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An exploration of interdisciplinary collaboration when serving students with moderate and severe disabilities at the middle and high school levels: A current snapshot of perceived barriers and opportunities

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An Exploration of Interdisciplinary Collaboration When Serving Students with Moderate
and Severe Disabilities at the Middle and High School Levels: A Current Snapshot of
Perceived Barriers and Opportunities

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Dissertation submitted to the
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ABSTRACT

An Exploration of Interdisciplinary Collaboration When Serving Students with Moderate
and Severe Disabilities at the Middle and High School Levels: A Current Snapshot of
Perceived Barriers and Opportunities

Sara A. Brannan

This study investigated current perceptions of the barriers and the opportunities for
interdisciplinary collaboration among Special Educators and Related Health Service
Personnel at the middle and high school levels when serving students with moderate and
severe disabilities. In order to serve individuals with moderate and severe disabilities in
accordance with federal legislation and current best practice, it is important that
education and related health services professionals work together collaboratively.

The design of this study combined a simple quantitative survey measure with
exploratory, qualitative inquiry using a series of open-ended focus group interviews.
Sampling for this research study was purposeful homogeneous sampling where the
researcher intentionally selected individuals for investigating and understanding the
central phenomenon. In this study, the participants were drawn from middle and
secondary teachers and related service personnel employed by the Springfield City
School District, Springfield, Ohio.

Data was collected in three phases. Phase one consisted of a questionnaire distributed
district-wide to special educators and related health services personnel. Phase two
consisted of focus groups, one with special educators and one with related health services
personnel. Phase three data collection consisted of a final focus group combing both
special educators and related health service personnel.

Findings were that special educators and related service personnel participating in this
study agreed, in general, on the definition of interdisciplinary collaboration. Participants
in this study mutually agreed on the definition of collaboration, they perceived a lack of
support and understanding of collaboration on the part of administrators which they
identified as a barrier. A third area of general agreement involved the constraints of time.
Participants reported that finding the time to develop collaborations was a serious
problem. A unique opportunity for improved collaboration when serving students with
moderate and severe disabilities at the middle and high school levels was identified.
Both special educators and related health services personnel identified transition to be an
opportunity. Despite the existence of several barriers to the development and
implementation of effective collaborations, the value of collaboration was recognized by
participants.

Dedication

This dissertation is dedicated in memory of my parents:

Ruth P. Brannan

&

Thomas L. Brannan, Jr.

who laid my foundation for understanding community and collaboration.

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Chapter I

Statement of the Problem

Introduction

In order to serve individuals with moderate and severe disabilities in

accordance with federal legislation and current best practices, it is important that

education and related health services professionals work together collaboratively. If

these collaborative efforts are to bear fruit, it is imperative that those involved have a

mutual understanding of their respective roles and responsibilities as well as the

beliefs and expectations of the other collaborating team members. If genuine and

effective collaborations are not achieved, then the desired outcomes for these students

may not be accomplished. In addition, the working relationships among the

professionals themselves can be significantly impaired.

Students who have moderate and severe disabilities are entitled to the

provision of education and related services through the Individuals with Disabilities

Education Act (IDEA). The Association for Persons with Severe Handicaps (TASH),

the American Occupational Therapy Association (AOTA), the American Physical

Therapy Association (APTA), and the American Speech-Language-Hearing

Association (ASHA) all have issued statements addressing the role of the related

health professional as one that is to work jointly with educators and students' families

for the provision of services that support individuals with severe and multiple

disabilities to participate in home, school and community settings (Rainforth, York, &

Macdonald, 1992). Current best practice encourages and emphasizes the integration

of education and therapy and also recommends the provision of such services in the

most naturally occurring setting (least restrictive environment) for the best acquisition and generalization of skills. This ecological model of education (Brown et al., 1979) has been well defined and supported (Orelove & Sobsey, 1991; Rainforth, York, Macdonald, 1992; Snell, 1993).

The value of achieving strong interdisciplinary collaborative relationships became increasingly evident to me both during my tenure as a preschool special needs teacher at an Easter Seal Rehabilitation Center and as a teacher of high-school-aged students with severe and multiple disabilities in a public school system.   At times, I observed and or participated in true collaborative relationships among teachers and therapists that resulted in positive outcomes for students and creative solutions for mutual problems. For my colleagues and for me, such productive interactions reinforced and informed our future collaborative efforts, resulting in fewer perceived barriers and a heightened awareness of the potential opportunities for improving services for each student and family, as well as enhancing our professional growth and development. In this manner, a "win, win" situation was attained for all involved. At other times, however, failure at one link in the collaborative chain led to less than optimal results for a student, and negatively influenced our behaviors, performances and expectations. This often created additional barriers and missed opportunities for all involved.

The topic of collaboration continues to be of high interest to me. This is true because I am still involved in collaborative endeavors myself, since, as a college instructor, I must teach students how to be effective collaborators for their future roles as general and special educators. The topic of collaboration has become a personal

academic research interest. Consequently, I have already conducted research on the topic of collaboration in two preliminary qualitative studies.

In the first of these studies, I explored how the term "collaboration" was defined and how collaboration was taught within the academic programs of the following professional disciplines: speech/language pathology, nursing, physical therapy, occupational therapy, social work, educational administration, elementary and secondary education, and special education. This was accomplished by conducting personal structured interviews with the departmental chairperson in each discipline. In the second study, I examined the manner in which the values and skills of collaboration were incorporated and demonstrated in a high school special education program. This program included special education teachers (Specific Learning Disabilities, Behavior Disorders/Severe Emotional Disturbance, Mental Retardation, Severe and Multiple Disabilities), the transition coordinator, job training coaches, an occupational therapist, certified occupational therapy assistants, a physical therapist, a speech and language pathologist, a specialist in vision impairments, a school nurse, and general education teachers. Results and conclusions from these two studies proved to be informative and raised some additional concerns. These are briefly summarized below.

My first general conclusion was that no formal definition of the term collaboration could be identified by any of the participants, regardless of discipline. Nevertheless, all were able to define the term informally within the context of their own field and its practice. I feel the lack of formal definitions, or even a common informal definition, may contribute to different and, often changing expectations of

the practices and outcomes associated with collaboration among the disciplines examined. Many other researchers have found this to be true and confirm that these differing definitions often lead to confusion when serving students with disabilities (Briggs, 1997; Fleming & Monda-Amaya, 2001; Friend & Cook, 2003; Johnson & Johnson, 1991; Thomas, Correa, & Morsink, 1995; Walther-Thomas, Korinek, & McLaughlin, 1999). This confusion of defining collaboration and using various other words to impart the meaning of collaboration has also occurred in the field of business (Fleming & Monda-Amaya, 2001).

My second general conclusion was that broad agreement existed among all professionals and other personnel, regardless of discipline, that collaboration among practitioners of the various disciplines was highly desirable. Nevertheless, every person I interviewed expressed concern that some individuals within their own field did not, or would not, readily collaborate with others. The recognition of the importance of teaming in serving individuals with disabilities was recognized as early as 1962 in an article by Beck that addressed the advantages of a multi-purpose clinic for individuals who had mental retardation (Beck, 1962). This notion has continued to be developed and supported in the professional literature (Allen, Holm, & Schiefelbusch, 1978; Golin & Ducanis, 1981; Ogletree, Bull, Drew, & Lunnen, 2001).

My third major conclusion was that there is a general recognition that collaboration between professionals is especially desirable during the periods of assessment, planning, and program delivery. However, only some professionals from certain disciplines envision parents and families as possible collaborators. This

omission was further highlighted by the fact that the most often cited key components

of collaboration were skills associated with professional interactions and consultation,

as opposed to those needed for family involvement and partnership. In contradiction

to this finding, IDEA requires the active participation of parents/guardians and their

involvement has been, and continues to be, a hallmark of best practice.

Finally, it soon became apparent in my studies that the means by which

collaborative skills were acquired differed greatly between medical and educational

personnel. The nursing, occupational therapy, and physical therapy professionals

received formal training in the conduct of a multidisciplinary team approach. On the

other hand, educators and administrators received little or no formal training, but

indicated that working within a collaborative atmosphere was informally implied and

recognized as best practice. In articles by Lewis et al. (1998) and Stayton, Whittaker,

Jones, & Kersting (2001), the authors identify the need for training in

interdisciplinary practice and collaboration across the disciplines of education and

medicine. They also note the differing approaches to the development of

collaborative skills and multidisciplinary teaming. Others have found that when

individuals are taught interdisciplinary collaboration in preservice programs, they are

more likely to apply the practice to their own careers (Winton & Merlin, 1997).

From the results of these studies, I derived several considerations for

improvements in the areas of education and training of professionals and

paraprofessionals. The specific ideas were as follows: 1) individuals with special

needs are best served by collaborative efforts among their team members and service

agencies; therefore, a common understanding of collaboration is both relevant and

imperative to best practice, 2) professionals should be able to identify and compare how collaboration is defined and practiced across various disciplines that typically serve individuals and families with special needs; and, 3) professionals should also gain an understanding of how educational and medical models differ in their view and practice of collaboration. The findings of these studies have guided me in formulating the problem statement below.

Problem Statement

Federal legislation through the Individuals with Disabilities Education Act (IDEA) mandates a free appropriate public education that takes place in the least restrictive environment. For students with special needs, this includes both educational and therapeutic services. Thus, special educators and related health service providers must collaborate in order to provide services to these students. This is especially important for those students who have moderate and severe disabilities. Because of the multiplicity and the complexity of their needs, such students typically are served by more personnel and they often require integration of education and therapy to promote development and learning. In the absence of effective collaboration among service providers, there is the potential for needless redundancy in individual programming and the more serious problem that an essential component of service for an individual may be omitted. The former may result in the inefficient use of personnel time and district resources, and the latter may lead directly to limiting the progress of the individual student. Furthermore, another consequence of ineffective team collaboration can be observed in the personal interactions among the collaborators. Animosities and "turfism" may develop and the resulting poor work

environment may negatively impact not only student outcomes but also job

satisfaction for the professionals themselves. Nevertheless, I found no studies that

investigated the collaboration among interdisciplinary professionals serving students

with moderate and severe disabilities at the middle and high school grade levels. The

few studies that do exist address this issue only with young children in early

intervention and elementary school programs.

Purpose of the Study

The purpose of this study was to explore the perception of specific barriers

and opportunities for collaboration as identified by special education teachers and

related health service providers when serving students with moderate and severe

disabilities at the middle and high school level. The study was conducted using

participants drawn from the staff of the Springfield City School District in

Springfield, Ohio. This study consisted of three parts in sequence. Initially, I sent a

Likert scale questionnaire to all special education teachers and related health service

personnel in order to elicit their understanding of collaboration as individuals. This

information was used to inform and develop questions for several focus groups. I then

conducted two focus groups, consisting of the following: a) special education teachers

serving students with moderate and severe disabilities at the middle and high school

levels, interviewed alone and b) related health service providers serving students with

moderate and severe disabilities at the middle and high school levels, interviewed

alone. Lastly, I brought together participants from both of these groups to comprise

the final focus group. These focus groups were utilized to further explore the

perceived barriers and opportunities for collaboration when serving students with
moderate and severe disabilities at the middle and high school levels.

Guiding Research Questions

      The specific questions addressed in this study were the following:

1. Are there barriers and opportunities for collaboration that are unique to the middle
    and high school settings?

2. What are the currently perceived barriers to collaboration between special
    education teachers and related health service personnel when serving students
    with moderate and severe disabilities at the middle and high school levels?

3. What are the currently perceived opportunities for collaboration between special
    education teachers and related health service personnel when serving students
    with moderate and severe disabilities at the middle and high school levels?

4. Can areas of agreement be identified related to the process of collaboration
    between special education teachers and related health service personnel when
    serving students with moderate and severe disabilities at the middle and high
    school levels?

5. Can areas of disagreement be identified related to the process of collaboration
    between special education teachers and related health service personnel when

serving students with moderate and severe disabilities at the middle and high

school levels?

6. What specific suggestions can be made to promote more effective collaboration

when serving students with moderate and severe disabilities at the middle and

high school levels?

Definition of Terms

Collaboration   "a style for direct interaction between at least

two coequal parties voluntarily engaged in

shared decision making as they work toward a

common goal" (Friend & Cook 2003, p.5).

Focus group   a qualitative research method of data

collection   that utilizes group interview and

discussion of a focal topic.

High school   grades 9, 10, 11, and 12 as outlined by the

Ohio Department of Education (ODE).

Middle school   grades 6, 7, and 8 as outlined by ODE.

Moderate disabilities   students whose IQ level is between 55-35, this

category is covered under the term "cognitive

disabilities" (mental retardation) as defined by

ODE as: means significantly subaverage

general intellectual functioning, existing

concurrently with deficits in adaptive behavior

and manifested during the developmental

period, that adversely affects a child's

educational performance.

Related health service personnel   ODE defines "related services" as

transportation and such developmental,

corrective, and other supportive services as are

identified on the child's IEP and required to

assist a child with a disability to benefit from

special education. Related services may

include, but are not limited to the following:

attendant services, audiology, counseling

service, guide services, interpreter services,

medical services, occupational therapy,

occupational therapy assistant services,

orientation and mobility services, parent

counseling and training, physical therapy,

reader services, recreation, rehabilitation

counseling, school health services, school

nursing services, social work services, speech-

language pathology services. For the purposes

of this study, the following service providers:

physical and occupational therapists, speech

and language pathologist, and school nurses.

Severe and multiple disabilities   means concomitant impairments (such as

mental retardation-blindness, mental

retardation-orthopedic impairment, etc.), the

combination of which causes such severe

education needs that they cannot be

accommodated in special education programs

solely for one of the impairments. The term

does not include deaf-blindness. (ODE).

Special educators   teachers employed to provide educational

services to students identified as having

moderate and severe and multiple disabilities.

Significance of the Study

My expectations were that the results of this study would contribute

significantly to both the current body of literature and professional practice when

serving individuals with disabilities in the following ways:

1) This study would identify practices that facilitate collaborative efforts that foster

and promote services for students with moderate and severe disabilities in middle

and high school settings.

2) This study would generate and provide suggestions for training strategies to be incorporated in personnel preparation programs for special educators, as well as for related health service personnel.

3) This study would give rise to recommendations for policy and practice in state and local education agencies to support professionals in collaboration through staff development activities and administrative support and oversight.

4) This study would contribute to the limited literature available on the topic of collaboration, especially as it relates to the middle and high school levels for students with severe and multiple disabilities.

5) This study would increase the awareness of the study participants with respect to their own interdisciplinary collaborative practice.

Limitations of this study

Given the design of the study and subject population, I recognized that the limitations listed below must be considered in interpreting the results and formulating conclusions.

Generalization of findings and conclusions.

The aim of qualitative research is not the generalization of results to a larger population, but rather the acquisition of an in-depth understanding derived from evidence found in separate cases over time (McMillan & Schumaker, 1993).

However, some generalization is possible through the process of extracting common themes from the qualitative data analyses across multiple studies (Miles & Huberman, 1994, Creswell, 2002). Since this study has not yet been replicated, the findings are bound to the context in which they were collected and interpreted. Nevertheless, this study may prove useful to other interested investigators and practitioners and enable them to extend their own investigations and improve their practice.

Potential imbalanced participation.

In designing this study, I attempted to establish some degree of balance within the participants. The first manner in which I approached this was to mail a questionnaire to all special educators and therapists working with students identified as meeting the requirements for special education services in the Springfield (Ohio) City School District. As expected, the response rate was less than one-hundred percent. Sixty-five percent of the surveys were returned. These completed questionnaires were analyzed and the results were used to develop topics for examination by the more narrowly constructed focus groups. Only those special educators and related health services personnel working with students identified as having moderate and severe disabilities at the middle and high school levels were invited to participate in the focus groups. Thus, no personnel at the elementary level were included.

The outcomes of any focus group depends on individual variation in the ability and/or willingness of group members to express themselves. It was my responsibility as the principal investigator to recognize limited participation and to

provide a conducive environment and personal encouragement for equal participation. As the group moderator, I attempted to foster participation in the following ways:

a) As the moderator I was mentally alert and present throughout the discussion.

b) I created a warm and friendly environment for the participants by making small talk prior to the session while purposely avoiding the key issues to be discussed later.

c) The focus group room was easy to locate, relatively free from distractions and had chairs such that the participants faced each other.

d) As moderator, I was concerned with the direction of the discussion, promoting the flow of the discussion, and taking only minimal notes in order to identify future questions that needed to be asked. I employed two essential techniques including the "Five Second Pause" and "the Probe." The Pause often prompted addition points of view or agreement especially when accompanied with eye contact from the moderator. The Probe consisted of a request for additional information (e.g., "Could you give me an example of what you mean?"; "Please describe what you mean.")

e) The focus group interview was recorded on audio tape and video tape and written notes were taken by an assistant moderator, allowing me to remain engaged and connected to the group conversation.

f) As moderator, I promoted the creation of a thoughtful, permissive climate for the unhindered sharing of information among participants. This was accomplished, in part, by my setting the tone for the discussion. I established

and maintained positive rapport with all participants, permitted time for

response and reflection, and monitored body language among participants.

Chapter II

Review of the Literature

In this review of the literature, I will examine the history of collaboration

among special education teachers and related services personnel in the provision of

special education programming for students under the Individuals with Disabilities

Education Act (IDEA). The concept and process of collaboration, as it relates to the

processes of consultation, teaming, co-teaching and service delivery will be addressed

and defined for the purpose of this study. Finally, the literature review will identify

the beneficiaries of collaboration and summarize current practices and strategies for

personnel preparation and professional development related to the process of

collaboration.

History of Collaboration in Special Education

The concept of collaborative teaming when serving individuals with

disabilities and special learning needs is not a new phenomenon. In an early article by

Whitehouse (1951), the notion of *teaming* was presented with claims that it improved

services and allowed them to be provided in a more professional manner for children

with special needs. The first formal legal mandate for teaming and collaboration arose

in 1975 with the passage of Public Law 94-142, the Education of All Handicapped

Children Act. This law served as an impetus for professionals of differing disciplines

to work together collaboratively. This statement of collaboration is tied to the law's

multi-factored evaluation process. The law specifically stated in section 121a532(e)

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." This initial legislation moved the primary decision-making role from the school psychologist to a multi-disciplinary team that included the school psychologist, but also involved teachers, school administrators, physicians, nurses, social workers, counselors and parents (Kaiser & Woodman, 1985).

In 1986, Public Law 99-457, the Education of the Handicapped Act Amendments, strengthened the call for collaboration among service providers, especially for those involved with young children (birth through age 2) with developmental disabilities or delays and those young children considered at risk for later problems. Part H of the legislation required the development of statewide, coordinated, comprehensive, multidisciplinary, interagency programming (Siders, Riall, Bennett, & Judd, 1987). This legislation helped move the concept of collaboration beyond the local school district and its employees or contracted providers to the broader scope of interagency coordination in the provision of services to children with special needs.

In 1990, Public Law 94-142 was amended by Public Law 101-476 and renamed as the Individuals with Disabilities Education Act (IDEA). This revision placed more emphasis on collaborative teaming and stipulated that increased collaboration among special educators, classroom teachers, and related services personnel must occur. It also addressed the need for interagency collaboration. Rothestein (1995) summarizes this provision:

> Many of the related services required by the IDEA are services that were provided by other agencies before passage of IDEA. Services such as residential placements for children who are severe emotionally disturbed or certain kinds of therapy may have been forthcoming from state agencies such

as departments of health and human services and departments of welfare. Other health-related services were provided or at least paid for by family health insurance agencies. The IDEA makes the state education agency the primary supervisor for the provision of related services that are required for the child to benefit from special education. State educational agencies must have the general supervisory role for coordinating service delivery by other agencies, but the IDEA provides no real means to mandate that other agencies provide certain services. (p. 154).

Coben, Thomas, Sattler, and Morsink (1997) noted that each successive version or revision of the law called for the involvement of numerous individuals from various professional disciplines, as well as the students and their families, for the purpose of identification, program design, and delivery of services for children with disabilities. These legal mandates necessitated the development and implementation of collaborative efforts, including interdisciplinary teams serving students with educational as well as health and medical needs.

Fishbaugh (1997) provides a final note on the legal precedents for collaboration in special education and disability services across the life span. In her book, *Models of Collaboration,* she cites Section 504 of the Rehabilitation Act of 1973 as civil legislation that can be applied to support students who may not meet the criteria for services under IDEA, but may need reasonable accommodations if they have a physical and/or mental disability that interferes with a major life activity. Students in this category may include those with chronic illness, diabetes, AIDS or even pregnancy, all of which may necessitate collaborative efforts to implement the appropriate accommodations to suit the individual's educational needs.

Collaboration Conceptualized and Defined

Any exploration of collaboration would not be complete without presenting how collaboration has been applied and defined by professionals in the areas of

special education and disability services. Friend and Cook (2003) suggest that there

has been much discussion of and writing about collaboration, but that few clear

formal definitions have been set forth. In their book, *Interactions: Collaboration*

Skills for School Professionals, the authors further state that "the term collaboration

often is carelessly used and occasionally misapplied" (2003, p. 4). They note that

some authors have described the benefits of collaboration without defining it, and

others have treated collaboration as a synonym for other concepts, such as teaming or

consultation. Overall, they believe that most authors tend to define collaboration as a

process of working together for mutual benefit.

Numerous and varied definitions have been presented and utilized in books,

journal articles and research studies. I offer a few examples of the varying definitions

below to provide insight into the conceptualization of collaboration. These

definitions have aided me in defining the term for the purpose of the proposed study.

Collaborative consultation- an interactive process that enables people with
diverse expertise to generate creative solutions to mutually defined problems. The
outcome is enhanced, altered, and produces solutions that are different from those that
the individual team members would produce independently. The major outcome of
collaborative consultation is to provide comprehensive and effective programs for
students with special needs within the most appropriate context, thereby enabling
them to achieve maximum constructive interaction with their non-handicapped peers
(Idol, Paolucci-Whitcomb & Nevin, 1994, p.1).

Collaboration means working together for a common end. As educators and
human service professionals collaborate, they should do so with a knowledge of
different models for collaborating, and recognition of the different purposes for their
collaborative practice (Fishbaugh, 1997, p.4).

Collaboration is a style of professional interaction between and among
professionals, parents and families, and, where appropriate, students themselves to
share information, to engage in collaborative decision making, and to develop
effective interventions for a commonly agreed upon goal that is in the best interests of
the student (Mostert, 1998, p.16).

Collaboration is a style for direct interaction between at least two coequal parties voluntarily engaged in shared decision making as they work toward a common goal (Friend & Cook, 2003, p. 5).

It is the last of these definitions that I have chosen for use in the proposed study. Friend and Cook (2003) also describe six elements or defining characteristics related to the process of collaboration. These defining characteristics are:

1. "Collaboration is voluntary; it is not possible to force people to use a particular style in their interactions with others" (p. 6).

2. "Collaboration requires parity among participants"(p. 7).

3. "Collaboration is based on mutual goals" (p. 8).

4. "Collaborating depends on shared responsibility for participation and decision making" (p. 8).

5. "Individuals who collaborate share resources" (p. 10).

6. "Individuals who collaborate share accountability for outcomes" (p. 11).

Collaboration among Special Educators and Related Services Personnel

IDEA identifies special education personnel as those qualified to provide educational services as outlined by individual state licensure guidelines and related service personnel as those individuals who provide supportive services which allow the student with identified disabilities and other special learning needs to benefit from education. Collaborative practices among teachers and related service personnel, such as physical and occupational therapists, speech/language pathologists, medical and counseling/social services have been longstanding and well documented for individuals with disabilities (Idol, 1983; Orelove & Sobsey, 1991; Rainforth, York, & Macdonald, 1992). Most recently, collaboration has been a predominant feature of

services for young children from birth to three and for individuals with severe and multiple disabilities of all ages. This is related to the intensity and multiplicity of needs for young children in the early stages of development or older individuals with multiple physical, medical and/or educational needs.   In both of these areas, various teaming models have been established with interdisciplinary and transdisciplinary teaming being explicitly defined and associated with special education and disability services (Friend & Cook 2003; Orelove & Sobsey, 1987, 1991; Rainforth, York, & Macdonald, 1992).

Although allied health professions have provided services to children and adults with disabilities for many years, the presence of medical and therapy services in educational settings has grown over the past twenty-five years. Prior to the passage of Public Law 94-142 in 1975, therapy services were most commonly provided in medical facilities and residential living facilities (McAfee, 1987). Since then these services have moved into the school environment. Irving Independent School District vs. Tatro (1984) was the landmark case in which the U.S. Supreme Court ordered schools to provide appropriate health services if a student in special education required a health procedure during the school day (Rapport, 1996). The provision of such medical and therapeutic services has continually increased in the school setting with each revision of the law. As young children who were served through early intervention programs that used interdisciplinary and transdisciplinary service delivery models reach school age and transitioned into the school setting, their parents brought with them an expectation of well coordinated team services in the school program as well. Over time, there has also been an increase in the number of

students who require medical procedures during the school day. Such procedures

include tube feedings, ventilator and oxygen management, catherization, and the

administration of medication (Heller, Fredrick, Best, Dykes & Tucker-Cohen, 2000;

Heller, Fredricks, & Rithmire, 1997; Lehr, 1990; Mulligan-Ault, Guess, Struth, &

Thompson, 1988). As students with severe and multiple disabilities are increasingly

integrated and included into education programs, the need for collaboration between

the education and allied health professions has become more apparent and necessary

(Hunt, Hirose-Hatae, Maier, & Goetz, 2001).

In both the educational and medical literature, differences in approaching

collaboration exist and have been reported (Dettmer, Thurston & Dyck, 2002;

Downing, 2002; Howard, Williams, Port & Lepper, 2001; Purvis & Whelan, 1992).

The issues raised by these studies have to do with differences in professional

preparation and orientation, the limited amount of time spent in particular settings, the

size of the therapy caseload, and whether the related service personnel are hired

directly by the district or contracted through an agency. Dettmer, Thurston, and Dyck

(2002) discuss how these differences result in related service providers feeling as if

they are working from a very different standpoint from the educators with whom they

are expected to collaborate. Additionally, such differing views may lead to

misunderstandings, miscommunications, and potential or outright conflict.   The

preparation of individuals within the varying fields of allied health services, including

physicians, nurses, physical therapists, occupational therapists, and speech/language

pathologists, tends to approach collaboration from the medical model which can be

considered as a top-down approach, viewing the medical professional as the expert

(McAfee, 1987). In the past, this has led to issues of "turfism" among related service personnel from differing therapeutic areas and between related service personnel and educators. This hierarchical medical model unfortunately often envisions and places educational personnel on a lower rung (Bateman, 1995). This can result in limited or constrained communication among professionals, incompatible goals and activities in programming, and an overall lack of coordinated service delivery. To address these concerns, new models are now emerging for training both educators and service providers in skills related to collaboration (Dettmer, Thurston, & Dyck, 2002; McAfee, 1987; Rainforth, York, & Macdonald, 1992).

　　　With the growing recognition of the importance of collaboration and the problems posed by differing perspectives from the medical and educational viewpoints, this issue is being addressed currently not only at the graduate and inservice level but also at the undergraduate and preservice level of preparation (Gable, Young & Henderickson, 1987; Gable, Hendrickson & Rogan, 1996). The issues of interdisciplinary training and personnel preparation have received most emphasis in the area of early intervention (Bailey, Simeonsson, & Yoder, 1990; Cochrane, Farley, & Wilhelm, 1990; Dinnebeil, Hale, & Rule, 1999; Heston, et al. 1998; Humphry, & Link, 1990; Winton, 1995). Training programs include topics such as effective communication, scheduling and creating time for collaboration to occur, and working with paraprofessionals and families. Despite the recognition of the importance of preparing multiple disciplines for collaboration, in the area of severe and multiple disabilities this topic has been somewhat/relatively neglected. As a result, little is known about what opportunities for and barriers to collaboration are

perceived by practitioners currently out in the field providing daily services to these students.

Research on Collaboration

In the discipline of special education, research on collaboration has primarily focused on students with mild to moderate disabilities being served in inclusive classrooms and in the area of early intervention for young children from birth through age five. The studies in early intervention have investigated collaborative practices with parents as well as interagency collaboration as it relates to improved service provision. The research studies in special education for school-aged students have focused on co-teaching practices between general and special educators, effectiveness of school-based intervention teams (Aksamit & Rankin, 1993; Bahr, Whitten, Dieker, Kocarek, & Manson (1999); Sindelar, Griffin, Smith, & Wantanabe (1992); Whitten & Dieker (1995) as well as student peer collaboration within the classroom (Van Meter & Stevens, 2000). Overall, these studies found that the special educator typically assumes the primary role of service provider for the student with special needs. When co-teaching in a general education classroom, it was found that initially special education teachers and the general education teachers viewed their roles as discrete, but as the team worked together this separation of roles was lessened. It was also reported that the special educator and the administrator serve as the primary communicators to the family when serving students through collaborative teams.

As for students with severe and multiple disabilities, one small study investigated how collaborative teaming could support three students with severe disabilities and three students who were considered at risk academically into general

education classrooms (Hunt, Soto, Maier, Doering, 2003). It should be noted,

however, that this study only used collaboration teams that consisted of educators and

parents.   Another qualitative study, carried out in one California school district,

investigated teachers' perceptions of collaborative teaching and their role in efforts to

include students with severe disabilities in elementary general education classrooms

(Wood, 1998). Again, it should be noted that this study only used general and special

educators and key administrators involved in educational service provision and did

not include therapists. Two final studies were completed by Snell and Janney. Their

initial research investigated how students with moderate and severe disabilities were

included in elementary classrooms (Janney & Snell, 1997). This was an ethnographic

study that looked at the manner in which general and special educators included such

students. Their findings suggested that all teachers shared similar goals and preferred

written plans or at least verbal agreements as to how the inclusive process would

occur and what modification would be needed. A follow-up study was also

ethnographic in nature and investigated how teachers planned for children requiring

extensive supports and services (Snell & Janney, 2000). In this study, the researchers'

primary focus was to consider how decisions were made about practices and

programming (Snell & Janney, 2000). Three students enrolled in kindergarten and

first grade classrooms were selected as case studies for this research. The researchers

found that child focused concerns from the inclusive classroom fell into three

categories: 1) student goals and abilities, 2) participation, and 3) classroom

community. When the researchers considered how the team approached problem-

solving, they noted that decisions were made based on the level of immediacy

required. Snell and Janney (2000) stated that by using this method of problem-solving the general education teachers often did not engage in brainstorming, and that it reduced the overall participation for all team members. They concluded that when serving students with moderate and severe needs in inclusive classrooms the special education teacher's role requires a focus on both the student and the team even though logistical barriers exist that do not allow the special educator to be ever present in the inclusive classroom. They further state that "the special education teacher needed to discriminate the planning styles and instructional focus of classroom teachers and other team members, to assess team dynamics, and to adjust her consultative interactions accordingly when tutoring staff to work as a team to resolve unconventional child-centered challenges" (2000, p.16).

Unfortunately, the area of interdisciplinary collaboration among service providers (allied health professionals and general and special educators) has been significantly neglected across early intervention, special education, and health care. This gap in the research is most evident in special education for students with moderate and severe disabilities beyond the elementary school years.

Beneficiaries of the Collaborative Process

The obvious beneficiary of a collaborative approach to the provision of services in special education and disability services is the student, followed by parents, siblings, and other family members. Less obvious, but also important, are the benefits derived by the collaborators themselves and those derived by administrators, programs, and society as a whole. These benefits have been noted and reported by many (Dettmer, Thurston & Dyck 2002; Friend & Cook, 2000, 2003; Fishbaugh,

1997; Idol, 2002; Mostert, 1998; Thomas, Correa & Morsink, 2001)**.** The current literature has presented several major themes as benefits of collaboration: creative solutions to issues and problems; optimal use of time; more opportunities to learn from others; improved practices and accountability; enhanced resources; increased knowledge and skills; and lastly, school and systems reform. Although the detriments noted have been few in number, these have included scheduling problems; increased personnel cost, time subtracted from the provision of services; and reduced caseload size (Dettmer, Thurston & Dyck 2002; Fishbaugh, 1997; Thomas, Correa & Morsink, 2001).

In the current millennium, collaboration among the fields of medicine, public health, social services and education will continue to generate new approaches for professionals and students, enhance the development of programming, provide better individual and family services, and advocate for improved services and health care legislation. Collaboration will forge new roads of access for the students and families served, as well as for the professionals involved in the process. These include improved programming and congruent student outcomes, solid transitioning, and increased professional contact. The study described in the next section was designed to obtain a snapshot of the current state and practice of collaboration within a single school district serving students with moderate and severe disabilities at the middle and high school levels. In addition, this study was conducted to identify current perceived barriers to better collaboration, as well as opportunities that exist but have not yet been pursued. It was my hope that this information would contribute to an area for which there is little data in the current literature. It was also my hope that the

results would contribute to the further development of informed best practice in this

area.

Chapter III

Design of the Study

Introduction

In this chapter is discussed the quantitative and qualitative methods used to examine the following guiding research questions:

1. Are there barriers and opportunities for collaboration that are unique to the middle and high school settings?

2. What are the currently perceived barriers to collaboration between special education teachers and related health service personnel when serving students with moderate and severe disabilities at the middle and high school levels?

3. What are the currently perceived opportunities for collaboration between special education teachers and related health service personnel when serving students with moderate and severe disabilities at the middle and high school levels?

4. Can areas of agreement be identified related to the process of collaboration between special education teachers and related health service personnel when serving students with moderate and severe disabilities at the middle and high school levels?

5. Can areas of disagreement be identified related to the process of collaboration between special education teachers and related health service personnel when serving students with moderate and severe disabilities at the middle and high school levels?

6. What specific suggestions can be made to promote more effective collaboration
    when serving students with moderate and severe disabilities at the middle and
    high school levels?

Initially, the responses to a questionnaire were analyzed quantitatively. The results of

this questionnaire were used to formulate probing questions to be use in a series of

focus groups. Data derived from the focus were analyzed qualitatively.

Quantitative Analyses: Differences Among the Groups

The quantitative results of the survey were analyzed using non parametric

statistics. Specifically the Kruskal-Wallis test was used and a *p* value of <.05 was

taken to be significant. In contrast to the more familiar quantitative approach to data

collection and analysis, qualitative research involves broad and open-ended questions

that allow participants to share their views concerning the topic of study (Creswell,

2002). Creswell states that the outcomes of a qualitative study can be described as

descriptive (i.e., What happened?), interpretive (i.e., To what do/did the participants

attribute what happened?), and process oriented (i.e., What happened over time?).

The qualitative approach was selected in order to keep the direction of the study open

and informed by the participants. In qualitative research, the interpretation emerges

from analyses of the detailed stories, quotes, and documents provided by the

participants.

Qualitative research can also be defined by its data collection strategies. The

three main data collection strategies related to qualitative investigation are interview,

observation, and document review (Grady, 1998). Data analyses in qualitative

research involve the process of inquiry known as analytic induction. Patton (1990)

defines inductive analysis as "the immersion in the details and specifics of the data to

discover important categories, dimensions, and interrelationships; by exploring

genuinely open questions rather than testing theoretically derived (deductive)

hypotheses" (p. 40). The development of the theory by this process follows the

collection of qualitative data, the formulation of hypotheses based on the data, and

testing of the hypotheses against the data. The theory developed in this manner is

called grounded theory, because it arises out of and is directly relevant to the

particular setting or topic under study (Frankfort-Nachmias & Nachmias, 1996).

Qualitative inquiry and grounded theory methodology include ten classic

perspectives that have arisen from various disciplines including anthropology,

philosophy, psychology, sociology, natural sciences, and even theoretical physics.

From among these, I have chosen the perspective of phenomenology which has its

roots in philosophy. Phenomenology, as a philosophical tradition, was introduced by

Edmond H. Husserl (1859-1938). Early in the last century, Husserl (1913) described

phenomenology as the study of how people describe things and experience them. His

philosophical assumption was that "we can only know what we experience" by

attending to perceptions and meanings that awaken our conscience awareness. Thus,

the development of understanding comes from sensory experience of phenomena

followed by a description, explanation and interpretation of the sensory experience.

Descriptions of experience and interpretations are intertwined such that they often

become one. From a phenomenological perspective, the focus becomes how we put

together the phenomena that we experience in such a way that we make sense of the

world and in so doing develop a world view. Phenomenology, as a major

philosophical and social science perspective informing inquiry, has been influenced

by the works of many authors (Patton, 1990).

Patton (1990) suggested that there are two implications of the

phenomenological perspectives that are often confused. The first implication is that it

is important to know what people experience and how they interpret the world. This

is the focus of phenomenological inquiry. The second implication deals with

methodology and the importance of participant observation. It might be assumed that

the only way for us to "really know" what another person experiences is to experience

it for oneself. Patton (1990) states that the confusion can be resolved with the

realization that the phenomenological perspective can mean either or both of the

following: (1) a focus on what people experience and how they interpret the world

(in which case, interviews can be used and actual experience of the phenomenon is

not required), or (2) a methodological mandate to actually experience the

phenomenon under investigation (in which case, participant observation is required).

I have chosen the first of these perspectives for this study.

Patton (1990) also describes one final dimension that defines a

phenomenological approach, that is, the assumption that "there is an essence or

essences to shared experience" (p. 70). These *essences* are the core meanings derived

and understood through a commonly experienced phenomenon. Subsequent to the

collection of the qualitative data, the experiences of different people were coded,

analyzed and compared, and from this process the essence(s) of the phenomenon

emerged. In Patton's words, "The assumption of essence, like the ethnographer's

assumption that culture exist and is important, becomes the defining characteristic of a purely phenomenological study" (p. 70).

Since this study focused on the shared experience of collaborators in the educational setting who serve students with moderate and severe disabilities at the middle and high school levels, I determined that the qualitative research approach and phenomenological perspective were appropriate. As described in detail below, I used a series of focus groups to allow the participants to explore and investigate their shared experiences related to the barriers and opportunities for collaboration in this setting. Subsequent coding and analysis of the data allowed me to determine the emerging themes related to the shared experience. These themes can then inform best practice by being used to reinforce the elements that currently work, as well as to identify persistent barriers and potential opportunities for improved collaboration.

Design and Implementation

The design of this study combined a simple quantitative survey measure with an exploratory, qualitative inquiry using open-ended focus group interviews (see figure 1). A focus group interview is an interview with a small group of people on a specific topic. An interview group size is typically four to eight individuals who participate in an interview that lasts from one-half to two hours (Patton, 1990). Focus groups are advantageous when the interaction among interviewees will likely yield the best information and when interviewees are similar to and cooperative with each other. When conducting focus groups, all participants should be encouraged to contribute (Creswell, 2002). These authors stress that a focus group is not a decision making or problem-solving group; it is truly an interview using open-ended questions.

The following advantages and disadvantages of using focus group interviews are put

forth by Patton (1990):

> It (focus group interviews) is a highly efficient qualitative data
> collection technique. In one hour, the evaluator can gather
> information from eight people instead of only one person.
> Thus the sample size can be increased significantly in an
> evaluation using qualitative methods through focus group
> interviewing. Focus group interviews also provide some
> quality controls on data collection in that participants tend to
> provide checks and balances on each other that weed out false
> or extreme views. The group's dynamics typically contribute
> to the focusing on the most important topics and issues in the
> program and it is fairly easy to assess the extent to which there
> is relatively consistent, shared view of the program among
> participants. Finally focus groups tend to be highly enjoyable
> to participants.
>
> There are also some weaknesses of focus groups. Because of
> the amount of response time to any given question is increased
> considerably by having a number of people respond, the
> number of questions that can be asked is limited. With eight
> people in an hour, it is typically possible to ask no more than
> ten major questions. Facilitating and conducting a focus group
> interview requires considerable group process skills. It is
> important to know how to manage the interview so that it is not
> dominated by one or two people, and so that those participants
> who tend not to be highly verbal are able to share their views.
> (p. 335-336).

Both the advantages and disadvantages described above applied to this study,

and I remained cognizant of this fact throughout my interpretation of the data

and discussion of their implications.

Figure 1
Structure of Research Design
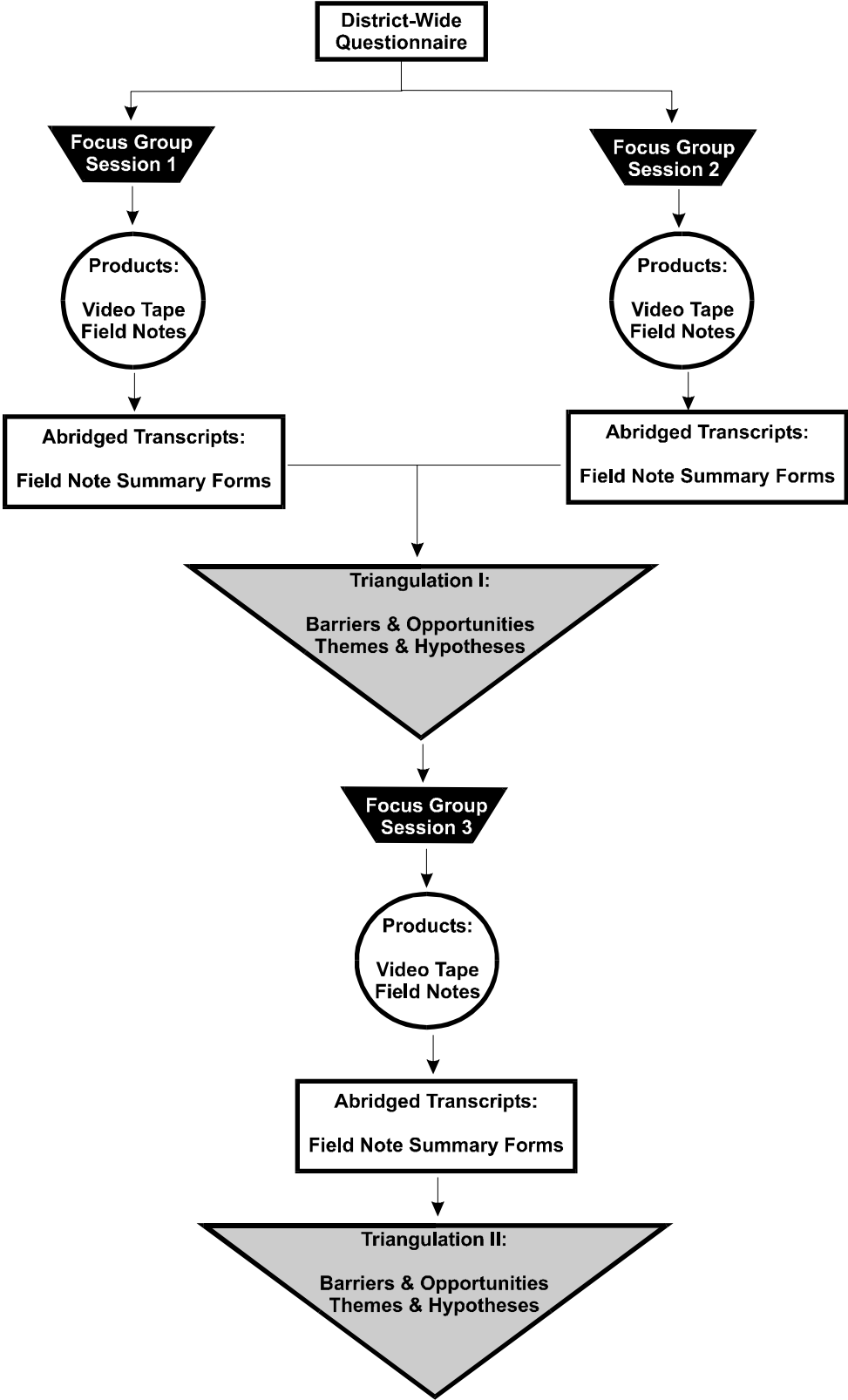
Three different focus group interviews were conducted for this study. The groups consisted of five persons in Focus Groups A1, six persons in Focus Group A2, and a combined total of ten persons for Focus Group B. The composition of the three focus groups was as follows:

Focus Group A1 (5 total)- Special education teachers in the area of moderate and severe disabilities employed at middle and high schools in the Springfield City School District, Springfield, Ohio;

Focus Group A2 (6 total)- Related health service personnel from the same middle and high schools in the Springfield City School District, Springfield, Ohio; the related health service personnel included occupational therapists, physical therapists, speech/language pathologists, and school nurses;

Focus Group B (10 total)- Combined membership of groups 1 & 2 following the initial two focus group interviews.

Sampling

The type of sampling for this research study was purposeful homogeneous sampling. In purposeful sampling, the researcher intentionally selects individuals or sites for investigating or understanding the central phenomenon (Creswell, 2002). The standard in choosing individuals is whether they are "information rich" (Patton, 1990, p. 169). In other words, the individuals identified for participation in the focus group are selected because they bring specific expertise or experience related to the topic under investigation.

In this study, the participants were drawn from middle and secondary teachers and related service personnel employed by the Springfield City School District, Springfield, Ohio. This long established city school district in 2004 had a total student population of 9,081 and served 1,474 students identified as receiving special education under IDEA. There were eleven (11) elementary schools, five (5) middle schools, two (2) high schools, two (2) alternative schools, and one (1) early childhood center. The district employed 749 teachers with 113 serving as special educators; in addition, the district employed three (3) occupational therapist, two (2) physical therapist, twelve (12) speech/language pathologist, and nine (9) nurses. This school district was selected because it was recently identified as a "failing" district by the Ohio Department of Education. This designation had spurred an internal examination of programming and practices. Thus, any conclusions and recommendations that are drawn from the completed study can be beneficial to the district in implementing changes in their current programs that serve students with special needs. In addition, due to the partnership agreement with Wittenberg University (by whom I was and am currently employed as an instructor), I obtained initial permission to collect data for my dissertation (see appendix A). This was and is a long-standing, productive, and mutually beneficial partnership. Examples of the good working relationship include advisory board positions, professional development programs, a teaching associates program, adjunct faculty, field placements, and student-to-university student tutoring programs. This symbiotic relationship further increases the probability that any specific conclusions and recommendations from the proposed study will be utilized.

As noted in the review of the literature, there exists a void in the investigation of collaborative efforts at the middle and high school levels in programs serving students with moderate and severe disabilities. So, I chose to use the entire special educator and service personnel populations for the initial questionnaire. I used the results of this questionnaire to inform and identify focus questions that were relevant, and, perhaps, specific, to middle and secondary schools. Subsequently, the focus groups were drawn from middle and high schools only and from professionals serving students with moderate and severe disabilities in these schools.

Data Collection and Analysis

Data was collected in three phases as illustrated in Figure 2. Phase I data collection consisted of a questionnaire. The results and analysis from the survey questionnaire were be used to generate questions for discussion in the second phase of data collection. Phase II data collection consist ed of two focus groups, one with special educators and one with related health service personnel. The results derived from the data collected and analyzed were used to inform the third phase of data collection. Phase III data collection consisted of a final focus group combing both special educators and related health service personnel. The final reporting of the data was derived from the interim data reports from Phases I, II and III.

FIGURE 2 Data Collection and Coding
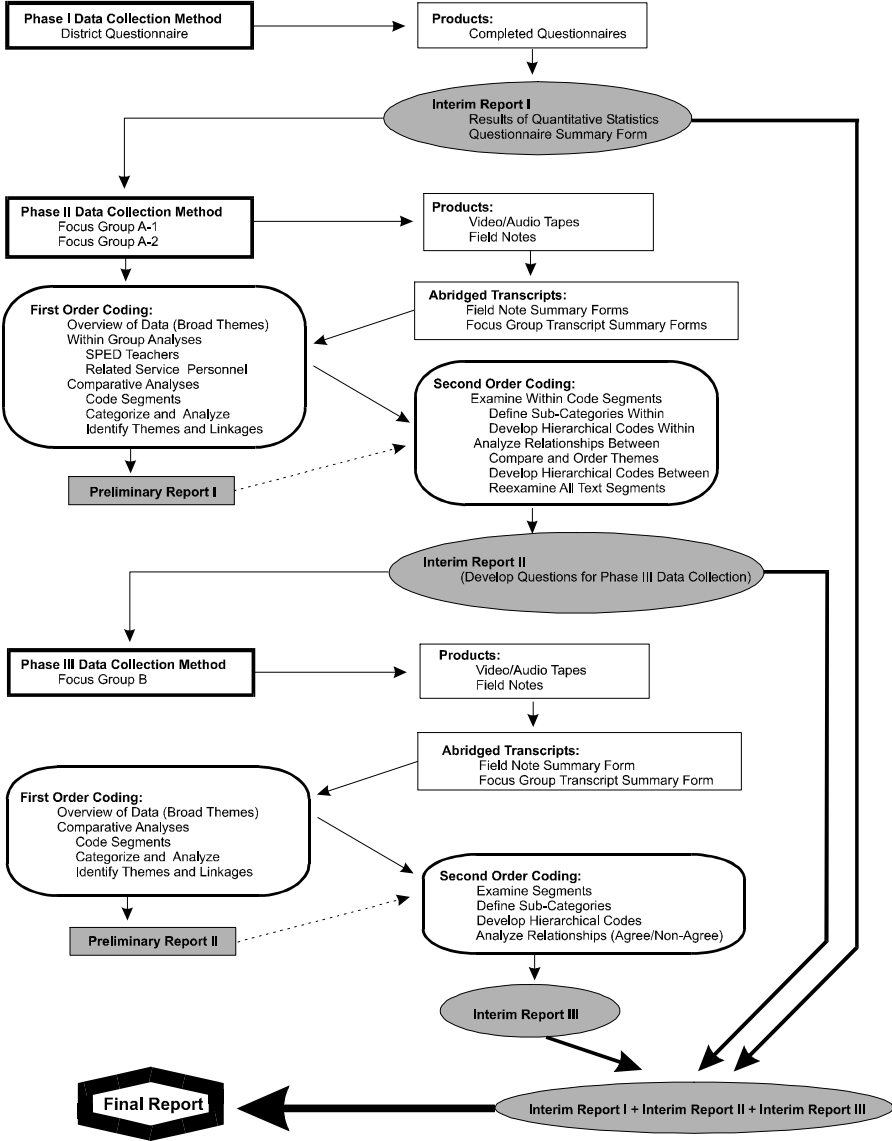
The questionnaire (see Appendix B) was distributed to all one hundred thirty-three participants (special educators and related health service personnel) at the preschool, elementary, middle, and high school levels in the school district. I designed this questionnaire specifically to investigate collaboration between special educators and related health service personnel. It was based upon the six elements of defining characteristics related to the process of collaboration as defined by Friend and Cook (2003). Data from these questionnaires were used to identify common and disparate themes among and between the groups. The questionnaire forms, together with a self-addressed postage pre-paid envelope were distributed to identified participants by the Springfield City School District's inter school mail system. Using the responses from all questionnaire participants, a mean response score was calculated for each question statement. These results were used to help paint a broad picture of the perspectives and opinions of those involved in collaboration within the entire school district. In order to get a more detailed picture of differences related to special educators versus related health service personnel and special educators involved at the preschool/elementary levels versus the middle/high school levels, specific comparisons were drawn. For each question a mean and standard deviation was calculated from the responses of each of these groups, and compared using the Kruskal-Wallis test a non-parametric statistical procedure (Creswell, 2002). The full data are displayed in Appendix E. This information was then utilized to confirm and develop questions for the initial focus groups (see Appendix C).

The specific results and broad themes derived from the questionnaire were further explored in a series of focus groups in which middle and high school special

educators and health related services personnel who work with students with

moderate and severe disabilities participated. As the principal investigator, I

facilitated these three focus group interview sessions. Because I was involved in

facilitating and unable to take extensive notes, an independent observer was present

to record field notes. This was a senior early childhood and special education dual

licensure major selected from a pool of twenty-two senior level dual licensure majors

because of her background and qualifications. I selected an undergraduate student

rather than a masters level student or faculty colleague to assure a relatively unbiased

opinion not prejudiced by employment with a school system. All focus group

interviews were videotaped for the purpose of identifying the speaker. The

videotaped sessions were also transcribed and utilized for confirmation of field notes

and other data analyses. The transcriber made use of a focus group seating chart (see

Appendices D-1 & D-2) in order to assist in the identification of the speakers.

     As expected, the transcripts and field notes contained large amounts of data.

The next step taken in order to produce findings was qualitative content analysis.

> In general, the analysis of the data from each focus group will consist of first
> developing a general sense of the data followed by coding and description of
> themes about the central question. This process is inductive, going form the
> particular (the detailed data) to the general (codes and themes). The final goal
> of this process is to generate a larger consolidated picture (Tesch, 1990).

This involved the following steps:

1. preparing and organizing the data for analysis

2. exploring the data

3. describing and developing themes from the data

4. representing and reporting the findings

5. interpreting the findings

6. validating the accuracy and credibility of the findings

   This process, which is common in qualitative research, involved repeated

reviews of the data and repeated analysis with each review (Miles & Huberman,

1994). The initial review consisted of scanning the data for general information,

making notes of ideas and stimulating my thinking concerning organization of the

data. The second review involved coding and categorizing the data. Coding

consisted of segmenting and labeling the text of the transcription and field notes in

order to form broad descriptions or themes found in the data. In contrast to the third

review was used to generate additional themes and confirm themes and place these

themes in hierarchical order. The object of this process was to make some initial

sense of the textual data, divide them into logical segments by assigning codes,

labeling the segments, examining the codes for overlap and redundancy, and, where

possible collapsing these codes into themes. Thus, the data were narrowed by this

inductive process into emerging themes and responses to statements.

   The emerging themes from the questionnaire and from each focus group were

triangulated in order to validate the findings for the final report. This triangulation

process is used to make comparison within and among non-parametric data sets

(Patton, 1990; Creswell, 2002).   Prior to conducting the focus groups in Phase

Three, transcripts and field notes from focus group sessions A1-Special Educators

and A2-Related Health Services Personnel were coded and analyzed. From the

emerging themes centering around barriers and opportunities, I constructed

questions. In order to lend validation to the results from Phases One and Two, the

group results were triangulated to identify convergent and divergent themes,

responses and explorative questions. Further validation was sought during the focus

group in Phase Three. The results of the analyses of Phase Two were revealed to the

combined population that made up focus group in Phase Three. These themes and

questions were the topics of discussion. Once again videotape and field notes was

recorded and analyzed. In order to ensure that the final report was accurate and

credible, two final triangulations were performed comparing the results of Phase

Three focus group B-Combined Group with those of focus group session A-1-Special

Educators and the results of focus group B-Combined Group with those of focus

group session A-2-Related Health Services Personnel. A final report was produced

and contained a summary of major and minor themes generated from the

questionnaire and confirmed and explored through each of the focus group sessions.

Perspective/Lens of the Researcher

In qualitative research it is imperative that investigator credibility be

addressed (Patton, 1990; Frankfort-Nachmias & Nachmias, 1996), that is, "the

principle is to report any personal and professional information that may have

affected data collection, analysis, and interpretation – either negatively or positively –

in the minds of the users of the findings"(Patton, 1990, p. 472). Therefore, I wish to

disclose my predispositions and biases. The following factors may have colored the

desired neutrality and impartiality with which I approached this study: (1) I had been

employed as a special education teacher in collaborative service settings serving

young children in early intervention birth to three at The Easter Seal Rehabilitation

Center and served students with moderate and severe disabilities at John Marshall

High School, both located in West Virginia; (2) I was and am currently employed as an Instructor of Special Education at Wittenberg University teaching both undergraduate and graduate students who will be asked to perform in environments where collaboration is both desired and required; and, finally, (3) this study, in part, satisfied the requirements for the Doctor of Education degree at West Virginia University.

Chapter IV

Results

Introduction

In this chapter the results are presented in three phases: Phase One- District

Questionnaire, Phase Two- Position Specific Focus Groups, and Phase Three-

Combined Focus Group. The interpretation of the results of each phase was

interpreted with respect to the six guiding research questions. As noted, each

sequential phase was used to develop the questions to be pursued in the subsequent

phase. Thus the results of Phase Three represent confirmation and support of the data

collected in Phases One and Two.

Phase One: District Questionnaire

Questionnaires were sent to all special education teachers and related health

service personnel within the Springfield City School District located in Springfield,

Ohio. Questionnaires were returned by 86 of the 133 possible respondents resulting

in a 65% return rate. The number of respondents within each job category are

contained in Table 1.

Table 1 Questionnaire Participants

Position	Number	Percent Returned
Special Education Teachers		
Preschool	7/10	70%
Elementary	24/42	57%
Middle	22/33	67%
High School	13/22	59%
Related Health Personnel		
Physical Therapist	2/2	100%
Occupational Therapist	2/3	67%
Speech Pathologist	8/12	67%
Nurse	8/9	89%
TOTAL	86/133	65%

Significant differences ($p<0.05$) among the groups were identified on seven (7) survey statements. These were statements numbered 2,3,5,11,12,21, & 23. On the remainder, no significant differences among the groups were found. For these results, questions for which the mean score rounded to greater than or equal to four (≥ 4) were deemed to be in agreement with the statement; statements for which the mean score rounded to less than or equal to two (≤ 2) were deemed to be in disagreement with the statement. Those statements that rounded to three were taken to indicate no consensus among the respondents. (See Table 2.)

Table 2 Questionnaire Statements Rounded Agreement, Disagreement & No
Consensus

Statement	Mean	Standard Deviation	Agree Rounded (≥4)	No Consensus	Disagree Rounded (≤2)
#1 There is sufficient time in my daily school schedule to develop collaborative interactions.	2.3	1.2			2
#4 My definition of collaboration matches that of the teachers with whom I work.	3.2	1.0		3	
#6 Collaboration with others is worth the time and effort in producing optimal outcomes for the student with special needs.	4.5	0.7	5		
#7 Collaboration allows for the generation of creative solutions to issues and problems.	4.5	0.7	5		
#8 I have had adequate training in the methods of collaboration.	3.4	1.1		3	
#9 Collaboration is critical to meeting the needs of students and families.	4.5	0.6	5		
#10 All members of collaborative teams participate equally.	2.8	1.2		3	
#13 Collaboration is voluntary.	3.0	1.1		3	
#14 Collaboration requires parity (equal participation) among participants.	3.9	1.0	4		
#15 Collaboration is based on mutual goals.	4.1	0.7	4		
#16 Collaborating depends on shared responsibility for participation and decision making.	4.2	0.7	4		
#17 Individuals who collaborate share resources.	4.0	0.9	4		
#18 Individuals who collaborate share accountability for outcomes.	3.9	0.9	4		
#19 My immediate supervisor understands the amount of collaboration required to serve my students.	3.4	1.1		3	
#20 Our school district places a high priority on collaborative efforts between teacher and therapist.	2.6	1.2		3	
#22 I am satisfied with my own collaborative efforts.	3.6	1.0	4		
#24 Collaboration is recognized and rewarded by my school system.	2.4	1.0			2
#25 I have ample time and opportunity to develop collaborative relationships.	2.2	1.1			2
#26 Collaborators are able to maintain professional attitudes; personal differences do not impede the workings of the group.	3.1	1.1		3	
#27 I am aware of the relevant federal legislation that requires collaboration among service providers.	3.2	1.2		3	

Respondents exhibited general agreement with a total of nine (9) statements. From review of these results the statement were grouped under three emergent and overarching themes. These statements fell into the three following themes:

theme A- value of collaborative programming (statement #s 6,7, & 9)

#6- Collaboration with others is worth the time and effort in producing optimal outcomes for the student with special needs.

#7- Collaboration allows for the generation of creative solutions to issues and problems.

#9- Collaboration is critical to meeting the needs of students and families.

For theme A, value of collaborative programming, there was strong agreement across all groups. This indicated that participants viewed collaboration as critical for the generation of effective programming and worth the time and effort required. This was indicated by means of the answers and the tight standard deviation shown in Table 2.

theme B- mutuality of goals and sharing participation & resources (statement #s 14, 15, 16, 17, & 18)

#14- Collaboration requires parity (equal participation) among

#15- Collaboration is based on mutual goals.

#16- Collaborating depends on shared responsibility for participation and decision making.

#17- Individuals who collaborate share resources.

#18- Individuals who collaborate share accountability for outcomes.

For theme B, mutuality of goals and sharing participation & resources, there was strong agreement across all groups. This indicated that participants recognized the value of parity and shared accountability among collaborators. This was indicated by means of the answers and the tight standard deviation shown in Table 2.

theme C- level of personal satisfaction (statement # 22)

#22- I am satisfied with my own collaborative efforts.

For theme C, level of personal satisfaction, there was some agreement across the groups. This indicated that as individuals participants were satisfied with their own collaborative efforts. This was indicated by the mean of 3.6 rounded to 4 and a larger variability as indicated by the standard deviation. (See Table 2.)

In general, respondents disagreed with the following three (3) statements which dealt with time, reward, and recognition:

#24- Collaboration is recognized and rewarded by my school system.

#25- I have ample time and opportunity to develop collaborative

relationships.

#1- There is sufficient time in my daily schedule to develop collaborative

interactions .

These results indicated that the lack of available time, recognition, and reward may be barriers to collaborative efforts.

The responses to the following eight (8) statements varied greatly within each group and the mean responses indicated no opinion that could be generalized between or among the groups:

#4 - My concept of collaboration matches that of the teachers with whom I work.

#8- I have had adequate training in the methods of collaboration.

#10- All members of collaborative teams participate equally.

#13- Collaboration is voluntary.

#19- My immediate supervisor understands the amount of collaboration required to serve my students.

#20- Our school district places a high priority on collaborative efforts between teacher and therapist.

#26- Collaborators are able to maintain professional attitudes; personal differences do not impede the workings of the group.

#27- I am aware of the relevant federal legislation that requires collaboration among service providers.

In contrast to the responses described above, significant differences were found among groups for seven (7) statements. This was determined by using the Kruskal-Wallis Test which is a non-parametric test used to compare three or more independent groups of sampled data. These survey statements were clustered as the following themes:

theme D- team membership & availability

theme E- concepts of roles & responsibilities

theme F- administrative support

theme G- personal satisfaction

For **theme D**, these two statements addressing team membership and availability of team members were as follows:

> #11- Membership on collaborative teams is appropriate at my school.

> #12- Necessary team members are available to participate in decision making.

The rank ordering of the mean responses for each group and the accompanying frequency histogram are presented below.

#11- Membership on collaborative teams is appropriate at my school *p* =**0.043**		
Position	**Mean**	**Standard Deviation**
Nurse	4.250	0.707
Preschool Teacher	4.143	1.069
Therapist	3.917	0.793
High School Teacher	3.385	1.261
Middle School Teacher	3.273	1.162
Elementary School Teacher	3.200	1.080

Statement 11

Each symbol represents up to 2 observations.
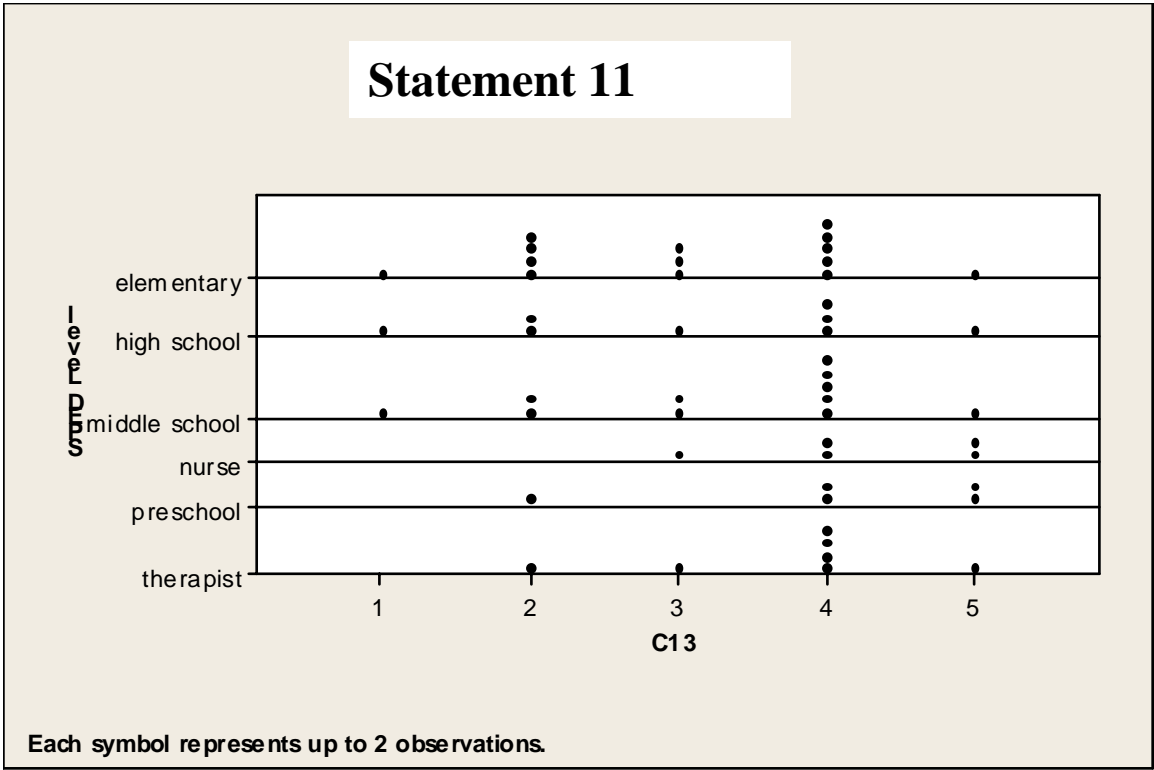
#12- Necessary team members are available to participate in decision making $p=0.015$		
Position	**Mean**	**Standard Deviation**
Nurse	4.000	0.926
Preschool Teacher	3.857	1.069
Elementary Teacher	3.400	0.913
Therapist	3.250	1.288
High School Teacher	2.692	1.109
Middle School Teacher	2.636	1.255

Statement 12
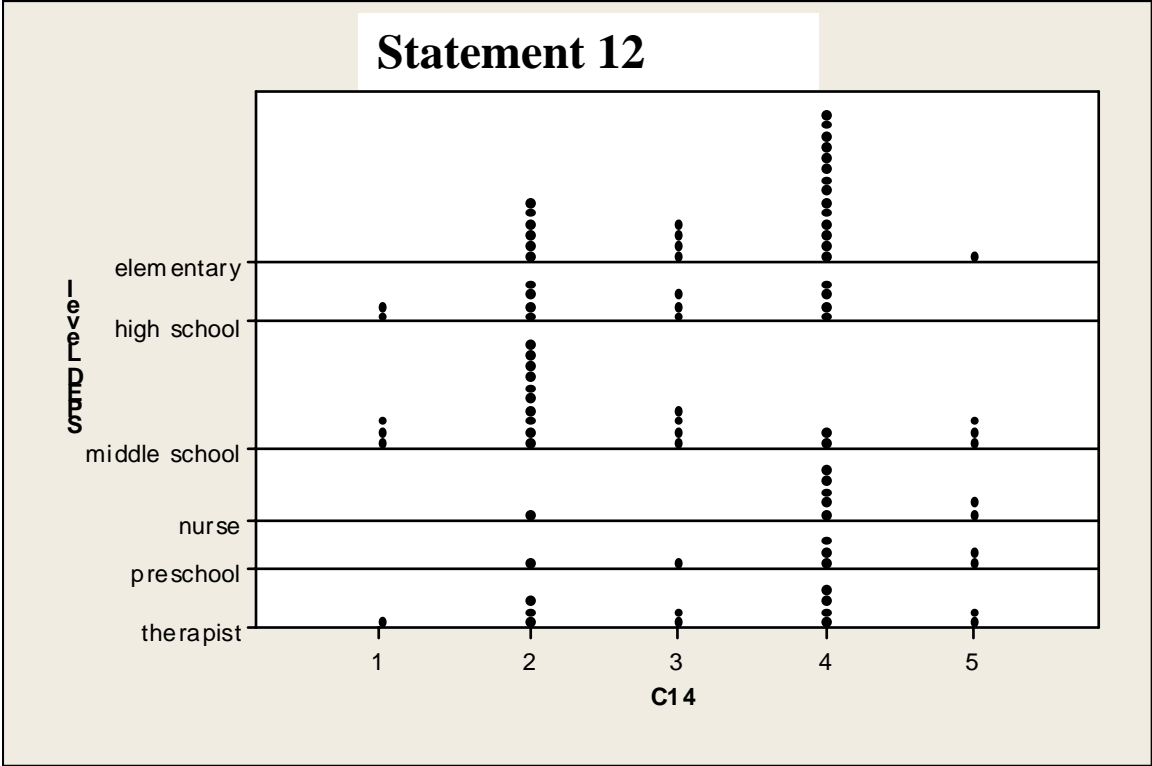
These results indicated that nurses, therapists and preschool teachers agreed strongly that collaborative team membership is appropriate for the students that they serve. The nurses and preschool teachers also felt that necessary team members are available. However, the therapists' opinions were highly variable and span the entire range of responses. On the other hand, elementary, middle and high school teachers expressed far less confidence that the make-up of the collaborative team is appropriate; middle and high school teachers in particular responded that team members are less readily available.

For **theme E**, these three statements dealing with the concept of role and responsibility were as follows:

#3- Other members of collaborative groups clearly understand their roles and responsibilities.

#5- My concept of collaboration matches that of the therapist with whom I work.

#23- Teachers and therapists are viewed as equal partners in collaborating.

The rank ordering of the mean responses for each group and the accompanying frequency histogram are presented below.

#3- Other members of collaborative groups clearly understand their roles and responsibilities $p=0.016$		
Position	**Mean**	**Standard Deviation**
Preschool Teacher	4.000	0.577
Elementary School Teacher	3.520	1.005
Nurse	3.500	0.756
High School Teacher	3.000	1.155
Therapist	2.833	1.193
Middle School Teacher	2.682	0.995

Statement 3
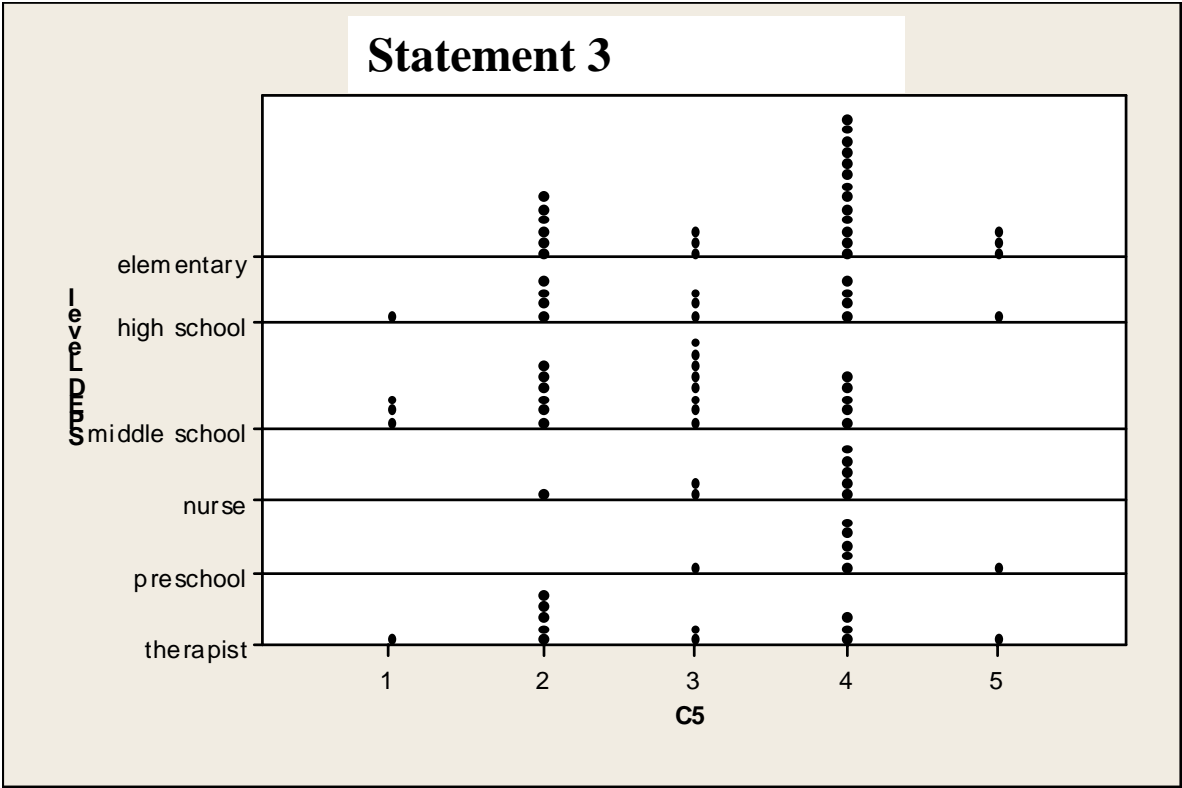
#5- My concept of collaboration matches that of the therapist with whom I work *p=0.017*		
Position	**Mean**	**Standard Deviation**
Therapist	4.083	0.900
Nurse	4.000	0.926
Preschool Teacher	3.857	0.690
Middle School Teacher	3.409	0.959
Elementary School Teacher	3.080	0.707
High School Teacher	3.077	0.862

Statement 5

Each symbol represents up to 2 observations.
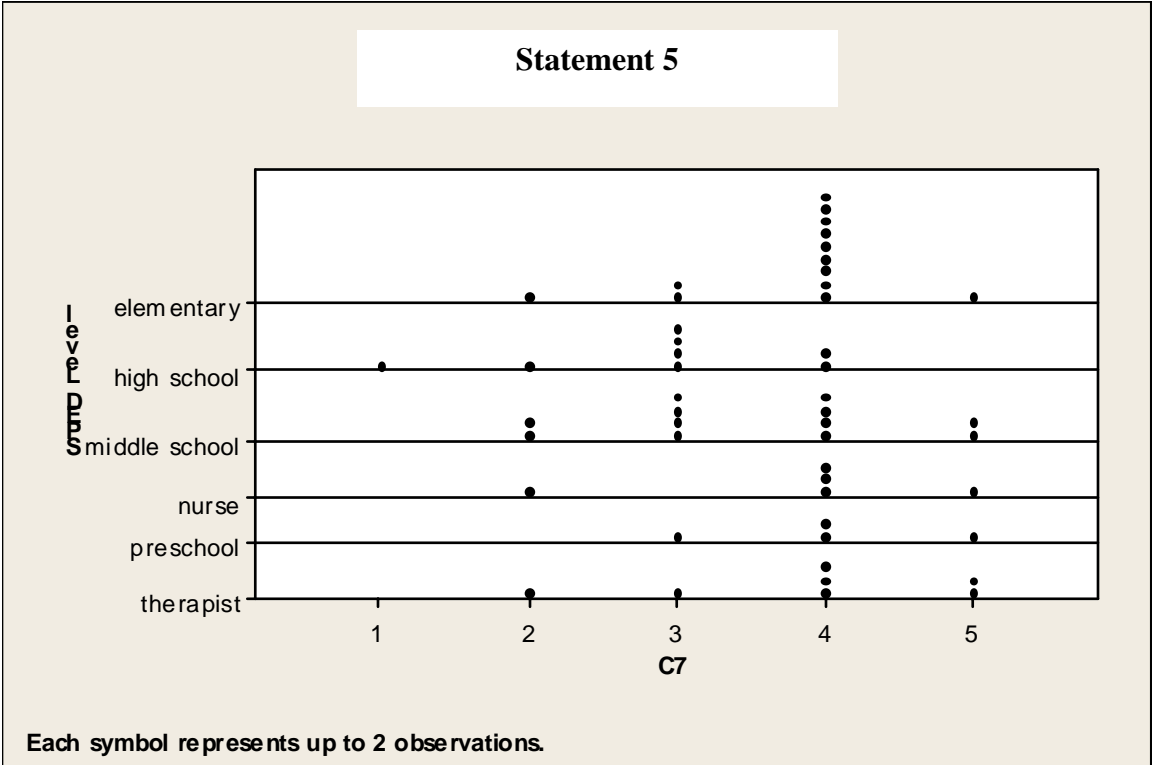
#23- Teachers and therapists are viewed as equal partners in collaborating $p=0.010$		
Position	**Mean**	**Standard Deviation**
Preschool Teacher	4.571	0.535
Nurse	4.000	0.756
Elementary School Teacher	3.600	0.913
Therapist	3.333	1.231
High School Teacher	3.154	0.987
Middle School Teacher	3.091	1.151

Statement 23
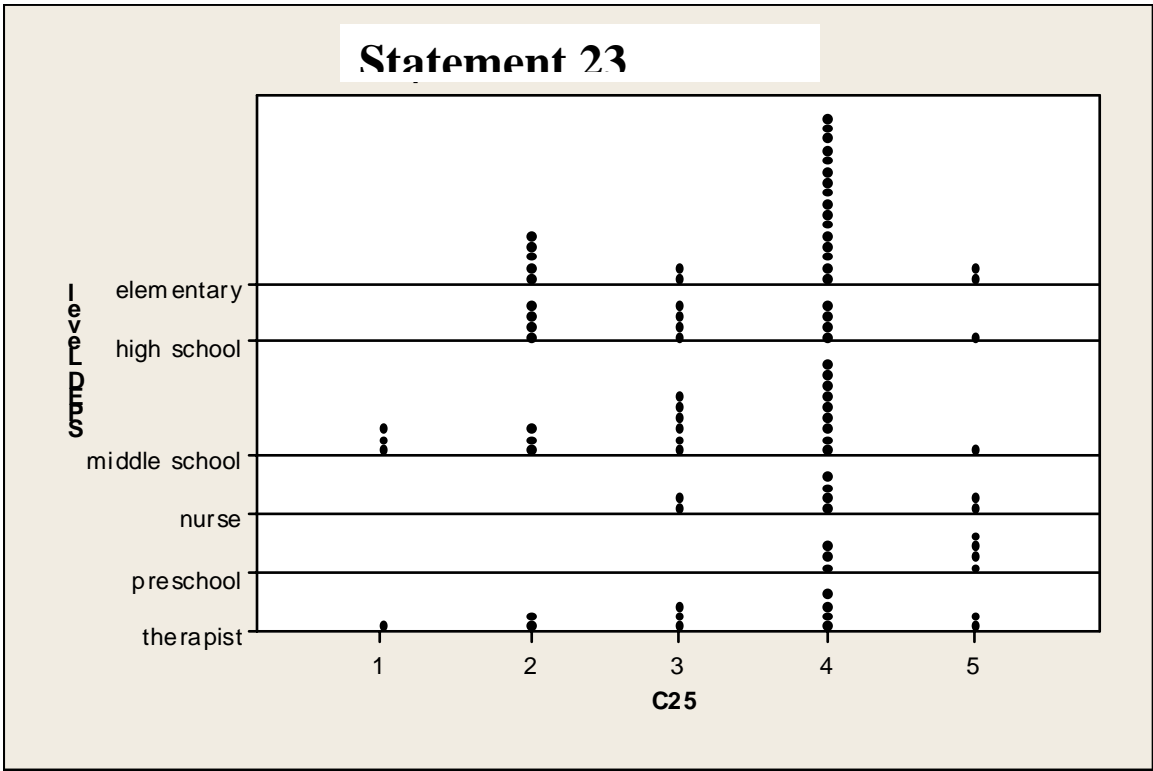
These results indicated that preschool teachers had a clearly higher level of agreement than the other groups that collaborative group understand their roles and responsibilities. While middle school teachers, high school teachers, and therapists did not clearly disagree, their responses indicated less confidence in this area. Nurses and elementary teachers appeared to be variable in their responses.

Results related to a mutual collaborative relationship with therapists with whom others work indicated that nurses, therapists, and preschool teachers agree; while elementary, middle and high school teachers expressed less agreement bordering on "no opinion".

Results related to being viewed as equal partners when collaborating indicated that preschool teachers, elementary teachers, and nurses agreed and differed from middle and high school teachers. The latter two groups again bordered on "no opinion". It is interesting to note that the responses of therapists, who serve across grade levels were variable, expressing only very slight agreement.

For **theme F**, this statement dealing with administrative support was as follows:

#2- My collaborative efforts are fostered and supported by the administration.

The rank ordering of the mean responses for each group and the accompanying frequency histogram are presented below.

| #2- My collaborative efforts are fostered and supported by the administration *p*=0.022		
Position	**Mean**	**Standard Deviation**
Preschool Teacher	4.429	0.535
Nurse	4.125	0.354
Elementary School Teacher	3.520	1.159
High School Teacher	3.231	1.235
Middle School Teacher	3.136	1.125
Therapist	3.083	1.165
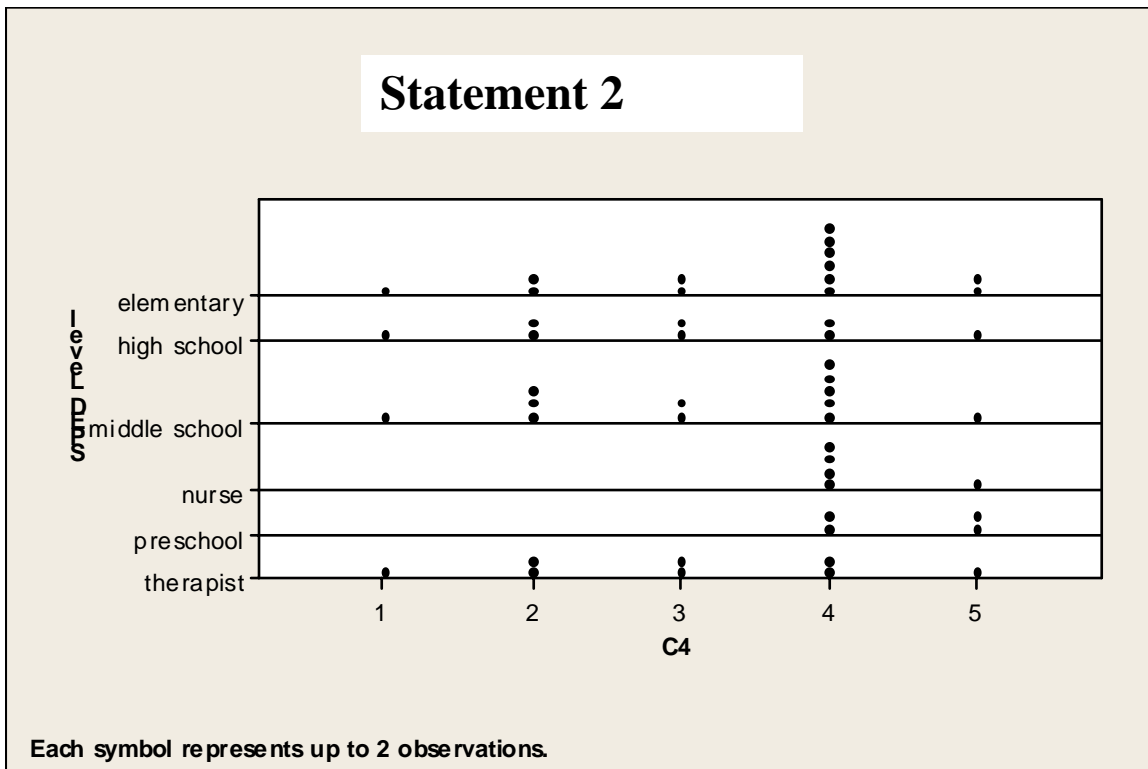
These results indicated that nurses and preschool teachers were highly satisfied with

the availability of administrative support. However, the level of satisfaction

expressed by therapists, elementary, middle and secondary teachers was considerably

less.

For **theme G**, this statement dealing with personal satisfaction was as follows:

#21- I derive personal satisfaction from my collaborative efforts.

The rank ordering of the mean responses for each group and the accompanying

frequency histogram are presented below.

#21- I derive personal satisfaction from my collaborative efforts		$p=0.037$
Position	**Mean**	**Standard Deviation**
Nurse	4.500	0.535
Preschool Teacher	4.286	0.756
Therapist	4.000	0.603
Elementary School Teacher	3.760	0.831
High School Teacher	3.692	0.751
Middle School Teacher	3.545	0.912

Statement 21

Each symbol represents up to 2 observations.
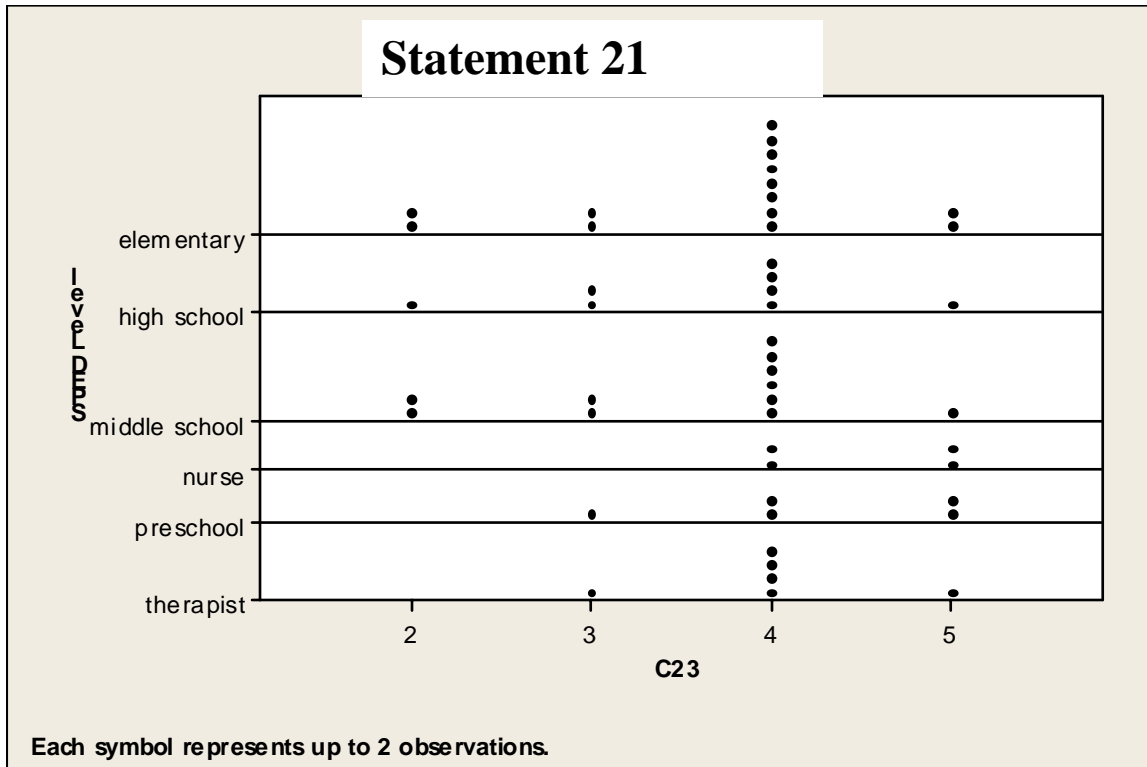
These results indicated that nurses, therapists and preschool teachers expressed the highest levels of satisfaction; while elementary, middle and secondary teachers appear to be more variable

Sixty-three of the eighty-six questionnaires returned (73%) contained a response to the open-ended question, "In your own words, how would you define collaboration?" Upon examination and coding of these responses across all participants, no distinctive differences between the responses of special education teachers and related health service personnel were identified. Rather, the many definitions of collaboration shared some common elements. These common elements included the following:

- Collaboration is *goal oriented*.

- Collaboration is *team-driven*.

- Collaboration is *student-oriented*.

- Collaboration involves *problem solving*.

- Collaboration is a *shared process*.

- Collaboration *addresses needs*.

- Collaboration is *ongoing*.

Other elements of the definitions of collaboration were cited much less frequently, but were deemed to be noteworthy by me through the coding of the data. These important elements included:

- The inclusion of parents as collaborative team members.

- The inclusion of the special education student him- or herself as one of the collaborative team members.

- The important role of administrators in successful collaborations.

- The requirement for role-release among participants.

- Successful collaborative efforts involve both school and community participants.

From the survey results and the definitions of collaboration described above, I developed the following specific questions and follow-up questions for use in Phase Two (focus groups A-1: middle and high school special education teachers and A-2: related health service personnel working at the middle and secondary levels) data collection.

- Is sufficient time available to collaborate?

  - Do you make use of it?

- How is collaboration recognized and rewarded?

  - What rewards would you suggest?

- Do you find that the time that you spend collaborating is worthwhile?

  - If so, then why?

  - If not, then why not?

- During your collaborative efforts do the following occur:

  - development of mutual goals?

  - sharing of responsibility and decision making?

  - input from all members?

- Are you satisfied with your own efforts when collaborating?

  - Why or why not?

Phase Two: Position Specific Focus Groups- A-1 & A-2

All potential focus group members working at the middle and high school levels with students having moderate and severe disabilities were contacted and agreed to participate. Unfortunately, the regular nurse at the high school was in the end unable to participate in focus group A-2. With this single exception, focus groups consisted of all the potential participants from the school district. The two focus groups during this phase of data collection were comprised of the following:

Focus Group A-1: Special Educators (total 5)

3 middle school special education teachers (moderate/severe)

2 high school special education teachers (moderate/severe)

Focus Group A-2: Related Health Services Personnel (total 6)

2 nurses (1 middle school level & 1 special needs nurse)

1 occupational therapist

1 physical therapist

2 speech & language pathologists

In these focus groups the same questions were asked of both the teachers and the related health services personnel. The analysis of the responses to the questions and representative and supporting quotations are presented below.

Question 1: Is sufficient time available to collaborate?

Special Education Teachers: The overwhelming response from all of the teachers regarding the availability of time conducive for effective collaboration was a resounding "no." Reasons given for this included the teachers' tightly scheduled time during a day and the often mismatched schedules of the teachers, nurses, and

therapists. When time for one presents itself, other members of the collaborative

team are often busy or unavailable. See selected quotes on this topic below.

> "Finding adequate time or times to collaborate. Although collaboration is many times done in informal settings, a specific or scheduled collaboration time would enhance services especially for specific students or issues."

> "From my experience, time to collaborate should be granted on a needs basis."

> "While I may have time in my day, the related health providers are only in my building on certain days and times, many of which are during my instruction blocks."

> "We don't talk, nor do we have time to."

> "As for time, often the service providers don't have enough time to give the student to be very effective. It's because they have too many other students at many different locations to truly meet their needs. Overall, there is not enough time in the school day to communicate."

> "I feel that, in the district, time is not given to for the collaborative relationships necessary to provide adequate services for our special education students, and collaboration with the regular education teachers is almost non-existent."

> "We have no planned communication time."

Related Health Service Personnel: When this group was queried with respect to the

availability of sufficient time to collaborate, the response was again a resounding

"no." Without exception all six participants responded that their caseloads prevented

them from collaborating at the level that they would desire. Without a reduction in

caseload or greater assistance, the percentage of their efforts devoted to collaboration

will remain unchanged, or probably erode further. See selected supporting quotes:

> "No! Time is the biggest problem."

> "I have to serve several schools within the district. Traveling to and from buildings takes a chunk of my time."

"Our caseloads and required paperwork cannot be accomplished in a 40 to 50 hour work week. Adding collaborative hours for each student is an unrealistic goal. I serve 60 speech students who would need to be met and planned about."

"We need a decrease in caseload, or assistants to some to help with required tasks. Basically, it's not working and that is why there are so many (job) openings the city."

"We have absolutely no time for collaboration. With pullout and inclusion four and one-half days per week, it leaves no time for common planning. My half day planning is taken up with MFEs (multi-factored evaluations) and IEP writing."

"I'm very happy in my unique role as a school nurse that I am able to attend IEPs, MFEs and other team meetings, but most of the nurses don't have this ability. The problem is that I have 1200 students in different building and I don't have enough time for everything."

From these observations, I concluded that the outlook of teachers differed from that of the related health service providers. The teachers appeared to hold out hope that their schedules might be optimized to allow a greater participation in collaborative efforts. Evidenced by statements such as:

"Although collaboration is many times done in informal settings, a specific or scheduled collaboration time would enhance services especially for specific students or issues."

"While I may have time in my day, the related health providers are only in my building on certain days and times, many of which are during my instruction blocks."

"It's because they have too many other students at many different locations to truly meet their needs."

The related health personnel, on the other hand, stated unequivocally that their schedules are overburdened with insufficient time for collaboration. Supported by the following statements:

"Our caseloads and required paperwork cannot be accomplished in a 40 to 50 hour work week."

"Basically, it's not working and that is why there are so many (job) openings the city."

"We have absolutely no time for collaboration."

In order to confirm these impressions, I decided to explore this in the combined focus group in Phase Three using the following prompting question: Given the fact that you value collaboration and note that finding sufficient time is a problem, could you re-arrange your schedule to allow more time for collaboration. If yes, how?; If no, what would make this possible?

Question #2: How is collaboration recognized and rewarded by the administration?

Both groups noted a lack of administrative support. Special education teachers and related health services personnel reported a lack of building level and district level of support and or understanding. In fact, they expressed a sense of frustration with the mixed messages sent by the district. This was evidenced by the following quotations from teachers and related services personnel.

Special Education Teachers:

"I don't think that the district cares. We are on our own to collaborate with other professionals. I think that the district just expects us to hand-off students without talking to each other."

"I feel that the attitude toward collaboration needs to start at the top. If my principal valued it, then the staff would too."

"The administration says it is all willing to support collaboration, but they do not follow through with the efforts to make it work."

"Our administration thinks that they provide time in our schedules with waiver day and team planning. I do not feel that they set high expectations for collaboration, not do they encourage it."

> "My supervisor is very good and knows the laws and adamantly follows them. She is leaving at the end of this year and I wonder what will happen. She is one of the few in the administration who gets it."

Related Health Services Personnel

> "I have a lack of support from building level administration. My building principals still don't understand that speech and language therapy is a handicapping condition and that it follows the same guidelines as other disabilities. Therefore they don't think that I need to talk to other people."

> "My building principals don't seem to care to collaborate themselves. They don't care to come to required meetings, let alone understand my need to collaborate."

> "I have found that the principals understand the need for collaboration, but they say that the district administrators don't get it."

> "The district just expects it to work."

From these observations, I concluded that both special education teachers and related health services personnel perceived there to exist a definite lack of administrative support for collaborative efforts. In order to confirm these impressions, I decided to explore this in the combined focus group in Phase Three.

Question #4: During your collaborative efforts do the following occur? (development of mutual goals, sharing of responsibilities & decision making, input from all members)

The special education teachers tended to have a uniform perspective on the development of mutual goals, the sharing of responsibilities, and having input on decision making from all. On the other hand, the related health services personnel expressed more divergent opinions.

Special Education Teachers: In general, believed that these activities above were

desirable elements and occurred the majority of the time. This was evidenced in the

following statements.

> "I have not had any problems with teaming. Everyone seems to know what they are are responsible for."

> "The therapist that I work with value collaboration like I do. We are careful to make sure that everyone is informed. We really try to focus on the students and their programming."

> "I think that we all handle our roles on a professional level. All team members should be respectful and treated like equal providers."

A few instances were noted where one or more important elements were

compromised. However, this appeared to be minimal and linked to specific

incidences.

> "Throughout my experiences at various schools, collaboration has been a very important topic that was beginning to be implemented. However, this year with my teaching middle school for Springfield City, I have seen both positive and negative aspects of collaboration. I feel that all people need to participate equally when it involves special education students, but I have found some regular education teachers who don't feel the same way. They don't want to deal with the added responsibility in their classroom."

> "During inclusion this year, I needed to collaborate with the regular education teachers to meet my students' needs, but my opinions and ideas never mattered. I was often belittled. This is the first time that I have had this happen in five years of teaching."

Related Health Service Personnel: It was evident from the questionnaire that the

perspective of the nurses differed form that of other related health service personnel,

and more closely resembled that of the teachers described above. This same

difference was also found during the focus group. It is reflected in the following

quotations from the two nurses.

"I've never had a problem with people understanding their role or responsibility. As a nurse, I don't usually have problems contacting different agencies or doctors. The therapists are always helpful and flexible and cooperative. I think the teachers and I work well together because they really need my assistance with the medical needs of their students. We all understand that we are in this together."

From my experiences, I've not had problems with teachers and therapists. We all work well together and respect each other."

The remaining related health personnel expressed a divergent opinion. In general, they felt that quite often one or more of the elements were lacking. The following quotes illustrate this perception.

"I think that sometimes therapists think differently than the teachers. We are more consultative and they expect us to spend more time."

"I have worked with some teachers who have refused to follow-up on anything that I recommended for the students. They don't seem to understand the concept of working as a team."

"I have experienced misunderstanding of responsibilities, and no follow through from special education teachers--not all teachers--but some are more difficult to work with than other."

"I believe that sometimes there are communication glitches that impede the team working well together."

Question #3: Do you find that the time collaborating is worthwhile?

Question #5: Are you satisfied with your own collaborative efforts?

Special Education Teachers and Related Health Services Personnel: The two focus groups did not differ with respect to their answers to these two questions. All found collaboration worthwhile and were satisfied with their personal efforts. The following quotes are indicative of their attitudes.

"It is worthwhile when it works for the student."

"I enjoy working with others and talking about the student that we serve."

"I like the opportunity to discuss ideas with others. When I work with other therapists, I find that I am able to stay up to date on new augmentative speech devices."

"The time spent collaborating is definitely worth it. We just don't have enough time."

"I believe that two are better than one. When the whole team is able to get together our time is well spent."

"I feel that when we work together and present as a team, parents understand better what is going on with their child. This makes working with some parents easier."

"I think that I work hard to develop positive relationships. I'm happy with my efforts."

"I could do better, but with the limited time that I have, I do the best that I can."

Phase Three- Combined Focus Group

The final focus group combined the educators and the related health services personnel. This group was comprised of the following ten participants:

2-middle school special education teachers (moderate-severe level)

2-high school special education teachers (moderate-severe level)

2-nurses (1-special needs specific)

1-occupational therapist

1-physical therapist

2-speech pathologists

During the final phase of data collection the same set of questions was asked of the combined group that was asked of the separate groups during Phase Two in order to have confirmation of areas of agreement and disagreement. Additional

questions were more broadly themed and drawn in part from the Guiding Research

Questions described in Chapter One and in part as additional follow-up to the original

questionnaire. These were purposefully broad questions to permit the respondents

wide latitude and discovery of evidence to support or refute identified themes

including barriers and opportunities. These questions were as follows:

- In your collaborative capacity at the middle and/or high school level, can you
  identify unique barriers to collaboration?

- In your collaborative capacity at the middle and/or high school level, can you
  identify unique opportunities?

- Within your setting are there additional means by which more effective
  collaboration can be promoted? If so, then what?

Results for Phase Three confirmed all of the themes and findings noted in

Phase Two data collection. This may have been due in part to the fact that all of the

participants in the final combined focus group had previously participated in the

discipline specific groups in Phase Two. After coding the transcripts of the final focus

group, it was worth noting that those participating in the combined group upheld the

same attitudes and findings expressed previously by their discipline on the original

five questions. For the new questions, two additional themes were noted relating to

possible barriers to collaboration. The first theme dealt with the low expectations for

student progress that leads to frustration and loss of hope that any interventions will

be beneficial. The second additional theme was the absence or very limited use of a

functional skills curriculum for students with moderate and severe disabilities. Due to

the multiplicity of need and the cognitive level of student with moderate and severe

disabilities, a functional skills curriculum, addressing life skills. requires the input

form multiple team members in order to address educational and physical

accommodations.

The perspective of hopelessness was represented by two concerns: limitations

based on level of disability and length of time that students could attend the high

school program. The following quotes reflect this sense of hopelessness.

> "I sometimes think that, based on the severity of the disability, people collaborate more or less. What I mean is, for kids who have less severe disabilities, we can generate more ideas for programming. For some kids there is a limitation to what we can do."

> "By the time these students get to the high school, everyone has given up hope."

> "At the middle and high school level, we often work on maintenance as opposed to progress."

> "People collaborate more at preschool and elementary levels because they are developing new programming. In the upper grades, we are often using the same plan over and over."

> "When you work with the same student for years and see minimal progress, the team often just goes through the motions."

The two teachers and the four therapists participating in the focus group made

comments that reflected an additional theme of student programming limitations.

They stated that since the district required educational programming linked to the

Ohio Academic Content Standards, there was limited or no use of a functional skills

curriculum for students with moderate and severe disabilities. These selected quotes

support this theme.

> "Our district is so focused on academics they don't realize that these students need functional curriculum. But then again this would require more time to collaborate."

"In the middle school we do some collaboration with the consumer science classes but that is because we fought for it."

"At the high school we never get to use the home-ec rooms or borrow the equipment. They say special ed has money- you buy it. So much for teaching something useful."

"As a therapist, I see IEPs with education goals and no life skills. The district is afraid to use a goal that is not in the content standards. These kids should be working on life skills. It should be all right with the state department- after all, these kids get alternative assessments."

The combined group was able to identify one unique opportunity for collaboration at the middle and high school level, that of addressing the requirement of transition. However, the special education teachers and related health services personnel expressed that transition was not being addressed adequately. The following quotes support the identification of this unique opportunity.

"These students range from 12 to 22. We should address transition, but we don't. Or at least not like we are supposed to."

"Isn't transition required by IDEA? At what ages" (*Response provided by me as the facilitator: "Yes. For middle and secondary students, transition is required at ages 14 & 16.*) "Wow, I didn't realize that it was a legal requirement."

"We do address transition, but usually just on education and legal guardianship for moderate and severe students. We don't do much for transition for independent living or work."

When asked to generate ideas as to how the district could recognize and reward collaborative efforts, the participants simply stated more time to collaborate would be reward enough. The group also agreed that having students demonstrate success was another reward. The following quotations lend support to these two beliefs.

"I don't need to have rewards outside of the positive progress of the individual student."

"True, I am most satisfied when we make progress as a team."

"Parents leaving a meeting with a better understanding due to correct collaboration is the reward. Everything with these students overlaps and having everyone on the same page is the payoff."

"Reward would be having a scheduled time to collaborate outside of my planning time. I'm constantly tracking down people."

"OK, it is fine to be happy with student progress, but having time to discuss the student would still be most helpful."

The final question addressed additional means by which more effective collaboration could be promoted. There was no group consensus, but the following variety of ideas were generated: better use of e-mail and phone calls; time set aside each grading period for the teachers and related health services personnel to get together at the middle and high school; flex time for evening meetings; required training for administrators on the importance of collaboration when serving students with special needs. It should be noted that I inquired about the desirability of additional training in collaboration skills for teachers and related services personnel, but the group agreed that training was not needed as much as time.

Chapter V

Discussion

Introduction

This study was designed to examine the state of ongoing collaborative efforts among special education teachers and related health service personnel in the Springfield City School District in Springfield, Ohio. In particular, I sought answers to six guiding research questions. These were as follows:

1. Are there barriers and opportunities for collaboration that are unique to the middle and high school settings?

2. What are the currently perceived barriers to collaboration between special education teachers and related health service personnel when serving students with moderate and severe disabilities at the middle and high school levels?

3. What are the currently perceived opportunities for collaboration between special education teachers and related health service personnel when serving students with moderate and severe disabilities at the middle and high school levels?

4. Can areas of agreement be identified related to the process of collaboration between special education teachers and related health service personnel when serving students with moderate and severe disabilities at the middle and high school levels?

5. Can areas of disagreement be identified related to the process of collaboration between special education teachers and related health service

personnel when serving students with moderate and severe disabilities at
the middle and high school levels?

6. What specific suggestions can be made to promote more effective
collaboration when serving students with moderate and severe disabilities
at the middle and high school levels?

To obtain answers to these, I utilized a simple quantitative survey measure combined
with a qualitative interview measure consisting of a series of focus groups. The focus
groups were used to examine in more detail collaboration at the middle and high
school levels when serving students with moderate and severe disabilities. The results
fell into three broad categories. The first category consisted of responses for which
there was broad agreement related to concepts of collaboration. In the second
category were grouped responses addressing specific perceptions and practices at the
middle and high school levels. Responses in the final category were those for which
there was no general agreement across groups and high variability within groups.
From these results, I have drawn conclusions, recommendations, and directions for
future research.

Category One

Agreement on Value of Collaboration

Despite differences in training and experience among teachers and related
health services personnel, they tended to define common elements of collaborative
efforts when serving students with disabilities in the school setting. There were three
major areas of agreement. All participants recognized the value of collaboration when
serving students and the importance of mutual goals and responsibilities. In addition,

individuals expressed that they derived personal satisfaction from their participation in "successful" collaborative teams.

These common elements may constitute the driving forces behind continued efforts to participate in collaborative efforts despite a plethora of perceived barriers. These three elements were not only identified by these special education teachers and related health services personnel, but they are also supported in the various definitions of collaboration by Idol, Paolucci-Whitcomb & Nevin (1994), Mostert (1998), and Friend & Cook (2003). These definitions all support and identify the requirement that collaboration consist of progress toward shared or common goals, have parity of participation, and be beneficial to the student being served. From this study, it was evident that when collaborating these teachers, therapists, and nurses felt a sense of efficacy based on their efforts. No opportunities were identified by special education teachers or related health services personnel at any level on the questionnaire.

Agreement on Perceived Barriers and Opportunities

Responses to the questionnaire indicated that the lack of sufficient time was one of the two common barriers identified by all participants. The other common barrier was a lack of sufficient/adequate/appropriate reward and recognition by administrators.

Category Two: Focus on Middle and High School

This category addresses those issues where significant differences were identified using the questionnaire and further explored in the focus groups. Specific differences existed between special education teachers and related health services

personnel and/or early and upper grades. These included the following: 1) appropriate team composition; 2) availability of team members; 3) mutual understanding of team members roles and responsibilities, and 4) insufficient administrative understanding and support.

The questionnaire identified team composition and availability of team members to be barriers to collaboration. Focus group discussions revealed that caseloads for the therapists and nurses were onerous and confirmed that appropriate team members were not always available. Consequently, group decisions might be made without one or more of the essential team members present. This problem was exacerbated when scheduling for students, teachers, and therapists became progressively more difficult at the middle and high school. For example, a single nurse may serve all of the students with moderate and severe disabilities across nine schools within the district. This presents this nurse with a myriad of scheduling and availability problems. The therapists are also deliver services across age groups and have to travel throughout the district. This is not an unusual happening in the delivery of services to students with moderate and severe needs. Both the educational and medical literature view this as common practice however, no one states that this type of services delivery is optimal (Heller, Best, Dykes, & Cohen, 2000).

The questionnaire identified a perception that administrative support was lacking for therapists and special education teachers at the middle and high school levels. This was further explored in the focus groups. The discussion revealed that on contributing factor was the difference in the scheduling of activities at middle and high school versus preschool and elementary. Scheduling at middle and high school

levels did not provide adequate time to be devoted to planning or executing successful collaboration. Because teacher classroom duties occupied the entire day. Teachers expressed the feeling that this situation was recognized by their disability area special education coordinator, but not by their building principals. In their opinion, principals failed to understand the importance of collaborative planning for the execution of the delivery of educational services. Rather, the completion of required IEPs and assessments was emphasized at the level of the principal.

Both teachers and related health service personnel both expressed the feeling that district and building level administrators were unwilling to hear suggestions and/or follow-up on suggestions directed at remedying this problem. Consequently, teachers and related health services personnel had the perception that their collaborative activities and the delivery of services to students with special needs has a low priority within the Springfield City School District. This perception may impede the implementation of collaborative efforts that constitute recognized best practice. Overall, I sensed a general state of resignation that things would remain the same despite their efforts and wishes. Indeed, this perception on the part of teachers and related health services personnel may have induced in them a state of "learned helplessness" and dulled their incentive and ability to recognize other opportunities. This may be evidenced in the fact that neither teachers nor the related health services personnel identified other opportunities that would lead to improved collaborative team function.

Category Three: Mixed and conflicting Opinions

Responses in this category displayed a high degree of variability and the maximal possible range. Consequently, the group/participants as a whole had mixed or conflicting opinions. This was true on the following questionnaire statements:

#4 My concept of collaboration matches that of the therapists with whom I work.

#8 I have adequate training in methods of collaboration

#9 Collaboration is critical to meeting the needs of students and families.

#10 All members of collaborative teams participate equally

#13 Collaboration is voluntary

#20 Our school district places high priority on collaborative efforts between teachers and therapists.

#26 Collaborators are able to maintain professional attitudes; personal differences do not impede the workings of the group.

These results may have been due, in part, to the specific training and experiences of each individual. The differences in the educational and medical models of training and the differences in individual experiences may also have contributed to the high degree of variability of responses. Indeed, upon further exploration of these topics in the focus groups, it was confirmed that, even within a single discipline, the formal training specifically addressing collaboration was highly variable. Not surprisingly, the experience of individual teachers also varied widely. I was surprised to find that there was no agreement within or among the groups on statement #9*: Collaboration is critical to meeting the needs of students and families.* Similar statements on the questionnaire elicited general agreement on the value of collaboration as did focus

group discussions. Perhaps this was due to the phrasing of this statement. In particular I suspect that the use of the word "critical" may be open to varying interpretations.

Summary

Federal legislation and current best practices demand that education and related health services professionals work together collaboratively. This study was designed to examine the participants' understanding of their roles and responsibilities as well as their beliefs and expectations concerning effective collaborations. Areas of agreement and disagreement among the collaborators were examined in order to identify current barriers to effective collaboration and potential opportunities for better delivery of services through improved collaboration.

Special educators and related service personnel participating in this study agreed, in general, on the definition of interdisciplinary collaboration. This finding differs from the reports of them (Thomas, Correa & Morsink, 2001; West & Idol, 1987) that the definition of collaboration often differs between disciplines and that differing definitions lead to misunderstandings between service providers. The present result may be due to the development of a greater emphasis on and acceptance of collaboration in recent years or to better perception of teachers and health related personnel. While the participants in this study mutually agreed on the definition of collaboration, they perceived a lack of support and understanding of collaboration on the part of administrators which they identified as a barrier to the development of better collaborations. It is interesting to speculate that administrators may indeed have a different definition of collaboration and outlook on the benefits of collaborative practice a possibility remains to be investigated.

Another area of general agreement was the positive perceptions of collaborative efforts with respect to providing student services as well as for personal satisfaction. This positive perception offers an opportunity for further development of collaborative efforts. The participants acknowledged and supported the beneficial outcome of collaboration that allowed participants to have joint ownership of the process and to make use of creative problem solving to improve the services delivered to the students. Such collaborations could then be more effectively directed toward increasing student skills and the level of academic performace. These positive benefits have been noted by many in the field of special education (Dettmer, Thurston & Dyck 2002; Friend & Cook, 2000, 2003; Fishbaugh, 1997; Idol, 2002; Mostert, 1998; Thomas, Correa & Morsink, 2001).

A third area of general agreement among participants involved the constraints of time. Both teachers and related health services personnel reported that finding the time to develop and carryout collaborations was a serious problem. The participants noted issues of scheduling, assignment to multiple buildings, and size of caseloads as determining factors limiting the time available to develop and implement effective collaborations. Over and over in the literature on interdisciplinary collaboration in early intervention and special education programming, time has been noted as a barrier to successful collaboration (Dettmer, Thurston, & Dyck,2005; Friend & Cook, 2003; Rainforth, York, & Macdonald, 1992; Thomas, Correa, & Morsink, 2001). The results of this study confirmed that time limitations are a major barrier to the development of collaborative relationships.

From the results of this study, a unique opportunity for improved

collaboration when serving students with moderate and severe disabilities at the

middle and high school levels was identified. Both special educators and related

health services personnel identified transition to be an opportunity. This demonstrates

their understanding and commitment to the need for and process of transition. In

particular, these participants stressed the importance of collaboration when addressing

transition at the ages of fourteen and sixteen. The need for transition was recognized

originally by IDEA and most recently in 2004 with its reauthorization. The overall

importance of transition at these ages has been recognized and well documented by

many authors (Deutsch-Smith, 2005; Heward, 2000; Mastropieri & Scruggs, 2004;

Turnbull, Turnbull, Shank & Smith 2004). Orelove and Sobsey (2005) and Dettmer,

Thurston and Dyck (2005) state the unique needs of individuals with severe and

multiple needs for transition services that lead to meaningful and productive lives.

Dettmer, Thurston, & Dyck (2005) state that, "without concerted team effort, students

with disabilities will be hard-pressed to make a successful transition to adult life."

(2005, p. 330). The recognition on the part of the participants in this study that

transition presented an opportunity for more effective collaboration may lead to better

delivery of services during this period.

Despite the existence of several barriers to the development and

implementation of effective collaborations, the value of collaboration is recognized

by these participants, and they see several opportunities exist to improve

collaborations. It is my hope that further research into the collaborations among

educators and related health services personnel will address the existing barriers and

provide the knowledge necessary to tear them down. In addition, novel opportunities
to create more effective collaborations must be identified. In this way, collaborations
among participants in the fields of medicine and education serving students with
moderate and severe disabilities at the middle and high school levels continue to grow
more effective. As new approaches are developed, additional benefits will accrue for
all involved.

Recommendations

Recommendations for the District

Based on my review of the data and hearing the voices of the special
educators, therapists, and nurses employed by the Springfield City School District, I
will make the following recommendations to the district:

- Address the need for an increase in time dedicated to interdisciplinary
  collaboration. The participants suggested that at least one time per
  grading period be dedicated to collaborative planning. Another
  suggestion would be to allow for "flex time" for evening collaboration
  with professional and families. This of course would require a system
  for documentation.

- Address how collaboration can support the requirement of transition
  for students enrolled in middle and secondary programs. This should
  be a high priority since IDEA legally requires and best practice
  supports the need for transition, especially for students with moderate
  and severe needs. This could be carried through by students and
  parents participating in an "orientation" visit and the high school

special education teachers spending time observing in the middle

school setting for insight on specific student programming. The special

education teachers, therapists, and nurses could also meet to

specifically develop transition plans.

- Provide training to administrators that addresses the benefits of

  collaborative practice when serving students with special needs. This

  training should also present different models of collaboration so that

  an administrator is better equipped to facilitate collaboration at both

  the building and district level.

- A review of the curriculum for students with moderate and severe

  disabilities should also be completed. The teachers and therapist

  expressed a desire for this review, and they noted that the current

  academic based curriculum was not addressing the needs of these

  students.

Recommendations for Policy and Practice

I can only make limited recommendations for practice at this point in time.

This is due in part to the limited comparative body of literature investigating

interdisciplinary collaboration when serving students with moderate and severe

disabilities at the middle and high school levels. However, I suggest the following:

- Consider the legal requirement of on-going collaborative practice.

  Even though the law embodies interdisciplinary efforts it does not

  directly require that such interaction be on-going. Since IDEA

  mandates transition at ages fourteen and sixteen, perhaps the law

should delineate who should be involved when a student moves from one grade level to the next, such as middle school to high school. Another consideration for students with moderate and severe disabilities who are typically served in school until the age of twenty-one, a third age for transition should be added at age eighteen. This would ensure that "age of majority" be addressed for students and families.

- Incorporate the formal teaching of collaborative practice into undergraduate and graduate level degree programs. In specific, the disciplines should address how to approach collaboration in the inclusive educational setting. Teaching various skills for how to collaborate within and between disciplines would only increase the likelihood that collaboration would be carried out when providing programming for students. Even though this has been stated as a need in the literature, from this study and from my current perspective as an instructor in a university setting, I do not see collaboration being address in the manner in which it should. Perhaps with the 2004 reauthorization of IDEA and with the No Child Left Behind mandate of hiring highly qualified teachers, undergraduate and graduate programs will see the increased need necessity for training in collaboration.

Limitations

Given the design of this study and subject population, I recognized that the limitations must be considered and recognized when interpreting, formulating, and applying the results and conclusions. The aim of qualitative research is not the generalization of results to a larger population, but rather the acquisition of an in-depth understanding derived from evidence found in separate cases over time (McMillan & Schumaker, 1993). However, some generalization is possible through the process of extracting common themes from the qualitative data analyses across multiple studies (Miles & Huberman, 1994, Creswell, 2002). Since this study has not been repeated, the findings are bound to the context in which they were collected and interpreted. In particular, the present study examined only collaboration involving the delivery of service to children with moderate to severe disabilities. Nevertheless, a desired outcome of this study was that it would prove useful to other interested investigators and practitioners and enable them to extend their own investigations and improve their practice.

Future Research

Several future research questions emerge from the results of this study. First, it is apparent from the results that the collaborating special education teachers and related health service personnel have the perception that administrators in the Springfield City School District place a low value on collaborative efforts. This perception appears to have a dramatic impact on the attitudes and practices of the collaborating special education teachers and related health personnel. An obvious

follow-up study would involve an examination of the outlook of the district and building administrators with respect to collaboration within their district and schools. At this time, it is not clear whether their outlook and expectations differ from those of the teachers, therapists, and nurses. In such a follow-up study, several areas could be examined with respect to the administrators, including: their definition of collaboration; their opinion of the benefits of collaboration for the students; their perceptions of existing barriers and opportunities to improve and foster collaborative efforts within the schools; and their interpretation of their legal responsibilities to implement collaborative efforts. In some areas, the opinions and perceptions of special education teachers and related health personnel differed across the grade levels. Thus, it is possible the that the attitudes and practices of administrators at pre-school, elementary, middle, and high school levels may also exist and influence the collaborations that occur. Such differences could examined and compared to those of teachers and related health personnel.

This study presents findings based on a narrowly defined population of moderate and severe disabilities. It is possible that the level of participation, attitudes, and perceptions of collaboration among teachers and related health personnel who deliver services to children with mild disabilities differ from those dealing with children with moderate to severe disabilities. Such differences also remain to be examined.

The present study examined a relatively small urban school population. In the future, it may also be of interest to examine collaboration in a rural school population and/or a larger urban school population.

References

Aksamit, D.L., & Rankin, J.L. (1993). Problem solving teams as prereferral process. *Special Services in the Schools 7, 1-25.*

Allen, K. E., Holm, V. A., & Schiefelbusch, R. L. (1978). *Early intervention: A team approach*. Baltimore: University Park Press.

Bahr, M. W., Whitten, E., Dieker, L., Kocarek, C. E., & Manson, D. (1999). A comparison of school-based intervention teams: Implications for educational and legal reform. *Exceptional Children*, *66*(1), 67-83.

Bailey, D. B., Simeonsson, R. J., Yoder, D. E., & Huntington, G. S. (1990). Preparing professionals to serve infants and toddlers with handicaps and their families: An integrative analysis across eight disciplines. *Exceptional Children, 57*(1)*, 26-34.

Bateman, B. (1995). The physician and the world of special education. *Journal of Child Neurology, 10*(1), 114-120.

Beck, H. L. (1962). The advantages of a multi-purpose clinic for the mentally retarded. *American Journal of Mental Deficiency*, *66*, 789-794.

Briggs, M. H. (1997). *Building early intervention teams: Working together for children and families*. Gaithersburg, MD: Aspen.

Brown, L., Branston, M. B., Hamre-Nietupski, S., Pumpian, I., Certo, N., & Gruenwald, L. (1979). A strategy for developing chronological age appropriate and function curricular content for servele handicapped adolescents and young adults. *Journal of Special Education, 13*(1), 81-90.

Cochrane, G. G., Farley, R., & Wilhelm, I. J. (1990). Preparation of physical

therapists to work with handicapped infants and their families: Current status

and training needs. *Physical Therapy, 70*(6), 372-380.

Coben, S. S., Thomas, C. C, Sattler, R. O., & Morsink, C. V. (1997). Meeting the

challenge of consultation and collaboration: Developing interactive teams.

Journal of Learning Disabilities, 30 (4), 427-432.

Creswell, J. P. (2002). *Educational research: Planning, conducting, and evaluating

quantitative and qualitative research*. Columbus, OH: Merrill/Prentice Hall.

Dettmer, P., Thurston, L. P., & Dyck, N. (2002*). Consultation, collaboration, and

teamwork for students with special needs.* Boston: Allyn and Bacon.

Dettmer, P., Thurston, L. P., & Dyck, N. (2005*). Consultation, collaboration, and

teamwork for students with special needs* (5th ed.) Boston: Allyn and Bacon.

Deutsch-Smith, D. (2004). Introduction to special education: Teaching in an age of

Opportunity (5th edition) Boston, MA: Pearson Education.

Dinnebeil, L. A., Hale, L. M., & Rule, S. (1999). Early intervention program practices

that support collaboration. *Topics in Early Childhood Special Education

19*(4), 225-235.

Downing, J.E. (2002). *Including students with severe and multiple disabilities in

typical classrooms: Practical strategies for teachers* (2nd ed.). Baltimore: Paul

H. Brookes.

Fishbaugh, M. S. E. (1997). *Models of collaboration*. Boston: Allyn and Bacon.

Fleming, J. L., & Monda-Amya, L. E. (2001). Process variables critical for team

  effectiveness: A Delphi study of wraparound team members. *Remedial and*

  Special Education, 22(3) 158-171.

Friend, M., & Cook, L. (2000). *Interactions: Collaboration skills for school*

  professionals (3rd ed.). White Plains, NY: Longman.

Friend, M., & Cook, L. (2003). *Interactions: Collaboration skills for school*

  professionals (4th ed.). Boston: Allyn and Bacon.

Frankfort-Nachmias, C., & Nachmias, D. (1996). *Research methods in the social*

  sciences (5th ed). New York: St. Martin Press.

Gable, R. A., Henderickson, J. M., & Rogan, J. P. (1996). TEAMS supporting

  students at risk in the regular classroom. *The Clearing House, 69* (4), 235-

  238.

Gable, R. A., Young, C. C., & Henderickson, J. M. (1987). Content of special

  education teacher preparation. Are we headed in the right direction? *Teacher*

  Education and Special Education, 10, 135-139.

Golin, A. K., & Ducanis, A. J.(1981). *The interdisciplinary team.* Rockville, MD:

  Aspen.

Grady, M. P. (1998). *Qualitative and action research: A practitioner handbook.*

  Bloomington, IN: Phi Delta Kappa Educational Foundation.

Heller, K.W., Fredrick, L.D., Best, S., Dykes, M.K., & Cohen, E.T. (2000).

  Specialized health care procedures in the schools: Training and service

  delivery. *Exceptional Children, 66* (2), 173-186.

Heller, K.W., Fredrick, L., & Rithmore, N. (1997). Special health care procedures in the schools. *Physical Disabilities: Education and Related Services, 14*, 5-22.

Heston, M. L., Raschke, D., Kliewer, C., Fitzgerald, L. M., & Edmiaston, R. (1998). Transforming teacher preparation in early childhood education: Moving to inclusion. *Teacher Education and Special Education, 21*(4), 278-292.

Heward, W.L. (2000). *Exceptional children: An introduction to special education* (6th ed.). Upper Saddle river, NJ: Merrill.

Howard, V. F., Williams, B. F., Port, P. D., & Lepper, C. (2001). *Very young children with special needs: A formative approach for the 21st century:* Upper Saddle River, NJ: Merrill.

Humphry, R., & Link, S. (1990). Entry level preparation of occupational therapists to work in early intervention programs. *American Journal of Occupational Therapy, 44*(9), 828-833.

Hunt, P., Doering, K., Hirose-Hatae, J., Maier, J., & Goetz, L. (2001). Across-program collaboration to support students with and without disabilities in a general education classroom. *The Journal of the Association for Persons with Severe Handicaps, 26*(4) 240-256.

Hunt, P., Soto, G., Maier, J., & Doering, K. (2003). Collaborative teaming to support students at risk and students with severe disabilities in general education classrooms. *Exceptional Children, 69*(3), 315-332.

Husserl, E. [1913] (1962) *Ideas*. London: George Allen & Unwin. (Republished, New York: Colliers.)

Idol, L. (1983). *Special educator's consultation handbook*. Austin, TX: Pro-Ed.

Idol, L. (2002). *Creating collaborative and inclusive schools*. Austin, TX: Pro-Ed.

Idol, L., Paolucci-Whitcomb, P., & Nevin, A. (1986). *Collaborative consultation*. Rockville, MD: Aspen Systems Corporation.

Idol, L., Necin, A., & Paolucci-Whitcomb, P. (1994). *Collaborative consultation.* (2nd ed.). Austin, TX: Pro-Ed.

Idol, L. & West, J.F. (1987). Consultation in special education (Part II): Training and practice. *Journal of Learning Disabilities, 20*. 474-494.

Irving Independent School District v. Tatro, 486 U.S. 883, 104 S. Ct. 3371 (1984).

Janney, R.E., & Snell, M. E. (1997). How teachers include students with moderate and severe disabilities in elementary classes: The means and meaning of inclusion. *Journal of the Association for Persons with Severe Handicaps 22*(3), 159-169.

Johnson, D. W., & Johnson, F. P. (1991). *Joining together, group theory, and group skills* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.

Kaiser, S. M., & Woodman, R. W. (1985). Multidisciplinary teams and group decision-making techniques: Possible solutions to decision-making problems. *School Psychology Review, 14*, 457-470.

Lehr, D.H. (1990). Providing education to students with complex health care needs. *Focus on Exceptional Children, 22*(7), 1-12.

Lewis, R. F., Tucker, R., Tsao, H., Canaan, E., Bryant, J., Talbot, P., King, D., & Flyth, M. (1998). Inproving interdisciplinary team process; A practical approach to team development. *Journal of Allied Health, 27*(2), 89-95.

Mastropieri, M.A. & Scruggs, T.E. (2004*). The inclusive classroom: Strategies for effective instruction,* (2nd ed.) Columbus, OH: Merrill Prentice Hall.

McAfee, J. K. (1987). Integrating thereapy services in the school: A model for training educators, administrators, and therapists. *Topics in Early Childhood Special Education, 7(3)*, 116-126

McMillan, J.H., & Schumaker, S. (1997). *Research in education: A conceptual introduction* (4th ed.) New York: Longman.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Mostert, M.P. (1998). *Interprofessional collaboration in schools*. Boston: Allyn and Bacon.

Mulligan-Ault, M., Guess, D., Struth, L., & Thompson, B. (1988). The implementation of health-related procedures in classrooms for students with severe multiple impairments. *Journal of the Association for Persons with Severe Handicaps, 13,* 100-109.

Ogletree, B. T., Bull, J., Drew, R., & Lunnen, K.Y. (2001). Team-based service Delivery for students with disabilities: Practice options and guidelines for success. *Intervention in School and Clinic, 36*(3), 138-145.

Orelove, F. P. & Sobsey, D. (1987). *Educating children with multiple disabilities: A transdisciplinary approach*. Baltimore: Paul H. Brookes.

Orelove, F. P., Sobsey, D., & Silberman, R.K. (2004). *Educating children with multiple disabilities: A collaborative approach* (4th ed.). Baltimore: Paul H. Brookes.

Orelove, F. P. & Sobsey, D. (1991). *Educating children with multiple disabilities: A*

    transdisciplinary approach (2nd ed.). Baltimore: Paul H. Brookes.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed). Newbury

    Park, CA: Sage Publications.

Purvis, P., & Whelan, R. J. (1992), Collaborative planning between pediatricians and

    special educators. *Pediatric Clinics of North America, 39* (3), 451-469.

Rainforth, B., York, J., & Macdonald, C. (1992). *Collaborative teams for students*

    with severe disabilities: Integrating therapy and educational services.

    Baltimore: Paul H. Brookes.

Rapport, M.J. (1996). Legal guidelines for the delivery of special health care services

    in schools. *Exceptional Children, 62,* 537-549.

Rothstein, L. F. (1995). *Special education law* (2nd ed.). New York: Longman.

Sindelar, P. T., Griffin, C. C., Smith, S. W., & Wantanabe, A. K. (1992). Prereferal

    intervention: Encouraging notes on preliminary findings. *Elementary School*

    Journal, 92, 245-259.

Snell, M. E. (1993). *Instruction of students with severe disabilities* (4th ed.). New

    York: Macmillan.

Snell, M. E., & Janney, R.E. (2000). Teachers' problem-solving about children with

    moderate and severe disabilities in elementary classrooms. *Exceptional*

    Children, 66(4), 472-490.

Stayton, V.D., Whittaker, S., Jones, E., & Kersting, F. (2001). Interdisciplinary model

    for the preparation of related services and early intervention personnel.

    Teacher Education and Special Education, 24(4), 395-401.

Siders, J. Z., Riall, A., Bennett, T. C., & Judd, D. (1987). Training of leadership

    personnel in early intervention: A transdisciplinary approach. *Teacher*

    Education and Special Education, 10, 161-170.

Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. Bristol,

    PA: The Falmer Press.

Thomas, C. C., Correa, V. I., & Morsink, C. V. (1995). *Interactive teaming:*

    Consultation and collaboration in special programs (2nd ed.). Englewood, NJ:

    Prentice Hall.

Thomas, C. C., Correa, V. I., & Morsink, C. V. (2001). *Interactive teaming:*

    Enhancing programs for students with special needs (3rd ed.). Columbus, OH:

    Merrill Prentice Hall.

Turnbull, R., Turnbull, A., Shank, M., & Smith, S.J. (2004). *Exceptional lives:*

    Special education in today's schools (4th ed.). Columbus, OH: Merrill Prentice

    Hall.

Van Meter, P., & Stevens, R. J. (2000). The role of theory in the study of peer

    collaboration. *The Journal of Experimental Education, 69*(1), 113-127.

Walther-Thomas, C., Korinek, L., & McLaughlin, V.L. (1999). Collaboration to

    support students' success. *Focus on Exceptional Children, 32*(3), 10-20.

Whitehouse, F. A. (1951). Teamwork: An approach to a high professional level.

    Exceptional Children, 18(1), 75-82.

Whitten, E., & Dieker, L. (1995). Intervention assistance teams: A broader vision.

    Preventing School Failure, 40, 41-45.

Winton, P. (1995). A model for supporting higher education faculty in their early intervention personnel preparation roles. *Infants and Young Children, 8*(3).

Winton, P., & Mellin, A. (1997). *The "ammunition" (data and strategies) you need to promote interdisciplinary preservice training.* Paper presented at the annual conference of the Division for Early Childhood of the Council for Exceptional Children. Louisiana: New Orleans.

Wood, M. (1998). Whose job is it anyway? Education roles in inclusion. *Exceptional Children, 64*(1), 181-195.

Appendix A-1
Letter Requesting District Support

March 17, 2004

Frank Schiraldi, Ph.D.
Springfield City School District
Department of School Improvement
49 East College Avenue
Springfield, OH 45501

Dr. Schiraldi,

I am writing to request permission from the Springfield City School District to complete
my doctoral research study in your school system. I am completing my studies through
West Virginia University in Morgantown, WV, however, I am currently employed at Wittenberg
University in the Education Department. I have lived in Springfield for the past two years, and I have
had the opportunity to work with the district in providing field experience, student teaching and
collaborative presentations through the Springfield-Wittenberg partnership.

My research focuses on the collaborative relationship between special educators and related service
providers. In specific my study will investigate the opportunities and barriers to collaboration between
special education teachers, occupational therapists, physical therapists, speech/language pathologists,
and school nurses at the high school level when serving students with moderate to severe disabilities
and learning needs. I can assure you that I will protect the anonymity of the district, as well as the
teachers and related service personnel in presentations and any subsequent publications. Should the
district grant me permission, I will submit copies of my Institutional Review Board approval from
West Virginia University. I will also provide a summary and analysis of the research to the Springfield
City School District.

Specifically, I am requesting the following:
      1. permission to distribute a broad questionnaire investigating collaboration to all special
      educators and related health services personnel employed by the district.

      2. permission to hold a series of focus groups with selected high school special education
      teachers and related health services personnel who work with students identified as having
      moderate to severe learning needs.

I thank you for your consideration of my request. Should you need further information or
documentation, please feel free to contact me. I look forward to your reply.

Sincerely,

Sally Brannan
745 Snowhill Boulevard
Springfield, OH 45504
(937) 399-0178 (home)
(937) 327-6334 (work)

cc: Wendy Ford, Director of Human Resources

Springfield
City Schools

May 25, 2004

Sally Brannan
745 Snowhill Boulevard
Springfield, OH 45504

SCOTT A. SPEARS, Superintendent
E-mail SpearsS@springfield-city.k12.oh.us

MICHAEL E. KINNEER, Treasurer
E-mail Kinneer@springfield-city.k12.oh.us

BOARD OF EDUCATION
TODD JONES, President

CHRISTI LOCKHART, Vice President

JAMES BACON

JAMES L. HUFFMAN

REGINA ROLLINS

Ms. Brannan

On behalf of the Springfield City Schools, Mr. Scott Spears, Superintendent, and
Dr. Frank Schiraldi, Executive Director of School Improvement, we give you permission
for the following:

1. Permission to distribute a broad questionnaire investigating collaboration to all
   special educators and related health services personnel employed by the district.
2. Permission to hold a series of focus groups with selected high school special
   education teachers and related health services personnel who work with students
   identified as having moderate to severe learning needs.

The Springfield City Schools understands that this research study is to be used for the
completion of your doctoral studies at West Virginia University and will investigate relationship
and collaboration special education teachers, nurses, therapists, and pathologists regarding
students with moderate to severe disabilities. You will also provide the district copies of the
Institutional Review Board approval and a summary of the research to the Springfield City
Schools.

I would like to thank you for your participation with the Springfield City Schools-Wittenberg
partnership. The Springfield City Schools values the strong relationship and collaboration it has
with higher learning institutions and contributions each partner provides.

Sincerely,

Kraig Hissong

Kraig E. Hissong
Asst. Executive Director of School Improvement
Springfield City Schools
49 E. College Ave.
Springfield, OH 45504

Appendix B-1

Survey on Interdisciplinary Collaboration

The following questionnaire investigates collaboration between special educators and related health services personnel (PT, OT, SLP, Nurse). Please answer the questions in light of your position in working with students with special needs.

I am (circle one)

| Special Educator | Physical Therapist | Occupational Therapist | Speech/Language Pathologist | Nurse |

I am currently working at the following level (circle all that apply)

Preschool   Elementary School   Middle School

High School

For each of the questions below circle the most appropriate response.

Collaboration in My School	Strongly Disagree Agree	Disagree	No Opinion	Agree	Strongly
1. There is sufficient time in my daily school schedule to develop collaborative interactions.	1	2	3	4	5
2. My collaborative efforts are fostered and supported by the administration.	1	2	3	4	5
3. Other members of collaborative groups clearly understand their roles and responsibilities.	1	2	3	4	5
4. My concept of collaboration matches that of the teachers with whom I work.	1	2	3	4	5
5. My concept of collaboration matches that of the therapists with whom I work.	1	2	3	4	5
6. Collaboration with others is worth the time and effort in producing optimal outcomes for the student with special needs.	1	2	3	4	5
7. Collaboration allows for the generation of creative solutions to issues and problems.	1	2	3	4	5
8. I have had adequate training in the methods of collaboration.	1	2	3	4	5
9. Collaboration is critical to meeting the needs of students and families.	1	2	3	4	5
10. All members of collaborative teams participate equally.	1	2	3	4	5
11. Membership on collaborative teams is appropriate at my school.	1	2	3	4	5
12. Necessary team members are available to participate in decision making.	1	2	3	4	5

	Strongly Disagree Agree	Disagree	No Opinion	Agree	Strongly Agree

Collaboration in General

13. Collaboration is voluntary.
1 **2** **3** **4** **5**

14. Collaboration requires parity (equal participation) among participants.
1 **2** **3** **4** **5**

15. Collaboration is based on mutual goals.
1 2 3 4 5

16. Collaborating depends on shared responsibility for participation and decision making.
1 **2** **3** **4** **5**

17. Individuals who collaborate share resources.
1 **2** **3** **4** **5**

18. Individuals who collaborate share accountability for outcomes.
1 **2** **3** **4** **5**

19. My immediate supervisor understands the amount of collaboration required to serve my students.
1 **2** **3** **4** **5**

20. Our school district places a high priority on collaborative efforts between teacher and therapist.
1 2 3 4 5

21. I derive personal satisfaction from my collaborative efforts.
1 **2** **3** **4** **5**

22. I am satisfied with my own collaborative efforts.
1 **2** **3** **4** **5**

23. Teachers and therapists are viewed as equal partners in collaborating.
1 **2** **3** **4** **5**

24. Collaboration is recognized and rewarded by my school system.
1 **2** **3** **4** **5**

25. I have ample time and opportunity to develop collaborative relationships.
1 **2** **3** **4** **5**

26. Collaborators are able to maintain professional attitudes; personal differences do not impede the workings of the group.
1 **2** **3** **4** **5**

27. I am aware of the relevant federal legislation that requires collaboration among service providers.
1 **2** **3** **4** **5**

In your own words, how would you define collaboration?

A. **Please elaborate on your thoughts concerning any item(s) on the survey listed above concerning collaboration:**

B. **Please comment on your perceptions of current barriers for collaboration among special educators and related health service providers.**

Appendix B-2
Questionnaire Letter for Special Educators

April   , 2004

Dear Special Educator:

My name is Sara Brannan. I am an Instructor in the Department of Education at
Wittenberg University and I am currently working on my dissertation project as part
of the requirements for completing my doctoral degree in Special Education and
Community Medicine at West Virginia University. My dissertation research project
is designed to investigate collaboration among Special Educators and Related Health
Service Personnel. Of particular interest are the perceptions of barriers and
opportunities for collaborative interdisciplinary efforts. As part of my investigation, I
have been given permission by the Springfield City School District to seek your
responses to the questions contained in the enclosed survey. In addition, this study
has been approved by Exempted Review through the Institutional Review Board at
West Virginia University.

I respectfully request that you spend a few moments to complete the enclosed
questionnaire and to return it to me in the enclosed stamped envelope.

Thank you for your participation.

Sincerely,

Sara A. Brannan, M.Ed.

Appendix B-3

Questionnaire Letter for Related Health Service Providers

April   , 2004

Dear Related Health Service Provider:

My name is Sara Brannan. I am an Instructor in the Department of Education at
Wittenberg University and I am currently working on my dissertation project as part
of the requirements for completing my doctoral degree in Special Education and
Community Medicine at West Virginia University. My dissertation research project
is designed to investigate collaboration among Special Educators and Related Health
Service Personnel. Of particular interest are the perceptions of barriers and
opportunities for collaborative interdisciplinary efforts. As part of my investigation, I
have been given permission by the Springfield City School District to seek your
responses to the questions contained in the enclosed survey. In addition, this study
has been approved by Exempted Review through the Institutional Review Board at
West Virginia University.

I respectfully request that you spend a few moments to complete the enclosed
questionnaire and to return it to me in the enclosed stamped envelope.

Thank you for your participation.

Sincerely,

Sara A. Brannan, M.Ed.

Appendix C

Focus Groups A-1, A- 2, & B Focal Topics
(Sample for Prospectus and Institutional Review Board)

The questions/focal topics to be addressed in the discussion items:

Focus Groups 1 & 2

Focus groups will be derived from the answers/responses to the questionnaire described. (See Appendix A for sample questions.) These questions will address those current barriers and potential opportunities for improved collaboration at the middle and high school levels within the Springfield City Schools.

A list of expected questions and focal discussion items include these listed below. The actual questions and discussion items will be developed following the analysis of the written questionnaire.

Possible Perceived Barriers and Opportunities
Time
Support
Assigned not voluntary
Non-parity
Disparate goals
Responsibility not shared
Resources not shared
Education/Professional Development appropriate
Insufficient resources
Work culture
Accountability (equal/unequal)
Membership of decision-making
Pooling of resources

Appendix D-1

Focus Groups A-1 & A-2 Seating Chart

Date: Location:

Co-Facilitator

Facilitator

Video
Recorder
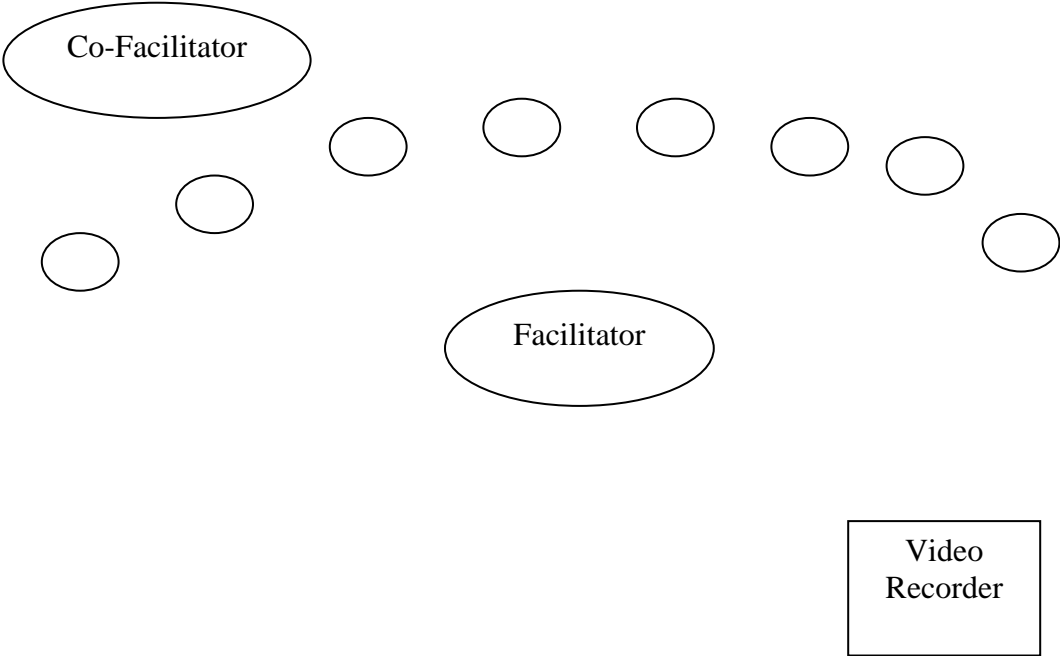
Appendix D-2

Focus Group B Seating Chart

Date: Location:

Co-Facilitator

Facilitator

Video
Recorder
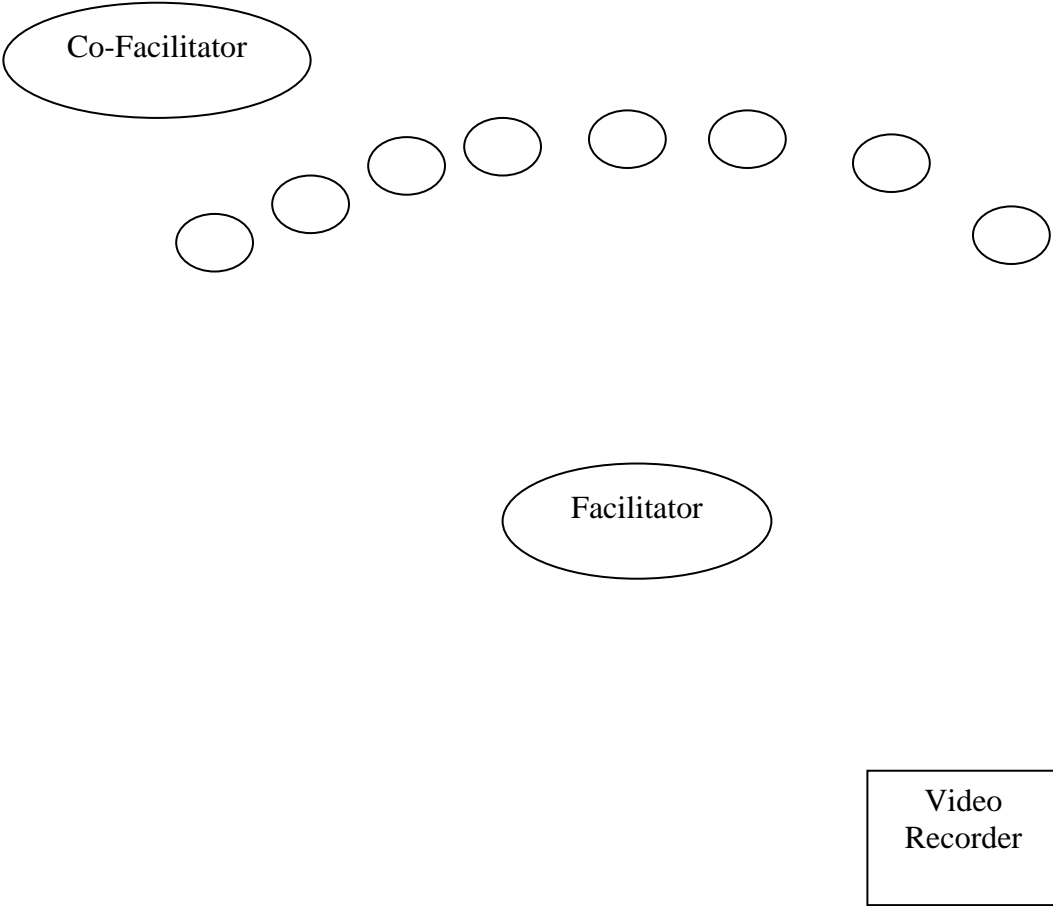
Appendix E

Kruskal-Wallis Test: #1 versus SPED Level

```
SPED Level      N   Median  Ave Rank      Z
elementary     25   2.000      43.1   -0.20
high school    13   2.000      36.0   -1.24
middle school  22   2.000      44.0    0.01
nurse           8   3.000      59.8    1.85
preschool       7   2.000      46.6    0.29
therapist      12   2.000      42.3   -0.25
Overall        87              44.0

H = 5.31  DF = 5  P = 0.380  (adjusted for ties)
```

Kruskal-Wallis Test: #2 versus SPED Level

```
SPED Level      N   Median  Ave Rank      Z
elementary     25   4.000      45.7    0.41
high school    13   3.000      39.2   -0.74
middle school  22   3.500      37.1   -1.48
nurse           8   4.000      58.3    1.68
preschool       7   4.000      66.4    2.44
therapist      12   3.000      35.7   -1.23
Overall        87              44.0

H = 13.11  DF = 5  P = 0.022  (adjusted for ties)
```

Kruskal-Wallis Test: #3 versus SPED Level

```
SPED Level      N   Median  Ave Rank      Z
elementary     25   4.000      51.8    1.83
high school    13   3.000      40.0   -0.61
middle school  22   3.000      32.9   -2.38
nurse           8   4.000      51.3    0.86
preschool       7   4.000      63.1    2.08
therapist      12   2.500      36.3   -1.13
Overall        87              44.0

H = 14.02  DF = 5  P = 0.016  (adjusted for ties)
```

Kruskal-Wallis Test: #4 versus SPED Level

```
SPED Level      N   Median  Ave Rank      Z
elementary     25   4.000      49.0    1.16
high school    13   3.000      41.5   -0.38
middle school  22   3.000      35.9   -1.75
nurse           8   4.000      58.4    1.70
preschool       7   4.000      53.4    1.03
therapist      12   2.500      36.1   -1.16
Overall        87              44.0

H = 9.09  DF = 5  P = 0.105  (adjusted for ties)
```

Kruskal-Wallis Test: #5 versus SPED Level

```
SPED Level      N  Median  Ave Rank      Z
elementary     25   4.000      48.0   0.95
high school    13   3.000      28.3  -2.43
middle school  22   3.000      36.9  -1.53
nurse           8   4.000      54.6   1.24
preschool       7   4.000      48.2   0.46
therapist      12   4.000      56.2   1.80
Overall        87              44.0

H = 13.82  DF = 5  P = 0.017  (adjusted for ties)
```

Kruskal-Wallis Test: #6 versus SPED Level

```
SPED Level      N  Median  Ave Rank      Z
elementary     25   5.000      42.5  -0.35
high school    13   5.000      44.3   0.04
middle school  22   5.000      42.9  -0.23
nurse           8   5.000      51.1   0.84
preschool       7   5.000      43.7  -0.03
therapist      12   5.000      44.2   0.03
Overall        87              44.0

H = 1.04  DF = 5  P = 0.960  (adjusted for ties)
```

Kruskal-Wallis Test: #7 versus SPED Level

```
SPED Level      N  Median  Ave Rank      Z
elementary     25   4.000      40.7  -0.78
high school    13   5.000      48.1   0.63
middle school  22   5.000      42.7  -0.28
nurse           8   5.000      46.6   0.31
preschool       7   5.000      42.0  -0.22
therapist      12   5.000      48.3   0.64
Overall        87              44.0

H = 1.74  DF = 5  P = 0.883  (adjusted for ties)
```

Kruskal-Wallis Test: #8 versus SPED Level

```
SPED Level      N  Median  Ave Rank      Z
elementary     25   4.000      45.3   0.30
high school    13   4.000      42.9  -0.17
middle school  22   4.000      40.8  -0.69
nurse           8   4.000      58.2   1.67
preschool       7   3.000      41.2  -0.30
therapist      12   4.000      40.6  -0.50
Overall        87              44.0

H = 3.67  DF = 5  P = 0.598  (adjusted for ties)
```

Kruskal-Wallis Test: #9 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   5.000      43.9  -0.03
high school     13   5.000      46.4   0.37
middle school   22   4.000      41.0  -0.63
nurse            8   5.000      48.4   0.51
preschool        7   5.000      46.1   0.23
therapist       12   4.500      43.0  -0.15
Overall         87              44.0

H = 0.96  DF = 5  P = 0.966  (adjusted for ties)
```

Kruskal-Wallis Test: #10 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      51.4   1.74
high school     13   2.000      40.3  -0.57
middle school   22   2.000      39.1  -1.06
nurse            8   2.500      47.1   0.37
preschool        7   2.000      40.7  -0.36
therapist       12   2.000      41.4  -0.38
Overall         87              44.0

H = 4.22  DF = 5  P = 0.518  (adjusted for ties)
```

Kruskal-Wallis Test: #11 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   3.000      36.5  -1.75
high school     13   4.000      42.0  -0.32
middle school   22   4.000      38.7  -1.13
nurse            8   4.000      60.0   1.88
preschool        7   4.000      59.0   1.64
therapist       12   4.000      52.0   1.18
Overall         87              44.0

H = 11.45  DF = 5  P = 0.043  (adjusted for ties)
```

Kruskal-Wallis Test: #12 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      48.5   1.05
high school     13   3.000      34.2  -1.52
middle school   22   2.000      33.0  -2.37
nurse            8   4.000      61.4   2.05
preschool        7   4.000      58.1   1.54
therapist       12   3.500      45.7   0.25
Overall         87              44.0

H = 14.13  DF = 5  P = 0.015  (adjusted for ties)
```

Kruskal-Wallis Test: #13 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      44.3   0.08
high school     13   3.000      38.6  -0.84
middle school   22   3.000      38.8  -1.11
nurse            8   4.000      51.4   0.87
preschool        7   2.000      40.1  -0.43
therapist       12   4.000      56.0   1.78
Overall         87              44.0

H = 5.96  DF = 5  P = 0.310  (adjusted for ties)
```

Kruskal-Wallis Test: #14 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      45.5   0.36
high school     13   4.000      43.7  -0.04
middle school   22   4.000      49.8   1.24
nurse            8   2.500      30.3  -1.61
preschool        7   2.000      27.2  -1.83
therapist       12   4.000      49.5   0.81
Overall         87              44.0

H = 8.39  DF = 5  P = 0.136  (adjusted for ties)
```

Kruskal-Wallis Test: #15 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      44.5   0.11
high school     13   4.000      43.5  -0.08
middle school   22   4.000      47.0   0.64
nurse            8   4.000      47.3   0.38
preschool        7   4.000      38.8  -0.57
therapist       12   4.000      39.0  -0.74
Overall         87              44.0

H = 1.70  DF = 5  P = 0.889  (adjusted for ties)
```

Kruskal-Wallis Test: #16 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      41.5  -0.58
high school     13   4.000      44.3   0.04
middle school   22   4.000      44.3   0.06
nurse            8   4.000      41.9  -0.25
preschool        7   4.000      42.3  -0.19
therapist       12   4.000      50.8   1.00
Overall         87              44.0

H = 1.53  DF = 5  P = 0.910  (adjusted for ties)
```

Kruskal-Wallis Test: #17 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      41.3  -0.64
high school     13   4.000      48.1   0.64
middle school   22   4.000      44.8   0.18
nurse            8   4.000      53.3   1.09
preschool        7   4.000      45.1   0.12
therapist       12   4.000      37.0  -1.04
Overall         87             44.0

H = 3.66  DF = 5  P = 0.599  (adjusted for ties)
```

Kruskal-Wallis Test: #18 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      45.5   0.36
high school     13   4.000      48.1   0.63
middle school   22   4.000      39.6  -0.94
nurse            8   4.000      44.0   0.00
preschool        7   4.000      52.0   0.87
therapist       12   4.000      39.7  -0.63
Overall         87             44.0

H = 2.62  DF = 5  P = 0.759  (adjusted for ties)
```

Kruskal-Wallis Test: #19 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      41.6  -0.56
high school     13   3.000      37.8  -0.96
middle school   22   4.000      47.1   0.67
nurse            8   4.000      53.4   1.11
preschool        7   4.000      56.8   1.40
therapist       12   3.000      36.3  -1.14
Overall         87             44.0

H = 5.99  DF = 5  P = 0.307  (adjusted for ties)
```

Kruskal-Wallis Test: #20 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   2.000      41.0  -0.69
high school     13   3.000      42.5  -0.24
middle school   22   2.000      38.5  -1.17
nurse            8   4.000      65.5   2.53
preschool        7   3.000      48.3   0.47
therapist       12   2.500      45.0   0.15
Overall         87             44.0

H = 7.95  DF = 5  P = 0.159  (adjusted for ties)
```

Kruskal-Wallis Test: #21 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      42.0  -0.46
high school     13   4.000      38.9  -0.79
middle school   22   4.000      36.5  -1.62
nurse            8   4.500      63.5   2.29
preschool        7   4.000      56.6   1.37
therapist       12   4.000      47.2   0.47
Overall         87              44.0
```

H = 11.83 DF = 5 P = 0.037 (adjusted for ties)

Kruskal-Wallis Test: #22 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      43.1  -0.21
high school     13   4.000      37.6  -0.99
middle school   22   4.000      44.4   0.09
nurse            8   4.000      62.6   2.19
preschool        7   4.000      52.9   0.97
therapist       12   3.500      34.5  -1.40
Overall         87              44.0
```

H = 9.83 DF = 5 P = 0.080 (adjusted for ties)

Kruskal-Wallis Test: #23 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      46.5   0.59
high school     13   3.000      35.2  -1.36
middle school   22   3.000      35.7  -1.79
nurse            8   4.000      54.9   1.28
preschool        7   5.000      70.4   2.88
therapist       12   3.500      41.0  -0.45
Overall         87              44.0
```

H = 15.18 DF = 5 P = 0.010 (adjusted for ties)

Kruskal-Wallis Test: #24 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   2.000      42.6  -0.33
high school     13   3.000      44.3   0.05
middle school   22   2.000      41.8  -0.48
nurse            8   3.500      62.3   2.14
preschool        7   3.000      56.6   1.37
therapist       12   2.000      31.1  -1.90
Overall         87              44.0
```

H = 9.98 DF = 5 P = 0.076 (adjusted for ties)

Kruskal-Wallis Test: #25 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   2.000      47.3   0.76
high school     13   1.000      32.2  -1.83
middle school   22   2.000      42.1  -0.40
nurse            8   3.000      61.8   2.09
preschool        7   2.000      40.6  -0.37
therapist       12   2.000      43.5  -0.07
Overall         87              44.0

H = 8.71  DF = 5  P = 0.121  (adjusted for ties)
```

Kruskal-Wallis Test: #26 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   4.000      48.1   0.97
high school     13   4.000      46.4   0.38
middle school   22   2.000      30.9  -2.81
nurse            8   4.000      51.9   0.93
preschool        7   4.000      47.4   0.37
therapist       12   3.500      49.5   0.81
Overall         87              44.0

H = 9.25  DF = 5  P = 0.100  (adjusted for ties)
```

Kruskal-Wallis Test: #27 versus SPED Level

```
SPED Level       N  Median  Ave Rank      Z
elementary      25   3.000      44.5   0.11
high school     13   4.000      50.7   1.04
middle school   22   4.000      46.0   0.43
nurse            8   3.000      37.9  -0.72
preschool        7   4.000      48.6   0.51
therapist       12   2.500      33.4  -1.56
Overall         87              44.0

H = 4.20  DF = 5  P = 0.521  (adjusted for ties)
```

DATE: June 18, 2004

This research will be monitored for re-approval annually.
APPROVAL PERIOD: June 18, 2004 to June 17, 2005

NOTICE OF APPROVAL FOR PROTOCOL: IRB #16273

TO: Sara Brannan

TITLE: An Exploration of Interdisciplinary Collaboration When
Serving Students with Moderate and Sever Disabilities at the Middle
and High School Levels: A Current Snapshot of Perceived Barriers
and Opportunities

AGENCY: N/A

    The Institutional Review Board for the Protection of Human
Research Subjects (IRB) has approved the project described
above. Approval was based on the descriptive material and
procedures you submitted for review. Should any changes in
your protocol/consent form be necessary, **prior approval must
be obtained from the IRB.**

    According to the Code of Federal Regulations, Section 312.32,
investigators are required to notify the FDA and the study sponsor
of any adverse experience associated with the use of an
investigational drug that is serious and unexpected. A
serious adverse experience is considered any event that is fatal or
life-threatening, is permanently disabling, requires inpatient
hospitalization, or is a congenital anomaly, cancer, or overdose.
An unexpected adverse experience is an event that is not identified
in nature, severity, or frequency in the current investigator
brochure. Any experience reportable to FDA and the sponsor must
also be reported immediately to the IRB. If the study is funded,
initiation of the protocol may not begin until the contract is
finalized.

A consent form* X is___ is not required of each subject.

An assent form___ is X   is not required of each subject.

A recruitment ad has__ has not___been approved.

A consent form waiver has___ has not X been approved.

An authorization form to use PHI has___ has not X been approved.

A PHI waiver has___ has not X been approved.

    Only copies of the consent and/or assent form with the IRB's approval stamp may be used with human subject research. It is the responsibility of the investigator to submit a revised consent form for the IRB's approval should funding be obtained. This stamped consent form must then be used for subjects enrolled. A copy of each subject's signed Consent/Assent Form must be retained by the investigator and accessible to federal regulatory authorities for at least three years after the study is completed.

_____

Lilo A. Ast `
Senior Program Coordinator for
Research Compliance

LAA/clg

Consent and Information Form
for
Participating Special Educators

AN EXPLORATION OF INTERDISCIPLINARY COLLABORATION WHEN SERVING STUDENTS WITH MODERATE AND SEVERE DISABILITIES AT THE MIDDLE AND HIGH SCHOOL LEVELS: A CURRENT SNAPSHOT OF PERCEIVED BARRIERS AND OPPORTUNITIES

Introduction: I have been asked to participate in this research study which has been explained to me by Sara A. Brannan, doctoral student in Special Education. This research is being conducted at West Virginia University as a dissertation project by Sara A. Brannan.

Purpose of the Study: The purpose of this study is to investigate current perceptions of the barriers and the opportunities for interdisciplinary collaboration among Special Educators and Related Health Service Personnel at the middle and high school levels when serving students with moderate and severe disabilities.

Description of Procedures: I am being asked to participate in two Focus Groups Sessions to be conducted during a three week period. The first of the two Focus Groups will be comprised of 8 to 12 Special Educators only. A combination of 8-12 Special Educators and Related Health Service Personnel will be participants in the second of the two Focus Groups. Each of the focus group sessions will be no more than two hours in duration.

Risk and Discomfort: There are no known or anticipated risks to participants in these focus groups.

Alternative: I understand that I do not have to participate in this study.

Benefits: I understand that the results of this study are to be the subject of the doctoral dissertation of Sara A. Brannan. In addition, I may also derive potential benefit from my participation in the form of greater insight into my professional career planning and choices. I will receive no payment except for food and beverages to be served during the Focus Group Sessions.

Contact Persons: For more information about this research, I may contact Sara A. Brannan at 937-399-0178 or her Dissertation Committee Chair, Dr. Barbara Ludlow at 304-293-3450. For information regarding my rights as a research subject, I may contact the Executive Secretary of the West Virginia University Institutional Review Board at 304-293-7073.

submission date	1 of 2	initial _____
6/17/2004		date _____

Confidentiality: I understand and have been assured that any information about me or my students obtained as a result of my participation in this research study will be kept in strict confidence within legal limits. My name or identifying information, as well as, that of other participants or students, will not be used in any publications that result from this study without written consent of the principle party or parties. I also understand that any records generated during this study may be subpoenaed, like hospital records, by court order or inspected by federal regulatory authorities.

Voluntary Participation: My participation in this research study is totally voluntary. I understand that I am free to withdraw my consent to participate at any time. Such withdrawal of consent will involve no penalties or losses to me. I have been given the opportunity to ask questions about this research, and I have received answers to my questions. My signature below signifies my willingness and consent to participate. Upon signing this form, I will receive a copy.

Signature of Special Educator Participant:

_____   DATE: _____

Signature of Principle Investigator:

_____   DATE: _____
(Sara A. Brannan, M.Ed.)

Consent and Information Form
for
Participating Related Health Service Personnel

AN EXPLORATION OF INTERDISCIPLINARY COLLABORATION WHEN SERVING STUDENTS WITH MODERATE AND SEVERE DISABILITIES AT THE MIDDLE AND HIGH SCHOOL LEVELS: A CURRENT SNAPSHOT OF PERCEIVED BARRIERS AND OPPORTUNITIES

Introduction: I have been asked to participate in this research study which has been explained to me by Sara A. Brannan, doctoral student in Special Education. This research is being conducted at West Virginia University as a dissertation project by Sara A. Brannan.

Purpose of the Study: The purpose of this study is to investigate current perceptions of the barriers and the opportunities for interdisciplinary collaboration among Special Educators and Related Health Service Personnel at the middle and high school levels when serving students with moderate and severe disabilities.

Description of Procedures: I am being asked to participate in two Focus Groups Sessions to be conducted during a three week period. The first of the two Focus Groups will be comprised of 8 to 12 Related Health Service Personnel only. A combination of 8-12 Special Educators and Related Health Service Personnel will be participants in the second of the two Focus Groups. Each of the focus group sessions will be no more than two hours in duration.

Risk and Discomfort: There are no known or anticipated risks to participants in these focus groups.

Alternative: I understand that I do not have to participate in this study.

Benefits: I understand that the results of this study are to be the subject of the doctoral dissertation of Sara A. Brannan. In addition, I may also derive potential benefit from my participation in the form of greater insight into my professional career planning and choices. I will receive no payment except for food and beverages to be served during the Focus Group Sessions.

Contact Persons: For more information about this research, I may contact Sara A. Brannan at 937-399-0178 or her Dissertation Committee Chair, Dr. Barbara Ludlow at 304-293-3450. For information regarding my rights as a research subject, I may contact the Executive Secretary of the West Virginia University Institutional Review Board at 304-293-7073.

submission date   1 of 2   initial _____
6/17/2004   date _____

Confidentiality: I understand and have been assured that any information about me or my students obtained as a result of my participation in this research study will be kept in strict confidence within legal limits. My name or identifying information, as well as, that of other participants or students, will not be used in any publications that result from this study without written consent of the principle party or parties.   I also understand that any records generated during this study may be subpoenaed, like hospital records, by court order or inspected by federal regulatory authorities.

Voluntary Participation: My participation in this research study is totally voluntary. I understand that I am free to withdraw my consent to participate at any time. Such withdrawal of consent will involve no penalties or losses to me. I have been given the opportunity to ask questions about this research, and I have received answers to my questions. My signature below signifies my willingness and consent to participate. Upon signing this form, I will receive a copy.

Signature of Related Health Service Personnel Participant:

_____ DATE: _____

Signature of Principle Investigator:

_____ DATE: _____
(Sara A. Brannan, M.Ed.)

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