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Effective multidisciplinary team problem solving : a review of literature

Abstract

The historical legislation mandating multidisciplinary teams (MDTs) in schools is well known, yet relatively little attention has been directed toward either evaluating systematic processes that would lead to the desired outcome of better services to all students or educating team members in problem solving content and process. The purpose of the study was to examine the factors that influence problem solving outcomes and other aspects of service delivery in MDT settings, including the changing role of school psychologists.

Results indicated much variability and little consensus in several areas: clarity of role expectations, family involvement, interdisciplinary collaboration, continuing educational training, and overall functioning and structure of multidisciplinary teams. Effective MDTs work to increase skill and knowledge in systematic problem solving, engage families in decision-making processes, demand equal member participation, and continue group process and team effectiveness training.

EFFECTIVE MULTIDISCIPLINARY TEAM PROBLEM SOLVING:

A REVIEW OF LITERATURE

An Abstract of a Master's Paper

Submitted

In Partial Fulfillment

of the Requirements for the Degree

Masters of Arts

Debra S. Meyer

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March, 2000

ABSTRACT

The historical legislation mandating multidisciplinary teams (MDTs) in schools is well known, yet relatively little attention has been directed toward either evaluating systematic processes that would lead to the desired outcome of better services to all students or educating team members in problem solving content and process. The purpose of the study was to examine the factors that influence problem solving outcomes and other aspects of service delivery in MDT settings, including the changing role of school psychologists. Results indicated much variability and little consensus in several areas: clarity of role expectations, family involvement, interdisciplinary collaboration, continuing educational training, and overall functioning and structure of multidisciplinary teams. Effective MDTs work to increase skill and knowledge in systematic problem solving, engage families in decision-making processes, demand equal member participation, and continue group process and team effectiveness training.

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This Research Paper by: Debra S. Meyer

Entitled: EFFECTIVE MULTIDISCIPLINARY TEAM PROBLEM SOLVING:
A REVIEW OF LITERATURE

has been approved as meeting the
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Annette M. Carmer

Director of Research Paper

John E. Henning

Co-Reader of Research Paper

Annette M. Carmer

Graduate Faculty Advisor

Barry J. Wilson

Head, Department of Educational
Psychology & Foundations

3-23-00

Date Approved

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CHAPTER 1

INTRODUCTION

One focus of the education reform movement has been an increased reliance on multidisciplinary teams to ensure quality services to all students (Flugum & Reschly, 1994; Graden, Zins, & Curtis, 1988; Reschly, 1988a; Reschly & Ysseldyke, 1995; Rosenfield & Gravois, 1999). The historical legislation mandating MDTs in schools is well known, yet relatively little attention has been directed toward either evaluating systemic processes that would lead to the desired outcome of better services to all students or educating team members in problem solving content and process. Shifts away from the commonly implemented refer-test-place MDT model require school psychologists to rely on skills and competencies in effective problem solving consultation for which they may not have adequate training (Kratochwill & McGivern, 1996; Reschly, 1988a; Reschly & Grimes, 1991; Reschly & Ysseldyke, 1995; Shapiro, 1991). The central purpose of this paper is two-fold: (a) examine MDT members' roles and, specifically, the changing role of the school psychologist; and (b) examine problem solving content and process.

The current reform movement to redefine special education service delivery and the practice of school psychology (Cobb, 1990; Cobb & Dawson, 1989; Reschly, 1980, 1986, 1988a; Reschly, Tilly, & Grimes, 1998; Reschly & Wilson, 1990; Reschly & Ysseldke, 1995; Wilson, 1991) has placed school psychologists in a position to adopt assessment procedures that are linked directly to developing school based interventions (Kratochwill & McGivern, 1996; Lenz & Shapiro, 1986; Reschly, Tilly, & Grimes, 1998;

Reschly & Ysseldyke, 1995). According to Peterson and Casey (1991), school psychologists who do not change from a testing role may have to face a declining demand for the services they offer. Cobb (1992) asserted that "school psychologists who perceive their primary responsibility as one of providing test scores for decision making are likely to test themselves out of existence" (p. 5). Thus, as school psychologists' roles change, a need to develop additional skills beyond the service model of individualized, standardized assessment has transpired.

One response to the school reform initiative, at both the system and classroom levels, shifts school psychologists' emphasis from diagnosis and classification procedures to intervention design, implementation, and evaluation, all structured to base educational decisions on student outcomes (Christenson & Buerkle, 1999; Flugum & Reschly, 1994; Reschly, 1988b; Reschly, Grimes & Tilly, 1998). This shift has placed school psychologists in a position of shared responsibility regarding student assessment and intervention decisions (Sarason, 1990; Thousand & Villa, 1992).

As part of the reform effort to meet the needs of all children and to achieve better integration of services between regular and special education (Reschly, Tilly, & Grimes, 1998; Reynolds, Wang, & Walberg, 1987; Welch, Brownell, & Sheridan, 1999; Yoshida, 1980), multidisciplinary teams (MDT) were initiated. Once assessment data have been collected, MDTs are used to make decisions about students' limiting conditions and educational programs and placements.

In the collaborative effort to complete discrete mandated functions, school psychologists, families, and other multidisciplinary team members (e.g., regular

education teacher, special education teacher, school consultant, principal) participate in problem solving assessments and intervention procedures to address problems in a disciplined and structured manner in order to develop potential solutions. Child study teams existed in some systems before MDTs (Pryzwansky & Rzepski, 1983) the law and its accompanying regulations served as a catalyst for professionals working together in problem solving teams.

Although some studies have found the multidisciplinary team problem solving structure to be effective (Chalfant & Pysh, 1989), various literature reviews (Cox, 1995; Fuchs & Fuchs, 1996; McGrath, Berdahl, & Arrow, 1995; Rosenfield & Gravois, 1996) reported limited empirical data on the effectiveness and quality of individualized interventions designed and implemented by MDTs. Further, relatively limited research has been written about the process that contributes to the outcomes of the problem solving process (Rosenfield & Gravois, 1996; Semmel, Abernathy, Butera, & Lesar, 1991).

The literature is replete with technical guides, but the role of preparation in effective implementation is still unclear. Despite the increased use of MDTs, limited research is available to address the process that contributes to positive outcomes of problem solving (Semmel, Abernathy, Butera, & Lesar, 1991). Therefore, it is important to assess the function and procedures of MDTs to determine if they are efficient in attaining student outcomes through a collaborative problem solving approach. In addition, it is important to understand the school psychologists' changing role and those factors that support or impede the process of multidisciplinary team problem solving.

Huebner and Hahn (1990) contended that MDT problem solving may not go beyond pooling individual input unless teams members receive additional specialized training and support. Collaborative problem solving efforts are often limited due to barriers. The barriers that often plague the MDT problem solving process are: (a) lack of systematic decision making processes, (b) lack of interdisciplinary collaboration and trust, (c) lack of family involvement, and (d) lack of education and training in MDT processes (Fenton, Yoshida, Maxwell, & Kaufman, 1979; Kaiser & Woodman, 1985; Pfeiffer, 1981).

These barriers often decrease the quality and undermine the efforts of the team. Ultimately, understanding the MDT problem solving process, its key components and barriers, and conducting further research in MDT problem solving is important to the extent that it contributes to positive student outcomes.

Purpose of the Study

This study will examine the factors that influence problem solving outcomes and other aspects of consultation in an MDT problem solving setting. In particular, understanding school psychologists' changing role, the criteria of effective teams with attention to variables that must be addressed to insure their effectiveness, and discussing research on group effectiveness within MDTs in schools is important. Exploring the key components and barriers to MDT decision making will offer insight into the possible reality of problem solving using a team approach.

<u>Explanation of Terms</u>

This study uses several widely accepted terms within the fields of school psychology and special education. The following definitions may provide clarity and an understanding of the use of the terms.

<u>Area Education Agency (AEA)</u>

These Iowa regional agencies "share responsibility in promoting partnerships to increase family involvement and participation in the social, emotional, and academic development of children" (Reschly, Tilly, & Grimes, 1998, p. 210). Currently fifteen such administrative districts provide support to schools in the state. They were created in 1974 to compensate for the inequitable distribution of services to special education students under a system funded by individual counties (Kleve, 1988). AEAs hire support staff such as school psychologists, speech pathologists, social workers, and consultants. They provide additional services to children in educational media, research, and staff development.

<u>Individual Education Program (IEP)</u>

An IEP is a written statement that outlines an individual student's unique needs and describes how these needs should be met through special education in the least restrictive environment.

<u>Mainstreaming</u>

This refers to the placement of a child with identified learning or adjustment problems in a regular classroom. It involves a process that incorporates a continuum of

steps for educational program changes that progressively include the general education classroom.

Multidisciplinary Team (MDT)

The advent of Public Law 94-142 mandated that the decision making process for assessment and placement into special education programs become a team or group task. Section 121 a.532(e) of P.L. 94-142 states that "the evaluation is made by a multidisciplinary team or group of persons, including at least one teacher, or other specialist, with knowledge in the area of suspected disability" (Fagan & Warden, 1996, p. 214).

Problem Solving

Problem solving refers to a systematic approach that includes problem identification, problem analysis, the implementation of a solution, and evaluation of the effectiveness of solutions (Bergan, 1977) to address the problematic educational performance problems of individual learners (Reschly, Tilly, & Grimes, 1998).

Regular Education Initiative (REI)

REI is a "partnership between special education and regular education" according to Will (1988, p. 476). This partnership is directed toward combating organizational and administrative impediments to effective instruction of educationally handicapped children in regular education settings.

Renewed Service Delivery System (RSDS)

The Renewed Service Delivery System (RSDS), as implemented in the state of Iowa, is a statewide reform effort (Reschly, Tilly, & Grimes, 1998, p. 209). RSDS is a

policy initiative directed toward attaining needed improvements in the delivery of

programs and services to students with learning and adjustment difficulties (Reschly,

Tilly & Grimes, 1998). RSDS mirrors the important components of problem solving

assessment coupled with noncategorical programming and system reform. According to

Reschly, Tilly, and Grimes (1998), over 80% of the schools in Iowa are involved in

RSDS activities.

Organization of the Paper

Chapter I includes the introduction, purpose of the study, and an explanation of

terms. Chapter II offers a review of the literature related to multidisciplinary teams. An

overview of the history of multidisciplinary teams, school psychologists' changing role,

problem solving models used in Iowa, and the barriers that impede the MDT process are

presented. School based problem solving models used in Iowa will be described.

Chapter III will synthesize the topics presented in the earlier chapters and offer

implications and recommendations for future research.

CHAPTER II

LITERATURE REVIEW

This chapter will offer a review of the related literature on MDT problem solving and the school psychologists' role. The chapter includes a review of related literature in the following areas: (a) historical overview of MDTs, (b) barriers to MDT problem solving, (c) overview of problem solving, and (d) the changing role of school psychologists.

Historical Overview of Multidisciplinary Teams

The earliest uses of teamwork according to Julia and Thompson (1994, cited in Rosenfield & Gravois, 1999) were for medical practices in the 1920s. References to multiprofessional team concepts in the health care, mental health, and rehabilitation fields began appearing in the 1940s (Rosenfield & Gravois, 1999). However, teams were not used in schools until the 1960s when the federal government provided incentives to develop interdisciplinary services for the disabled (Armer & Thomas, 1978; Maher & Yoshida, 1985). According to Wasley (1994), it is still unclear why teams in schools were initiated in the 1960s and then diminished until the mid-1970s.

During the 1970s, reform efforts gained momentum as a result of growing public optimism for what education might do to enhance the learning of children with disabilities. In 1975, following critical court decisions on the education of students with special needs, President Gerald Ford signed Public Law 94-142 (Skrtic, 1991). This legislation mandated that a team using multiple criteria and sources must be the decision making body and guaranteed families the right to participate in decision-making (Jacob-

Timm & Hartshorne, 1994). Section 121a. 532(e) of Public Law 94-142 (Reschly, Tilly, & Grimes, 1998) denotes that the MDT, including professionals knowledgeable about children, determines placement options based on evaluative data.

Public Law 94-142 and its amendments continue to be a critical force in ensuring the educational rights of children with disabilities. The law details several MDT components: (a) teams are responsible for assessing referred students' suspected areas of disability based on educational and developmental needs; (b) formal assessment procedures are followed by a determination of eligibility for special education placement in the least restrictive environment (LRE); (c) teams formulate IEPs (Maher & Yoshida,1985), develop short term instructional objectives, and may even project long term educational goals for those students who qualify for special education services; and (d) teams are required to involve parents in the problem solving MDT process.

Reynolds, Gutkin, Elliott, and Witt (1984) summarized the legislative and professional expectations of MDTs:

multidisciplinary teams have been expected to provide a number of functional benefits beyond those provided by any single individual. These benefits include: greater accuracy in assessment, classification, and placement decisions; a forum for sharing different views; provision for specialized consultative services to school personnel, parents, and community agencies; and the resource for developing and evaluating individualized educational programs for exceptional students (p. 63).

The MDT approach also grew out of concern that minority group members were being misclassified as handicapped (Maher & Yoshida, 1985) and the belief that a group decision reduces bias and errors in assessment and judgment while enhancing adherence to due process requirements (Huebner & Hahn, 1990; Kabler & Genshaft, 1983; Pfeiffer, 1980; Rosenfield & Gravois, 1999; Yoshida, 1983). Educational decision making teams were composed of at least three of the following: school psychologists, families, regular education teachers, special education teachers, school consultants, and principals (Abelson & Woodman, 1983).

The most recent MDT approach mandate in Iowa was an attempt to replace the refer-test-place process, re-emphasize shared responsibility and decision making, and solve educational problems in regular education classrooms. The refer-test-place process was expensive, time consuming, required coordination of many professionals, and was typically implemented with the sole purpose of determining eligibility for special services placement (Sheridan & Kratochwill, 1991). Numerous studies reported the practice to be both inconsistent and unreliable (Algozzine & Ysseldyke, 1981; Christenson, Ysseldyke, & Algozzine, 1982; Epps, Ysseldyke, & Algozzine, 1983; Ysseldyke, Algozzine, & Epps, 1983). The typical outcome of the refer-test-place process was predictable. Once the student was tested there was a high probability that they would be placed and remain in a special education program through high school graduation (Christenson, Ysseldyke, & Algozzine, 1982). A major reason for refining the MDT process in Iowa was to reduce the number of children referred for psychoeducational evaluation by having teams

determine functional or instructional recommendations to implement in regular and special education classrooms.

Iowa's new MDT approach requires interdisciplinary collaboration for organizing, delivering, and evaluating services for all children, not only children eligible for special education programs. MDT members are to collectively generate innovative solutions to attain mutually shared goals. The team determines the most appropriate intervention based on need rather than on labels or categories.

According to Pfeiffer (1981), "The key elements of a multidisciplinary team are a common purpose, cooperative problem solving by different professionals who possess unique skills and orientations, and a coordination of activities" (p. 330). Given these elements, multidisciplinary teams have been expected to provide a number of functional benefits beyond those provided by any single individual.

Public Law 94-142 prescribed minimal team composition guidelines but not the specific procedures teams would follow, leaving those decisions to the states. Thus, the composition of school based teams and their procedures for making decisions were likely to vary (Poland, Thurlow, Ysseldyke, & Mirkin, 1982). As predicted, states interpreted the federal law differently and mandated different composition requirements and operational procedures for teams (Reschly, Tilly, & Grimes, 1998). Regardless of team composition, MDTs were to limit the decision making authority of any one professional, make sure different perspectives from diverse group members were considered, and involve parents in the decision making about their children.

Barriers to optimal MDT problem solving have been identified (Abelson &

Woodman, 1983; Bardon, 1983; Fleming & Fleming, 1983; Kabler & Genshaft, 1983;

Maher & Pfeiffer, 1983; Pfeiffer, 1981; Rosenfield & Gravois, 1999). Yoshida (1983)

argued that "organizational barriers must be overcome before an environment is created

for productive MDT operations... An organizational perspective recognizes that team

members represent different constituents and philosophies of service delivery. Most of

the time these separate perspectives produce mutually exclusive expectations for job

function" (p. 140). MDTs have been allowed to function neither as they were intended

(Yoshida, 1983) nor with the latitude to use their creative potential to solve the problems

facing special education (Pfeiffer, 1980).

Anderlini (1983) and Pfeiffer (1980, 1981) analyzed and categorized the various

barriers experienced by MDTs. This analysis resulted in the delineation of four

categories of barriers affecting team functioning: (a) lack of systematic decision making

processes, (b) lack of interdisciplinary collaboration and trust, (c) lack of family

involvement, and (d) lack of education and training in multidisciplinary team processes

(Fenton, Yoshida, Maxwell, & Kaufman, 1979; Kaiser & Woodman, 1985; Pfeiffer,

1981).

Lack of Systematic Decision Making Processes

MDTs have been criticized for their loosely structured and nonsystematic decision

making processes (Maher & Pffeiffer, 1983). Skill and knowledge deficits in the

preliminary, basic areas of obtaining, organizing, and presenting information often doom

the decision making process to failure before the actual group problem solving occurs.

Since team members rarely receive training in decision making processes, this is a particularly troublesome issue for MDTs in school systems.

In discussing team decisions, Yoshida, Fenton, Maxwell, and Kaufman (1978) applied social psychology theory of organizations to MDTs. Specifically, they hypothesized that participation in the group process is related to member satisfaction with decisions that should result in commitments to implement them (Cooper & Wood, 1974). This relationship was confirmed; more participation led to increased levels of satisfaction (Yoshida, Fenton, Maxwell, & Kaufman, 1978). Thus, including the contributions of all team members coupled with training in team efforts (Jones, White, Benson, & Aeby, 1995) is essential in facilitating effective quality decision making. Ysseldyke (1983) concluded that MDTs do not meet the criteria of effective decision making practices. Effective practices consist of four major components.

First, the purpose of the meeting must be made explicit. Based on extensive research, Pfeiffer (1980) and Ysseldyke (1983) found that the purpose of meetings was seldom explicitly stated. Second, sufficient time must be allowed to make effective decisions. Bardon (1983) and Maher and Pfeiffer (1983) found that team decision making was adversely affected by time constraints. Fleming and Fleming (1983) found that MDT members said lack of sufficient time to problem solve and make decisions was their most frequent concern. They also reported members of MDTs frequently complained that the quality of their decisions was impaired by the apparent need to rush through cases in order to stay on schedule. Bergan and Tombari (1975) contend adequate time in the decision making process is essential. If problems are defined incompletely or

incorrectly, problem solving will likely be ineffective. Given the importance of this stage in the problem solving process, adequate time and energy should be expended in efforts to identify the problem. Often times the problems are multifaceted and limited discussion or quick decisions can lead to inefficiency of team decision making and inadequate decisions (Fleming & Fleming, 1983).

Third, role expectations must be clear. Pfeiffer (1980) and Ysseldyke (1983) found that team roles were rarely defined clearly. MDTs are particularly vulnerable to confusion over role expectations due to the extensive overlap in training and areas of expertise among team members (Pfeiffer, 1980; Pryzwansky, 1981). Fenton, Yoshida, Maxwell, and Kaufman (1977) analyzed the responses made by principals, school psychologists, special education teachers, and regular education teachers to determine the role expectations of team members, both within and across roles. Yoshida (1980) defined role ambiguity within a role as "disagreement about appropriate behavior and activities for a given role among members' function in that role" (p. 223) and role ambiguity across roles as "disagreement between others' expectations for a given role and the expectations of the members functioning in that role." They concluded that without role clarity both within and across roles, MDT members are seriously hindered in their ability to make appropriate decisions.

Fourth, all members must contribute in an organized manner. MDT effectiveness is maximized when all team members contribute to the decision making process in an organized and structured manner (Abelson & Woodman, 1983). Yet, the literature has

repeatedly cited a lack of training in systematic decision making processes as a major barrier for MDTs (Pfeiffer, 1981; Yoshida, Fenton, Maxwell, & Kaufman, 1978).

Lack of Interdisciplinary Collaboration

One of the primary objectives of any team is to effectively use the resources of each individual member. School psychology literature usually cites the inappropriate or poor management of resources as the reason behind ineffective MDT decision making (Fenton, Yoshida, Maxwell, & Kaufman, 1979; Yoshida, 1980).

Interprofessional tension is another powerful inhibitory barrier to successful team functioning (Ysseldyke, Algozzine, & Mitchell, 1982). According to Fleming and Fleming (1983), when team members feel their area of expertise is infringed upon, they view team collaboration as a surrender of power and influence. Therefore, they often develop negative attitudes toward MDT decision making. It is important for team members to feel secure both as individuals and within their respective disciplines to avoid the frequent territoriality concerns that arise in multidisciplinary teams.

Groups may be dominated by one or a select few members with strong personalities who may persuade the remaining members to accept underdeveloped solutions or inadequate recommendations (Abelson & Woodman, 1983; Hyman, Duffey, Caroll, Manni, & Winikur, 1973). In order for MDTs to function as teams, Kaiser and Woodman (1985) and Fiorelli (1988) suggest that more powerful members must recognize their authoritative position and strive to work with others to redistribute power.

Elliott and Sheridan (1992) reported the MDT input from various disciplines has been disproportionate, with school psychologists and special educators contributing the most and classroom teachers and families contributing very little. Researchers concluded that teachers and families lack of active participation led to less satisfaction with team decisions and little internalization of the team's proposed educational plan (Yoshida, Fenton, Maxwell & Kaufman, 1978; Ysseldyke, Algozzine, & Allen 1982).

Armer and Thomas (1978) analyzed attitudes of school personnel toward MDTs and concluded that teacher involvement was critical. They found that school personnel gave more favorable ratings to teams that possessed the highest degree of collaboration. In short, whether a single intervention, a modification for a classroom, a program change, or the restructuring of an entire service delivery system, the change will be more readily accomplished if all MDT members are included in the planning. Doing so allows opportunities to feel invested in outcomes. Change becomes less threatening and the potential for resistance is decreased.

Yoshida, Fenton, Maxwell, and Kaufmann (1978) concluded that MDT problem solving participation is highly related to individual satisfaction with the decision. It is remarkable that instructional personnel, the individuals most responsible for implementation of team decisions, are the individuals who participate the least. Teachers who are lowest in participation and satisfaction may not implement MDT decisions.

Teamwork implies a high level of interpersonal skill is needed for genuine collaboration (Kane, 1975; Orlando, 1981). Unfortunately, no team process model is guaranteed to produce a team that will, without fail, be sufficiently imbued with and

knowledgeable about group relations and the change process. However, MDT member

training in team processes may facilitate effective collaborative problem solving.

Lack of Family Involvement

The regulations that mandate family's integral participation in all phases of MDT

decision making have been recognized as a catalyst in educational improvement.

Promoting family involvement in the MDT problem solving process implies that families

have skills to offer, the exchange of information and assistance is a mutually beneficial

process, and families offer different and valuable perspectives (Christenson & Buerkle,

1999; Christenson & Cleary, 1990; Conoley, 1987; Mowder, Widerstrom, & Sandall,

1989).

The need to promote family involvement in the MDT problem solving process is

apparent. Many conflicts between the school and the home can be attributed to the lack

of a systematic process for involving families (Christenson & Buerkle, 1999). MDTs too

often narrowly focus on the referred child to the relative neglect of conceptualizing the

family as a systemic set of influential factors, which has led Conoley (1987) and Pfeiffer

and Tittler (1983) to encourage teams to consider adopting a school-family system

orientation.

Despite the mandates, there is little evidence that genuine collaboration between

family and school occurs. Moreover, when home and school systems are required to

engage one another, generally around a child problem, the relationship is frequently

characterized by crisis, tension, defensiveness, blame, and miscommunication (Lightfoot,

1978).

Various barriers inhibit teams working well with families (Seligman, 1979): (a) the stereotype educators hold for certain types of parents, (b) previous experiences of parents and educators, and (c) the level of interpersonal skill development of the educator. Many families, although concerned with their child's education, are fearful, suspicious, and mistrust school personnel because of their own negative experiences as students (Hansen, Hines, & Meier, 1990). Finders and Lewis (1994) suggested that family involvement practices were too often based on the assumption that educators are the experts and family involvement is for the purpose of educating parents and family members.

Conoley (1987) and Pfieffer (1980) are among those who have called for more parent participation in MDT activities. Family involvement has typically only included families playing a relatively passive role of involvement rather than becoming active participants in team problem solving (Yoshida, Fenton, Maxwell, & Kaufman, 1978; Ysseldyke, 1983). On the whole, families have essentially served as consent givers, with the decision making power resting primarily with the professionals (Harry, 1992).

Harry (1992) suggested families must be offered and must assume new roles if they are to have greater power in the educational partnership. The first step, she argued, is to truly engage families in the decision making process. When families actively participate in problem identification and the planning phase of the intervention program, the likelihood for their increased understanding, acceptance, and commitment is enhanced (Christenson & Clearly, 1990; Mowder, Widerstrom, & Sandall, 1989).

Christenson and Cleary (1990) reported that successful family involvement includes sharing of information and mutual problem identification. When families are not involved in problem identification, they are unlikely to be an integral part of the implementation efforts, for how a problem is defined reflects the underlying attributions for the problem, and these attributions will strongly influence the exploration and development of outcome strategies (Weiner, 1986).

Lack of Continuing Education

Continuing education goals should be needs-based or intended to meet a demonstrable need. Preparing individuals for complex team decision making has been part of continuing education efforts.

Paradoxically, professionals recognize the importance of continuing education yet often view the training as irrelevant to real life issues (Smylie & Conyers, 1991). Traditional continuing education training tends to be the least effective method for professional growth. Fullan (1990) suggested staff development has not been successful because it is poorly practiced. Continuing education training typically consists of a single session in which a presenter, often from outside the area, offers information and then leaves with no provision for ongoing assistance and support.

Educational training creates fear among many professionals. According to Menlo (1982), fear about the personal impact of change is the category into which most professional resistance falls. Professionals may anticipate that they do not have the skills to participate in the change, and they may perceive that they cannot acquire them. This sense of potentially diminished competence can create a tremendous fear for

professionals who are used to working in isolation and deriving reinforcement from their personal sense of competence.

In a comprehensive review of the literature on continuing education, Showers, Joyce, and Bennett (1987) concluded that the most effective training involved not only the presentation of information but also provided opportunities for practice and feedback. Participants were more likely to adopt techniques and strategies when the training incorporated a variety of hands on activities (Powers, 1983). Equally important, Elliot and Witt (1988) reported practitioners' attitudes often do not change until they see the learned strategies at work in the classroom.

MDT effectiveness was facilitated when members were trained and understood the criteria for team effectiveness, the stages of development that teams go through, and the dynamics of group processes (Rosenfield & Gravois, 1999). Staff development goals should be directed toward involvement, commitment, and renewal. Professional development needs to be tailored to accommodate individual styles and skill levels. Clear and explicit planned activities that provide practice, feedback, and support transfer of new skills are essential.

Team approaches that fostered shared participation among team members seemed to be appropriate ways to assure that a range of educational decision options are considered, especially when decisions to be made were complex, involved numerous elements, and occurred at different points in time (Abelson & Woodman, 1983; Reschly, Tilly, & Grimes, 1998; Schein, 1980). There is considerable empirical evidence that team building activities can increase the effectiveness of teams (Woodman & Sherwood,

1980). Tuckman and Jensen (1977) defined 5 developmental stages for teams: forming, storming, norming, performing, and adjourning. Team building elements show team members how to work together as equal partners, respect diversity, and build the trust necessary for collaborative teams to solve problems and create new opportunities.

Beninghof (1996) suggested three factors that are essential for effective professional development in support of collaboration for more inclusive educational services. First, the district must offer a spectrum of professional development activities to address the individual needs of staff and students. Second, planning for professional development should take into consideration that staff members will be at varied stages of readiness to accept major changes. Specific development activities should be tailored to the needs of participants as they move through different levels of the change process. Third, implementation is most successful when broad input is encouraged and staff is involved in the planning of professional development options from the beginning.

Beninghof's model proved effective in creating quality continuing education programs. However, the evaluation of professional training programs was relatively underdeveloped (Grant & Anderson, 1977). West and Idol (1987) reported that staff development for school collaboration had received little attention.

Based on Zins and Curtis' (1984) findings, staff development in systematic problem solving process skills was needed to minimize the shortcomings of [MDT] conferences. Implementing the problem solving process successfully was dependent on team members' skill and ability to address issues systematically and efficiently.

Overview of Problem Solving

Educational literature, especially that of the last several years, features problem solving consultation as an effective method of service delivery to children in school settings (Kratochwill, Elliott, & Busse, 1995; Reschly, Tilly, & Grimes, 1998; Sheridan, Welch, & Orme, 1996; West & Idol, 1987; Zins, Kratochwill, & Elliott, 1993). The MDT problem solving model (Reschly, Tilly, & Grimes, 1998) is based on the behavioral and process consultation models (Bergan, 1977; Schein, 1980). A strength of the problem solving model is the utilization of a systematic data base for identifying problems and evaluating outcomes (Bergan & Kratochwill, 1990).

According to Reschly and Ysseldyke (1995), a systematic problem solving approach can provide the overall structure for an alternative delivery system and is viewed as an essential component to implementing advances in assessment and interventions. Reschly, Tilly, and Grimes (1998) reported that problem solving systems improve on historical special education systems by assessing problems directly, providing assistance to students before special education qualification is determined, and by providing a continuum of possible resources that can be matched to problem severity.

Problem Solving Models

Numerous and varied problem solving approaches or models appear in the literature (Bergan, 1977; Bergan & Kratochwill, 1990; Kratochwill, Elliott, & Carrington Rotto, 1995). These models share four common stages or questions in the problem solving process: (a) problem definition and identification, (b) problem analysis, (c) intervention design, (d) progress monitoring (with data-based intervention revisions as

needed) and outcomes evaluation (Flugum & Reschly, 1992; Reschly, Tilly, & Grimes, 1998; Reschly & Ysseldyke, 1995). Reschly, Tilly, and Grimes (1998) emphasized "problem solving is not a collection of practices; it is a systematic way of thinking about how to help the individual succeed in performance problems" (p. 223).

Although MDTs are no longer optional as a means of deciding services to disabled children, the methods by which school personnel implement MDTs are matters for local determination (Reschly, Tilly, & Grimes, 1998). It is relatively easy to develop an MDT problem solving model and a variety of systematic problem solving models are currently used in Iowa. It is more difficult to implement the model given the previous discussion of MDT processes.

<div align="center">Problem Solving Models: Two Iowa Area Education Agencies</div>

Iowa's Area Education Agencies (AEAs) were created in 1974 by the legislature to ensure equal educational opportunities for all children. Fifteen AEA support service sites currently operate in Iowa. Each agency serves a specific region of the state and employs professionals who provide a wide variety of support services to schools, families, and children. AEAs have assumed a leadership role in defining the philosophies and practices that drive efforts to solve problems experienced by children, families, educators, and schools. Problem solving and solution focused models are two of the problem solving approaches implemented throughout the state. Two specific AEA models are Heartland AEA's Problem Solving Approach Model and Grant Wood AEA's Solution Focused Model.

<u>Heartland's Problem Solving Approach</u>

Heartland Area Education Agency 11, located in central Iowa, is the largest of the state's 15 area education agencies. Heartland's support staff serves one-fifth (119,000) of Iowa's total students (Heartland Area Education Agency, 1999). The agency has developed and implemented a four-stage problem solving alternative service delivery system (Heartland Area Education Agency, 1994). Each level increases the intensity and resources necessary to develop plans to address the identified concern and resolve the problem. The problem solving process includes the following components: clearly defined problems, direct measures of behavior, baseline data, problem analysis, interventions designed and implemented, progress monitoring, and data based decision making (Reschly & Ysseldyke, 1995).

The model illustrated (Appendix A) represents Heartland's approach. At Levels I and II, participants engage in informal problem solving processes. Levels III and IV require more intensive and systematic data collection using a behavioral approach.

<u>Informal Problem Solving</u>

Level I problem solving involves consultation between the parent and teacher (e.g., communication with parent through notes, phone calls, or conferencing) to address concerns. This is a first step procedure and resolves a significant number of student related concerns. Level II includes the parent and teacher from Level I along with a team of teachers trained in problem solving. This team is referred to as the Building Assistance Team (BAT) and usually consists of three to six team members, who may be fellow teachers, a special education teacher, school counselors, the principal, or other

support staff (Heartland AEA, 1996). At this level the problem is functionally defined, and an intervention is developed and implemented. Progress monitoring is used to determine intervention success. Interventions at Level II vary based on the collective experience of the BAT members. Both Level I and II problem solving occurs primarily within the general education setting, where support service personal participate only as needed.

Systematic Problem Solving

In the model illustrated, as the intensity of the problem increases so does the amount of resources needed to solve the problem. Problem solving at Level III involves Heartland support staff members and is a data driven intervention effort that involves a description of the problem, systematic data collection, problem analysis, an intervention goal, intervention plan development and implementation, progress monitoring, and decision making. Interventions that meet these criteria standards must be implemented and monitored for a reasonable period of time (Gresham, 1991). Level IV problem solving for entitlement may be initiated under two conditions. First, lack of change in target behaviors as a function of the intervention criterion. Second, too many regular education resources to be feasible long-term.

Additional resources at Level IV may be required to address the problem. At this level it may be determined that an Individual Education Plan is needed to begin special education services based on academic peer norm data discrepancies, behavioral peer norm data discrepancies, and insufficient improvement through interventions implemented in the regular education setting.

The problem solving process, as illustrated in the largest circle (Appendix A), describes the steps used to define the problems and generate and evaluate solutions from information gathered from numerous sources. The Heartland problem solving model focuses less on the attributes of the child and more on variables in the classroom and school that can be altered to better support the child.

Grant Wood's Solution Focused Process

Grant Wood Area Education Agency 10, located in eastern Iowa, has implemented a problem solving model focusing on solutions. The Solutions Focused Process (SFP) is a problem solving process that focuses on solutions within the general education environment that can be generated and implemented by those most closely involved with the student. It recognizes the possibility of multiple solutions. This process is believed to improve a student's school success (Grant Wood Area Education Agency, 1999). An extended solutions focused diagram (Appendix B) illustrates the Grant Wood solutions focused process. Levels one and two represent more informal problem solving strategies, while levels two and three are more comprehensive and data intensive evaluations.

In the first level, the emphasis is on customary adjustments implemented by the teacher/parent/caregiver in collaboration with other support individuals. The team oriented activities at the next level result in a student team evaluation plan. The first two levels of activities represent general education interventions that can be repeated as often as necessary. If the concerns persist, a full and individual evaluation is initiated to determine the educational interventions required to resolve a student's problem or

behavior of concern, including whether the necessary educational interventions are special education (Grant Wood AEA, 1999).

In spite of the fact AEA models have different names, the problem solving processes vary only slightly. Iowa's AEA problem solving models are designed to assist MDT members in making appropriate intervention decisions. Although the systematic concept has garnered great interest, the problem solving process is not always utilized.

Efficacy of Iowa's Problem Solving Models

According to Tilly, Flugum, and Reschly (cited in Reschly, Tilly, & Grimes, 1998), over 2100 educators, support staff, and administrators were asked to rate their agreement with the statement, "[Renewed Service Delivery Service] RSDS will produce better outcomes for students in comparison with the 'Old System '" (p.11). Responses indicated overwhelming optimism toward RSDS.

Despite the positive response, barriers to problem solving implementation occurred in Iowa. Flugum and Reschly (1992) studied the implementation of prereferral interventions, a proactive form of problem solving consultation in which school psychologists helped teachers address problems they had with students who were at-risk of special education placement. Prereferral interventions were being endorsed as a means of preventing the growth of special education enrollment. Only 40% of surveyed school psychologists developed an intervention plan. Only 13% of teachers and school psychologists who actually developed an intervention plan utilized baseline data in evaluating their interventions. Finally, less than 3% of the respondents employed all of the necessary steps for a standard behavioral intervention (Flugum & Reschly, 1992).

In a study of Iowa educators' perceptions of RSDS, over 70% of those surveyed stated that RSDS would involve the use of data-driven models of intervention for students with special needs (Tilly, Reschly, Flugum, Atkinson, & Sullivan, 1992). However, more than a quarter of the respondents failed to answer the question pertaining to this issue, indicating diminishing use of data-driven problem solving models (Flugum & Reschly, 1992). Perhaps the individuals most involved in implementation had the least favorable attitudes because of lack of problem solving skills.

Bone (1992) conducted a survey on fourth grade teachers' perceptions of the premises of RSDS in Iowa. RSDS relies on problem solving interventions and teacher consultation in the delivery of services. While attitudes were generally favorable, the survey elicited many comments pertaining to a perceived lack of support from school psychologists and state officials when it came to assistance in providing an education to mainstreamed students.

A replication of Bone's (1992) research was conducted by Petersberg (1993) two years later. Similar concerns were voiced by respondents regarding a lack of support from AEA officials. The author offered limited statements noting only those who were most involved with the implementation of problem solving and mainstreaming for at-risk students had the least favorable attitudes toward the entire process.

Iowa School Psychologists' Changing Role

In Iowa, school psychologists increasingly are being called upon to guide the MDT problem solving efforts that foster the academic, social, and emotional needs of

children. Therefore, it is important to understand what they contribute to building problem solving partnerships.

The role of the school psychologist in Iowa has shifted from diagnosis and classification procedures to intervention design, implementation, and evaluation, all structured to base educational decisions on student outcomes (Reschly, Tilly, & Grimes, 1998). This shift is a response to Iowa's RSDS designed to emphasize outcome-based education (Reschly, Tilly, & Grimes, 1998).

School psychologists roles are shifting from the commonly implemented refer-test-place model to the problem solving service delivery model. The Iowa State rule Section 41.47(3) "requires the use of systematic problem solving that includes a description of the problem in objective, measurable terms based on systematic data collection" (Reschly, Tilly, & Grimes, 1998, p. 210). Therefore, the role of the school psychologist in RSDS has focused on problem solving. School psychologists were to implement the problem solving model either directly or indirectly. Iowa school psychologists participate in activities aimed at solving problems within the collaborative framework of students and their families, area education agencies (AEAs), schools, and community service providers.

The results of a study conducted by Roberts and Rust (1994) revealed that school psychologists in Iowa spent more time in the areas of intervention and consultation (26.65% and 29%) than the national average time school psychologists reported spending (22.36% and 20.86%) on these activities. According to Grimes (cited in Roberts & Rust, 1994), "It seems from these results that the RSDS model has actually impacted the role of

practicing psychologists from Iowa in the areas of assessment, intervention, and consultation" (p. 117).

As school psychologists' traditional role within the refer-test-place model diminishes (Tally & Short, 1996) and expands into areas of service integration, prereferral interventions, program planning, and evaluation are becoming a part of their daily activities (Conoley & Gutkin, 1896; Illback & Kalafat, 1997; Maher & Illback, 1984). In this role expansion, school psychologists link what is known about family, school, and community processes to programmatic intervention through evaluation.

In their newly expanded role, school psychologists provide and coordinate services with other professionals who deliver health and social services (Carlson, Paavola, Talley, 1995; Dwyer, 1996; Reeder, Maccow, Shaw, Swerdlik, Horton, & Foster, 1997) to promote family, school, and community involvement. Especially beneficial is an understanding of interventions that involve home-school collaboration and facilitate community level alliances (Baker, Bridger, Terry, & Winsor, 1997; Christenson, 1995; Christenson, Rounds, Gorney, 1992; Conoley, 1987; Epstein, 1995; Zins, 1997).

School psychologists who choose to ignore the change in their role as testers may face a declining need for the services they offer. This role change may require school psychologists to obtain additional training to expand their skills. School psychologists need to make fuller use of the knowledge and skills they have and expand their skills in order to remain valuable members of schools (Reschly, 1988a).

School psychologists trained in group process management (Abelson & Woodman, 1983; Pfieffer, 1980) can serve as team leaders in MDT decision making. Implementing systemic problem solving procedures can guide the team interaction as it relates to quality outcomes. The emerging role of school psychologists is that of a leader facilitating the effective academic, social, and emotional development of children.

CHAPTER III

CONCLUSIONS AND IMPLICATIONS

Conclusion

Based on a review of the literature, several implications for multidisciplinary

teams are apparent. Based on interviews with numerous educators across the state of

Iowa, collaborative problem solving is not occurring to the extent desired. The literature

reveals much variability and little consensus in several areas: clarity of role expectations

(Fenton, Yoshida, Maxwell, & Kaufman, 1977), family involvement (Christenson &

Cleary, 1990; Davis, 1988; Mowder, Smith-Harvey, Moy & Pedro, 1995; Pfeiffer &

Tittler, 1983), interdisciplinary collaboration (Gutkin & Curtis, 1999), continuing

educational training (Fleming & Fleming, 1983; Gutkin & Curtis, 1999), and overall

functioning and structure of multidisciplinary teams (Flugum & Reschly, 1994; Gutkin &

Curtis, 1999; Pffeiffer, 1982; Rosenfield & Gravois, 1999; Yoshida, Fenton, Maxwell, &

Kaufman, 1978; Ysseldyke, 1987).

Studies attempting to describe the MDT problem solving process have found

variation in team structure and the decision making process (Gutkin & Curtis, 1999;

Poland, Thurlow, Ysseldyke, & Mirkin, 1982; Rosenfield & Gravois, 1999) and a link

between level of participation and satisfaction (Yoshida, Fenton, Maxwell, & Kaufman,

1978). Fleming and Fleming (1983) concluded that skill and knowledge deficits in the

preliminary, basic areas of obtaining, organizing, and presenting information often doom

the decision making process to failure before the actual group problem solving occurs.

Second, family participation in MDT decision making has typically allowed

families a passive, and not an active role in team problem solving (Christenson & Cleary, 1990; Yoshida, Fenton, Maxwell, & Kaufman, 1978; Ysseldyke, 1983). Harry (1992) reported that families essentially have served only as consent givers, with the decision making power resting primarily with the other MDT professionals. She argued families must be offered and must assume new roles if they are to have greater power in the educational partnership. The first step, is to truly engage families in the decision making process. Involvement is the first step in building congruence in how a problem is perceived and in strengthening a collaborative commitment to efforts to resolve it (Christenson & Cleary, 1990; Kraus, 1980). When families and educators work together in MDT arrangements, they may benefit from understanding the responsibilities, assets, and contributions of other team members.

Third, it appears that not only do all members regardless of role reported less satisfaction with MDT problem solving (Harrington, 1985), but teachers most responsible for implementation of team decisions participated the least. It is apparent that effective problem solving requires the participation of all MDT members. Strong team members need to be more aware of the powerful influence they have on other members, especially regular education teachers, in order to decrease its deleterious effect on collaborative team decision making. The fundamental success of the MDT decision making includes contributions from all members. Jones, White, Benson, and Aeby (1995) concluded the contributions of all team members coupled with training in team efforts is essential in facilitating effective decision making.

Fourth, it is vital that MDT members enhance their skills in group process (Tuckman & Jensen, 1977) and team effectiveness training (Woodman & Sherwood, 1980). While continuing skill development in assessment and implementation is necessary, training in team process is equally important (Fleming & Fleming, 1983).

Educational staff development encompasses a variety of purposes and activities. In its general function it is a change agent. However, many educational training programs do not appropriately utilize professional development time. More extensive educational development efforts need to be scheduled. Educational skills training should meet several goals: foster creative problem solving, increase the depth of content knowledge, educate about the problem solving process, assist members in synthesizing conflicting data reports, encourage creative decision making, and assist MDT members in redefining and expanding their roles.

Lastly, given the entire state of Iowa is interested in the problem solving approach, research needs to be conducted to document the effectiveness of the various problem solving models. MDT activity so far has been too narrowly conceived. School psychologists who broaden their scope from the refer-test-place role can lead the way in effective MDT problem solving. Arguably, training that fosters MDT members' creative problem solving skills rather than training that imposes "prescribed" problem solving will enhance decision making efforts, ensuring that the intent of the legislation mandating MDT decision making is carried out and the academic, emotional, and social needs of children are served.

Implications for Research

The primary intent of this literature review was to examine MDTs and the problem solving model of service delivery. In addition, attention was devoted to understanding the changing role of school psychologists, specifically in supporting MDT problem solving.

Research correlating systemic observations of participation with reported levels of participation would be valuable for training implications. Systemic observations of team activities would further identify those activities that would benefit from improvement in order to design effective MDT training programs. Research based on systemic observations would assist in designing flexible programs that would increase the participation of team members and the quality of the problem solving efforts. This research would help provide better training in team and problem solving processes to ensure the promotion of academic, emotional, and social development in children.

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APPENDIX A

Heartland Area Education Agency Problem Solving Model
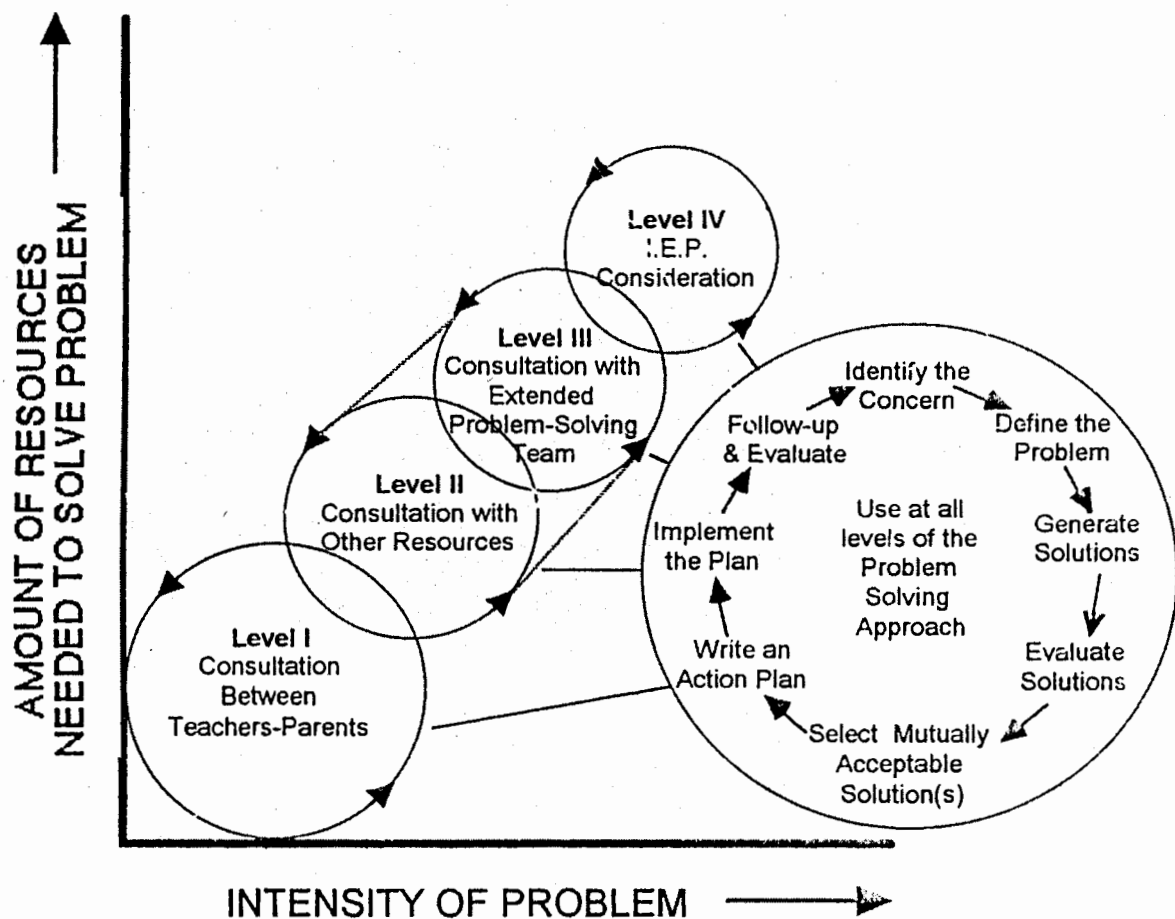
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APPENDIX B

Grant Wood Area Education Agency Solutions Focus Process
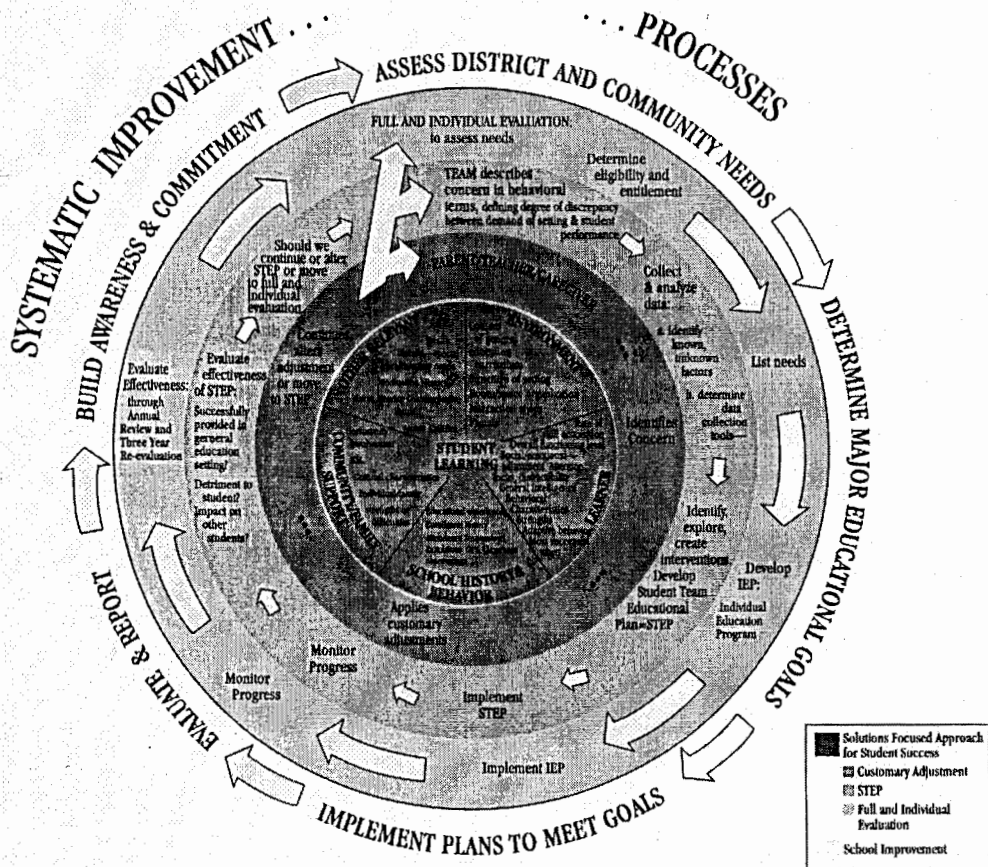
Source: Grant Wood Area Edcation Agency 10. (1999). Solutions focus process (p.4). Cedar Rapids, IA: Author.