grade teams' problem definitions were typically framed within the instructional context. Two sample third-grade cases' problem definitions were: "not completing creative writing assignments" and "difficulty making connections between previous and current work."

The second-grade team's problem definitions included both vague, behavioral descriptors and more specific, academic definitions. For example, the problem definition for Pablo's case that was referred in November was: "Attention issues: Pablo does not socialize with others and tends to be rude to adults. Has difficulty remaining focused and organized. Seen daily." Even though Ms. Mendelsohn said in her interview that she did not completely agree with this problem definition, it was never revisited or revised. The problem definition for Veronica's case referred in March was: "Not making academic progress in reading: continuing to read at a level eight; demonstrate more confidence in reading/use strategies while reading; make connections between letters and sounds." This sample of problem definitions indicated that while there was a range of problem definitions, none of them would meet the criteria for a "good" problem definition (Flugum & Reschly, 1994).

Processing problems. Another common reason for referring students to school-

based problem-solving models is the suspicion that they have “processing problems.” This term is a code-word for learning disability and is only useful for labeling students as needing special education and not implementing interventions in the context of general education. At a kindergarten grade-level TAP meeting I attended with Maria, Ms. Young raised Shane’s name. Ms. Young was worried that he would struggle in first grade due to his “processing problems.” Maria asked Ms. Young to clarify what she meant by “processing:” Did that refer to sequencing, recalling, or something else? While “processing problems” might have been a legitimate referral to the SST, it was too vague and useless of a descriptor to be appropriate for TAP. Maria recognized that she needed to help Ms. Young clarify her concern and describe it in more concrete terms. Ms. Young replied that he can reproduce something, but it is hard for him to draw on a blank page. It is hard for him to pull from memory beyond letters.

This response, although more specific than the opener of “processing problems,” would still not meet the criterion for a well-defined target behavior supported by baseline data. However, the kindergarten team and their coach, Maria, seemed content with the newly revised problem definition that began as processing problems and was refined to hard for him to access in his memory what he has already learned. Despite Maria’s attempt to get Ms. Young to describe Shane’s performance in more concrete terms, they did not conclude the problem identification stage with stated “replacement behaviors and/or expected academic performance levels” (p. 15). Hence, they did not complete the problem identification stage as detailed in the manual, and they were left to discuss the case in broad, sweeping adjectives and develop interventions that involved watching



Shane and providing him with extra support.

Severe, multifaceted problems. Karen completed a TAP problem identification form for a fourth-grade student on October 30. The described problem came from the “whole child” framework and was framed in such severe terms that a teacher could not be expected to effectively teach the child in the classroom. Karen listed the reasons for referral as,

Attentional concerns-- singing, humming, putting her hands in her mouth often, late to class frequently, late to school frequently;

Lack of motivation-- classwork and homework not completed, does not follow a task through to completion-- will start a task but will not finish it;

Social/emotional concerns-- few peer relationships, poor social skills;

Poor organizational skills;

Immature-- babyish voice and conversational manner.

These definitions suggested that there was a limited conception that the process was supposed to be guided by stages, and the proposed definitions did not set the teams on the right track for collecting further classroom data and developing reasonable, targeted interventions.

### Problem Analysis Stage

The next stage in the TAP model is problem analysis. This stage is defined in the TAP manual as,

A detailed look at why the problem is occurring is necessary...Problem analysis focused on whether the problem is the result of a student who “can’t” do it (skill

deficit) versus a student who “won’t” do it (performance deficit). Attention is also paid to the problem’s duration (how long it has been occurring), the problem’s intensity (the force with which it is being exhibited), and its frequency (how often the problem occurs)...

Comprehensive analysis thus requires that many factors be considered.

Specifically, the following should be scrutinized: instructional/ curricular factors; teacher/ teaching factors; student factors; school environmental factors; home/ community factors...In summary, the goal of Problem Analysis is to identify the reason(s) for the discrepancy between desired performance. To accomplish this, it is necessary to examine all factors that may be related to the problem(s). Thus this analysis serves as a functional assessment of academic and/ or behavior problems (pp. 15-17).

Flugum and Reschly (1994) define problem analysis as “validating the existence of a problem, identifying instructional and student variables that may contribute to a solution, and collaboratively developing a systematic plan” (p. 3). Given everything that needs to be considered when conducting the problem analysis stage, a vague or global problem definition makes problem analysis virtually impossible. In addition, if the emphasis of the referred cases is not on classroom-based interventions but on possibly referring a student for psychoeducational testing, the focus of the “problem analysis” becomes skewed.

Third grade, Barbara. One clear example of the teams’ confusion regarding the problem analysis stage was offered at a building-level TAP team meeting on April 1.

Barbara was referred by the third-grade-level team because the interventions were not effective and the team wanted her tested for a learning disability. (Her case is summarized more extensively in the “Time Limit on Cases” section.) However, once Barbara’s mother revealed at the building-level meeting that Barbara was recently diagnosed with a sleep disorder the team agreed that her sleep deprivation could be responsible for her poor productivity and work completion. All present at the meeting agreed to table the proposal of testing her for a learning disability in light of her recent medical diagnosis.

However, this news did not tell her teachers how to instruct her and serve her more effectively, the true problem. Regardless of her medical condition, no team member entertained the possibility that Barbara’s poor school performance could also be due to inadequate interventions. The revelation of the sleep disorder seemed to provide a false sense of clarity, enabling the team to feel content with their current efforts. This was articulated by Kim when she debriefed with the team after the meeting. She noted: See how important Problem Analysis is? Her sleep disorder is an important piece of data that explains her difficulties. Kim saw this as a teachable moment and she reinforced the global, amorphous problem conceptualization in concurring that the learning problems of a student with a medical diagnosis cannot be reduced to the prescriptive features of a behavioral definition required by most school-based problem-solving model.

If this case offered a clear explanation of the importance of the problem analysis stage, as Kim claimed, then it aligned the case within the tradition of the deficit model and not an ecological perspective that involves manipulating the student’s instructional

environment in order to improve performance. According to the deficit model, a student with sleep apnea has little chance in being successful and classroom-based interventions are likely to be ineffective. However, her sleep apnea might have caused her to miss crucial reading and writing instruction, preventing her from mastering the academic skills needed to perform third-grade tasks. This possibility would indicate that intensive reading and writing instruction would be warranted independent of her medical diagnosis.

Third grade, Curtis. Barbara's case highlights the elusiveness of the problem analysis stage, particularly when the problem definition is inadequately conceived. In another third-grade case, Mr. Nicholson referred Curtis. He listed five concerns and prioritized them by naming his poor attention as the primary one. When I asked if Curtis's below grade level reading might make him appear that he has attention problems but really he is losing attention because he cannot complete the work, Mr. Nicholson replied no. With this response, the discussion was closed and the problem identification and problems analysis stages were completed in about five minutes. Mr. Nicholson was confident that he had analyzed the problem correctly, that his observations of Curtis's attention constituted valid data, and the team was content with his interpretations. With the team's approval, he had no reason to doubt his understanding of the relation between Curtis's reading and attention problems or his own practice of TAP; he had done everything correctly as he understood it.

The problem analysis stage was described at the TAP trainings and during Kim's visits as the most important stage of TAP. However, it was not clear how to complete

this stage adequately and correctly. Did Barbara's medical diagnosis of sleep apnea truly resolve the problem analysis stage? This diagnosis discouraged teachers from developing targeted, useful interventions for her, because they came to the conclusion that they were not empowered to instruct a student with this condition. Their problem analysis foreclosed the case rather than developing it. Similarly, Mr. Nicholson's problem analysis that Curtis's reading problems were the result of his attention problems was not questioned by any of his team members and he confidently responded to my challenge that he had sufficient observational data to support his claim. Determining when the problem analysis stage is complete appears to depend on the teams' conception of data and what constitutes valid data collection.

#### Data Collection

There were programs and practices at Woods Terrace, other than TAP, that required "data collection," for example, the new reading guidelines. Although TAP was conceptually different from other models and programs the teachers encountered and implemented, they had seen many of its features and labels before. This similarity in labels, including the frequent use of the term "data," did not refer to exactly the same concepts in TAP but influenced the teams' conceptualizations.

The ubiquitous usage of the term "data," a term that became fashionable in this school system over the past few years, was one source of confusion. "Data" was a buzzword at Woods Terrace during the 2002-2003 school, as teachers were being asked to furnish data for many purposes and audiences. Other programs at the school that involved data collection included the Professional Learning Communities initiative

supported by the Office of Staff Development, a new mathematics curriculum, and the new kindergarten curriculum, each directed from the district's central office; Ms. Jackson also introduced the Pupil Progress Initiative (PPI)<sup>11</sup>, a program that requested data for individual students who were not performing successfully. This abundance of requests for data from the school system and the new principal regarding teachers' instruction, students' learning, and student performance both taxed the teachers and convinced them that they were intimately familiar with the concept of data.

Conceivably, the frequent request for data would make teachers more comfortable with data collection and would promote a clearer understanding of TAP. As a "data-based decision-making" model, TAP should have fit neatly in with these other initiatives as another one that involved data collection. In addition, if teachers were collecting data for multiple purposes and audiences, data collection could be streamlined through TAP and teachers could become more efficient in their usage of data in the context of instructional decisions. For example, a teacher would know a referred student's reading level due to the frequent running records and assessments she or he was expected to administer. The teachers at Woods Terrace were not intimidated by the concept of data collection, but the varieties of data that were being requested seemed to confuse, not clarify, their concepts of adequate, reliable data.

In the context of referred TAP cases, anecdotal observations were the primary genre of "data" the teachers supplied to support their referrals. The TAP manual states, "... information should be examined from multiple sources, using multiple methods...All

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This title, like the other titles in the study, is a pseudonym.

decisions about how to collect information, what to collect and when to collect it are determined through the TAP Team process” (p. 16). However, teachers often did not collect additional data after they referred a case. They typically felt that they knew the student sufficiently by the point of referral that they did not need more information. In the case of the second-grade team, the teachers wanted the specialists to engage in additional data collection to supplement what the teachers already knew about the student. This lack of data collection on behalf of the teachers’ post-referral represented their perception that they were constantly engaged in data collection and did not need to collect more data or did not have access to the same data sources as the specialists.

Kindergarten, Ms. Young. During Ms. Young’s reflective interview, she mentioned two types of data: anecdotal, observational data and psychoeducational testing results. She collected anecdotal data on a regular basis and when she suspected that Shane was experiencing severe learning difficulties she wanted him to participate in psychoeducational testing. She made no reference to curriculum-based data that would address his mastery of the academic skills she was teaching. When I asked her what data she used to determine that he was not making progress, she replied:

The observational record that I keep, as far as a portfolio. And...little pieces of assessments that I had done informally. And the fact that when I asked him to repeat the letters periodically he just didn’t know them. And he would know them at one point and not know them at another point. So, based on the little assessments and everyday observation of him and his portfolio and his journals. I could see him making some progress, but it wasn’t enough to... say he really

learned something...I think I had pretty much a world of data with his...day to day performance stuff.

Ms. Young's baseline data were her "observational records" and "little assessments" that would be valuable in guiding more systematic data collection and intervention design. I asked Ms. Young, "did you collect any different or new type of data after you referred him to TAP?" thinking that the TAP referral might have sent her on a new data collection path. However, this question confused her as she thought I was referring to the psychological and "neurological" testing that was in progress and being done as part of his special education referral. Even though the psychoeducational results were not available yet, she was pleased that a new "data gathering" process was underway: "there were observers for him...and then the speech person came in and the reading person came in; the...PT [physical therapist] and OT [occupational therapist] people [also] observed." Since Ms. Young only acknowledged two varieties of data in her interview, anecdotal and norm-referenced, it probably did not occur to her that she could collect systematic, curriculum-based data that would promote targeted interventions for Shane. She was apparently unfamiliar with this third variety and did not know how to collect it so that it would be usable and meaningful.

The ubiquitous term of "data collection" at Woods Terrace most likely accounted for this oversight. Since the term "data" usually meant observational, anecdotal data or norm-referenced results, it was difficult to associate new meanings to the word. For example, in addition to the "world of data" that Ms. Young was collecting regarding Shane, she was also expected to administer standardized achievement tests to her



students. When I asked her to comment on the recently revised, semi-controversial kindergarten curriculum, she replied,

Yeah, I had initial thinking on that and now it's changed. Because when I see what the kids can accomplish I think it's a neat thing and it's a good thing...There's just so much testing and so much data gathering that I thought it was not worth it and now I think that it is worth it.

The controversy over the kindergarten curriculum was whether it was too advanced and sophisticated for the students. Included in the revised curriculum was standardized testing the teacher had to administer. This type of "data collection" reinforced for Ms. Young, and most likely other teachers, that the plane of data collection existed only at the poles: There was the global, anecdotal, amorphous type of data and the standardized type of data that was perceived to be a burden and not used to inform or differentiate instruction.

In response to my next question regarding whether the results from the assessments help Ms. Young modify her teaching practice she replied: "I think more it confirms my notes from my observation... because you're observing these things all the time. By the time you get to the test you pretty much...know." The results from these assessments confirm hunches without contributing to the teachers' lesson plans. In the second reflective interview she added: "That would be an exaggeration...I do find [the results] enlightening in some way." While the results might have been enlightening, they were not useful. If Ms. Young has to go through the hassle of administering a standardized assessment in order to confirm what she already knows, it is doubtful that

she will perceive this type of data collection as valuable. It is also doubtful that she will independently know how to interpret the data so that she can develop targeted, individualized classroom-based interventions for a TAP case.

Second grade, Ms. Marshall. The second-grade TAP team was the best functioning team due to their regular, productive meetings. This was a team that met bi-weekly as intended and during the alternate weeks if they did not finish their TAP business from the week before. Roles were assigned to team members, such as note-taker and time-keeper. While this team may have been the most dedicated and reliable in terms of team functioning, their sensemaking of TAP prevented them from engaging in stage-based problem solving.

I asked Ms. Marshall what new data she had collected for Veronica's case, who was referred to TAP due to lack of progress in reading.

Just the running records that I continue to do, the new [reading standardized] data that I should be finishing up as soon as I get all of them done. We do our school-wide assessments and so some of them are actually being scored now and we have to get them back to them next week. And then just observations, class assignments, homework assignments... that type of data. More running records, the things that I used before my referral I continue to use.

Similar to Ms. Young, Ms. Marshall was continuing to collect the data she had been collecting all year long and was not doing anything new. If Ms. Marshall conducted running records with all of her students, administered the standardized reading test to all of them, and all students participated in the school-wide assessment, then how was data

collection for a TAP case any different from non-TAP students? Referring Veronica to TAP did not require Ms. Marshall to collect any additional data or analyze her data any differently. However, Veronica's case was stalled while Ms. Marshall waited for her CTBS results and Ms. King's ESOL report. Data that she could not collect herself were given more status.

In fact, Veronica's TAP case might not have required additional data collection. Between all of the data collection methods she named, she should have had a relatively robust data set regarding Veronica's reading. However, none of these data had been analyzed so that they could be made useful for intervention development purposes. Ms. Marshall, with the help of her TAP team, could have conceivably combed through the data in order to learn that Veronica had not yet mastered her phonics and developed a phonics-based intervention. Instead, of analyzing the data to inform instruction or develop interventions, Ms. Marshall collected data for all of her students including Veronica and organized it neatly into a binder. Without realizing the potential of her collected data by actually analyzing it, it was as though she never had it.

Ms. Marshall criticized the graduate program where she earned her Masters in Reading by saying,

I was really disappointed with the Reading program...because it didn't...give you the specifics. You just took all these courses about giving tests and analyzing data, but not how to direct instruction towards what you find out about the child when you do all the testing. So I was disappointed, and I wasn't the only one.

Similar to her training, she collected data regarding Veronica but she did not analyze it to

develop interventions or instructional strategies.

Third grade, Mr. Nicholson. While Ms. Young collected data that was primarily observational and anecdotal in nature and Ms. Marshall collected potentially very useful data but did not analyze it or use it as a basis for intervention, Mr. Nicholson experienced a lack of data. As Barbara's homeroom and creative writing teacher, Mr. Nicholson referred her to TAP because her writing was not at a third-grade level. He explained that she would occasionally write her name and the title of the task on the top of the paper. However, she was not writing the "meat and potatoes" of the task. Mr. Nicholson felt that it was the "lack of data" that convinced him to refer her.

Considering that Barbara's lack of production was her teachers' concern, they referred her based on an absence of data. While an absence of data could be acceptable from a gatekeeping perspective, such that the referral is based on a student's weak writing, additional data collection would be necessary in order to identify the student's writing skills and develop an intervention. However, given the fluid definitions of data that were used as a basis for substantiating the cases, the absence of data was also legitimate without a need for supplemental data.

Maria, TAP chair. Maria explained in her reflective interview that data collection is essentially documentation, or formally recording your observations for data collection purposes. According to Maria, this type of documentation can lead to intervention development. In her own words,

Documentation is work, but you have to do that extra step... if you really want to be effective...Separating out work versus what is documentation that will help

support why a child has certain needs. And it just takes time to do that, we have a young staff. It's time that you understand you can't just say, he has a learning disability. Well, what is it? What are his processing problems? Is it auditory discrim[ination]? Is it visual memory? And the only way you're going to know that [is] if you start pooling together data. And that's where I think we're weak in, is getting all the data to really support what we're trying to say. And once you get it, it should be a breeze [laughs]. It might not be as easy as you want it to be, but in the long run it'll definitely be a more effective way of identifying how we can help the kids. And that's what the bottom line is: how can we meet success for every student?

Maria's version of data collection, or documentation, involves more than the teachers' current practice. The issue for her is "getting all the data to really support what we're trying to say." While Maria acknowledged that data collection involves more than their current practice, the purpose of data collection is to provide evidence for what you currently know, not to learn more. If all relevant information is already known intuitively, but not documented yet, then data collection is more of a formality than a learning, reflective experience.

Summary. The examples described above highlight that no definition or concept is so straightforward or obvious that it can be interpreted without teachers' individual or collective sensemaking. Flugum and Reschly's (1994) definition of the problem analysis stage requiring "evidence" is just as ambiguous as the data sets the teachers collected. The teachers were surrounded by data and were expected to collect data for multiple

purposes; they did not realize that TAP was asking them to do something different from their ongoing data collection by either collecting a new type of data or analyzing their collected data differently. They did not realize that their anecdotal observations were not sufficient to develop a behavioral problem definition or targeted interventions that would be consistent with the TAP model. Their constructed understandings about the types and purposes of data collected for TAP were attributed to their regular use of “data” that referred to other varieties of data.

### Intervention Design

The third stage in the TAP model is intervention planning and implementation. The manual explains that as part of this stage, “Discussions should center on developing interventions that address the reasons that have caused a problem. Often, this involves teaching the student specific skills to learn and/or manage behavior better. The goal is to decrease the mismatch between current performance and desired performance” (p. 17). Flugum and Reschly (1994) define this stage as “implementing the plan as intended, continuously monitoring progress, and changing the plan if necessary” (p. 3). While the purpose of the stage is stated relatively simplistically, the absence of a clear problem definition and useful baseline data make this stage extremely difficult. If amorphous problem definitions are posed and supported by anecdotal, observational data, any gesture on the part of the teacher becomes an acceptable intervention.

Generic interventions based on anecdotal data. An example of lack of clear problem definitions and anecdotal data leading to generic interventions was offered by the third-grade team. At a grade-level meeting, Ms. Lyon suggested to Mr. Nicholson

that he “break down” the directions he gives to Curtis and teach him how to use a highlighter to address his attention problems. While these are worthy instructional strategies for all students, not just those who present with attention problems, these recommended interventions were only loosely connected to an ill-defined problem with general descriptions and inferences used in the place of data.

Another example of the relation between observational data supporting a problem and generic interventions was offered by Maria on June 12. On this day Erin, the coordinator of the Learning Center, asked me if two particular third-grade students were “receiving interventions.” She asked because this was a question on some bureaucratic-related paperwork that she was responsible to complete. Since neither student was a legitimate TAP case but their teachers were concerned about them, I replied “sort of.” One of the students in question was Tracy, Mr. Nicholson’s TAP non-case. He raised her name in the last five minutes of the previous grade-level TAP meeting. Mr. Nicholson characterized her reading level as “low” and said that she was “at-risk for falling behind next year.” Since he felt that he successfully met her academic needs as her third-grade teacher without truly referring her to TAP, was she “receiving interventions?”

I told Erin that depending on one’s conceptualization of “interventions” the answer could be “yes,” although I would personally say “no.” Maria was nearby when we were considering the possible meanings of “interventions” and she interjected, ‘a parent phone call is an intervention; a parent conference and proximity to the student are interventions.’ While these are examples of interventions, they are not based on clear problem definitions or systematic data collection. I would have expected a TAP school

and its TAP chair to use the term “intervention” more selectively than Maria’s suggested usage.

Maria’s interpretation of interventions and hence the intervention planning stage highlights the subjective meaning that can be attributed to an intervention. As the teams interpreted the individual TAP stages and the entire TAP model, they negotiated possible meanings among each other. The TAP chair’s affirmation that all gestures of student support constitute interventions without a need to acknowledge the relation of the interventions to the problem definition or data-based problem analysis indicates that the team members probably did not either.

Unwelcome, suggested interventions. It is not a surprise that global problem conceptualizations and observational data would yield generic, stock interventions that are not “targeted” or “systematic.” Another complication in the Intervention Design stage was pointed out by Ms. Young: that teachers would not want to hear their colleagues’ suggested interventions. Ms. Young perceived Shane to have severe learning difficulties, although she regularly insisted that he was “smart,” and doubted that her colleagues had useful recommendations for her. She felt that Shane’s problems were too severe for any intervention to be effective short of special education. Ms. Young described her team members’ reactions to her descriptions of Shane during grade-level TAP meetings as,

Yeah, they just said “oh.” [chuckling]...I would never...bring it up...for an answer for them. We just discuss children to get...a gut response from some people.

So...I think we just bounce off...this is what I did, this is what I did. I don’t think



we do specific.

I think what's perceived is that you are with the kid every day and you know what you know best. And if people have an idea they will share it. But they don't...we aren't accustomed to say try this or try that. And I think because I have this gray hair that people don't just say, did you try?...And I guess I wouldn't...venture to do that with somebody else either. I mean, I think people know their kids and so I expect that they've tried everything.

According to Ms. Young, the kindergarten team was looking for assistance in the form of moral support or sympathy. Offering advice was almost unwelcome among that team, as teachers were presumed to, "know their kids [and have] tried everything." If teachers do not want the Intervention Development stage to be collaborative, this undoubtedly diminishes the value of the team-based component of problem solving.

#### Plan Monitoring and Evaluation

The fourth and final stage of TAP, and most other stage-based school-based problem-solving models, is Plan Monitoring and Evaluation. This stage is described in the TAP manual as, "Methods used during this step provide appropriate feedback about the effectiveness of the intervention to determine what, if any, modifications need to be made. The targeted behavior or academic skill that is expected to improve is checked for progress toward the eventual goal" (p. 18). Flugum and Reschly (1994) label this stage "problem evaluation" and define it as, "evaluating the effectiveness of the intervention, and if it has been ineffective, modifying the plan" (p. 3).

There is little to say regarding the TAP teams' conceptualization and

implementation of this stage. As Flugum and Reschly (1994) and others state, the problem identification stage is recognized as the most crucial stage in the problem-solving process. Once the teams do not state the problem definition in observable, measurable terms, observational data are used to support the loosely-defined problem, and interventions are generic and not well-developed, there is little opportunity to evaluate the “plan.” There was no recognition among the staff at Woods Terrace that this was a distinct stage within problem solving that requires its own data collection. While Maria commented that this stage represented their “weakness” in providing support to students, she was apparently referring to a more global concept of “follow-up” and not evaluating an intervention plan, as such plans were never really developed.

#### Summary

The TAP teams at Woods Terrace negotiated new meanings for the four TAP stages and did not understand the model to represent a stage-based model in which the tasks associated with each stage must be completed before beginning the next stage. While TAP represented change to new and old staff at the school, its concept of stages was loose and the problem conceptualizations were global, multifaceted, and considered the student from a “whole child” perspective. The coaches, who were the trainers of the grade-level teams, had similar understandings of the cases and reinforced these fluid conceptualizations. The lack of specific, behaviorally-defined problem definitions influenced the sensemaking of the remaining stages. The problem analysis stage often involved teams attributing the problem to deficits within the student or the home environment and there was no perceived need to collect data beyond the initial anecdotes.

The interventions were designed and monitored with the same fluid, intuitive approach in which the problems were identified and analyzed.

## Chapter Seven

### Findings: School-Based Problem-Solving Process: Paradigm Shift or Subtle Adjustments?

Maria, Jeanette, Karen, and the third-grade teachers each expressed to me that they thought they had been reasonably successful in implementing TAP. They received positive feedback from Kim each time she visited the school and David, the supervisor of psychological services and the primary TAP advocate, praised the school for their success in implementing the model when he visited the school. The teams were getting very clear and consistent messages that they were a successful Phase One TAP school. If TAP were to represent a paradigm shift and the staff at Woods Terrace were consistently being told that they were implementing the model well, then it is reasonable to conclude that they were involved in a paradigm shift. This chapter will present findings that relate to whether Woods Terrace's practice of TAP represented the intended paradigm shift or changes that were more slight and less substantive.

#### Paradigm Shift

Maria was enthusiastic about the introduction of TAP at Woods Terrace and commented at a building-level team meeting on May 6 that, "TAP makes you think a whole new way." At this meeting Kim presented a conceptual overview of the TAP model to the team. Maria responded to the presentation by remarking how TAP represented a paradigm shift from SST. While Maria did not seem to have major opposition to SST when it was in place, she was pleased that TAP, a clear improvement in her mind, had replaced it. As she described SST in her interview,

[It] was basically a group of professionals meeting once a week, talking about a kid, open and shut case. You know, this is the need, this is the problem, we're going to solve it here at the table in 30 minutes. Which is divergent from...the TAP process...Now that I think back to how we...ran the SST's I think, Wow, I would never, I would never do it [again]. But basically that's all we did, have meetings. And...if it couldn't be solved in 30 minutes it...wasn't solved. We just had another meeting to try to solve it in 30 minutes. But there was not any of that real collaboration that you do see ongoing through the TAP process.

To Maria, problem solving was synonymous with grade-level collaboration.

[In SST] there wasn't that ongoing collaboration, where you can sit down with the teacher and talk about what did not work, what kind of follow-up did you do, do you need any more help? That wasn't a part [of it]. Theoretically it should have been, but that's not the way it ran. Basically, we met, we made suggestions, recommendations and accommodations and we moved on. And teachers were not happy with it...This year...when it's time to come to the [building-level TAP team meeting]...teachers have so much information and have already had so much collaboration and help with other team members that they don't feel intimidated. They actually feel a part of that problem solving...now...they're pretty much like Hey, I can say anything I want to; I feel comfortable. Now, what are we going to do next? And they really do feel a part of that decision-making, which I believe in past years was an issue. Teachers were saying, I don't want to go; what's going to happen? There's never any follow-up. Or, all the work is put on me.

These excerpts from Maria's interview are representative of comments she made throughout the year. Maria was convinced that the grade-level and building-level teams were conducting problem solving, as evidenced by her frequent use of that term without ever mentioning it as an area of need or weakness. She concluded that the teachers' discussions of cases at the grade-level empowered them to feel more comfortable and confident regarding the student's needs. Apparently, when teachers attended the building-level TAP meetings they no longer felt interrogated or that they were being given non-helpful advice by specialists who did not know the child well or the learning situation. This was a change from when they practiced SST. Teachers were seen as more prepared and more engaged during the "problem solving" at the building-level TAP meetings due to the grade-level problem solving.

#### Adding a Stage to SST Without Transforming the Process

No teacher was willing to consider TAP to be a negative experience. Ultimately, all whom I asked claimed that they thought it was valuable. However, it seemed that they liked it because they recognized it as a student support model, and not necessarily as a school-based problem-solving model or a "paradigm shift" from the SST model. The most compelling indication that TAP may not be a paradigm shift from SST was offered by Maria. While she knew that she was supposed to call TAP "problem solving," the tasks associated with each of the four stages and the distinctions between the stages seemed to elude her. At a building-level TAP team meeting on December 3, the team presented a completed copy of their needs assessment to the building's TAP coach, Kim. All participating TAP schools were asked to complete the needs assessment, have it

signed by the principal, and submit it to the TAP developers.

When submitting the needs assessment to Kim, Maria commented aloud that the team's biggest area of need was Stage Four of TAP, following up on interventions and documenting what happens. Maria explained that the team had mastered the first three stages of TAP, problem identification, problem analysis, and intervention design, when they practiced SST. However, after the SST engaged in these first three stages, there was no follow-up or evaluation the intervention's effectiveness in the context of the student's progress. The building-level TAP team members and Kim, the TAP coach, sat around the table and nodded approvingly at Maria's observation. No one present, myself included, challenged this observation by suggesting that TAP involved more than tacking on the additional stage of intervention monitoring to their prior practice.

Maria's observation regarding the team's competencies and need to add one more stage to their previous practice would contradict her other observation that TAP is a "paradigm shift" from SST. Adding another stage should not be adequate in transforming the entire process. While the names of the stages across the models were the same, the tasks associated with the stages in TAP were not tasks the Woods Terrace SST was performing. Therefore, if TAP were to be a paradigm shift, it would have to involve more than following up on the interventions proposed for the referred cases. For TAP to represent a paradigm shift from SST, the practices must shift substantively and more needs to occur than merely adding one stage while keeping the previous practice in place.

According to Maria's interpretation of TAP, the model was asking them to add a

new stage to their current practice, but not fundamentally change their practice. Maria's interpretation, which was shared by the rest of the team, proved to be an obstacle for their development with and practice of TAP. The team had no reason to seek improvement and additional training with the model or a new understanding regarding their practice of providing student support if they were convinced that they were already doing it well. Between the formal trainings in July and March and Kim's occasional visits to Woods Terrace, they never became aware that TAP might represent more than a slight adjustment of their current practice or an alternative method of student support that differed from their interpretation.

#### TAP as an Alternative Referral System

SST was a student support model that doubled as a referral system. When it was replaced by TAP, a school-based problem-solving model, the teachers were left without their referral system and needed to recreate it. Ms. Mendelsohn offered a powerful commentary when she described her idealized version of TAP. Implicit in her description is that TAP is an inadequate referral system that needs to be improved, not recognizing that as a school-based problem-solving model it was never intended to be a referral system. Ms. Mendelsohn described her idealized vision of TAP as follows:

OK, I'll tell you kind of what I think, what I would envision what TAP should be, and I'll tell you what I think it really does. So, ideally I think TAP would be a way for a teacher to flag a child...[or] identified issues that are interfering with academic performance. Be that attentional, be that emotional, be that stuttering, be that dyslexia, be that whatever. Some type of issue, and it could span across



emotional, psychological, academic, familial, if you want to talk about family circumstances. And that you need to flag these issues because they are affecting academic performance. And then with that, that there would be more collaboration, that there would be teachers coming together and say, I'm seeing x, y, and z.

Ms. Mendelsohn was expressing regret that this was not how she was experiencing TAP at her grade-level team nor with the cases she referred or inherited through performance-based grouping. However, Ms. Mendelsohn's idealized version of TAP does not correspond to how it was intended to function. Ms. Mendelsohn's disappointment with TAP would not have been alleviated had the model been implemented with high fidelity, since she wanted an alternative referral system and not a school-based problem-solving model.

#### Subtle Adjustments

Despite the promotion of TAP as a "paradigm shift," there was no indication that this dramatic change materialized at Woods Terrace. Maria was the only person I heard at Woods Terrace use this term to describe TAP and I did not observe evidence to support this claim. While most had not been in the school long enough to experience SST and have the opportunity to compare it to TAP, they did not have the impression that TAP represented something new or remarkable as a student support model. Rather than identify TAP as a conceptually different student support model, they seemed to think that TAP represented moving the SST meetings from the building-level to the grade-level. A more accurate characterization of the changes at Woods Terrace that were associated

with TAP would be “subtle adjustments” that created the appearance of change and inhibited a more profound, substantive change.

Grade-level teams. The grade-level teams component of TAP was highly salient, and teachers and staff considered this to be the most distinctive difference between the two student support models. However, TAP was presented at the trainings and described in the manual as more than shifting the location of the meetings and discussions.

Teachers were expected to define the problems in concrete and behavioral terms, not global, amorphous terms; they were supposed to collect a new variety of data that would support or challenge their problem definition; ultimately, they were expected to conceptualize the cases from an ecological framework and not a deficit orientation.

These conceptual differences are more profound than asking teachers to fill the role of primary problem-solver and moving the location of the meeting to the grade-level.

Maria, Karen, and Ms. Price seemed to believe that the act of holding grade-level team meetings facilitated the anticipated, substantive changes. Maria felt that the meetings increased teachers’ participation at the building-level team meetings; Karen and Ms. Price felt that more mild, early intervention level concerns were being referred to TAP. These three who held that TAP represented substantive change did not comment on the problem-solving stages or features that would indicate an improvement in that area, such as behavioral definitions of problems, data collection, and systematic implementation of interventions. It was not the act of holding grade-level meetings that was supposed to improve the quality of problem solving and positively influence the effectiveness of the interventions developed through TAP, but that seemed to be the

sense of these three team members.

Ms. Price commented that at her previous school, one of the TAP pilot schools, TAP was perceived by the teachers as a gesture by the psychologists trying to shirk their role and pass it onto the teachers. “Everything gets thrown at the teachers. Rather than the psychologists doing their own job, they were looking to lighten their load and give their work to the teachers.” She complained that the teachers’ load was continuously increasing and that specialists are always trying to pass their jobs onto the teachers. While Ms. Price claimed to be speaking for others, it seemed that this was her personal sentiment.

However, a competent grade-level TAP team that engages in stage-based problem solving is expected to develop superior, targeted interventions in contrast to a single psychologist dispensing advice about a student she or he hardly knows at an SST meeting. The complaint that psychologists are passing on their work to teachers is compelling only if the teachers assume that the psychologist’s role is as an expert dispensing suggestions. Once the teachers are replicating the SST effort, they would rather do this in the company of the psychologist. Nonetheless, the change to discussing students in grade-level meetings was associated with other subtle adjustments that furthered the perception that the teams were practicing TAP correctly. These changes included increased teacher collaboration and communication, more teacher participation at building-level team meetings, and adding more “follow-up” to cases.

TAP as teacher collaboration. As a school that practiced performance-based grouping, most students were shared across teachers. For example, if a student was

“inattentive” during Language Arts, that teacher would need to inquire with at least one if not two other teachers in order to know about his or her attention levels in other subjects. Grade-level teams at Woods Terrace met on a bi-weekly basis to discuss administrative and procedural matters and coordinate upcoming events and programs. The TAP team meetings on the alternate weeks offered teachers the opportunity to discuss children and not scheduling. Given the hectic schedule of teachers, the scheduled TAP meetings undoubtedly increased communication among teachers.

A notable, positive change that emerged from TAP was the increase in teachers’ communication about their shared students. The observed collaboration among grade-level team members was a positive change recognized by Maria, and she was not particularly concerned with the actual content of the discussions at the meetings. She seemed to believe that teachers meeting and talking about children were the most important aspects of TAP. This conceptualization of problem solving as collaboration does not require rigorous adherence to the stages of the school-based problem-solving model or reliance on certain types of interventions over others. In fact when Maria compared TAP to SST in her 90 minute interview, she emphasized TAP’s contribution of collaboration without mentioning that TAP represented a stage-based model or that teachers were developing different interventions than had been developed or recommended during the SST days. As TAP chair and the local expert on students’ needs, Maria’s lack of awareness of what should be accomplished while teachers are collaborating influenced the sensemaking of the teachers who were not trained in the model.

While increased communication among teachers was one benefit associated with TAP, it also presented with disadvantages. Some teams, for example the first and fifth-grade teams, and building level staff overestimated their communication and perceived that all teams were experiencing enhanced communication. This perception may have prevented more extensive communication from taking place, as those individuals believed that their recent improvements represented significant change and were content with their perceived accomplishments.

More teacher participation at building-level TAP meetings. Another change associated with TAP, according to Maria, was teachers' increased engagement and participation at building-level TAP meetings. In contrast to the SST meetings, Maria felt that the teachers arrived at the building-level TAP meetings more prepared and comfortable contributing. In light of the increased communication among teachers at the grade-level meetings, Maria's conclusion that they were more prepared and more comfortable at the building-level team meetings is highly plausible.

Maria interpreted the teachers' increased comfort at the building-level team meeting as a positive change associated with TAP. She was pleased to see the teachers be more active participants at the building-level meetings. However, Maria did not recognize that their increased participation was accompanied by the cost of reinforced deficit-oriented attributions. At the grade-level meetings, teachers rarely challenged the referring teacher's observations and attributions of the student's problems; they either agreed with the teacher by offering their own supporting examples or listened quietly. Through this team experience, the referring teachers did not actually reflect on the case

or the experience of student learning. Instead, they left the meeting more confident in the variation of deficit-attribution about the student's problems they held when they entered the meeting.

Therefore, Maria's observation that teachers felt more confident and comfortable at the building-level meetings had mixed value. Referring teachers' initial impressions were reinforced through their participation in the grade-level meetings making them more confident and ready to participate in the building-level team. However, their increased comfort was rarely connected to reflection or data-based problem analysis regarding the referred case.

Comfortable vs. working collaboration. Maria's assessment that the teachers were collaborating more because of TAP was probably accurate. The experience of meeting together and talking about students fostered more communication than they had enjoyed in the past. However, while increased collaboration was one of TAP's goals, the types of collaboration were not distinguished. Fullan and Hargreaves (1991) describe four types of collaboration: balkanization, comfortable collaboration, contrived collegiality, and professional interdependence.

The weakest level of collaboration, "balkanization," may have described Woods Terrace prior to the advent of TAP and the new principal, Ms. Jackson. In this version of collaboration, teachers associate most closely with a subset or a clique of other staff members and collaboration is contained within groups. They may even engage in competition or "petty disputes" (p. 53) over space and resources. This is in contrast to working collaboration, the most desirable level of collaboration, in which staff are

responsible for collegial tasks and they reflect and question together. In this type of collaboration, teachers talk about their work and inquire among each other in order to improve their teaching and service delivery with the goal of serving students.

The collaboration that Maria observed at the school would be considered by Fullan and Hargreaves (1991) as “comfortable collaboration.” In this type of collaboration teachers and teams coordinate, exchange, and share, but they do not probe each other regarding the substance of their work. Comfortable collaboration represents an improvement over the individualism of balkanism, as the teachers are in greater communication, but they are not challenging or questioning each other as a way to improve the quality of their joint work. As Ms. Young described, the kindergarten teachers listened during the TAP meetings but did not offer suggestions. Such suggestions would have been unwelcome as they would have challenged the autonomy and professionalism of the referring teacher, possibly making the teacher feel threatened and would have violated the norms of school culture. Therefore, while the observed collaboration at Woods Terrace might have represented an improvement, it did not represent the working collaboration intended by school-based problem-solving models.

Shared reality. Teachers’ increased participation in building-level team meetings was related to their confidence in their “analysis” of the student’s problem. During team meetings teachers had the opportunity to reinforce each other’s perceptions regarding the referred student, particularly when more than one teacher was experiencing problems with this student. These discussions nurtured a deficit-oriented explanation of the student’s difficulties since they were observed across classrooms and appeared to be

consistent within the student. It was the increased communication that enabled the teachers to create a “shared reality” that was more powerful and convincing than the opinions they held individually and privately about the student (Higgins, 1999).

For example, Ms. Mendelsohn was convinced that second-grader Pablo had social-emotional problems, even though they were not particularly serious yet, which she understood from a deficit perspective. Because Ms. Marshall observed these concerns first, followed by Ms. Mendelsohn, they were both confident in their deficit-oriented assessment of him. As Higgins (1999) explained, when an individual is uncertain about information or a position or is contemplating ambiguous information, the experience of discussing it with others creates a “shared reality” in which the situation assumes a new clarity. A teacher might be hesitant or reluctant in her description and opinion about the student. However, the grade-level TAP team meetings gave the teachers the opportunity to create the new reality through their discussion.

Ms. Mendelsohn explained during her interview that as a first year teacher she did not feel confident in her opinions and assessments of students and would defer to the opinion of a veteran teacher.

I probably was not as in-tune to these issues with Pablo as Ms. Marshall was.

And then once she pointed them out I said, “Oh yeah, you’re right.”..she’s in her seventh year of teaching, so she’s seen a lot more kids; she knows more kind of what might seem out of the ordinary for somebody. For me, this is my first year, so I haven’t had as many children in my past where I would be able to really pick up on, “this is not right.” Does that make sense? Again, I think the TAP process



is positive in that it does raise awareness...

Ms. Mendelsohn considered her lack of teaching experience to be a liability and preferred to rely on the judgment of her senior colleagues. In her quote, she recognized the reality that Ms. Marshall helped create for her. She needed Ms. Marshall to alert her to Pablo's "problems" in order to recognize them. While Ms. Mendelsohn did not support Ms. Marshall's observation that Pablo behaved rudely toward adults, she was unwilling to contradict Ms. Marshall's interpretation that his behavior was problematic. Their communication fostered a new reality and confidence regarding Pablo's problems.

Ms. Chen had a similar reaction to the improved communication she shared with the other first-grade teachers. When a particular student concerned her, she checked with the other first-grade teachers to see if their impressions matched hers. If they replied in the affirmative, then she pursued Maria or another specialist for help. Once Ms. Chen knew that other teachers were experiencing difficulty with the student, she reflexively concluded that the magnitude of the problem was too large for her to resolve it independently or with the help of her grade-level colleagues. She did not feel empowered to help the student and needed to invite a specialist to accept responsibility for the case. The improved communication across teachers appears to have reinforced deficit-orientations about the referred students, disempowered some teachers, and inhibited the creative, problem-solving process.

When teachers reinforced each other's attributions about the students' problems during team meetings, the attribution was not necessarily an internal deficit-orientation in that the student was labeled as the source of the problem. Most attributions were a

variation of the deficit model in which the student's parents, limited English, or another deficit, was blamed as the problem. Rarely was the attribution a classroom feature or a cause that the teachers felt comfortable resolving with classroom-based interventions. For example a second-grade special education student who was progressing was described as having, "a learning disability [and] on top of that she has visual memory, auditory processing issues." As these teams talked about the students, they became more convinced of the deficit attribution of the students' problems.

The second-grade TAP team demonstrated this during one of their meetings. At a meeting held on May 21, when discussing the progress of a few students, Ms. Mendelsohn expressed concern regarding a particular student who was Asian, Steve.

I'm just really frustrated on the Steve-front and that's just me with one hour of math a day...he's not in my homeroom for reading and writing, and we're seeing all the same stuff. I think what we really need to do is, we only have...four and a half [weeks left of school] and we've got to be making some decisions around these kids because I don't think going on to third grade in a regular classroom is going to be in his best interest.

The coach, Jeanette, responded with the following comment.

Right, I understand. All you really need to do for Steve, and you're doing [this] now and I'm doing it as well is documenting his reading progress, documenting his reading level, documenting what he's able to do, what he's not able to do and also what would be helpful, and we're going to have to depend on Karen again... to... come in one more time and do a time study [and] look at how much this child

is active and not active...[W]e can still continue to do more behavior scales, these are not going to take a whole lot of time. *We already know without a shadow of a doubt that this child has attention deficit* [emphasis mine]. It's not really the school's responsibility to make that medical diagnosis and we can't; the doctor has to do that. So at this point we can really move forward and get in on a medical evaluation. And either [the mother] medicates Steve so that he can be successful in a resource program in a regular ed school or it may come to the point where he needs a more restrictive placement.

As evidenced by this discussion, the teachers' enhanced communication at the team meetings did not empower them to develop effective classroom-based interventions for Steve. Instead, they continued to feel overwhelmed by Steve's needs and their worry that they had not served him adequately or prepared him for a regular education third-grade classroom. The team consensus was that this child had severe attention problems, a deficit-oriented attribution, and that they were limited in the support they could provide him. The actions they limited themselves to included inviting the counselor to conduct an observation, complete standardized behavior scales to be submitted to the child's doctor, and "document" what he was doing and how he was performing. This documentation is not the same as data collection: The purpose of data collection is to use the information to develop a targeted intervention, while documentation is used to demonstrate the severity of a case and the helplessness teachers feel in addressing the student's needs.

The teachers' perceived helplessness in addressing their students' problems

convinced them that these were difficult problems, not that they needed more support to improve their problem-solving skills. In fact, the only issue that was posed directly to Kim for assistance involved teams fitting all of their referred cases into the allotted bi-weekly meeting times. The teams and coaches were not skilled enough in problem solving to identify that they were not practicing a stage-based process nor collecting suitable data to support the problem definitions and proposed interventions. According to the community-created meaning, they were practicing the model correctly and unsuccessful cases were attributed to the severity of the student's needs.

Summary. The increased collaboration and communication that was promoted by TAP's grade-level teams simultaneously created unintended disadvantages. Teachers collaborated more and felt more comfortable and participated more in building-level meetings, although they were not more reflective. However, they also reinforced referring teachers' perceptions regarding the severity of a student's needs, reinforced deficit-oriented attributions, and suggested ineffective strategies which further convinced teachers of the severity of their students' needs. The discussions established the consensus that they were not empowered to develop classroom-based interventions that could benefit the student.

#### TAP as a Compliance Model

The TAP teams at Woods Terrace adapted the school-based problem-solving model into another procedural, compliance-type model (Wolf & Hassel, 2001). Instead of reflecting on factors that influence learning, such as instructional practices and the curriculum, to develop targeted interventions, they reaffirmed the students' perceived

weaknesses or the lack of support at home; instead of teachers engaging and challenging one another during the team meetings and promoting reflection, all teacher comments were accepted without discussion and were met with agreeing nods from their colleagues. Meetings often produced “to-do” lists that involved implementing stock interventions, requesting professionals who were not present at the meeting to collect further data, such as asking the reading specialist to administer a reading assessment or the counselor to conduct an observation, or requesting a specialist to provide direct services to a student.

The second-grade team was the most procedural in their practice of TAP. In an email their coach sent to her TAP team and the other TAP coaches, myself included, on November 21 she summarized the “Team Questions and Concerns about the TAP Process” posed by the second-grade teachers at the previous meeting. She listed them as follows:

Problems:

1. The team felt that at times the TAP process is too lengthy.
2. The team would like more follow-up on students referred to the building level and more closure at the TAP meetings.
3. The team is unsure how to refer students when they feel there is a concern.

These are thoughtful and reasonable concerns a dedicated and committed community would ask when trying to make sense of and implement a new model. However, the solutions the coach proposed were an outline of steps and listing of responsibilities.

These were highly procedural in nature and did not directly address problem solving, the purpose of TAP. She continued:

Solutions:

1. The TAP Coach will be responsible for giving the team feedback on cases brought to the [building] team level via e-mail.
2. Teachers will e-mail the TAP coach prior to scheduled team level TAP meetings about students.
3. The TAP coach will fill out the referral form before the team level meetings.
4. The team will review referral, complete the problem analysis, and intervention plan [forms] at team meetings.

While Jeanette identified who is responsible to report to whom and who is expected to fill out which TAP forms when, she did not acknowledge the data collection, problem analysis, or teacher reflection as the crux of the process. Instead, she volunteered to complete the Referral form independently even though she is not the referring teacher and said that the team will fill out the other forms as a group during the meetings. Her proposed solutions emphasize timeliness of response and form completion. Instead of a stage-based process in which the fourth item represents the entire process, TAP became another procedure in which the input, timelines, and paperwork are the primary features. Jeanette's "solutions" are an adaptation of SST and special education into the two-tier team level structure of TAP.

Compliance instead of problem solving. The procedural, compliance-oriented tone of Jeanette's public reply to her team was supported by the second-grade teachers' explanation of how they spent their meeting times. Ms. Marshall said during her interview that Veronica's case languished while they waited for specialists to complete

their portions of the “data collection” as assigned by the team. Instead of looking within themselves for the data and interventions, these teachers consistently relied on others who rarely had relevant data that could contribute to a focused, behaviorally-defined problem definition. However, because they conceptualized the students’ problems from a disability or deficit-orientation, it was logical for them to consult multiple specialists before continuing with the case. Ms. Mendelsohn explained that during their meetings they produced lists of actions, such as call the parent and check with the ESOL teacher. This grade-level team, like the others, talked around the referred problems without actually engaging in problem solving.

A compliance-model, special education interpretation of TAP implementation also accounts for teachers’ explanations regarding the success of their cases during the reflective interviews. Ms. Marshall thought Veronica’s case should never have been referred to TAP and Ms. Young thought Shane’s TAP case was a success; however, neither case involved stage-based problem solving. Ms. Marshall judged Veronica’s case to be superfluous because Veronica’s reading level improved substantively and the team concluded that she did not have “processing problems.” Conceptually, within the special education framework, referring a student who does not have a disability is considered an “inappropriate referral,” but within TAP, a student whose reading level improves from a teacher-delivered instructional intervention should be considered a success. Ms. Marshall evaluated the appropriateness of Veronica’s TAP case based on the special education criteria and not the TAP criteria.

Conversely, Ms. Young considered Shane’s TAP case to be a success, despite the

lack of problem definition and targeted interventions, because it ended with his being placed in special education. She did not evaluate the success of his case based on his progress with TAP-related interventions, but based on his placement in special education. Both teachers evaluated the success of their TAP cases based on special education criteria and not the criteria associated with school-based problem-solving models.

Compliance-oriented interventions. The second-grade team's interventions primarily involved requesting specialists to provide direct services to the students in the classroom setting. These interventions resembled the service delivery students classified with special education disabilities receive. For example, the intervention of "speech pathologist will come to the math class twice a week" involved someone other than the classroom teacher providing assistance and listing the specialist's responsibility but not what the student was to accomplish. The teachers were frustrated with these interventions because the service delivery was "so erratic; it's so inconsistent" and "what suffers is these kids." The sentiment among the second-grade team was that if the specialists had fewer conflicts and delivered direct service to the TAP students more consistently, the students would benefit more. Similar to the compliance model of special education, success was measured by adults complying with procedures and timelines and students' progress was implicit and assumed.

Vaguely stated problem definitions and specialist-focused interventions disempowered the classroom teachers from developing or implementing their own interventions. Unlike special education, the recommendations from the team meetings to the school specialists are not legally binding and the specialist had to agree to balance her



legally binding responsibilities to IEP students with the needs of the TAP students. Amorphous problem definitions are not conducive to measuring progress, and when specialists are confronted with conflicts, direct service to a referred TAP student will be the first responsibility to be postponed. Without measurable progress or consistent “intervention implementation,” the second-grade teachers became frustrated with TAP. They interpreted that they fulfilled their role as TAP team members: They attended and participated in TAP meetings, and made recommendations to building specialists, but the proposed interventions did not occur.

The experience of “talking about” students without engaging in problem solving and developing classroom-based interventions that involved specialists providing direct services in the classroom represented an adaptation of TAP from a school-based problem-solving model into another compliance model. Adapting TAP into a compliance model is a logical consequence when most team members have not been trained in the model and their mental framework for student support is special education. This was apparent with all the TAP teams at Woods Terrace, particularly the building-level team and the second-grade team. The TAP teams’ re-enactment of SST and special education at the grade-level demonstrated their limited conceptual understanding of TAP.

An important point to note is the teams’ relation with special education. The roles of most of the TAP coaches were heavily connected to special education, particularly the second-grade coach who was the school’s resource teacher. However, many of the teachers were new to Woods Terrace and many were relatively new to

teaching. At first blush, one might not expect these communities to be so enmeshed in special education that it colored their interpretations of TAP. However, regardless of their personal familiarity with special education, an expert model of direct service to students having difficulty seems to be pervasive throughout schools. The teachers were socialized, probably through their pre-service training and general teaching experiences, to find a specialist outside the classroom to help with a student who presents with learning challenges. With this general culture, embodied by special education, the teachers were comfortable and familiar with deficit attributions and compliance-type models for providing assistance to students in need.

Documentation for compliance purposes. In addition, many of the interview participants mentioned the importance of “documentation.” Ms. Marshall, for example, wanted documentation of Veronica’s reading difficulties for next year’s third-grade teachers. Although legitimate, the teachers’ preoccupation with documentation and secondary interest in effective classroom-based interventions highlights that the purpose of the documentation was primarily procedural and compliance-oriented, not for the purposes of problem solving and intervention design. Similar to a compliance model, the value and content of the documentation is secondary to the fact that the responsible party provided documentation. Ms. Marshall wanted to document what she was doing with Veronica so that the third-grade teachers could not suspect her of being a poor teacher. She wanted documentation to demonstrate that she complied with her responsibilities as a teacher, not whether Veronica benefitted from interventions or improved instruction.

#### Limited Feedback

There is no evidence to support that the Woods Terrace TAP teams produced the anticipated changes outlined in the TAP manual. Indeed, while accomplishing TAP's goals would be a tall order for any school to accomplish in one year, Woods Terrace did not appear to be on-track to producing these goals. The TAP developers regularly reassured the Phase One TAP schools that "change is difficult and complex," allotted time for members of the same school to plan for continued implementation at the trainings, and told the participants to expect a three to five year transition before they would be practicing TAP proficiently. While this feedback appeared to motivate and encourage the staff at Woods Terrace, it was too general to help them evaluate their success with the model and improve their implementation. Without an articulated description of the three- to five-year trajectory that represents steady growth toward competent practice or the benefit of the level of implementation scales, the staff at Woods Terrace could not validly assess their progress.

The TAP developers appeared to interpret Woods Terrace's practice of TAP along with their complaints about implementation challenges as an indication that they were engaged in the model and practicing it correctly. When David visited the school with Kim, he explained to the building-level team and other specialists who were present that "change is complex and difficult"; if a team is experiencing difficulty with implementation, then they can take pride in their effort and commitment to the model. These gestures represent the leadership style labeled "affiliative" (Fullan, 2001b). An affiliative leader is one who attempts to promote harmony and focuses on praising, without including critical feedback.

Those at Woods Terrace who were engaged in TAP did appear to be dedicated and committed to this model. However, their complaints about the difficulty of program implementation should have been interpreted as more than “growing pains.” The complaints should have been interpreted as indications that they needed more intensive support in order to practice TAP as it is described in the manual.

Even if schools need to participate in a program for a few years before becoming proficient, they need not wait this length of time in order to know their “level of implementation” and progress with the model. Identifying the meaning the community members create about the program, particularly in the first year when they are first encountering and reconciling the messages they hear about the program, can provide valuable, initial evidence as to whether their understanding of the program will yield the practice intended by its developers. By all indications, the meaning the staff at Woods Terrace negotiated about TAP would prevent them from implementing the model as envisioned by the developers.

### Summary

The teachers’ and teams’ understandings of school-based problem-solving models suggest that they negotiated an alternative meaning to the process than the one intended by the TAP developers. While the model was meant to stimulate a paradigm shift in service delivery for needy students, the coaches only saw a need to add the plan monitoring stage to their existing practice in order to comply with the model. Changes to their prior practice was observed, such as grade-level teams meeting regularly, teachers participating more comfortably at building-level team meetings, and increased teacher

collaboration. However, these changes resulted in TAP being practiced as a compliance model and not a problem-solving model. The appearance of change created by these subtle adjustments and the praise that Woods Terrace received from the TAP developers convinced them that they were successfully practicing the model.

## Chapter Eight

### Findings: Preliminary Results and the Larger Context

The findings presented thus far described Woods Terrace and its school district, TAP, and the teams' practices of TAP that are believed to represent their sensemaking about problem solving and their educational beliefs. The teachers' patterns of referral, or gatekeeping, their conceptions of the model's stages, and their reflections about the entire process of problem solving each represents a complementary dimension of their individual and collective meaning making process. Additional components that must be considered involve the TAP outcome data that their practices yielded and the larger school environment. Both elements provide a context that facilitates interpretation of the findings regarding the teams' sensemaking and practice of TAP.

### Preliminary TAP Outcome Results

According to an interpretive paradigm, the collective sensemaking of school staff is the most important and relevant consideration when they are in the first year of implementing a new initiative. However, the school and the school system were primarily interested in their outcome data: how many students were referred to TAP, how many were referred for psychoeducational evaluation, and how many were determined to be eligible for special education services. An improvement in these data was interpreted by the TAP developers and others in the school system that TAP was promoting the use of classroom interventions and supports among teachers and diminishing the need for special education services.

The Phase One TAP schools were asked to submit quarterly data summary sheets

to the TAP developers for data review and analysis. According to Woods Terrace's fourth quarter data summary, from April 1 to June 17, 19 students were discussed at the grade-level TAP team meetings and 13 were referred to the building-level TAP team. Psychoeducational assessments were requested for four students, and two met the qualifications for special education eligibility and services. Without prior comparative data, the consensus at the school was that this represented a reduction from previous years when they participated in SST. This apparent reduction was interpreted by most that TAP was meeting its goals and that the staff at Woods Terrace were developing the competencies required to implement TAP at a high level.

In addition, one TAP developer reported on Woods Terrace's outcome data for the 2002-2003 school year. However, these data could not be located in order to verify the report. It was shared that 50% of Woods Terrace's grade-level cases were "resolved" at the grade-level without progressing to the building-level team. Of the cases that were referred to the building-level team, 80% were resolved within the team without a request for psychoeducational testing. All cases that were referred for psychoeducational testing were found to meet the eligibility criteria for special education. While these year-long data do not match the fourth quarter data I obtained, it is probably because the fourth quarter was not representative of most of the school year. Presumably, more meetings were held to bring cases to closure in anticipation of the end of the school year.

Reviewing these data, the conclusion that Woods Terrace was effective and successful with their TAP implementation seems reasonable. However, the rest of the findings reported in this study would contradict such a conclusion. This contradiction

highlights the importance of the research methods and design influencing the findings and interpretations of a study. The teams were not observed using the problem-solving stages and continued to use global conceptualizations of problems, stock interventions, and requested specialists to provide direct services to students. In light of the teams' misunderstandings and adaptations of the model, it is puzzling that they were able to produce such positive outcomes.

The contradictory data, the teams' misunderstandings and adaptations of the model albeit with favorable outcomes, needs to be reconciled. It is possible that the two-tier structure of teams, grade-level and building-level, created a barrier for teachers and discouraged them from referring cases to the building-level team after they attempted to resolve it at the grade-level. As discussed in the "Time Limit on Cases" section, referring an unsuccessful case to the building-level team required more attention and effort from the teachers, perhaps more than they were willing to put toward a single case. Even if the case was not resolved to the teacher's satisfaction at the grade-level team, referring the case onto the building-level team when the teacher wanted to address other students' needs or other matters was not necessarily a desirable alternative.

This explanation was not pursued while the study was in progress and is only plausible speculation. There is another likely explanation that could have worked in concert with the first explanation. Woods Terrace, like all schools, participated in multiple new program and resources during the 2002-2003 school year. This was particularly the case at Woods Terrace, as it was the principal's first year in that role at the school and she was attempting to recreate the academic success she had created at her



previous out-of-state schools. It is highly likely that the other new initiatives, resources, and culture of collaboration that the principal was introducing promoted academic success among the students and mitigated the need for a school-based problem-solving model. Since most of these programs did not have a strong data collection component, it is difficult to ascertain how much of the effect can be attributed to a particular program. Instead, the positive TAP outcome data are probably due to the collective impact of all of the new and enhanced programs.

While the need for student support is not ever expected to vanish, complementary and supporting services that are provided to the general student body will enable all, or at least most, students to be successful. If students who might typically struggle are benefitting from increased math instruction, reading enrichment programs, and performance-based grouping, then they would not be perceived by their teacher as in need of referral to the school-based problem-solving model. These initiatives and others that Ms. Jackson, the principal, introduced are discussed in the next section.

#### Woods Terrace: The Larger Community of Practice

According to the communities of practice framework (Wenger, 1998), individuals belong to multiple communities that can mutually influence their learning and participation in different activities. For example, a teacher at Woods Terrace can belong to the community of her or his grade-level colleagues, the community of a school improvement or other committee, and the larger community of the entire school. The members of each community vary, each community has a different purpose and related activities, and members have differing levels of commitment and participation to each

community. The community at the school-level is a powerful one that can engage and distract teachers due to its own demands.

The principal's nomination of Woods Terrace to be a Phase One TAP school is an indication of her educational vision and the community of practice she was trying to create throughout her school. Yvette Jackson explained to me that she wanted Woods Terrace to participate in TAP because she wanted the students to receive more classroom-based interventions. Prior to being an administrator Ms. Jackson was a special education teacher, and she felt that teachers often make inappropriate referrals to special education and that minority students are overrepresented in special education. In the words of Maria, Woods Terrace's TAP chair and speech and language pathologist, Ms. Jackson wanted Woods Terrace to participate in TAP because:

Basically... she saw [the need to create] success for all students. That we [would]...be reducing the number of minority students who were identified as special education...which was a mission of hers. But that actually aligned with what the TAP program is all about, too...And so it just was a nice transition from one totally different state and curriculum and expectations to come here.

Essentially, the goals of TAP resonated with Ms. Jackson's vision for Woods Terrace and her previous experiences as a special educator and principal. Therefore, her interest in having Woods Terrace participate in TAP cannot be attributed to the staff's dissatisfaction with the previous model of student support or any reason other than Ms. Jackson's personal, educational vision. In fact, it is difficult to know both how many of the staff wanted this change and what their initial expectations were.

Ms. Jackson's gesture of nominating her school to participate in TAP was one example of her educational vision of "affect and rigor." This vision permeated her style of leadership and the host of initiatives she introduced. These initiatives, some of which are described below, can be assumed to have had an effect on teachers' efforts and sensemaking regarding TAP, be it competing or complementary. In addition, the non-TAP initiatives probably stimulated reflection among the teachers about their instruction and their understandings about student learning. A selection of these initiatives are described at length in order to present the context in which teachers and staff were negotiating the meaning and practice of TAP.

#### Ms. Jackson's Leadership

During the year of data collection, Woods Terrace could be characterized as a well-functioning school in which the majority of students are learning, with close oversight from Ms. Jackson herself. Ms. Jackson, an African American woman, was described as a "visionary" and "hands-on principal" by her staff, and was perceived as an instructional leader invested in the students' performance. Ms. Jackson described herself as a "blunt person" whose mission at Woods Terrace is to create a sense of "affect" throughout the school.

Ms. Jackson arrived to this school system and to Woods Terrace in November 2001 as acting principal, and became principal at the start of the 2002-2003 school year. She was confident that she could replicate her previous successes as principal at other elementary schools by similarly infusing Woods Terrace with "positive affect." She was committed to creating a warm and friendly school climate for students.

Ms. Jackson got favorable to enthusiastic reviews from the staff I interviewed. Ms. Price, a part-time teacher whose load included third-grade Language Arts for Gifted and Talented students, said that this is the first year, “I have not cried from my job.” The 2002-2003 school year was her first year at Woods Terrace, though her 20<sup>th</sup> year teaching, almost exclusively in this school system. She described Woods Terrace as a “more creative school” where she had “freedom” in developing lesson plans and throughout her job. Ms. Price characterized herself as someone who likes to “think outside the box” and the openness at Woods Terrace allowed her this flexibility.

Ms. Massey, a seventh year teacher in her third year at Woods Terrace and the second-grade team leader, claimed to like Ms. Jackson’s leadership style and described her as “demanding” and insisting on “accountability” from the teachers. Her sense, however, was that teachers did not feel micro-managed or that they did not have the flexibility to use their own professional judgment. Under Ms. Jackson’s principalship, teachers were expected to keep a portfolio of student work and track student data. Ms. Massey acknowledged that this increased the paperwork, but she felt that it was worth it because she saw the students as learning more than they did in previous years.

Mr. James, the assistant principal, had clear affection for Woods Terrace and Ms. Jackson, attributing a positive school climate change to her. In 2002-2003 Mr. James was in his sixth year at Woods Terrace and his second year as the assistant principal. He characterized Ms. Jackson as a “visionary” who was successfully transforming Woods Terrace from a low-performing to high-performing school. Amidst her multiple initiatives to achieve this, Mr. James perceived himself as the “bridge” between the staff

and the administration. Due to his relative longevity at the school, he perceived himself as representing continuity in the administrative pair while Ms. Jackson represented change. He described their leadership styles as different, but complementary, enabling Ms. Jackson to pursue her agenda and Mr. James to help the staff with the changes:

Since I was here [before] I had that connection with the staff and was able to bring them along a little bit more quickly than if she was just here by herself. So I think we've got two different kinds of leadership styles. You know, she, she's a big visionary person. I kind of like to work among the people, in the here and the now. And so we meshed our styles and we were really able to push people where they needed to go.

#### Changes at Woods Terrace

As of June 2003 Ms. Jackson seemed to be well-liked among the school staff. There was high morale among teachers and respect and admiration extended toward Ms. Jackson. As an semi-insider at the school I expect that I would have heard complaints about her if they were being expressed. While teachers are generally protective of what they say about their principal, it was apparent to me through my participant-observation as well as the reflective and supplemental interviews I conducted that her "open-door" policy and leadership style endeared her to her staff.

Ms. Jackson's popularity, however, did not materialize immediately. During the 2002-2003 school year, 11 of the 21 general educators were in their first year at Woods Terrace and 6 were in their second year. This means that only four teachers were at Woods Terrace for more than two years, before Ms. Jackson's arrival. The 81% teacher

turnover cannot be attributed solely to Ms. Jackson, as she had been at the school less than two years herself. The six second year teachers filled vacancies that were created before Ms. Jackson arrived. Nonetheless, more than half the teachers left Woods Terrace after Ms. Jackson's year as acting principal and this high teacher turnover rate raises questions about what transpired during the 2001-2002 school year.

According to the assistant principal, Mr. James:

Historically, Woods Terrace has always had a high turnover. We're talking about eight to ten people leaving on a yearly basis. This year I think we've got four staff members that are leaving. But they're leaving for the right reasons...So, [Ms. Jackson] developed a nucleus of good teachers here that I think will be here for awhile...And the trend of high turnover was due in large part to dissatisfaction with the school [and] she's changed that. She's changed the whole school climate, so to speak.

This explanation for the high rate of teacher turnover suggests that it was a systemic, historic problem, independent from Ms. Jackson's arrival. Maria, the TAP chair, was one of the few staff people who had enough longevity at Woods Terrace to comment on Mr. James' assessment. She agreed that Woods Terrace had an historically high rate of teacher turnover, but she did not see the 50% departure rate after the 2001-2002 school year as a mere coincidence with Ms. Jackson's arrival.

Ms. Jackson was apparently very straightforward and "blunt" (as she described herself) about what she did and did not like about Woods Terrace when she arrived in November 2001. Ms. Jackson spent her first, partial year as acting principal acclimating

herself to the school and piloting some of the innovations she intended to implement school-wide as principal the next year. Performance-based grouping was one major change that she piloted with the fourth and fifth-grades in math mid-year and it was expected to be school-wide in the 2002-2003 school year. Performance-based grouping involves placing students of similar skill levels in the same class. However, unlike tracking, students can be in different skill-level classes for different subjects and there is the expectation that students will advance to the next skill-grouping mid-year. Unlike a homeroom-type schedule, in performance-based grouping teachers have different students in their subject area classes.

In another example of change that was shared with me, Ms. Jackson eliminated the Reading Recovery teaching position after June 2002. This decision proved to be highly controversial. Reading Recovery is a reading program that supports first and second-grade students with weak reading skills on an individual basis. Ms. Jackson reportedly did not approve of a reading program that taught students individually while a majority of the students were assessed as having weak reading skills; she wanted to reallocate those resources for a reading intervention that would support more students. The controversial elimination of this position affirmed for teachers that there had in fact been a “change of guard,” and dissatisfied teachers were invited to request transfers to teaching positions at other schools in the district.

It appears that Ms. Jackson laid the groundwork for her principalship during the 2001-2002 school year. While she introduced many academic and home-school collaboration initiatives in the 2002-2003 school year, teachers had exposure to her

direction and leadership the prior year and had a hint of what was to come. Judging by the satisfaction expressed during teacher interviews and the uncharacteristically low teacher turnover rate by June 2003, Ms. Jackson was credited with creating a productive and pleasant school environment.

Academic initiatives. Ms. Jackson was perceived as a leader and change agent among her staff. In addition to introducing an array of home-school collaboration initiatives to increase parent participation, she introduced multiple academic initiatives to Woods Terrace, including TAP. Ms. Jackson saw herself first and foremost as an instructional leader who intended to improve the quality of the education at the school.

When meeting together on one occasion we began discussing the topic of school improvement. Ms. Jackson described her success at her previous low-performing schools in improving students' standardized achievement scores. She attributed the improvement to the sense of "positive affect," or positive school climate, that she created in the school. When I mentioned that I thought differentiated, individualized instruction would be the most important feature in improving learning outcomes, she replied, Ms. Benn, quality instruction to me is like brushing my teeth. It's so obvious [that it has to happen], I don't think to mention it. Indeed, the bulk of the innovations that Ms. Jackson brought to Woods Terrace were of an academic nature. As Mr. James indicated, "Mrs. Jackson has brought in a lot of accountability to the teachers; she's put in a lot of programs in place that are really teaching the staff members to monitor instruction and to really know where the students are."

Teaming. One of the more major changes introduced by Ms. Jackson was her



conceptualization of grade level teachers as “teams” and emphasis on team planning. According to Mr. James, “I see a lot more team planning. She developed a master schedule so that teachers could plan every day for 50 minutes [together]. I mean, that’s pretty innovative. And I think we’re seeing the fruits of our labors [in the results from the standardized testing].” A team leader was designated for each team, or grade, and the team leaders met with the administration on a monthly basis. The teams were expected to meet weekly during their shared planning time: one meeting a month was devoted to discussing the information from the team leaders’ meeting and the team leader was required to submit a summary of the grade-level’s meeting to the administration, two meetings a month were devoted to TAP, and the topics of the fourth monthly meeting were left to the discretion of the team. In addition, teachers participated on school-level teams that had regular meetings, including a school improvement committee. Some of the school-level committees existed before Ms. Jackson’s arrival, but since they did not meet on a regular basis they were not judged to be particularly effective or productive.

Ms. Massey said that she liked the team structure because I never knew what the other teachers were doing before. Teaming, in her view, provided more opportunities for sharing and communication across grades. Whereas before she only knew about her students, the increased communication made her feel like she knew more about Woods Terrace as a school and she enjoyed seeing “how the kids are growing.” She even described the teachers as a little competitive now, in a playful way. Before you never knew what the other teachers were doing or how their students were performing. Now we talk about kids more, so we can compete.

Many teachers are not accustomed to working as teams and can find this expectation to be a nuisance (Sarason, 1996). Due to the common experience of isolation among teachers (Little, 1990), many may find it more comfortable and efficient to work independently, seeking out colleagues' advice only on an occasional basis. However, the team orientation that Ms. Jackson introduced to Woods Terrace was a useful structure for managing the largest, most salient innovation she introduced: performance-based grouping.

Performance-based grouping. Performance-based grouping, as Ms. Jackson was quick to explain, is not tracking. When students are tracked, they are placed in classes grouped by "ability" and they are in that same ability level for all subjects without the opportunity to advance to the next track for one or multiple subjects. Performance-based grouping, in contrast, involves placing students of similar skill levels in a class together for each subject with the possibility of "movement." The movement occurs for individual students who are promoted to the next grouping based on their mastery of the material at natural breaks in the curriculum. The other possibility of movement occurs when the groupings are reconfigured in preparation for a new unit that involves different concepts and prerequisite skills. For example, after the multiplication and division unit was taught in the second-grade math classes, a new pre-assessment was administered so that the groups could be reorganized for the money unit, and the students were re-grouped again for the geometry unit.

In order to successfully execute performance-based grouping, the school must run on a "block schedule," where all teachers of one grade level teach the same subject at the

same time. This type of scheduling makes a class of every skill level available to every student, so that a weak reader but strong math student can be placed in those respective skill level classrooms for those subjects. Another feature of block scheduling is that team members have the same planning time and need to meet together regularly to coordinate activities and schedules. The primary advantage of performance-based grouping is the homogeneity in students' skill level in each class, enabling the teacher to better individualize and differentiate instruction.

At Woods Terrace two subjects were performance-based grouped, Language Arts and Math, while Science, Social Studies, and Creative Writing were taught by the homeroom teacher. Homerooms were organized heterogeneously with careful attention paid to ensure an even distribution of gender and minority representation. Due to the performance-based grouping structure, students could have as many as three teachers and multiple transitions as they would go to those teachers' classrooms. Teachers were expected to keep regular data on their students, and were asked to evaluate which students were ready to advance the next performance-based group at natural breaks in the semester or curriculum. Teachers who taught the lowest performance-based group described feeling pressure from Ms. Jackson to promote their students to the next level. Demoting a student to a lower performance-based group was frowned upon by Ms. Jackson.

Despite some of the ambivalence toward performance-based grouping among teachers, it drove the need for team functioning among grade-level teachers. Since teachers shared the students and had to maintain the same blocked schedule to allow for

timely transitions, working as a team became a necessity. Otherwise, it would be difficult to manage the flow of the school day and curricular and teaching planning. In addition, preparing students' report cards and identifying students for semester honors was a team activity, as students were shared across teachers. Since the performance-based grouping made teaching individual classrooms into a team experience, grade-level TAP teams were a natural extension of the ongoing grade-level collaboration.

Performance-based grouping was a much-discussed topic at Woods Terrace. Based on interviews I conducted in Spring 2003, reactions among teachers about performance-based grouping ranged from favorable to ambivalent to neutral. Ms. Massey, who taught the second-grade's highest of four reading groups and lowest of four math groups, liked performance-based grouping because she felt that the students benefitted. "[Because of performance-based grouping] our students are stronger this year than they were at this time last year." Erica Marshall, a seventh year teacher in her second year at Woods Terrace who taught the second-grade's lowest reading group, said that at the beginning of the year she was neutral to performance-based grouping. By the end of the year, she was supportive of performance-based grouping 'overall' for the school, particularly in reading, less so in math.

While Ms. Marshall did find performance-based grouping beneficial in reading, she mentioned that the teacher assigned the lowest readers has a lot of pressure from Ms. Jackson and "the most [clerical] work." The clerical work is a result of being responsible for a disproportionate amount of paperwork and principal conferences regarding the students' reading levels. Greg Nicholson, the team leader for the third grade and the

teacher of the lowest of four reading groups, did not have a strong opinion but given the choice would prefer to return to the traditional, homeroom instruction. He and his team felt that logistically managing the transitions and the groupings was too demanding. Kay Mendelsohn, a first year, second career teacher for the second grade, felt conflicted about performance-based grouping and expressed a “slight preference for the homeroom” arrangement.

According to Mr. James, the opinions regarding performance-based grouping and Ms. Jackson’s academic leadership in general evolved over the school year, with debate and controversy at the beginning of the year and primarily satisfaction at the end of the year:

I think that [the response to Ms. Jackson’s academic leadership has] been a positive one. With any change, you know you are going to have different levels of participation. Some of the new people didn’t know any better, so they took right to it...But everybody now is on the same level because they’re seeing that what Mrs. Jackson had asked is working. It’s really working. In terms of all the assessing that we’re doing, in terms of the collaboration and working as a team, all that is paying off. They might have balked in the beginning but everybody is on board now.

When Mr. James said “it’s really working” he was referring to the dramatic increase in standardized testing scores in spring 2003 as compared to spring 2002.

Pupil Progress Initiative (PPI). A second example of an academic initiative introduced by Ms. Jackson was the “Pupil Progress Initiative” or PPI. The PPI was a

form in triplicate that teachers were supposed to complete for students who were not progressing adequately in their classrooms (see Appendix E). The form is divided into three sections, Reading, Writing, and Mathematics and asks teachers to identify the student's current levels of performance as indicated by standardized testing and report card grades and intervention strategies being employed in each subject area. There are 13 to 15 intervention strategies listed that teachers can check off as well as an "other" line for teachers to add interventions. At the bottom of the form is space for two teachers' signatures, the parent's signature, and the principal's signature.

The concept of the PPI is similar to TAP, in that both are student support models. However, while TAP is an example of a team-based school-based problem-solving model, PPI is a documentation of the interventions the referring teacher is using with the student. PPI represents the solo effort of the teacher, and the parent and principal become involved through signing the forms. By completing an PPI, teachers document the additional support they provide to students who are not successful. Students at Woods Terrace were only supposed to be referred to the grade-level TAP team after the referring teacher decided that they did not improve with a PPI.

Supplemental resources. Another example of an academic initiative Ms. Jackson brought into the school was Voyager Extended Day Learning Opportunity<sup>12</sup>. This is a commercial reading program taught by the school's teachers after the school day ended. Voyager is an intensive literacy program intended to supplement the reading curriculum

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Since Voyager is a commercial program, it is referred to by its real name and not a pseudonym.

for students with below average and average range reading skills. The program lasted 16 weeks, and the classes met three days a week for two hours a day. There were 108 students from grades K-5 who participated. Ms. Jackson increased the amount of time devoted to math instruction, after reportedly commenting, of course the students have low math scores; they don't have enough math instruction during the day. She also provided teachers with a resource called "Scoring High" in order to enhance students' math skills. These and other resources were brought by Ms. Jackson to support and motivate the teachers to increase student performance.

Home-school collaboration. Mr. James credited Ms. Jackson with changing the school climate, partly through family and community outreach. There were 20 initiatives at Woods Terrace that addressed students, parents, families and the broader community<sup>13</sup>. The initiatives were of varying size, most of which were new though some involved enhancing existing initiatives. One may be tempted to assume that a long list of activities implies that the school adopted programs in name only in order to look more impressive. However, these initiatives were brief, well-defined events that were part of the larger mission of establishing home-school collaboration.

One category of the parent outreach programming can be described as "social activities." According to Mr. James:

The first action from Ms. Jackson and the PTA was we got to get parents to come

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These initiatives were described in a power point presentation entitled, "Telling the story: One school's journey toward parent involvement" that was shared at a local Parent Outreach Conference in May 2003. The information summarized here is taken directly from that presentation.

out in a nonthreatening atmosphere where it's fun and festive. That's where the Math Nights became involved, that's where the Movie Nights came, Pizza Bingo; all of these things to bring parents into the school in a nonthreatening way.

In addition there was a subset of parent and community events that targeted the Hispanic and African American parent populations. Mr. James assessed that, "in the past... the majority of our [minority] populations have felt disenfranchised, sort of unwelcome to the school. Ms. Jackson has changed that." He described the Hispanic Focus Group that met on a monthly basis, the Parent Bilingual Lending Library, the "Success for All Parent Workshop" that was offered in Spanish and English as part of the long list of parent outreach and parent communication initiatives.

There was consensus throughout Woods Terrace that Ms. Jackson was creating broad-based change throughout the school, including enhancing the home-school collaboration and increasing parents' engagement with their children's education. This involved developing creative ways to invite and welcome the parents into the school and enhancing the existing outreach efforts. The initiatives spanned social events to information sharing about the school and school system to skill development with reading, ESOL strategies, and computer literacy. Spanish-speaking parents and traditionally alienated parents were targeted as the audience for these events, through the type of activities and emphasis on Spanish language and culturally sensitive programming. Mr. James insisted that the level of parent involvement as of May 2003 represented a remarkable improvement from previous years. "[This has been accomplished] in just a short time. We're talking about 18 months here that [Ms.



Jackson's] been around. And I'm really seeing a difference in the school. I [credit all of this to her], a lot of it I do."

### School-Wide Outcome Data

One of the more remarkable achievements during Ms. Jackson's brief tenure was the substantial improvement in students' academic skills as measured by standardized test data. Ms. Jackson proudly told me that Woods Terrace met Adequate Yearly Progress Under No Child Left Behind for the 2002-2003 school year in all categories. According to third-grade assessment scores, 66.2% of students met proficiency level in reading, while 24.6% did in 2002. In math, 65.2% of third-graders were judged to be proficient, while 26.1% were in 2002. While the 2001 proficiency rates for third-graders in math and reading are somewhat higher than the 2002 rates, the 2003 proficiency rates represent a doubling of the prior years' average proficiency rates. This same pattern is true for the second, fourth, and fifth-grade assessment scores, the other grades that participated in standardized assessments.

This remarkable improvement became a source of pride at Woods Terrace, and the improvement was interpreted by teachers as an indication that the performance-based group was effective. Because the rise in standardized scores was so dramatic, it was not dismissed as a coincidence or natural fluctuation. Instead, there was consensus that Ms. Jackson was turning the school around through actualizing her "vision" and bringing new resources into the building. Without definitively being able to identify which innovation accounted for this change, the shared sentiment was that it should be attributed to performance-based grouping, the most involved and sustained innovation that directly

addressed instruction.

The other innovations, including TAP and home-school collaboration, were seen as part of Ms. Jackson's larger, well-rounded approach of improving the school. The performance-based grouping enabled teachers to individualize instruction more effectively and each resource and opportunity provided by Ms. Jackson promoted a more effective learning environment. In this context of school-wide improvement, the need for TAP may have been mitigated which was manifest in the presumed reduction in referred cases.

#### TAP in the Context of These Changes

This school-wide academic improvement may account for the promising, initial TAP data. However, attributing the students' doubling of standardized achievement scores in one year to a single initiative is inappropriate; there were too many initiatives, particularly academic, being introduced that made the school a complex and dynamic environment. The related innovations either directly or indirectly supported instruction, and each one could have influenced how teachers understood these programs and students' learning, as they were promoting reflection and possibly challenging teachers' existing educational beliefs. The new programs and resources that were introduced into the school by Ms. Jackson also facilitated collaboration and communication among the teachers. The entire context of an engaged administrator who served the role of instructional leader, new programs, and increased teacher collaboration fostered a new learning environment for the students.

While TAP is on the list of programs that Ms. Jackson introduced to support

students and improve their achievement, the need for TAP may have been mitigated by the presence of the other programs. Parents who participated in the home-school collaboration programming may have developed a more positive attitude in their home about school and become more effective in helping their children complete their homework. Grade-level teachers were meeting on a regular basis and needed to discuss students among themselves on the occasions when they reorganized the performance-based grouping and assigned grades prior to report card distribution.

In my role as researcher regarding TAP and TAP support, I attended too few of the general teacher meetings to know the nature of these discussions and how they talked about students. Nonetheless, these programs were essentially providing academic interventions to many of the students. All students received more math instruction, many students received supplemental reading instruction through their participation in Voyager, and the performance-based grouping enabled teachers to individualize instruction more effectively. As indicated by Ms. Marshall's and Ms. Mendelsohn's students whose reading accelerated without individualized, TAP-developed interventions, they were able to modify their reading instruction due to the homogeneity of reading levels across their students. The performance-based grouping most likely facilitated teachers' ability to attend to individual students without developing systematic data-based interventions.

Ms. Jackson had effectively reorganized the school through the resources and opportunities that promoted a more effective learning environment. In addition to the introduction of TAP, the context of the school-wide improvement may have caused fewer

students to be in need of individualized interventions and problem solving. The lack of data from the other innovations, the improved school context, and increases in academic achievement as evidenced by the school-wide achievement testing indicate that the promising preliminary TAP data must be interpreted with care.

### Conclusions

The key findings of this study demonstrate that when school staff were in their first year of program implementation, they were simultaneously engaged in sensemaking. The staff and teams at Woods Terrace did not implement the program literally, as directed by the trainers or the manual. Instead, they reconstructed the program by interpreting it through the lens of the mutually negotiated meaning that emerged from their team meetings and their personal educational perspectives. This active, creative, social constructivist process yields a final product, TAP at Woods Terrace, that resembled but was not identical to the program described in the manual. The school's implementation of TAP is best understood as a manifestation of their interpretation of the model.

The meanings that teams at Woods Terrace negotiated about TAP were varied, but generally similar. The full participants disproportionately influenced the sensemaking process, while the possible contributions of two peripheral members, the principal and school psychologist, were missed. Teachers indicated through their referral, or gatekeeping, process that they perceived students who were struggling academically but were not currently receiving any services to be the best-suited candidates for TAP. The teachers' gatekeeping practices also indicated that students who

were eking by and were at-risk for failure the next school year were good candidates for TAP. Usually the at-risk referrals did not become full-fledged TAP cases and some were non-cases in which TAP was used as a bureaucratic, referral procedure and not a school-based problem-solving model.

The TAP teams generally retained the broad, overarching conceptualization of student problems from the previous student support model and did not develop behavioral problem definitions. Instead of adhering to the structured, proscribed stages of the model, they reconfigured TAP into a fluid, compliance-oriented model in which many interventions involved ‘watching the student’ or requesting direct service from a specialist. Instead of experiencing the anticipated paradigm shift through their practice of TAP, the teams experienced subtle changes that led them to think that they were implementing the model correctly. The unambiguous compliments that they received from their TAP coach and their positive preliminary outcome results substantiated that they were doing everything correctly. However, as a school undergoing many changes and a new leadership, there were many possible causes for their reduction in referrals to special education and their improved school-wide performance.

## Chapter Nine

### Interpretations

The interpretations based on the study's findings are discussed in this chapter. The major themes that emerged from analyzing the participating school's problem-solving teams as communities of practice are interpreted first. The limitations of the study are presented next. The chapter ends with a discussion regarding the implications for practice and the recommendations for future research.

The purpose of the current study was to understand how the teachers and staff at one school interpreted a new team-based school-based problem-solving model in its first year of implementation. A sociocultural learning framework (Yanow, 1996) that recognizes the individual's role within the social process of negotiating meaning was used to analyze and interpret the findings, specifically the communities of practice framework (Wenger, 1998). Instead of conceptualizing implementation as a discrete, albeit ongoing, event (Fullan, 2001a), it was understood as a manifestation of the community's understanding of the program and a creative act that further developed the member's meaning about the program. While the school staff members were collectively making sense of the new program and implementing it, they were drawing on their previous understandings about supporting students and their personal, educational perspectives were shaping this process.

The research questions that guided this study were:

- 1) What meaning is negotiated among teachers about the problem-solving process that influences their implementation of a school-based problem-solving model?

2) What are individual teachers' beliefs about student learning that contribute to their understandings about problem solving?

In response to the first research question, teachers collectively negotiated meaning regarding which students were preferred candidates for problem solving; their interpreted meaning of the problem-solving stages represented a shift from the meaning indicated by the manual as they conceptualized problem solving from a special education and compliance paradigm, rather than a preventive, classroom-focused paradigm. The patterns of case referral, for example that students who receive services should not be referred for problem solving, are not interpreted as coincidental. Instead, it was that the teams arrived at a collective meaning regarding student characteristics that are suitable for problem solving.

Similarly, teams determined that the Problem Identification stage involved conceptualizing the problem from a whole child, multifaceted perspective and that Problem Analysis involved reporting anecdotal observations or collecting documentation. In addition, teams did not adhere to the structure of the model's stages, and attempted to resolve student problems using a more fluid referral process that did not necessarily involve any problem solving. Some teachers used the school-based problem-solving model as a procedural step in the referral system when they perceived the student's problems to be too severe to benefit from classroom-based interventions. These meanings, among others were identified through the teams' practice and implementation of school-based problem solving.

In response to the second research question, teachers apparently believed that

students who presented with intense learning needs could not be successfully taught by the classroom teacher. This belief that referred students required intervention from a specialist, typically in a location other than the general classroom, influenced their choices about data collection and intervention development. Had they believed that they could effectively teach the student, their interventions would have undoubtedly looked different. In addition, teachers were found to conceptualize students' learning difficulties from a complex perspective, giving weight to factors such as social-emotional development, home support, and attention, while minimizing the contributions of the classroom environment. This emphasis on factors internal and external to the student, all of which are beyond the control of the teacher, reflects educational beliefs that non-classroom factors are more relevant to a student's learning experience and disproportionately determine a student's success.

### Communities of Practice

Change in schools has been recognized as difficult and elusive across varying conceptual and analytic frameworks (e.g., Fullan, 2001a; Sarason, 1996; Spillane, 1998). The findings from this study should not be interpreted as a negative evaluation of this particular school-based problem-solving model nor the staff at the participating school. Rather, the findings should be interpreted as further evidence that implementing a new program, including school-based problem-solving models, is difficult and that the communities of practice framework offers a new way to account for how programs become implemented in schools.

Most studies that rely on the analytic framework of communities of practice (e.g.,



Supovitz & Christman, 2003) or other variations of the interpretive paradigm (e.g., Weick, 1995) examined large scale phenomenon, such as community initiatives (e.g., Yanow, 1996), school restructuring (Lipman, 1998) or major curriculum changes (Coburn, 2001; Jennings, 1996). School-based problem-solving models, in contrast, focus on how teachers address the progress of an individual, struggling student. Applying an interpretive paradigm, particularly the communities of practice framework, to a school's first year implementation of a school-based problem-solving model, thus, extends the approach of the interpretive paradigm. In addition, functioning as a participant-observer and emphasizing the communities' collective sensemaking process and individual educational beliefs enabled me to elaborate on how communities of practice construct their meaning about the program in question in the context of the larger school.

The communities of practice framework fits within the interpretive, social constructivist paradigm and emphasizes the group experience in learning and change. The individual contributions to the community are recognized as well, and change or lack of change in practice is explained as representing the socially constructed meaning about the model. Recognizing that those who participate in school-based problem-solving models are negotiating the meaning of the process and tasks together, their collective and individual understandings of the model and student learning are the window to interpret their participation and implementation.

#### Understanding School-Based Teams as Communities of Practice

Teachers' practice of new programs is embedded in their community experience

and is influenced by their understanding of these programs. Grade-level teams of teachers at elementary schools (Gallucci, 2003) and departments within high schools have been found to form natural communities of practice (Printy, 2002). While whole schools can form communities, distinctions between particular grade levels and departments can warrant that these groups be recognized as individual communities as well. Due to the differences across teams in this study, they are conceptualized in the interpretations as individual communities within the larger community of the school.

Recognizing the problem-solving teams at the participating school as communities of practice was useful in analyzing how they worked together to implement all of the innovations for which they were responsible during the 2002-2003 school year, including the new school-based problem-solving model. School-based teams, of any variety, fit the definition of communities of practice because they work together as groups on goals and tasks of shared interest, the quality of their team functioning and their effectiveness notwithstanding (Wenger, 1998). Central to the communities of practice framework is the conceptualization of learning as an inherently social process (Wenger, 1998). A major assumption of the communities of practice framework is that people are social beings and their participation in groups and teams is the primary mechanism for learning. As evidenced by the findings of this study, changing a socially-shared meaning about a school-based service or program is particularly difficult because the community norms and expectations are collectively shaped and reinforced (Wenger, 1998). To state that a team of teachers is a community does not indicate how effective, productive, or collaborative they are: communities of practice may reinforce stereotypes

and unhelpful practices and may block change initiatives.

In fact, communities of practice often preserve the status quo and are naturally resistant to change (Printy, 2004). This was evidenced in this study, as the social experience of the communities stifled the individual reflection described by Schön (1983, 1987). Developing teams to function as social communities that exchange ideas, positively influence each other, and rely on their practice to serve a population's needs in a democratic, open-minded fashion is a noble challenge. For example, Printy suggests that in order for high school departmental communities of practice to change their core practices, they need "some deliberate intervention or a community norm oriented toward innovation" (p. 21). However, the introduction of problem-solving teams was the "deliberate intervention" that was welcomed into the school studied here and the principal was successfully establishing a school-wide norm of innovation. Although both of these components were arguably present at the participating elementary school, the communities enacted incremental change, not change in their "core practices."

The participating school's communities interpreted the meaning of the school-based problem-solving model and evaluated their implementation based on the coaches' impressions. Since the communities were not experienced or familiar with school-based problem-solving models, they had to conceptualize it from their existing frames of reference: student support and special education. While they attempted to implement the new and unfamiliar program as directed, they actualized it by practicing the familiar. In the absence of intensive training for all who were expected to practice the new model, the communities reverted back to their prior practice of student support and reinforced the

collective belief that their incremental change represented major change. The chair's and the coaches' limited training prevented them from seeing the model's conceptual differences and nuances, and they established the consensus throughout the school that they were practicing the model as intended.

### Educational Beliefs and Reflective Practice

The findings from this study indicate that the communities of practice framework was more helpful in guiding data collection and analysis than the constructs of educational beliefs and reflective practice. While school-based problem-solving models and nearly all school-based programs require staff to draw on their educational beliefs for implementation, validly identifying or inferring these subtle and implicit beliefs is extremely difficult (Kagan, 1990). The introduction of a new program should be a catalyst for change and modification of the staff's micro-level educational beliefs, making them easier to study. However, if this change does not occur, then the staff's implicit beliefs remain just as elusive and hardly available for study as they were prior to the introduction of the program. This study's findings confirm that analyzing the broad, sweeping educational perspectives and orientations, and not the highly-specific educational beliefs, of school staff is the preferred construct that can be supported by the data. If a shift in educational perspectives were to be observed following the introduction of a new program, this would present a good opportunity to move forward to study the educational beliefs of the school staff.

The approach of the reflective practitioner (Schön, 1983, 1987) also initially seemed like a suitable framework to guide analysis for this study. However, this

paradigm was not rich enough to account for teachers' limited reflection about students' learning environments. The introduction of any new program should be cause for reflection, as it represents a "variation in practice" that interrupts the teacher's typical routine. This should be particularly true for the introduction of a school-based problem-solving model that asks teachers to analyze factors that influence learning and to regularly revisit a student's progress through data collection. However, the "epistemology" of reflective practice cannot explain why the staff at the participating school did not engage in reflection about their practice and how they were able to engage in "problem-setting" without the desired reflection.

Schön's (1983, 1987) model of the reflective practitioner appears to share a tension with the communities of practice framework. According to reflective practice, the introduction of a school-based problem-solving model should inspire teachers to reflect regularly. However, the social influence of the communities prevented the individual reflection. The limitation of the theory of the reflective practitioner is that it focuses on the individual professional without accounting for the social and environmental influences that might nurture or stifle reflection. The communities of practice framework highlights the powerful and near-paralyzing effects of social communities and instances when reflection is less likely.

Just as reflection is supposed to promote changed practice, communities of practice resist changed practice and promote the status quo. The relation between these frameworks should be further explored, just as the roles of the individual within the community and the entire community should be studied further. The reflective practice

approach remains an interesting and valuable paradigm for studying school staff when they implement new programs. However, it appears to be a more useful framework when there are social conditions that promote personal reflection.

### Gatekeeping

Gatekeeping is the term I use to describe the teachers' referral process within the school-based problem-solving model. When individual members of the community make decisions about what they will present and share with their team members, they are engaged in a personal process of gatekeeping that is informed by their educational beliefs. Even before one can attempt to interpret the community members' negotiation of meaning and participation, it is their gatekeeping process that restricts the content available for social learning. Members' gatekeeping prevents some cases and issues from coming under discussion and allows others to pass through. However, in addition to the individual component of gatekeeping, it is a social process that involves redefining the community's practice and influences members' subsequent and ongoing gatekeeping.

This construct of gatekeeping was an important dynamic in the functioning of the participating communities of practice. Many themes emerged from this study's findings regarding what the participating community members understood to be appropriate referrals to the school-based problem-solving model. These themes reflect an early step in the meaning-making process that has not been developed in the community of practice literature. While most of the school-based applications of communities of practice focus on features within types of communities, processes such as gatekeeping refine our understanding about communities' functioning. The social learning that takes place

within communities is shaped by the individuals' perspectives and willingness to refer certain issues for the communities' consideration.

Teachers' educational perspectives were inferred throughout their practice of the school-based problem-solving model, but they were the most apparent during the gatekeeping process. When teachers explained their reason for referring particular students, they often attributed a variation of deficit thinking to the student's perceived difficulties. For example, teachers across teams referred students based on their concern that they were "at-risk" for failing the next school year. The teachers' explanations for these referrals implied that they believed that there were limited interventions available that could prevent their failure. Just as the current teachers were not prepared to develop interventions for the students, they did not expect the future teachers to develop interventions, either. They merely wanted to alert the next teachers to the student's inevitable difficulties. Other gatekeeping practices, such as referring students to problem solving who were perceived to need out-of-class intensive-level interventions and reluctance to refer students receiving other services, suggest a similar deficit-orientation. In both of these examples participating teachers did not see a purpose in developing classroom-based interventions for the referred students. In fact, most of the communities' gatekeeping practices reflected a deficit-orientation about the students.

Much of the communities' negotiation of meaning about problem solving developed from their initial referral and gatekeeping practices. Rather than being merely a precursor to an involved, recursive process of social learning, the gatekeeping phenomenon seemed to be the most powerful influence on the teams' interpretation of

problem solving, more so than team discussions and members' participation.

Conceivably, all school-based teams and all communities engage in this initial screening of what they deem to be appropriate for the team's consideration. Recognizing the gatekeeping dynamic within communities of practice is not only helpful for interpreting the teams' socially-derived meaning but also the individual member's beliefs and perspectives.

### Teams' Conceptions of Problem-Solving Stages

A major theme that emerged from the participating communities' meaning about stage-based problem solving was that the stages did not require strict adherence.

Teachers retained their global problem conceptualizations about students from the previous student support model. This supports the findings from Knotek et al.'s (2003) qualitative study that teachers were reluctant to behaviorally define problems that they perceived as multifaceted and complex. However, in Knotek et al.'s study, the referring teachers worked individually with consultants who successfully persuaded them to define the problem in behavioral terms and supported them in imposing a stage-based structure on the case. In the communities at the participating school, there were virtually no members who challenged the global problem "definitions" which invariably promoted an amorphous, non-stage-based approach to problem solving.

The communities' lack of adherence to the work of each of the stages yielded the practice of a school-based problem-solving model that strongly resembled the previous, compliance-oriented student support model. This meaning negotiated by the communities raises the question of whether they simplified the differences between the



models or if the differences between the models were not articulated adequately. Considering the clear, positive feedback the school got from the model's developers, albeit not through a formal, objective evaluation, it is difficult to know if their blurring of the model's stages represented a weakness in implementation or a lack of clarity in the core meaning of the model. If there was ambiguity in the model's conceptual framework, then deficit attributions of student problems would be permissible for a subset of cases. Identifying which cases are allowed to have deficit attributions according to the model would be left to team discretion. It is possible that the communities negotiated meaning about the model's stages in the context of alternatively acceptable assumptions and beliefs within the model (i.e., deficit and ecological) preventing them from understanding the purposes and tasks of each stage.

One cannot overlook that the school was not using the stages of the school-based problem-solving model that they were being asked to implement. However, the more compelling question is how could the communities have assumed they were implementing the model correctly despite a lack of understanding regarding its stages. While the manual for the model explicitly states that it is developed from an ecological framework (Bronfenbrenner, 1989), requiring that the student's environment be explored as part of problem analysis, the manual also does not categorically reject deficit attributions as legitimate explanations for student difficulty.

For example, approximately one-fifth of the "factors that influence behavior and learning" (Appendix D) are deficit-based attributions while another fifth represent a "variation" of deficit thinking (Valencia, 1997). For example, the student-based factors

that influence learning are primarily deficit-based and include cognitive issues such as “attentional factors” and “learning styles, strengths, weaknesses.” The list of home or community factors that influence learning are variations of deficit thinking and include, “parenting skills” and “family educational values.” The availability of these deficit-related attributions provides teachers with a more comfortable and familiar explanation of the student’s difficulties and create a conceptual confusion about the ecologically-based model. In contrast, the instructional practices and teaching factors that are listed in Appendix D represent more ecologically oriented attributions. For example, contingencies before and after work is completed and rate of reinforcement represent environmental factors within the teacher’s control that can be manipulated to increase student learning and performance.

This conflict between framing the model as ecologically-based while permitting deficit attributions highlights a conceptual weakness within the model that can easily and unintentionally be distorted by communities. Teachers hear two seemingly incompatible messages from the model, that “all students can learn” and that a variety of cognitive and home-based issues over which teachers have little control can be responsible for a student’s lack of progress. When both messages are contained within the same model, communities are free to emphasize the message that makes more sense to them and qualify the statement that “all students can learn” with additional caveats (Sarason, 2004). Since the model essentially presented the members with a choice between an ecological message and a deficit-based message, the lack of stages associated with teachers’ global conceptualizations of problems represents their inclination toward the

deficit-based explanations.

This dilemma and sanctioned choice between ecologically-based explanations and deficit-orientations about student difficulty highlights the ambiguity embedded in most school-based problem-solving models. As discussed in Chapter Two, many school-based problem-solving models do not address educational beliefs and those that do allow for deficit-oriented explanations. This lack of clarity and unwillingness to categorically reject deficit attributions is apparently a common phenomenon within school-based programs (Sarason, 2004). Therefore, the members' global, "whole child" problem conceptualizations that fed their amorphous, non-staged approach to problem solving represents a frequent reluctance for school programs to move towards a purely ecological framework.

#### School-Based Problem-Solving Process

The findings from this study indicated that adopting a problem-solving process represented incremental changes and not a paradigm shift for the participating school. The primary obstacle to achieving a paradigm shift was the shared reality (Higgins, 1999) among team members that was created during the team meetings. Comments made during meetings were reinforced and reified by the agreement of the other team members, stifling reflection and reconsideration. Despite the intention of the developers that team meetings promote reflection, teachers entered the meetings somewhat tentative about their descriptions of the student's problems and left the meetings convinced that their initial descriptions were accurate.

Communities of practice have been described as promoting the status quo and

resisting change (Printy, 2004). Since the members are typically comfortable with their current practice, it is the very community context that inhibits change. While a consultant in the context of dyadic consultation may be able to facilitate change in the referring teacher (e.g., Knotek et al., 2003), the grade-level team, functioning as a community of practice, is a more powerful group that may be less vulnerable to reflection and contemplation. The community's generated shared reality is more compelling than any individual member's conviction, and is what entrenches the community in its positions.

Viewing the grade-level teams and the building-level team as communities of practice provide a way to explain the new model's devolution to a step in the referral system. When the new school-based problem-solving model replaced the preceding student support model, the teachers could no longer request intensive services for a student without being asked to demonstrate that the classroom-based interventions developed at grade-level meetings were ineffective. The advent of the "non-cases" addressed this gap that was created by the new model: teachers mentioned a student's name during a grade-level meeting or to colleagues and they could claim that they had referred the student to the school-based problem-solving model.

Similar to referring "at-risk" students to the model, the "non-cases" represents a creative attempt to reconfigure the model so that it supported the interests of the teachers. The communities' implementation of the problem-solving process was not limited to the manual's description of the model. Instead, as the communities juggled their competing demands, including pursuing more assistance for struggling students, they integrated

features from the previous model that they felt they needed. Once they had convinced each other through their shared reality that some referred students' needs were too intense to be successfully resolved by problem solving within the grade-level community, they needed to adjust their rules of functioning and expand the model in order to address this need.

This adaptation of the school-based problem-solving model into a compliance model enabled it to resemble the familiar paradigm of student support (i.e., special education, Wolf & Hassel, 2001). Reconfiguring the school-based problem-solving model represents communities of practice's creativity and effort in negotiating the limits of their practice. Their process of labeling students as appropriate for referral to the model without engaging in the model's stages and claiming to have referred students without the referred students' concerns undergoing problem solving (i.e., "non-cases") highlights how communities of practice function when constraining mechanisms are placed on them. Since they collectively reinforced that there were certain, familiar features of student support that they could not do without, they found ways to negotiate meaning within the model that allowed them to continue their existing practice, thereby preventing a "paradigm shift."

### Summary

The communities of practice approach has been a useful and fruitful analytic framework for understanding school-based teams. The community members supported each other in their negotiated meaning of how to provide student support; they adapted the new school-based problem-solving model so that their practice could correspond to

their meaning about how to best serve students who were not succeeding. In addition, this qualitative study identified additional themes and dynamics that occur within communities of practice when they are confronted with a “deliberate intervention.” The practices of gatekeeping, exploiting weaknesses within models to favor deficit attributions, and creating shared realities that further entrench the communities in their current practice were identified as important rules of functioning and meaning-making for communities of practice. These constructs further enrich the communities of practice approach when studying school-based teams.

#### Limitations of the Study

As a qualitative, interpretive study, the reader is reminded that the interpretations presented are my own. The data collected were reviewed and triangulated to determine that they were legitimate and representative. However, the constraints of time and access to information presented limitations to the interpretations, as they would in any study for any researcher. While the theoretical and critical analysis undertaken in this study was colored by my experience and personal sensemaking the findings were presented in great detail in order to assist the reader in independent interpretation.

One strength of qualitative research is the flexibility of methods and sampling (Bogdan & Biklen, 1992). For example, in my role of participant-observer I was the coach for the third-grade team. This gave me the most access to the third-grade teachers, their cases, and other grade-level coaches. As an interviewer, questions I asked during the second reflective interviews were personalized for the participating teachers and based on their responses to the previous interview. Similarly, teachers were selected to

participate in the reflective interviews based on the criterion of having an active case and their willingness to consent to the interview process.

These flexible sampling methods increased my exposure to cases at the third-grade level, cases that were referred to the building-level team, and cases that were more likely to be active at the end of the school year. Simultaneous to the flexibility in methods is the risk that the research methods are not rigorous and that changes may weaken the findings from the study. A complete discussion of the methods and findings is important so that readers can judge the results in light of the explicated methods.

A limitation of the study is the focus on a single school site, and not staff at multiple schools. It is possible that the staff at the participating school negotiated meanings about problem solving and student learning that are different from the meanings negotiated at other schools, perhaps due to shared school culture (Sarason, 1996). By conducting this study at one school, my interpretations are limited to my participants and cannot be easily generalized to other schools. However, the in-depth reporting and rich description of the teams at one school provide a complete analysis of how the staff at one school made sense of and implemented a new school-based problem-solving model.

A second limitation of the study is the limited time span under which I conducted the reflective interviews, during May and June. There were not many active cases left in May, as many cases had been terminated by this late point in the school year and the cases that were active were near completion. However, this limitation was mitigated by my role as a participant-observer who worked at the school from November to June. In

this role I recorded fieldnotes, which became the study's primary data source. The supplemental data from the reflective interviews confirmed and elaborated upon the primary themes developed from my participant-observation.

In addition, while this was a study that considered the first year of implementation of a new school-based problem-solving model, the communities' collective negotiation of meaning should last as long as the model is in use. As articulated by Wenger (1998) and Schön (2001), communities and individuals redefine their constructed meaning and continue to engage in reflection any time they are presented with something new to consider. This would indicate that a study restricted to the first year of implementation is somewhat arbitrary. However, most of the sensemaking and reflection is expected to occur when the new model is introduced. In the first year, the teachers become acquainted and engaged with the model, as they have the most to learn, think about, and reconcile when they are confronted with the new process (Knoff, 2002; Schön, 1983, 1987).

### Reflections on My Learning Experience

Just as the staff at Woods Terrace was learning and negotiating a new school-based problem-solving model, I was learning, too. In addition to my role and bias as researcher described in Chapter Three, I was involved in my own personal sensemaking process that lasted the duration of the data collection period. In the role of school psychologist intern, I was in my first year working in this school and school district. It was my first time working in a school as more of a professional than a student, and it was my first experience supporting school staff with first year implementation of a problem-



solving model. My previous experiences were limited to schools that had already established problem-solving models inside their buildings. While I obviously did not have prior experience with TAP, since it was a new program, my graduate training in problem-solving models involved a model that included a dyadic structure as well as a team-based one. The presence of these elements in this context ensured that I was constantly learning, since there was much that was new to me.

For example, the grade-level teams at the participating school and other Phase One schools found themselves struggling with managing the load of referrals in two bi-monthly meetings. Since my training was in a dyadic model, I was accustomed to discussing a student for 20 to 30 minutes for a span of six to ten sessions; other team members also worked in dyads with teachers and the teams were used for solving problems that were challenging for the dyads and for training. However, this style of problem solving does not convert easily to a model that involves bi-weekly meetings with referring teachers who each have cases they would like to discuss. Just as the new teams were attempting to manage their time, I was attempting to adapt my previous consultation experience into this new format.

Similarly, I was not familiar with first-year implementation of problem-solving models. Since many of the teams at the participating school were meeting and discussing children, I initially assumed that they were practicing the model as one would expect from a successful Phase One school. In my fieldnotes, I recorded my observations of what the teams were doing, regarding cases and team functioning, and elements of the process that I noted to be missing. However, I had believed that the anecdotal data that

comprised the Problem Analysis stage or the recommended stock interventions were a function of the particular month in which I made the observations and that the teams' practices would be improved by the end of the year.

Once it was May it began to occur to me that these omissions and puzzling comments would not recede in time for the end of the school year. It was this late realization that enabled me to re-read my fieldnotes with a changed perspective, as compared to when I first wrote them. Rather than prejudging my findings and accurately anticipating my interpretations, my final interpretations surprised me because they did not match my initial assumptions when I was writing the fieldnotes.

#### Implications for Practice

The findings and interpretations from this study offer important implications for school-based programs, particularly school-based problem-solving models, as well as recommendations for future research. The implications address the need for extensive training, both before and during implementation, that addresses teachers' assumptions and beliefs throughout their implementation of the model. In addition trainers of team-based models need to be familiar with the communities of practice framework and need to be sensitive to teams' collective sensemaking, shared reality, and educational perspectives. Finally, when schools are interested in implementing new programs to address identified needs, the choice regarding developing something new or selecting an existing one is reviewed. These implications extend beyond the application of school-based problem-solving models and are relevant for all school programs, particularly ones that draw on team-based functioning.

### Importance of Initial Training

School-based problem-solving models involve more than introducing a new set of procedures to reform how schools provide student support. These models require teachers and school staff to conceptualize student learning, its relation with instruction and other factors external to the student, and systematic data collection from an unfamiliar perspective. If the problem-solving teams and participants do not negotiate the meanings intended by the model, they will not be able to effectively implement the model. Therefore, the pre-implementation training in school-based problem-solving models must include an overview of its conceptual framework and assumptions and beliefs associated with the model. Presenting such an overview is critical in helping the participants develop a conceptually clear understanding of the model. However, it will not be sufficient in promoting new understandings among the participants.

Trainers should not assume that their participants are “blank slates” or otherwise new and neutral to the information being presented. The participants should be assumed to have their own conceptual understandings from which they interpret the content of the training. Trainers need to be sensitive to these pre-existing beliefs and frameworks when they provide training regarding a new school-based problem-solving model. In addition, schools often implement new programs, and their trainings tend to become familiar and repetitive. Due to overlap in labels and concepts, teachers can assume that they already know what is being presented and can overestimate their understanding of the new model. For example, teachers are often engaged in student support and collect data for

other purposes. This misleading familiarity allows the distinctions between school-based problem-solving models and other models of student support to be easily obscured.

A presentation about the conceptual framework is best conveyed during a pre-implementation training, as the participants are not yet engaged in its service delivery and will be more open to discussions about theory. Once the teams are practicing the model and trying to resolve as many cases as possible during team meetings, they become more procedurally-focused and consider the conceptual discussions to be tangential or distracting from the purpose of the meeting. The teams need to enter the practice stage of implementation with a clear sense of the purpose of the model and the desired directions of the cases.

A premise of presenting the model's conceptual framework clearly, is that the model rests on a coherent theory. Ambiguities or inconsistencies within the model, such as promoting an ecological framework but simultaneously permitting deficit attributions, will permit the teachers to choose between the mixed messages they are receiving. Since many school-based problem-solving models share this feature of including contradictory concepts, those trainers should delineate explicitly how to practice the model and distinguish between when the model permits a deficit attribution and when an ecological interpretation would be expected.

### Ongoing Training and Support

Another important component of training in school-based problem-solving models involves ongoing support and training while the teams are implementing the model. In order to provide this support, the trainers need to be familiar with their

assumptions regarding program implementation. As highlighted in chapter two, there are different approaches to program implementation that involve different assumptions. For example, school-based problem-solving models predominantly correspond to Fullan (2001a) and Telzrow et al. (2000)'s perspectives that consider program implementation to be a challenging, but discrete, incremental process. Trainers who ascribe to this model would be inclined to develop detailed, explicit forms that can help guide correct practice, and may even choose to use intervention scripts (e.g., Ehrhardt et al., 1996). Feedback and praise would likely be embedded within the teams' ratings on the scales and measures. These trainers would also provide on-site support to the practicing teams. However, their focus during the ongoing training is likely to be of an incremental nature in which features, steps, and pieces of the model are emphasized individually.

An alternative approach to program implementation, the sensemaking, interpretive paradigm (e.g., Jennings, 1996; Yanow, 1996), does not appear to have any inroads within the school-based problem-solving model research and training community. Trainers are encouraged to become familiar with this approach, as it emphasizes the organic, social process of learning and recognizes implementation as a learning and change experience. Within this perspective, teachers' assumptions about student learning and student support influence how they practice problem solving. Therefore, trainers who ascribe to this approach would engage in "temperature taking" (Rosenfield & Gravois, 1996) and regularly examine the teams' sensemaking and beliefs while they are immersed in implementation. Initial implementation is always difficult and coaches who rightly expect there to be setbacks may not recognize them as being due

to conceptual confusions regarding the program in question.

A challenge regarding assessing teams' sensemaking and beliefs is the sensitivity that can engender. The assumptions of all school-based problem-solving models are intuitively appealing, and most educators would be loathe to contradict the assumption that, "all students can learn," at least in public (Sarason, 2004). Most programs' and models' assumptions have become cliches, as they are used regularly by educators and program developers. Their intuitive appeal masks their nuance and subtlety and how they can be operationalized into a practice that is different from compliance-oriented student support. In addition, the cushion that many models provide by permitting deficit attributions pose the risk of allowing many cases to be resolved from within a deficit approach. Stating the model's assumptions on multiple occasions would not be sufficient in promoting teacher reflection and the personal, self-exploratory process of clarifying one's beliefs to be followed by belief change.

A final component of ongoing support is providing specific, corrective feedback to the teams. Teams need continued support and assistance with constructing problem definitions, collecting types of data, and developing interventions. In Fullan's (2001b) description of six different styles of leadership, he describes the "affiliative" leader who seeks to "create harmony and build emotional bonds" by emphasizing the people within the change process (p. 35). Leaders who embody this style want to praise and reassure their team members to motivate them to continue with the change. However, praise in the absence of constructive feedback presents the dilemma of ultimately undercutting the progress of the team members. Without the tools to practice the model differently, the

team members are unlikely to realize the goals of the innovation.

According to the interpretive paradigm, in the absence of corrective feedback the teams will conclude that they are implementing the model correctly, as their practice will match their sensemaking. For example, Coburn (2001) demonstrated that grade-level teams arrived at different collective meanings about the new reading reform they were implementing. Presumably, after the teams collectively make sense of the model, they will believe that they are interpreting the model correctly and will not be able to monitor their own program implementation.

Relying on forms or intervention scripts to guide their practice and provide this “feedback” is insufficient, as even explicit and detailed items cannot promote the underlying conceptual understanding needed for correct practice. Forms are not neutral nor immune from prior conceptualizations and understandings; the teams’ sensemaking will influence how the members complete the forms. Teams need to participate in a formalized evaluation process that includes their sensemaking and assumptions in order to get feedback that can promote better understanding and practice.

### Recognition of the Role of Communities of Practice

Another consideration for trainers to recognize while they provide ongoing assistance is the powerful and sometimes paralyzing effect of communities of practice. While an individual consultee may be more malleable and flexible in the context of dyadic consultation, a team of teachers establishes consensus and can dilute a coach’s attempts to facilitate problem solving. The teams’ negotiated meaning, or shared reality, assumes a greater power than any individual team member’s sensemaking or

interpretation. Recognizing the teams' power in constructing sociocultural knowledge is crucial when trying to facilitate change through a team-based structure.

The "training of trainers" model of staff development is one that is commonly used in team-based models and is not sensitive to the functioning and development of communities of practice. Providing training only to grade-level coaches, team leaders, or other single individuals who are supposed to represent the team during the training creates a situation in which most of the program participants have not participated in any formal training. In this situation, one person participates in brief, intensive trainings, is expected to understand the model clearly, and is expected to direct a team of untrained teachers to understand and practice the model correctly. Even if the trained individuals' opinions are given more weight within the team, they are still single individuals within a group that is negotiating meaning about a program. Coaches would have to be persuasive, well-trained, and comfortable with the model in order to overcome the challenges presented by a team that is inclined to negotiate meaning that is more comfortable to them and may not be aligned with the model.

Recognizing that the teams, especially grade-level teams, may comprise natural communities of practice, it is not realistic to assume that coaches can train the team members in a school-based problem-solving model *in situ*, while the team is meeting and intended to address case referrals. If the primary problem-solvers are the teachers, then they must participate in the formal training opportunities. Printy (2004) demonstrated that a "deliberate intervention" is needed to effect change within communities of practice, enabling the members to support each other in the new program that they are



experiencing together. Her conclusion would suggest that all individuals who are expected to change need to participate in the training so that the “deliberate intervention” can be accessible and understood by the members. Otherwise, the powerful force of communities of practice and their inclination toward the status quo will prevent the desired change from materializing.

Another concept reinforced by the communities of practice was the deficit-based explanation that teachers attributed to the student they referred to the school-based problem-solving model. When teachers refer a student for problem solving, they are indicating that they have exhausted the obvious options for helping the student and they need additional support and resources. At this point, the teachers are convinced that they have “tried everything.” If there is something additional teachers can provide, they will attempt it before making the referral. Therefore, a deficit-based explanation is logical and reasonable once all known options have been exhausted. Since teachers will often engage in some variation of deficit thinking and the other team members will agree with them, the team discussion reinforces this conclusion and the community members become convinced that the problem lies within the student.

This powerful and tempting explanation of “blaming” the student and attributing the students’ problems to a deficit within the student or the student’s family is substantiated and reaffirmed by the team. Without training in the model, clarification of the model’s assumptions and beliefs, and reflection among teachers about their own assumptions and beliefs, the deficit attribution appears to be a trap that cannot be avoided by even the best-intentioned problem-solving teams.

### The Debate of Developing a New Program or Selecting an Existing One

A final implication of this study is acknowledging the difficulty in developing new school-based programs, including school-based problem-solving models. The school-based problem-solving model that was the focus of the current study was developed in consultation with university-based trainers who are involved in problem solving and intervention development. After the model was initially developed, it was piloted at four schools for a span of two years while being continuously revised and refined. This intensive work, however, was far from complete when the Phase One schools began implementation. Even as 20 schools were implementing the program, the program developers had not yet developed implementation scales that the coaches and teams could use for evaluation. The implementation difficulties described in chapter four represent a normal, developmental stage of a new program (Tharp & Gallimore, 1979). Providing adequate training, support, and feedback as well as planning for system-wide implementation requires much in the way of experience and resources, both financial and time.

Once there is a recognized need, schools and school systems are often presented with the choice of developing a new program or selecting an existing program to address this need (Rosenfield et al., 1997). The primary advantage of developing a “home-brewed program” (p. 10) which should always be based on empirically proven principles, is addressing the unique features of both the intended population and the system in which services will be delivered. Vaccaro, Rahill, and Shine (2003) describe the new school-

based problem-solving model developed within their large, urban school system and their projection for system-wide implementation. They presumably felt, like the model developers in this study, that the individual characteristics of their school system, demographic and otherwise, prevented any of the existing programs from being a good fit. Since none of the existing programs suited them, they developed a program that would factor in the components that they felt the other programs did not address.

However, developing an individualized, system-wide program involves requiring the school system to engage in the research and development phases of program development. School systems that choose to adopt existing programs have the advantage of using a program in which the research and development is already completed. Tharp and Gallimore (1979) summarize their research and development experiences when they created a program to improve reading for the indigenous populations of Hawaii. They describe an intensive, time-consuming, lengthy process that lasted over ten years, and they had considerable resources available to them. Even when school systems have offices of staff development and psychologists who are not responsible to provide psychological services to individual schools, they often need to juggle more competing demands and do not have the autonomy to prioritize among their responsibilities. The participating school system piloted their program for two years and allotted themselves four years for system-wide implementation across 125 schools.

This debate has been discussed elsewhere (Rosenfield et al., 1997). One of the critical questions posed is the following, “Is it better to “home-brew” programs or adopt already existing programs (p. 10)?” In either case, “...reformers need to know more

about the conditions under which either of these approaches would succeed.” This issue has not been resolved by the current study, either. However, as systems consider whether to adopt a program in which much of research and development are complete or develop their own, the findings from this study highlight the challenges when systems choose the “home-brewed” program.

### Recommendations for Further Research

The purpose of this study was to examine one school’s first year implementation of a new school-based problem-solving model from an interpretive paradigm, the communities of practice framework. This study seeks to contribute to the scholarly literature by extending the interpretive paradigm, and communities of practice in particular, to school-based problem-solving models. While topics of school-based reform have been studied through this analytic framework before, school-based problem-solving models have yet to be included within this genre of research. Recommendations for future research include studying different aspects of school-based problem-solving models, studying communities of practice that promote change, studying the educational beliefs and reflective practice of change-oriented communities of practice, and using qualitative methods to research programs during their early phases of implementation.

### School-Based Problem-Solving Models

Recommendations for future research include examining school-based problem-solving models from teacher sensemaking and communities of practice approaches. Future research about school-based problem-solving models should emphasize these approaches and investigate the meaning the teams negotiate about the process and student

learning. Do these concepts hold different meanings across teams that practice different models of problem solving? How does construction of meaning regarding the model and student learning relate to proportion of staff who participated in the model's formal trainings?

Another interesting research topic addresses the meaning constructed among dyadic-consultation pairs engaged in problem solving. What meaning do these pairs construct about problem solving and student learning? How is their process of negotiating meaning different from groups' and communities' processes of negotiating meaning? How does their respective participation in training influence their sensemaking? Presumably, if one member of the pair is well-trained it will be easier for them to arrive at the intended meaning than if one individual on a team or half the team is trained in problem solving. Conversely, if an individual belongs to additional communities that address issues related to problem solving, the influence of these memberships may be stronger over a consultation pair's sensemaking than an entire group's sensemaking.

#### Communities of Practice that Promote Change

Discussions within the literature point to the difficulty in developing communities that promote change (Wenger et al., 2002). Wenger offers detailed descriptions of the open, change-oriented communities as they are found in the corporate and business world and Printy (2004) and Gallucci (2003) developed typologies that describe the change-oriented school-based communities. The findings from this study suggest that creating change within a community of practice is even more difficult than Printy concluded

(2004). According to her conclusions, the descriptions of the principal's leadership at the participating school and the introduction of a new school-based problem-solving model should have been enough to effect change.

However, Printy's results were based on statistical modeling of quantitative data and the functioning of these open, progressive school-based communities have not been studied using qualitative methods. A study that includes participant-observation of such teams might find that there are additional features associated with change that were not detected in her results. A closer examination of communities of practice within schools that promote change is recommended.

#### Educational Beliefs and Reflective Practice

A change-oriented community of practice is likely to be the most suitable sample for studying educational beliefs and reflective practice in a naturalistic context. The difficulties of conducting research regarding these constructs were reviewed in chapter two and confirmed by the findings of this study. However, they remain important and worthwhile constructs. A community of practice that engages in reflection and modifies their educational beliefs through their reflective process would be good candidates to investigate these research topics.

The constructs of teacher efficacy and collective efficacy (Bandura, 1989; Goddard, Hoy, & Hoy, 2004) within the context of school-based problem-solving models are particularly relevant and worthy of further research. Teachers' gatekeeping practices (i.e., the types of cases they refer for additional support) are likely to be mediated by their perceptions of self-efficacy as teachers and their perceptions of the general competence

of the school staff. The construct of collective efficacy, in particular, highlights the impact of the organizational socialization on perceptions of group-wide competence. The relation between collective efficacy and the negotiation of meaning within communities of practice can further clarify how teachers understand and practice problem solving.

### Qualitative Research in Early Phases of Program Implementation

The final contribution of this study is the importance of qualitatively examining a new program when teams are in the early stages of implementation. When teams are first encountering a new program they must make sense of it in order to practice it; they do not “implement” it literally as it is described in its manual or during trainings. Even though participation is limited to fewer individuals in qualitative studies, more can be understood about the experience and progress of the teams. The immersion of the researcher into the program implementation site and the rich descriptions can provide a meaningful context for interpreting the findings. Program evaluation studies, including evaluations of school-based problem-solving models, are recommended to include qualitative methods.

### Summary

School-based problem-solving models are typically studied from the narrow lens of outcome data (e.g., Sheridan, Welch, & Orme, 1996) or process data (e.g., Telzrow et al., 2000) that do not address teachers’ competing and complementary responsibilities. These studies examine which features of problem solving were included in the case, the outcome of the case, and the consultation skills of the consultant as well as the consultee (e.g., Flugum & Reschly, 1994; Elliott & Busse, 1993; Knoff et al., 1995; Curtis &

Watson, 1980). However, the results are limited to noting what was accomplished in the case without developing an understanding about how the pair or team were able to reach these results and what prevented them from proceeding with the case differently. The current study highlighted the value of studying consultation practice from the naturalistic, organic perspective of the interpretive paradigm. The developers of school-based problem-solving models should be mindful of the beliefs and assumptions embedded in their models and strive for conceptual clarity. In addition, consultation research would be greatly enhanced if it were informed by well-developed constructs in educational psychology and educational policy. A more inter-disciplinary approach to research, training, and practice within school psychology is highly recommended.



Appendix A  
 Building-Level Team Functioning and Grade-Level Team Functioning  
 Direct Observation- Rating Worksheet

TAP TEAM FUNCTIONING (Building-Level & Grade-Level)	Observed	Not Observed
1. All pertinent team members and grade-level coach are present at meeting.		
2. All team members participate in problem-solving process/ discussion through active listening and appropriate communication skills.		
3. Prioritizes concerns.		
4. Defines problem(s) in observable, measurable terms. (Problem can be measured reliably by any given observer.)		
5. Explores Factors that Influence Student Learning & Behavior. (uses factor sheet as needed)		
6. Uses objective facts rather than subjective feelings to analyze issues.		
7. Analyzes problem using pertinent data, prior to intervention development.		
8. Explores relationship between academics and behavioral/ attentional issues. Identifies specific academic skills and functional levels. Explores possibility of instructional mismatch.		
9. Referring teacher is reflective of own practice and possible impact on child's performance (instructional factors).		
10. Elicits a specific description (in observable, measurable terms) of a previous intervention strategy attempted by the referring teacher.		
11. Discusses specific baseline data. Specific plan is developed to collect pertinent data.		
12. Discusses child's performance (baseline data) vs. teacher expectations/ desired performance for child. Elicits goals based on discrepancy between the two.		
13. Specific goals are set in observable/ measurable terms.		

Appendix A (cont.)  
 Building-Level Team Functioning and Grade-Level Team Functioning  
 Direct Observation- Rating Worksheet

14. Sets up data collection process to monitor intervention(s). (What will be collected? How frequently will it be collected? How will it be recorded?)		
15. Utilizes TAP forms to document team discussion.		
16. Records and reviews data on student progress and intervention progress.		
17. Utilizes team binder to organize data for each student.		
18. Team members demonstrate conflict resolution skills & come to a consensus with regards to decision making.		
19. Team members take time to recognize progress and celebrate success.		

4 = out of 19 items observed

3 = out of 19 items observed

2 = out of 19 items observed

1 = out of 19 items observed

0 = out of 19 items observed

Appendix B  
School-Wide Level of Implementation of TAP

School-Wide Level of Implementation of TAP	Established	Being Established	Not Established
1. Building-Level Team has been organized collaboratively with leadership from the principal, to include key members of the building which meet on a consistent basis (at least 2X/month).**			
2. Building-Level Team completed needs assessment and asset map.			
3. Grade-Level Teams have been organized and meet on a consistent basis (at least 2X/month).**			
4. Coaches assigned to grade-level teams and are present at meetings.**			
5. Roles and Responsibilities of Building-Level Team members are well defined.			
6. Building administrator is a regular participant member of building-level team. Attends meetings regularly and participates in TAP problem solving process.**			
7. DSS staff (including psychologists, PPW's, and Counselors) are active participants in TAP.			
8. TAP is the primary problem solving process in building.			
9. TAP is pervasive in all teams/processes in the building for school decision making/planning (e.g., SIT, staff meetings)			
10. School has developed and written a plan to train new staff, when there is staff turnover, to sustain process.			
11. Individual data is being shared with teacher, staff, and parents.			
12. Grade-level team member roles are defined, yet flexible as to whom assumes what role.**			
13. Building-Level Team understands information on Needs Assessment and uses it in the decision making process for school planning/training needs.			

Appendix B (cont.)  
School-Wide Level of Implementation of TAP

14. Building-Level Team understands information from Asset Maps and uses it in decision-making process. Asset Map data is made available to staff.			
15. Building-Level Team has a Level of Implementation of “4.”**			
16. Grade level teams have Level of Implementation of “4.”**			
17. Parents have been formally informed and are aware of TAP (e.g., Newsletter, information sharing session, TAP presentation).			
18. Data is being used for decision-making at the building level/team level/individual case.			
19. Based on Needs Assessment and TAP, school has developed and implements a school-wide positive behavioral support system and/or social skills program.			
20. School-Wide Data is being shared with school, staff, cluster, Board of Education, and Community Superintendent.			

\*\* - Directly Observable

When you chose Being Established, explain the criteria you used.

4- Independent Implementation of All Aspects of TAP = 20 out of 20 Factors Established

3- Implementation of TAP with Facilitator Support = First 11 Factors Established; Second 9 Factors Being Established

2- Infrastructure in Place with Process Developing = First 5 Factors Established; Factors 6, 7, 8, 9, 10, 11, 12 Being Established

1- Infrastructure & Process in Development = First 4 Factors Established; Factor 5 Being Established

0- No entry

Appendix C  
TAP Referral and Problem Identification Profile

**REFERRAL, PROBLEM IDENTIFICATION, AND STUDENT PROFILE FORM**

STUDENT IDENTIFICATION				
Student Name:	DOB:	Age:	Race:	Date:
School:	ID #:	Grade:	Form Completed by:	
Teacher:	Teacher:		Teacher:	
Teacher:	Teacher:		Teacher:	
Parent/Guardian:	Home Phone:		Work Phone:	
CRITICAL QUESTIONS		PURPOSE		
1) Why are you referring this student?		Describe the problem(s), how often, where & when it/they occur.		
2) What are the student's strengths/interests?		Identify relevant student strengths, academic or otherwise.		
3) What relevant information is available regarding educational history, test scores, instructional levels from the student's files?		Detail by grade, schools the student has attended, relevant report card grades earned, & teacher comments.		
Year/Grade	School	Relevant Report Card Grades/Comments		
Relevant test results (IRI, CTBS, GT, CRT, ECAP etc.) Attach any special education/504 assessments.				Date
<b>Current Instructional Levels:</b>				
1 = Above Grade, 2 = On Grade	Reading Decoding:		Math Calculation:	
3 = Below Grade, 0 = Very Low	Reading Comprehension:		Math Problem Solving:	
	Listening Comprehension:		Written Language:	
			Spelling:	
			Oral Expression:	
			General Knowledge:	
<b>What critical skills needed for the current grade/course curriculum does this student not yet demonstrate?</b>				
<b>Other relevant school issues (discipline referrals, retentions, suspensions, excessive absences, other data from record)</b>				
Date/Grade	Issue/Problem	Reason/Explanation		



Appendix D  
Factors that Influence Learning

1. Instructional/Curricular
2. Teacher/Teaching
3. Student
4. School Environment
5. Home or Community

**Instructional/Curricular**

Instructional Practices

- Objectives are clearly displayed and reflect activities for the day
- Accessibility of materials
- Pace of presentation
- Curriculum level
- Assignment length
- One-dimensional approach
- Lack of anticipatory set
- Guided practice
- Assessment of prerequisite skills
- Clear directions and objectives
- Opportunity for “wait time”
- Progress monitoring: How; How often; When; Where
- Engaged learning time
- Contingencies before and after work is completed
- Feedback procedures
- Variability of instructional practices from school to school

Curricular Conditions

- Curriculum level- too easy/too difficult
- Curriculum relevance- interest
- Curriculum flexibility to learning styles
- Curriculum breadth and depth
- Scope and sequence of objectives
- Curricular differences between schools (e.g., different reading programs)

Appendix D (cont.)  
Factors that Influence Learning

**Teacher/Teaching**

- Expectations too high or too low
- Rate of reinforcement too low
- Teacher/student proximity
- Insufficient feedback
- Teacher fatigue
- Lack of experience and/or support for differentiating instruction
- Consistency
- Cultural familiarity and sensitivity
- Experience with curriculum
- Classroom management skills
- Effective instructional language
- Teacher tolerance level for problems
- Beliefs, attitudes, and expectations
- Effective or ineffective teaching strategies
- Instructional presentation and feedback format

**Student**

Cognitive Issues

- Short/long term memory (auditory, visual)
- Attentional factors
- Executive functioning (focusing, planning, predicting, organizing, selective attending)
- Integration of visual/motor/auditory tasks
- Learning styles, strengths, weaknesses
- Information processing skills
- Language comprehension/expression
- Learning/skill retention rate
- Beliefs about self
- Lacks prerequisite academic skills
- Has effective listening, note taking, writing, study and test taking skills



Appendix D (cont.)  
Factors that Influence Learning

Behavioral/Motivational Issues

- Beliefs, expectations, attitudes
- Self-control, self-management
- Social skills
- Academic engagement
- Antecedents (slow, fast triggers)
- Consequences (positive or negative)
- Skill versus performance deficits

Health Issues

- Hearing, vision, motor issues
- Physical and/or mental condition
- Medication issues

Other

- Learning opportunities
- Excessive absences
- Predominant language not English
- Changes in school
- Acculturation

**School Environment**

Peers

- Peers model inappropriate behavior
- Peers trigger behavior
- Peers reinforce behavior
- Peer social and/or academic skills
- Peer group expectations, goals, values
- Peer positive and negative interactions
- Peer supports
- Peer expectations and consequences

Appendix D (cont.)  
Factors that Influence Learning

Classroom

- Design and appearance of classroom
- Limited auditory/visual/tactile distractions
- Appropriate temperature and lighting
- Appropriate desks and chairs
- Appropriate resources: texts, materials, and technology
- Seating arrangements that are conducive to learning
- Class size
- Accessibility of equipment

School

- School-wide values, goals and expectations
- In-house professional development options for staff
- Accessibility of building and classrooms
- Transportation considerations (length of time on bus, bus behavior)
- Staff to student ratio
- Sufficiency of materials
- Opportunities for cross grade-level instruction

**Home or Community**

- Home/School communication
- Family discipline/supervision
- Family conflict
- Family stressors
- Family changes/hardships
- Family support for homework
- Family educational values
- Family expectations (too high, too low)
- Support for school instructional, discipline policies, procedures and/or interventions
- Extracurricular activities
- Lack of community resources
- Inappropriate community influences (peer or adult)
- Parenting skills

## Appendix E Pupil Progress Initiative (PPI)

Name \_\_\_\_\_ Grade Level \_\_\_\_\_ Student Number \_\_\_\_\_  
 Teacher \_\_\_\_\_ School \_\_\_\_\_ Date \_\_\_\_\_  
 Area(s) Addressed: \_\_\_\_\_ **Reading** \_\_\_\_\_ **Writing** \_\_\_\_\_ **Mathematics**

**Reading**

Performance Level \_\_\_\_\_ CTBS Norm-referenced \_\_\_\_\_ Report Card Grades | | | | | Other \_\_\_\_\_

Diagnostics: Date \_\_\_\_\_ Academy of Reading \_\_\_\_\_ Results \_\_\_\_\_  
 Date \_\_\_\_\_ Other \_\_\_\_\_ Results \_\_\_\_\_

Circle Area(s) of Focus: \_\_\_\_\_ **Reading Process** \_\_\_\_\_ **Constructing Meaning** \_\_\_\_\_

Intervention Strategies:

_____ After School Programs	_____ Curriculum Modifications	_____ Flexible Groups	_____ Title I Support
_____ Assignment Modifications	_____ ESE Support or Sp. Ed.	_____ Parent Communication	_____ Tutoring
_____ Center Activities	_____ ESOL Support	_____ Summer School	_____ Work with Volunteer
_____ Cooperative Learning	_____ Parent/Guardian Contributions		

Other \_\_\_\_\_

**Writing**

Writing Assessment \_\_\_\_\_ Report Card Grades | | | | | Schoolwide Writing Assessment \_\_\_\_\_ Other \_\_\_\_\_

Diagnostics: Date \_\_\_\_\_ Title \_\_\_\_\_ Results \_\_\_\_\_

Circle Area(s) of Focus: \_\_\_\_\_ **Writing Process** \_\_\_\_\_ **Writing to Communicate** \_\_\_\_\_

Intervention Strategies:

_____ After School Programs	_____ Curriculum Modifications	_____ Flexible Groups	_____ Tutoring
_____ Assignment Modifications	_____ ESE Support or Sp. Ed.	_____ Parent Communication	_____ Work with Volunteer
_____ Center Activities	_____ ESOL Support	_____ Title I Support	
_____ Cooperative Learning	_____ Parent/Guardian Contributions		

Other \_\_\_\_\_

**Mathematics**

Performance Level \_\_\_\_\_ CTBS Norm-referenced \_\_\_\_\_ Report Card Grades | | | | | Other \_\_\_\_\_

Diagnostics: Date \_\_\_\_\_ Title \_\_\_\_\_ Results \_\_\_\_\_

Circle Area(s) of Focus: \_\_\_\_\_ **Number sense, concepts, & operations** \_\_\_\_\_ **Measurement** \_\_\_\_\_ **Geometry & Spatial Sense** \_\_\_\_\_  
 \_\_\_\_\_ **Algebraic Thinking** \_\_\_\_\_ **Data Analysis & Probability** \_\_\_\_\_

Intervention Strategies:

_____ After School Programs	_____ Curriculum Modifications	_____ Flexible Groups	_____ Tutoring
_____ Assignment Modifications	_____ ESE Support or Sp. Ed.	_____ Parent Communication	_____ Work with Volunteer
_____ Center Activities	_____ ESOL Support	_____ Title I Support	
_____ Cooperative Learning	_____ Parent/Guardian Contributions		

Other \_\_\_\_\_

**Signatures:**

Teacher \_\_\_\_\_ Date \_\_\_\_\_ Teacher \_\_\_\_\_ Date \_\_\_\_\_

Parent \_\_\_\_\_ Date \_\_\_\_\_ Principal \_\_\_\_\_ Date \_\_\_\_\_

Evaluation/Status: Student Achieved Proficiency Level: Yes \_\_\_ No \_\_\_ Remediation to Continue: \_\_\_ Yes \_\_\_ No

Date \_\_\_\_\_ Comment \_\_\_\_\_

Date \_\_\_\_\_ Comment \_\_\_\_\_

Date \_\_\_\_\_ Comment \_\_\_\_\_

Signature \_\_\_\_\_

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