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## The Evolution of a Collaborative Teaching Team in Higher Education

Gail Irene Shimer Bass

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THE EVOLUTION OF A COLLABORATIVE TEACHING TEAM  
IN HIGHER EDUCATION

by

Gail Irene Shimer Bass  
Bachelor of Science, University of North Dakota, 1972  
Master of Science, University of North Dakota, 1981

A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota

May  
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This dissertation, submitted by Gail Irene Shimer Bass in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

Kathleen Goodman  
(Chairperson)

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This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

Joseph D. Benoit  
Dean of the Graduate School

April 30, 2004  
Date

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To my parents Roy and Dorothy Shimer  
who gave me a love for learning.



## ABSTRACT

This qualitative research project is the study of a group of University of North Dakota (UND) faculty who developed and are teaching an innovative interdepartmental, transdisciplinary, pre-service early intervention course and the students who have taken the course. The purpose of this research was to study the perceptions of the faculty and students regarding their experiences with the course. The study was designed to answer the following research questions: 1) What are the dynamics within the faculty collaboration that have led to the success and longevity of this course, and 2) How did this happen and why has it lasted? The answers to these questions became the focus of the final data analysis.

The data collection took place over a six year period. The data collected were from multiple sources and included student and faculty interviews, student journals, course evaluations, faculty meeting notes and summaries, faculty written communications, and the researcher's personal notes and reflections. Themes, based on the faculty interviews, were developed through a process of coding and categorizing the data. The interview transcriptions were coded with frequently occurring key concepts. The codes and supporting data were grouped and collapsed into the categories. The categories were then used to develop the two themes that emerged from the analysis of the data. The themes are also supported by the other data that were collected.

Two themes emerged from the data analysis: Positive aspects/outcomes appear to supercede the negative influences/barriers. The relational dynamics between the faculty have had a positive influence on the development of the course. The themes and supporting data led the researcher to form the following conclusions: 1) The opportunity to be creative, the positive outcomes, open communication, and sense of fulfillment, all factors that help overcome the negatives/barriers, are what help keep the commitment strong. 2) The faculty all have a strong commitment, a passion for, the course model and content. 3) The faculty have become a support system for each other both professionally and personally.

## CHAPTER I

### INTRODUCTION

“If you can dream it, you can do it.” Walt Disney

This qualitative research project is the study of a group of University of North Dakota (UND) faculty who developed and are teaching an innovative interdepartmental, transdisciplinary, pre-service course and the students who have taken the course, the story of a journey that was taken together. The current title of the innovative course is “Collaboration in Early Intervention”, and it is described in the syllabus as a course for preparation of early intervention professionals to serve families with infants, toddlers, and preschoolers at risk or with identified disabilities; see Appendix A: Sample Course Documents.

I have always held an interest in the provision of services to infants and toddlers with disabilities. I am a registered occupational therapist and I have a Masters of Science in Elementary/Early Childhood Education and Special Education. Prior to becoming a faculty member at UND in 1996, I have worked 14 years primarily in special education cooperatives in Minnesota and Oklahoma that provided services to students with disabilities. My experiences in Oklahoma included the provision of intervention services to infants and young children as part of a special education team. While employed by a special education cooperative in the State of Oklahoma, I had the opportunity to serve on



one of the State committees that developed the early intervention service provision plan for the State.

Through work experiences, I have observed and been a part of teams of professionals who were able to work well together and, conversely, teams of professionals who were unable to work together in a congenial manner. In my experience, the majority of the teams functioned as individuals forced to work together rather than as a group of professionals collaborating to reach the goal of provision of the best services possible for children with disabilities and their families. As an occupational therapist and early childhood special education professional, and currently a UND Occupational Therapy Department faculty member, I have a great interest in how we, as university faculty, can facilitate team building and collaboration for early intervention service providers at the pre-service level in higher education programs. For this reason, I have been very excited to be involved in a collaborative teaching experience with faculty members from other professional disciplines at UND. As a collaborative faculty team from the departments of Occupational Therapy, Nursing, Social Work, Physical Therapy, Communication Sciences and Disorders, Pediatrics and Medical Genetics, Recreation & Leisure Sciences, and Teaching and Learning, we have been involved in the development and teaching of an innovative interdepartmental course for training students in collaboration and family-centered care for early intervention programming since 1998.

#### Purpose of the Study

At the present time, professionals who provide intervention services to infants and toddlers with disabilities are required to provide those services through a family-centered,



multidisciplinary team model. This requirement is defined in Part C, § 636 of the Individuals with Disabilities Education Act Amendments of 1997 (20 U.S.C. 1400 et seq.). I have participated in the development and teaching of an innovative interdepartmental course at the University of North Dakota. The focus of the course is to train students, from a variety of professional programs, at the pre-service level to understand the collaborative family-centered model of early intervention service provision for infants and young children with disabilities. The purpose of this research was to study the perceptions of students and faculty who participated in the course and to determine the impact of those perceptions on the course as a whole. This study was originally designed to answer the following research questions:

1. How do faculty and students experience an innovative interdisciplinary course which is based on collaborative teaching and learning across professional programs?
2. Are course objectives, as outlined in the course syllabus, being met with the collaborative teaching and learning model?
3. How, if at all, was the course planning process engaged in by faculty affected by the collection of data from the students?

As early data analysis was completed and data collection progressed a more important set of questions emerged:

1. What are the dynamics within the faculty collaboration that have led to the success (as defined by student evaluations and interviews, and faculty interviews) and longevity of this course?
2. How did this happen and why has it lasted?

The answers to these questions became the focus of the final data analysis. The original research questions one and two are addressed within the findings of this study. The focus of question one changed to an emphasis on the faculty perceptions of their experiences in planning and teaching the "Collaboration in Early Intervention Course", and the student data that was collected was used to help verify findings of the final data analysis. The third question was answered early in the process; faculty did use the interview and evaluation data that was collected during this study for course planning and revision. This is reflected in the faculty meeting notes and communications. The second of the original research questions is beyond the scope of this study. In order to fully answer this question, input is required from future employers of the students who have taken the class. This follow-up study is a recommendation that can be found in Chapter IV.

#### Overview

The purpose of this section is to give the reader a sense of the events that lead up to the creation of the course that is the focus of this study and to summarize important events that have occurred since the course's inception. "This process began as a small group of faculty sharing their philosophies and ideas. However, it eventually evolved into a well organized, broad-based faculty team representing multiple disciplines and developing a shared course" (Shaeffer, Bass, Mohr, & Hess, 1998, p. 165). The information included in this section is based on records that have been maintained throughout the course of this faculty collaboration. A detailed historical outline is included in Appendix B of this document.



In the United States, intervention services for infants and toddlers with disabilities are provided at the state level as defined by each individual state's early intervention plan, which is based on federal legislation. In North Dakota, early intervention services are provided by the regional Infant Development Programs within the Department of Human Services. Professional service providers are required by Part C of the Individuals with Disabilities Education Act (IDEA) Amendments of 1997 to provide family-centered services using a multidisciplinary team model. The term multidisciplinary team, as used for provision of early intervention services, is defined in the IDEA Amendments of 1997 (§635) and means services provided by a team of individuals comprised of the parents of the child and qualified personnel. This definition differs from the description of multidisciplinary in terms of how teams function; see Glossary of Terms at the end of this chapter.

In reference to the Federal legislation Yates and Haines (1997) write, "the vision presented to states with the passage of early intervention legislation was of a comprehensive, multidisciplinary, interagency, coordinated service system for infants and toddlers with disabilities and their families" (p. 27). According to Bailey (1997):

Anyone associated with early intervention is well aware of the challenges of this dynamic field. The professionals and paraprofessionals who touch the lives of infants and toddlers work in interdisciplinary contexts, in diverse settings, and with children who have widely varying abilities. Early interventionists are expected to be knowledgeable about diverse disabilities, able to identify the learning and therapeutic needs of young children, and highly skilled in designing educational and therapeutic interventions. They must also work collaboratively with parents and other family members to identify and meet the needs of individual children and support families in achieving family-identified priorities. Furthermore, they must be knowledgeable about the various agencies and

programs that serve children with disabilities and their families, and they must be skilled at integrating and coordinating services. (p. xiii)

Winton and McCollum (1997) note, "state policy makers are beginning to recognize that no matter how progressive their early intervention service delivery system may be, they will not be effective unless there are competent and qualified personnel to implement them (p. 7). The same authors support training at all levels, but advocate for university programs that provide specialized training in the area of early intervention.

### *The Outside Forces*

Prior to the time that this course was created, there were certain events that took place that supported and facilitated the idea of an interdisciplinary course. Faculty from the departments of Occupational Therapy, Physical Therapy, and Communication Sciences and Disorders had been meeting annually for an informal lunch for several years. The purpose of these gatherings was in part social, so that the faculty from the different departments could get to know each other, and also provided a time to discuss the programs and curriculum in the different departments. In the spring of 1996, faculty representatives (Sue McIntyre, Occupational Therapy, Peg Mohr, Physical Therapy, and Carla Hess Communication Sciences & Disorders) wrote and submitted a US Department of Education grant to develop and implement 4 interdisciplinary courses. At that time, I was not a faculty member in the UND Occupational Therapy Department, but I was hired by Sue McIntyre, the department chairperson, to help write the grant because of my background in early-intervention and in the school system. The primary purpose of the proposed project was to expand the quality of pre-service preparation of Occupational



Therapy, Physical Therapy, and Speech and Communication Disorders students in the area of interdisciplinary service delivery in early-intervention and school settings serving infants, toddlers, children, and youth with disabilities. This proposal was written because the participating faculty saw a need to give students exposure to other professional disciplines at the university pre-service level. The proposal was not funded, but the activity provided a seed for interdisciplinary teaching and student learning.

I joined the UND Occupational Therapy Faculty in the fall of 1996 and continued to meet with the two other faculty members who wrote the grant. We were joined by a new faculty member from the Department of Teaching and Learning and continued brainstorming as to how we could improve our pre-service training for students by providing interdisciplinary learning opportunities. Later, the four of us would become part of the collaborative faculty team that taught the course that is the topic of this study.

The first step in the process was perhaps the most difficult. It required individuals to come together to brainstorm ideas on how we might possibly improve our pre-service education programs. While the faculty members involved all worked in a relatively small environment, our interactions with each other had been perhaps typical of others in academia. We shared common committees and campus experiences, maybe even a student or two. But our professional conversations in the past had more likely been about "our program" and "your program." In a similar manner, students had been "our students" and "your students."

One of our first tasks was to identify and define common vocabulary, so that we know when we used similar words that we all meant the same thing. . . . Likewise, we needed to become more knowledgeable about each other's programs and the competencies that guided these. At times, we may have felt we were more different than alike as we discussed the focus and purpose of our programs.

However, we kept returning to the point of origin—that of providing the best possible pre-service for our students—to regroup and redirect our efforts. . . . This first step of allowing time for getting to know each other and to share ideas and philosophies should be emphasized. It provided the foundation for all of our

future conversations and provided us with a point of reference. (Shaeffer et al., 1998, pp. 167-168)

A second task of this group was to identify early intervention training needs as seen by direct service providers. We developed and sent a survey to two groups of people: direct service providers and administrators of programs providing early intervention services.

The response was a 52% return rate for administrators and a 40% return rate for direct service providers. It is beyond the scope of this paper to present the specific results of the survey. However, of particular interest to the interdisciplinary faculty group was the indication of a definite need for better prepared professionals in all four disciplines and also for more specific preparation in the areas of teaming and collaboration with other disciplines (Shaeffer et al., 1998, p. 168)

These meetings and survey were foundational to the development of that course.

During this same time period members of the Personnel Development Subcommittee of the North Dakota Interagency Coordinating Council (NDICC) wrote a set of proposed competencies for early intervention providers practicing in North Dakota. These competencies were approved by the full NDICC. The purpose of the proposed competencies was to assure quality care for infants and young children with special needs. At that time, personnel in the North Dakota Department of Public Instruction were considering a teaching credential in the area of early intervention, and the competencies were written to address personnel qualifications. Currently, the teaching credential is not available, but the Early Intervention Competencies continue to be used as personnel training guidelines by the NDICC.



The NDICC was established in 1987 and members are appointed by the Governor of North Dakota. This committee recommends how federal funds are spent to provide services for infants and toddlers (ages birth to 3 years) and preschool children (ages 3 through 5 years) with disabilities (State of North Dakota Office of the Governor, 2004). The mission of the NDICC "is to provide leadership in the development of a coordinated, statewide interagency system of comprehensive early intervention services and prevention awareness for children with disabilities and at-risk children birth through five" (North Dakota Center for Persons With Disabilities, n.d.).

In 1997, members of the Professional Development Subcommittee of the NDICC submitted a proposal to the Frank Porter Child Development Center at the University of North Carolina, Chapel Hill to be accepted as one of 5 states for participation in the second Supporting Change and Reform in Interprofessional Preservice Training (SCRIPT) program, a federally funded project. The proposal was accepted and North Dakota began participation in a 3 year project designed to help states develop, test, and evaluate innovative models for facilitating pre-service training for professionals who want to work with children with disabilities birth through five. The first state institute for the SCRIPT project was held October 1, 1997 in Mandan, North Dakota. The institute was attended by 62 invited participants who then became members of the State Resource and Planning Team (SRPT). The participants included university faculty members from a variety of disciplines, parents of children with disabilities, and personnel from a variety of state and community agencies that provide services to young children with disabilities. The major purpose of the institute was for the participants to determine state priorities to

be addressed through the SCRIPT project; the state plan for personnel development that was already in place was foundational to this activity. At that meeting the participants were divided into four university teams: University of North Dakota, North Dakota State University, University of Mary, and Minot State University. The mission of these "regional" teams was to review the proposed state priorities for personnel development and develop regional goals that would address the priorities at a regional level. Members of the University of North Dakota regional team included 16 people: 4 agency members and 12 representatives from UND. The faculty were from the departments of Occupational Therapy, Physical Therapy, Social Work, Nursing, Recreation and Leisure Sciences, Communication Sciences and Disorders, Special Education, and Early Childhood Education. There were also two representatives from the School of Medicine and Health Sciences, one from the Office of Medical Education and the other from the Department of Pediatrics/Medical Genetics. A parent of a child with disabilities was unable to attend the institute and joined the regional team later. At that time two members of the team were selected to coordinate the team's efforts and this regional team continued to meet periodically during the next three years. The full state team met four more times during the three years the project was in effect in order to share progress at the regional level, to evaluate the statewide efforts, and to share ideas for effective personnel preparation.

In a written document titled Summary of the North Dakota SCRIPT Activities Camille Catlett (n.d.), Project Co-Director from the Frank Porter Graham Child



Development Center, summarized the progress made by the four regional teams as of 1999.

- ▶ University of North Dakota team members have developed, implemented, evaluated, revamped, and are in the process of institutionalizing an interdisciplinary course on teams and teamwork in early intervention. Students have been enthusiastic participants and have encouraged faculty to consider offering additional opportunities for cross-disciplinary learning. Faculty/team members have made presentations about this model endeavor at national presentations [*sic*]. Perhaps even more important is the feedback that colleagues in the field and family members are noticing the difference that this collaborative preparation makes.
- ▶ University of Mary has incorporated a variety of program improvements as a result of SCRIPT. One hundred students from the disciplines of nursing, occupational therapy, and early childhood special education participated in the new family practicum experience, which provides students with time in the home of a family in which there is a child/children with disabilities. Based on the strength of the evaluation data from those experiences, 130 students will participate in the second year. A journal article will soon appear to describe this instructional innovation. Students are also participating in more real life experiences (IEP meetings, IFSP meetings) and have been commended for their expertise by employers.
- ▶ Minot State University's team members achieved initial success in family-faculty co-teaching and interdisciplinary co-teaching. Unfortunately, those efforts are in jeopardy as a result of significant budget cuts.
- ▶ North Dakota State University's faculty team members have all relocated but their parent team member reports increased involvement in family-to-family projects as a result of connections made through SCRIPT.

#### *Development of the Course*

The creation of the interdisciplinary course in early intervention at UND was an activity proposed by the UND regional team that was formed at the SCRIPT Institute.

During the Spring of 1998, representatives who were on the UND regional team met several times to discuss possible ways to collaborate on campus for training pre-service

professionals. After reviewing the priorities set by the group at the SCRIPT Institute, they discussed how the individual disciplines could address early intervention in their own curricula and options for interdisciplinary training. They ultimately decided to focus on developing a "shared experience" for students from multiple disciplines. "Several approaches were discussed from creating new course experiences to team teaching. It was decided that the most expeditious approach might be to develop an experience for students of multiple disciplines that could be implemented during the fall semester of 1998" (meeting minutes, February 9, 1998). The team then identified tentative objectives for the interdisciplinary, family-centered student experience. Those objectives included: providing students with information on effective team work, providing a pre-service training for professionals focused on working with children birth through five, and providing students with family centered training and opportunities to interact and learn from parents.

The team then outlined a pilot model for a course, "a part-semester or full semester course to be offered as an elective, special topics, course in each department represented by the group (OT, CSD, Therapeutic Recreation, Nursing, Social Work, Early Childhood, Sp. Ed., and PT). Each department would select the faculty member who would participate as an instructor in the course and recruit five students to register for the course" (meeting minutes, February 28, 1998). The team also developed a draft of a syllabus and an outline for possible course content based on the objectives identified during one of the early meetings. In order to provide opportunities for students to interact and learn from parents of children with disabilities, the team decided to recruit families to



assist with the course. The team decided to include the families because they are the recipients of the early intervention services. Family-centered care means that families are equal partners with the professionals in planning and implementing the services for their child with disabilities. The members of the team felt that it was key that the students in the course have an opportunity to learn directly from families of children with disabilities.

On April 27, 1998, the UND faculty who wanted to be involved with the course met to discuss the logistics of offering the course in the fall. The original faculty members were: Gail Bass, Occupational Therapy; Mary (Ebertowski) Riske, Pediatrics/Medical Genetics; Carla Hess, Communication Sciences & Disorders; a faculty representative from Social Work, Peg Mohr, Physical Therapy; Linda Olson, Office of Medical Education, Janet Schauer, Family and Community Nursing and Margaret Shaeffer, Teaching and Learning. From this point on, this group continued their participation with the UND regional team, but began to meet as a separate collaborating team dedicated to planning and teaching the course at UND.

The collaborative faculty team continued to meet during the summer months for planning and course development using the draft syllabus that was developed by members of the regional team as a starting point. Many of the collaborative faculty team members were not on contract during that time but nevertheless choose to convene because of a strong commitment to the course goals. Part of the planning time had been spent getting to know each other and about each other's departments and programs; the fact that four of the eight of us had been working together prior to this collaboration was facilitatory to this process. It is also significant to note that we all tended to agree on the basic goals

and content for the course and a great deal of our planning time was spent working out logistics for the course (see Chapter IV).

The course was taught as an elective for the first time at UND in the fall of 1998, and was originally called "Transdisciplinary Family-Centered Collaboration in Early Intervention". Participating were 15 students, the 8 faculty members, as listed above, and 4 families of children with disabilities. The students were from the departments of Occupational Therapy, Physical Therapy, Social Work, Communication Sciences & Disorders, Nursing, and Early Childhood Education, and there was a mix of graduate and undergraduate students. The faculty continued to meet throughout the semester, usually for dinner. During a meeting on March 1, 1999 the collaborative faculty team decided to teach the course again during the 1999 fall semester renaming it (a more manageable) "Collaboration in Early Intervention". The collaborative faculty team met repeatedly at various times and places for course planning and revision during the spring and summer months of 1999. Student input and suggestions, gathered through the course evaluations and interviews for this study, were considered during the planning sessions.

In October 1999, the collaborative faculty team felt a need for additional planning and discussion time. We began meeting early in the morning once a week during the fall semester; this practice has continued. The course was offered again in the fall of 2000, and recognizing the continuing need for planning time, we applied for and received a "flexible" grant for faculty and parent training from the UND Office of Instructional Development in December 2000.



The first activity that was supported by the flexible grant was a full day faculty planning workshop that took place at an off campus location May 31, 2001. The time was spent on course revisions, continued development, and discussions about where to go from here. Student input compiled from the course evaluations was used in the planning and revision process, and the faculty made revisions to the course goals. This was the first opportunity that the collaborative faculty team had a chance to spend a full day together without the interference of other departmental activities; there was also an opportunity for social time during meals and breaks. During the meeting, many of the faculty members commented that being able to have a full day devoted to course planning and future goals in a more casual setting had a major impact on the course and on the faculty.

The second major activity supported by the flexible grant was a parent workshop on June 26, 2001. This was a dinner meeting with time devoted to getting input from the parents who had participated in the class. This input was very valuable for future course development. The third activity was a faculty training workshop, June 7-9, 2002 that was led by Camille Catlett from the Frank Potter Graham Child Development Center at the University of North Carolina. Ms. Catlett was one of the ND SCRIPT Project facilitators and is a researcher and author in the area of early intervention. The remaining money from the flexible grant was used for course materials and supplies and for a minimal amount of secretarial support.

A second UND Office of Instructional Development grant was awarded for a shared summer professorship during the summer of 2001. Jan Schauer from the

Department of Nursing and I were the ones who shared the summer professorship and we met during the summer to work on the logistical components of the course (assignment forms, grading forms, planning forms, etc.). Our work was based on needs that were identified by the faculty during the planning workshop in May, on student input through the course evaluation process, and from family input gathered at the family workshop in June. The materials that were developed through the summer professorship were reviewed and approved by the faculty team before they were used in class.

The "Collaboration in Early Intervention" course was offered in the fall of 2001, 2002, 2003, and will be offered again in the fall of 2004. The collaborative faculty team has continued to meet to address course planning and revision throughout the last three years, but no major changes have been made in the course content or format. There have been some personnel changes in the collaborative faculty team, and these are noted in the Detailed Historical Outline in Appendix B.

#### *Course Description*

The syllabus for "Collaboration in Early Intervention" describes it as a course for preparation of early intervention professionals to serve families with infants, toddlers and preschoolers at risk or with identified disabilities. (Chapter IV contains a detailed description of the course, a description of the class setting and a typical class, as well as a description of faculty activities that occurred while the class was being developed and taught.) The course content focuses on the provision of collaborative and family-centered learning experiences for students enrolled in Social Work, Nursing, Occupational Therapy, Physical Therapy, Communication Sciences and Disorders, Recreational



Therapy, and education programs. Individual students register for 1-2 credits using a course number as defined by the individual departments. The only pre-requisite for the course is the permission of the instructor in the specific discipline of the student. The collaborative faculty team involved in the planning and teaching of the course are from the same departments as the students; by faculty agreement, in order to have students in the course, a discipline must be represented by a faculty member on the teaching team. The rationale for this is based on the fact that the discipline-specific faculty member on the teaching team is the instructor of record in the department and assigns the final course grade for the students from their department. There is also a faculty member from Pediatrics/ Medical Genetics; and although there are no medical students enrolled in the course, she has been involved in the planning and teaching from the beginning. During the third year (2000) that the course was offered, a parent of children with disabilities joined the faculty to serve as a family coordinator for the course. She is also involved in the course planning and teaching. A staff member from the Infant Development Program, Northeast Human Services Center, has been listed as a faculty member on the syllabus as a professional courtesy. Her role has been that of an outside advisor to give the faculty periodic feedback on the course from the direct programming aspect of early intervention. She has not been directly involved in the teaching or planning for the course.

The course is competency-based, with an emphasis on family-centered care and the transdisciplinary team model of service provision. Students set their own individual learning goals, based on the course objectives. They demonstrate personal competency in achievement of the goals through a portfolio that is submitted at the end of the semester.

In addition to the learning portfolio, students complete assigned journal entries and guided reflection papers throughout the semester. Students are evaluated by the faculty members assigned to their team and by their discipline specific faculty member. The discipline specific faculty member reviews the work of the students from her department and gives the final course grade based on this review and the evaluation information from the team faculty. Current course objectives as defined in the syllabus and are as follows:

At the completion of this course, the student will:

1. Demonstrate awareness of the expertise and authentic experiences of families who have children with disabilities.
2. Identify strengths and roles of transdisciplinary team members in terms of function and process.
3. Demonstrate increased understanding of family-centered services coordination in natural environments across disciplines.

#### Design of the Study

This is a qualitative study of a single case, the study of the perceptions of a group of faculty that designed and have taught an innovative, interdisciplinary course in a higher education setting. Planning for this course began in 1998 and it will be taught for the seventh time in the fall of 2004. According to Stake (1995), "the case is a specific, complex, functioning thing" (p.2). "We are interested in it, not because by studying it we learn about other cases or about some general problem, but because we need to learn about that particular case" (p. 3).



The real business of case study is particularization, not generalization. We take a particular case and come to know it well, not primarily as to how it is different from others but what it is, what it does. The emphasis is on uniqueness, and that implies knowledge of others that the case is different from, but the first emphasis is on understanding the case itself. (Stake, 1995, p. 8).

### Limitations of the Study

The research project is a qualitative case study of one specific course that has been taught during the fall semester since 1998. Because this study is based on a single case, the data analysis follows the descriptive process for data analysis that was described by Strauss and Corbin (1990). "The illustrative materials are meant to give a sense of what the observed world is really like; while the researcher's interpretations are meant to represent a more detached conceptualization of that reality" (p. 22). According to Maykut and Morehouse, (1994), "although description is the primary aim of this second approach to the data, some of the interpretations found in descriptive research suggest an interest in theory building" (p. 122). In order to get to the point of "grounded theory" (Strauss & Corbin, 1990) cases similar to the one in this study would need to be studied and the phenomenon compared.

### Expectations/Significance of the Study

I anticipate that findings may be used to improve interdisciplinary collaborative teaching and collaborative student learning across professional disciplines. to provide an innovative curricular design to teach teaming skills to students from multiple professional disciplines, and to provide insight into the collaborative teaching and learning models for

higher education facilities which provide pre-service training for professionals who plan to work in an early intervention special education setting.

### Glossary of Terms

1. *Collaboration*: "People who collaborate work closely together and share mutual responsibility for their joint endeavor. According to this conceptualization, collaboration not only involves cooperative action. It emerges from shared goals and leads to outcomes that benefit all partners" (Austin, & Baldwin, 1991, p. 4).

2. *Cooperative Learning*: According to Johnson, Johnson, and Holubec (1993), "cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning" (p. 1:5).

### 3. *Early Intervention Services*:

The term 'early intervention services' means developmental services that --

- (A) are provided under public supervision;
- (B) are provided at no cost except where Federal or State law provides for a system of payments by families, including a schedule of sliding fees;
- (C) are designed to meet the developmental needs of an infant or toddler with a disability in any one or more of the following areas --
  - (i) physical development
  - (ii) cognitive development
  - (iii) communication development;
  - (iv) social or emotional development: or
  - (v) adaptive development:
- (D) must meet the standards of the State in which they are provided, including the requirements of this part;
- (E) include --
  - (i) family training, counseling, and home visits;
  - (ii) special instruction;
  - (iii) speech-language pathology and audiology services;
  - (iv) occupational therapy;
  - (v) physical therapy;
  - (vi) psychological services



- (vii) service coordination services;
  - (viii) medical services only for diagnostic or evaluation purposes;
  - (ix) early identification, screening, and assessment services;
  - (x) health services necessary to enable the infant or toddler to benefit from the early intervention services;
  - (xi) social work services;
  - (xii) vision services;
  - (xiii) assistive technology devices and assistive technology services; and
  - (xiv) transportation and related costs that are necessary to enable an infant or toddler and the infant's or toddler's family to receive another service described in this paragraph;
- (F) are provided by qualified personnel, including –
- (i) special educators;
  - (ii) speech-language pathologists and audiologists;
  - (iii) occupational therapists;
  - (iv) physical therapists;
  - (v) psychologists;
  - (vi) social workers;
  - (vii) nurses;
  - (viii) nutritionists;
  - (ix) family therapists;
  - (x) orientation and mobility specialists; and
  - (xi) pediatricians and other physicians;
- (G) to the maximum extent appropriate, are provided in natural environments; including the home, and community settings in which children without disabilities participate; and
- (H) are provided in conformity with an individualized family service plan adopted in accordance with section 636 (Individuals with Disabilities Education Act Amendments of 1997(§632))

4. *Faculty collaboration*: "Faculty collaboration is described as a cooperative endeavor that involves common goals, coordinated effort, and outcomes or products for which the collaborators share responsibility and credit (Austin & Baldwin, 1991, p. 5).

5. *Infants and toddlers with disabilities*:

The term 'infant or toddler with a disability' --

- (A) means an individual under 3 years of age who needs early intervention services because the individual –

- (i) is experiencing developmental delays, as measured by appropriate diagnostic instruments and procedures in one or more of the areas of cognitive development, physical development, communication development, social or emotional development, and adaptive development; or
- (ii) has a diagnosed physical or mental condition which has a high probability of resulting in developmental delay; and
- (B) may also include, at a State's discretion, at-risk infants and toddlers (Individuals with Disabilities Education Act Amendments of 1997 (§632)).

6. *Multidisciplinary Team*: The term multidisciplinary team, as used for provision of early intervention services, is defined in the Individuals with Disabilities Education Act Amendments of 1997 (§635), and means services provided by a team of individuals comprised of the parents of the child and any of the qualified personnel listed under the definition of early intervention.

#### 7. *Team Functioning Models* (Briggs, 1997)

- A. **Unidisciplinary**  
One professional or one professional discipline attempting to serve all the needs of a family and child (p. 90).
- B. **Multidisciplinary**  
The multidisciplinary model is described as a parallel approach because each professional representative works next to the others with limited interaction and exchange of information, opinions, and expertise. . . . Each professional, however functions in isolation, much like the earlier approach. Yet there is acknowledgment that other viewpoints are being offered (p. 90).
- C. **Interdisciplinary**  
Interdisciplinary teams have established methods for communication between different professionals and with the family. Exchanges of information occur readily. Families can expect that the written results of an assessment by an interdisciplinary team will be in the form of an integrated report. Program planning is also done collaboratively (p. 93).
- D. **Transdisciplinary**  
Transdisciplinary teams allow for flexible definitions of roles and responsibilities. Members' value is not limited to responsibilities typically associated with any one profession. Each member brings to the team the



training and experience typically expected of representatives of their discipline. In addition, they may choose to offer other skills not typically associated with their disciplinary title. This flexibility in duties, roles, and responsibilities enriches the team and the families it serves while simultaneously empowering individual members. (p. 95)

The rest of this study is organized into four chapters. Chapter II contains literature that is pertinent to the research and Chapter III includes the rationale for the choice of research methodology and a description of the process. Chapters IV and V contain the findings, conclusions and recommendations of this study. Chapter V concludes with a section that contains my reflections as a researcher.

## CHAPTER II

### REVIEW OF LITERATURE

There is not one continuum of collaboration there are many. There is not "one way to do it" (Davis, 1995, p. 21)

No research study starts from a blank slate, every researcher has some form of preconceived ideas about the topic that will be studied. Some of the ideas and thoughts come from personal experiences and others are from the literature and theory surrounding a particular topic. "The very questions you raise derive from your view of the world. In research, this view is lodged in a disciplinary base and can be identified through attending to the literature you review in preparation for the study" (Merriam, 1998, p. 49).

As a collaborative faculty team we describe designed our course teaching model to teach students the transdisciplinary-team model of service provision for family-centered care in early intervention. In the beginning, we sat around a table and discussed what we wanted the course content to be and how we wanted to present it to the students. We chose to teach as a collaborative team, to design the course to encourage the students to be active learners and to add a family of a child/children with disabilities as part of the teaching team. During the original planning sessions, the collaborative faculty team felt it was important to include families because it was the best way to allow students to learn about the "real-life" experiences of families who have children with disabilities. Over time we used information and feedback from students and our own observations to refine

the content and logistics of the course. It was not until I began this study that we as a collaborative faculty team began to look at the research that supported the components of our teaching model. What has made our course unique is the fact that, by design, we have combined: 1) students as active learners on a collaborative team, 2) collaborative teaching as a transdisciplinary team, and 3) families as teachers as our teaching/learning model.

Chapter II is divided into five sections. The review will begin with references to a text edited by Winton, McCollum, and Catlett (1997), documenting issues for training early intervention providers. The second section will review the interdisciplinary training model that is advocated as a best practice for personnel preparation. The third section includes literature that supports the model of students learning about the team process by being a member of a team in the classroom; students learning a model by experiencing the process.

The fourth section reviews the writings related to the collaborative/cooperative and active learning models for students. The fifth section of the literature review will deal with faculty collaboration for teaching courses in higher education and will conclude with literature supporting inclusion of parents of children with disabilities on the collaborative faculty teaching team.

The need to address these issues evolved as early data analysis was completed and the original research questions were modified and refined to answer the question of "what is really happening here?".



In practice designing a study is not a linear process of reading the literature, identifying the theoretical framework, and then writing the problem statement. Rather, the process is highly interactive. Your question takes you to some of the literature, which sends you back to looking anew at the phenomenon of interest. In trying to shape the problem, you go back again to the literature, and so on. In essence, you carry on a dialogue with previous studies and work in the area. (Merriam, 1998, p. 50)

### Issues for Early Intervention Training

According to Bailey (1997):

Anyone associated with early intervention is well aware of the challenges of this dynamic field. The professionals and paraprofessionals who touch the lives of infants and toddlers work in interdisciplinary contexts, in diverse settings, and with children who have widely varying abilities. Early interventionists are expected to be knowledgeable about diverse disabilities, able to identify the learning and therapeutic needs of young children, and highly skilled in designing educational and therapeutic interventions. They must also work collaboratively with parents and other family members to identify and meet the needs of individual children and support families in achieving family-identified priorities. Furthermore, they must be knowledgeable about the various agencies and programs that serve children with disabilities and their families, and they must be skilled at integrating and coordinating services. (p. xiii)

Winton and McCollum (1997) note, "state policy makers are beginning to recognize that no matter how progressive their early intervention service delivery system may be, they will not be effective unless there are competent and qualified personnel to implement them"(p. 7).

Winton et al. (1997), address this issue through systems change or a reform in how personnel are trained. "Our hope for this edited volume is to promote and inspire continued innovation and creativity in how personnel are prepared and sustained in their early intervention roles" (p.xvi). The authors supported training at all levels, but advocated for university programs that provide specialized training in the area of early

intervention. Winton & McCollum (1997) identify four factors from the literature that are relevant in transforming personnel preparation systems into collaborative, effective systems: climate, policies, resources, and problem-solving structures. The authors point out, "the social and political climate at the federal, state and community levels is a factor likely to influence changes or reforms in personnel preparation efforts" (p. 15). The policies are the standards that have been set in and between agencies and include "laws, regulations, standards, licensing, certification, and interagency agreements. Policies have a significant impact on if and how agencies, disciplines, and people plan, fund, and implement personnel preparation" (Winton & McCollum, 1997, p. 15).

Each professional organization also has a set of policies governing its own license and certification systems and funding of its own discipline-specific personnel preparation initiatives. The result is that personnel preparation looks like 'parallel play.' In a single state there might be several different workshops on the same topic (e.g. child assessment, service coordination), but the workshops might be sponsored by different agencies for different disciplines and may promote conflicting philosophies and contradictory approaches to the one topic. The same parallel play characterizes personnel preparation activities in institutions of higher education. A child assessment course might be offered in several different departments or divisions (e. g. nursing, psychology, special education) without any attempt to have students come together for cross-disciplinary discussion or activities. There are few policies that facilitate or provide tangible incentives for cross-agency, cross-discipline instruction. (Winton & McCollum, 1997, pp. 15-16)

According to Winton and McCollum (1997) the availability of resources both human and material has an obvious effect on personnel training. The authors cite a study done by Thompson and Cooley school officials in all 50 states reported that the lack of financial resources was one of the biggest barriers to the provision of personnel training (p. 17).



The fourth critical element for addressing collaborative efforts for personnel training addressed by Winton and McCollum (1997) was the need for problem-solving structures. "The presence of structures that provide opportunities for agency, discipline, and constituent representatives to develop solutions to personnel preparation challenges is an important component of change" (p. 18). Winton and McCollum (1997) write, "the personnel preparation system should be leading and shaping efforts to reform the early intervention system" (p. 7).

Yates and Hains (1997) identify two barriers to personnel preparation at the university level.

A major barrier to meeting the personnel demands of early intervention has been the lack of collaboration between higher education and state agencies. . . . State agencies are responsible for supplying personnel to service delivery programs, but they are not responsible for funding universities to establish personnel preparation programs. Of the few preservice programs that offer infancy specializations, most have been funded on a short-term basis by federal grants. Universities need funding and time to initiate preservice programs. Both state agencies and universities are limited by constraints of time, funding, and authority in forging ahead with personnel preparation. Without additional incentives or external support for personnel preparation, significantly involving higher education in early intervention may continue to prove difficult. (Yates & Hains, 1997, p. 36)

The second barrier to meeting the vision of having well prepared personnel providing services to families of young children with disabilities is the absence of a model to train these preservice providers at the university level. According to Lawson & Hooper-Briar (1994), the way the training for personnel that eventually provide early intervention services is done within colleges and universities, in separate discipline specific



departments, is a detriment to implementation of the collaborative, community-based service provision model that characterizes early intervention programs.

An additional barrier, at the university level, to training early intervention providers to implement a collaborative, community-based provision model is described by Winton and McCollum (1997):

The reward system for faculty promotion and salaries in most universities is based on the production of academic publications and scholarly work. The importance of faculty, especially from human services disciplines, being involved in community service is beginning to receive some attention from university administrators; however, the balance is still heavily in favor of traditional scholarly pursuits as a measure of faculty success. . . . Given the important role that colleges and universities play in socializing and shaping future practitioners, changes in the higher education communities are an important aspect of any attempt to address personnel development problems. (p. 11)

#### The Interdisciplinary Model

The interdisciplinary model of education is by no means a new idea and it has been the subject of a great deal of literature across educational settings. "The idea of combining two or more disciplines, pedagogical approaches, groups of people, or skills is not new, first appearing in curricular contexts in the 1920s under the title 'core', interdisciplinary and integrated curriculum" (Mathison & Freeman, 1998, p. 1). Multiple authors have written defining interdisciplinary education, and describing the process, the barriers, and the benefits to students and teachers (Davis, 1995; Fine, & Nazworth, 1999; Hursh, Haas, & Moore, 1983; Klein, 1999; Mathison, & Freeman, 1998; Robles, 1998; and Schery, & Tharpe, 1999). In general, the definition of the interdisciplinary model is two or more disciplines working together to enhance learning and integrate information using common themes to form connections. Davis (1995) defines interdisciplinary as "the work that

scholars do together in two or more disciplines, subdisciplines, or professions, by bringing together and to some extent synthesizing their perspectives" (p. 5). The model takes on many forms from combining and paring courses, to infusing a discipline specific course with information from other disciplines, to bringing students together from different disciplines into a common course taught by one or more instructors. Klein (1999) writes that at the university level there is a strong history of the interdisciplinary model used with women's studies, general education, and with honors programs. In a document that supports the interdisciplinary model for general education courses at the university level Hush et al. (1983) describe interdisciplinary with the following:

If four pieces of fruit—an apple, an orange, a pear, and a peach—are placed on a table, specialists in each of those varieties may readily describe their differences. Their very existence as separate entities invites that discrimination, given the predilections of western thought toward specialization and analysis. If, however, those four entities are collected into a baskets, our specialist must shift their perspectives to recognize that a new entity is created: a fruit basket. This is a higher order construction, synthesizing into one construct the common attributes of the four entities. The sheer existence of the basket creates order—or unity—out of four disparate yet related items. (p. 47)

"If there is a key characteristic of interdisciplinary courses, it is 'integration,' scholars working together to pool their interests, insights, and methods, usually with the hope of gaining and presenting new understandings that could not be derived from working alone" (Davis, 1995, p. 6).

In their article on interdisciplinary studies for the K-12 curriculum, Mathison, and Freeman (1998) include three guidelines from Ackerman to define the role of the disciplines in an interdisciplinary model:



These are: (a) content and connections should hold "validity within the disciplines" that requires verification that the concepts are important to the disciplines; (b) concepts must also hold "validity for the disciplines" in that they actually enhance learning of the discipline; and (c) interdisciplinary concepts must have "validity beyond the disciplines" in that they "provide a greater understanding of complex issues in the world." (p. 7)

Klein (1999) offers the following strategies for integrating curriculum:

- ▶ organizing courses around a topic, theme, issue, idea, problem or question
- ▶ designing introductory and senior capstone seminars, theses, and projects
- ▶ clustering disciplinary courses around a particular theme or field of interest
- ▶ devising courses and units that reflect on the process of integration
- ▶ engaging in team teaching
- ▶ building learning communities
- ▶ using particular integrative approaches, such as systems theory, feminism, and textualism
- ▶ giving students models of interdisciplinary knowledge and integrative process
- ▶ requiring integrative portfolios
- ▶ offering residential living-learning experiences
- ▶ fostering interdisciplinary approaches to field, internships, travel-study and service learning. (p. 16)

When examining the interdisciplinary model for courses it is important to address the positive and negative aspects of the model along with the challenges faced for implementation. Davis (1995) writes that the overall benefit to this model is that faculty and students are able to gain new knowledge from a new perspective. Robles (1998) stated that there is an integration of knowledge for faculty and students, that communication is enhanced, that it is a way for faculty to combat isolation in the academy, and that the interdisciplinary model presents multiple perspectives to solve real world problems. Both of these authors advocate that this model gives students the



opportunity to look at issues with a more global perspective rather than with a discipline-specific view and that this is the way things are in the real world. Robles (1998) writes:

There are theorists, such as McGrath, who argue that interdisciplinary studies weaken the undergraduate curriculum. Others counter that interdisciplinary studies are perfectly suited to the undergraduate curriculum and evidence of interdisciplinary offerings in higher education tends to support this view. Because interdisciplinary approaches tend to be characterized by collaboration, interactivity, development of team-building skills, and development of critical thinking and problem-solving skills, they are well suited to produce the outcomes society, especially the workplace, currently demands. (p. 88)

Robles (1998) also addresses some of the negative aspects of the model. She wrote that barriers include faculty resistance, lack of administrative support and rigid policies at the administrative level. "In all three cases, it could be argued that a significant part of the answer lies in more time—time for faculty to become educated about interdisciplinary studies, time for interdisciplinary teams to become established and to develop curriculum, time for sufficient coordination and evaluation" (p. 89).

Robles (1998) lists some challenges to the development of interdisciplinary courses. The challenges included planning time and resources, faculty workload, the fact that faculty need to be able to work as a team and think outside of one's own discipline with knowledge of other disciplines, commitment to the idea of interdisciplinary by faculty and administration, agreement on outcomes, and the fact that students are challenged to take a more active role in their own learning.

The most important consideration in ensuring that interdisciplinary studies have, as one faculty member put it, "a place at the table." They should not be extolled in institutional rhetoric but then allowed only if taught on "voluntary" overload. And, they should not be left to fend for themselves. The rhetoric of increased interdisciplinarity implies that such programs are moving to the center of the academy, but without support they will remain marginal. (Klein, 1999, p. 22)

Hursh et al. (1983) advocate for the interdisciplinary model for general education courses at the university level:

It is true that disciplinary specialization provides indispensable tools with which to assess relationships among highly selected variables within manageable sectors of knowledge. Without disciplines we would have trouble deciphering many of the causal links that provide us with important answers to specific problems in the humanities, sciences, and social sciences. However, specialized nomenclature becomes dysfunctional for comprehension of the interrelationships among the disciplines. This specialization threatens to erect a new Tower of Babel in which highly trained disciplinarians, using precise, newly coined definitions, may speak meaningfully only to those small groups who share their special language. (p. 43)

After reflecting on past practices since the passage of the early intervention

Education, Bailey (1996) advocates for the interdisciplinary model of training for preservice early intervention personnel by writing:

More Than 20 Years Later [*sic*], the interdisciplinary approach remains one of the foundational components of services for children with disabilities. However, the implementation of interdisciplinary practices has been fraught with challenges, and scholars, practitioners, and parents acknowledge that, in most settings, interdisciplinary practices fall short of what was envisioned. Research during this time has reinforced the complex nature of teams and the ecologies within which teams work, and it is now clear that promoting interdisciplinary practices will require effort along a number of critical fronts. One of the most important of these activities is the training of professionals in the skills and philosophical orientation needed to make interdisciplinary practices work. (p. 3)

Bailey (1996) summarizes by writing, "interdisciplinary training, in which professionals from multiple disciplines interact over an extended period of time to develop the skills and visions necessary for interdisciplinary collaboration, will need to occur at both the preservice and in-service levels" (p.18). He states that the team approach to intervention is mandated in legislation and supported by the literature, and personnel from multiple



disciplines need to have training to understand the implementation of this type of approach and the rationale for it.

Throughout this literature, four major themes underlie the rationale for a team approach to intervention. It is argued that 1) the complex nature of many disabilities requires high levels of specialization, but the rapidly expanding knowledge base means that no one person or discipline has access to all of the information needed; 2) services need to be integrated 3) a process is needed to build shared ownership and commitment to goals and services; and 4) decisions made by a group generally are superior to decisions made by an individual. (Bailey, 1996, p. 4)

Bailey (1996) summarizes the research done in 1988 by the Carolina Institute for Research on Infant Personnel Preparation that looked at how students in 10 disciplines (audiology, medicine, nursing, nutrition, occupational therapy, physical therapy, psychology, social work, special education, and speech-language pathology) were prepared for providing services to infants and toddlers with disabilities by concluding "across almost every discipline, little emphasis was placed on working with families or on the interdisciplinary team process" (p. 10). He went on to write that the ideal training model would be "all of the major disciplines would have special tracks to provide students with the expertise needed to work with young children and families" (p. 10). Bailey, Simeonsson, Yoder, and Huntington (1990) note that this concept may not always be possible or realistic within the professional disciplines at the university level, they find that most students left their professional programs with little training on working with families and in teams. "It must be recognized, however, that most professionals entering early intervention will not graduate from a specialized program. Given this likely scenario, what changes should be made in existing preservice programs and how might



such changes be implemented?" (p. 33). The following four high-priority

recommendations emerged from the authors' study:

First, all students should receive an introduction to legislative mandates pertaining to young children and their families, as well as an overview of available programs and services. . . . A second, and related suggestion, is that all students should have at least some exposure to real programs and services provided for young children and their families. . . . Third, programs should expand the instructional and clinical experiences that students receive in working with families. . . . Finally, programs should expand the instructional and clinical experiences that students receive in working with professionals from other disciplines. (p. 33)

The implementation of the interdisciplinary model for teaching and learning presents challenges to the students as it encourages them to become active participants in their learning. Hursh et al. (1983) write "finally, we want to emphasize that the model will be a success only if students are required to engage in active participation. Students must constantly be required to think, challenge, infer, and synthesize disparate elements of information" (p. 57).

#### The Team Process

"The interdisciplinary team, with its legal and rational underpinnings, is now a standard part of special education and related services for children with disabilities and their families" (Bailey, 1996, p. 7). Research on the team process indicates that although much is known about how teams function, that there is often a lack of real collaboration on the part of the members from the different disciplines and that functioning as a collaborative team member is a learned process (Bailey, 1996).

Bailey (1984) describes the "triaxial model" to examine the group process and the function of the interdisciplinary team. He describes teams as a complex entity with three

dimensions. The first issue described was the dimension of team development; teams grow and change over time and go through multiple stages in their ability to work well together. The second dimension addressed the fact that teams face problems and conflicts in learning to work together. Conflicts on teams may be caused by a single team member or by subgroups of members. The last dimension looked at team function as a whole and problems that involve the team structure, organization, and clarity of member roles.

Bailey (1996) writes that group members need to understand groups and group process, that they need to be aware that team dynamics can be affected by the context in which the team is functioning and by the behavior of an individual or group of individuals, and that training is needed to facilitate the team process. "Changes in preservice education are essential for teaching initial skills and fostering a professional identity that centers around teams and families" (Bailey, 1996, p. 11).

Prior to examining disciplinary roles on teams and the issue of role release for good team functioning types of team function need to be defined. In *Webster's New Universal Unabridged Dictionary* (1983) teamwork is defined as "joint action by a group of people, in which each person subordinates his individual interests and opinions to the unity and efficiency of the group" (p. 1871). "'Multidisciplinary' has been defined by the U. S. Department of Education to mean efforts involving people representing at least two disciplines" (Kilgo & Bruder, 1997, p. 83). The term used in the early intervention legislation is not the same as when the term is used to describe the interactions or service delivery models of a team. Team interaction/service delivery is defined by the terms unidisciplinary, multidisciplinary, interdisciplinary, and transdisciplinary. Each term is



used to describe the process of how the team works together and the roles of the disciplines on the team. These terms have been defined by multiple authors in the literature (Bailey, 1996; Briggs, 1997, Hanson & Lynch, 1995; McGonigel & Garland, 1995; Rainforth & York-Barr, 1997; & Raver, 1999).

Briggs (1997) uses the following to define the team models of service delivery; these definitions are similar in the other literature:

- ▶ One professional or one professional discipline attempting to serve all the needs of a family and child describes the unidisciplinary approach to service delivery. (p. 90)
- ▶ The multidisciplinary model is described as a parallel approach because each professional representative works next to the others with limited interaction and exchange of information, opinions, and expertise. . . . Each professional, however functions in isolation, much like the earlier approach. Yet there is acknowledgment that other viewpoints are being offered. (p. 90)
- ▶ According to Briggs (1991), interdisciplinary teams have established methods for communication between the different professionals and with the family. Exchanges of information occur readily. Families can expect that the written results of an assessment by an interdisciplinary team will be in the form of an integrated report. Program planning is also done collaboratively. (p. 93)
- ▶ Transdisciplinary teams allow for flexible definitions of roles and responsibilities. Members' value is not limited to responsibilities typically associated with any one profession. Each member brings to the team the training and experience typically expected of representatives of their discipline. In addition, they may choose to offer other skills not typically associated with their disciplinary title. This flexibility in duties, roles, and responsibilities enriches the team and the families it serves while simultaneously empowering individual members. (p. 95)

Briggs (1997, p. 94), points out that the Transdisciplinary model includes four key components; multiple disciplines are involved and there are flexible boundaries and a



sharing of knowledge and skills, the team members work in collaboration and all members are involved in all the aspects of the service delivery, the families are central to the planning and intervention process and are considered a member of the team, and that one member of the team serves to coordinate the care and carry out the intervention activities

Hanson and Lynch (1995), write that the early focus of early intervention was interdisciplinary in nature but, based on research and literature, that focus has now changed.

However, transdisciplinary programming has evolved as the optimal model in early intervention. It allows one team member to be the primary liaison with families, reducing the number of professionals in the home and the number of people with whom parents have to relate. It increases the competence of all team members and enables them to be more effective with a wider range of children and families, and it increases professionals' opportunities to grow and learn. . . . In summary, several models have been used to provide educational intervention to infants who are at risk or disabled and their families. Initially, models were multidisciplinary in nature, with team members from various disciplines functioning autonomously. Interdisciplinary models followed, which included more collaboration among disciplines in both the assessment and delivery phases. More recently, transdisciplinary models have evolved. Although this model does not rule out individual therapies, it does emphasize shared professional skills and the blending of disciplinary roles. (p. 120)

The evolution of a transdisciplinary team is not an easy process and team members do not automatically have the skills to work within this model of service delivery. Tuchman (1996), points out "team building is a complex and dynamic process. Effective teams do not develop overnight, but build over time. Members need time to get to know each other, to understand their team's purpose, and to establish communication

channels in order to develop trust. From trust flows creativity, flexibility, accomplishment, and satisfaction” (p. 147).

Because teams are common in the workplace, team dynamics and group process have been studied extensively. Early intervention teams can learn much from the literature about characteristics of effective teams, relationships among team variables, and dynamic processes such as leadership, communication, and problem solving that promote teamwork. Ancient wisdom—“two heads are better than one”—and modern management approaches both point toward teamwork as the preferred method for bringing people together to share knowledge and solve problems. (Tuchman, 1996, pp. 145-146)

According to Briggs (1997), “There are many different elements that must be in place for teams to function successfully. However, from a systems perspective, the three essential components that must coexist are: commitment, collaboration, and communication” (p. 123). Tuchman (1996, pp. 148-151), describes the following characteristics of effective teams that are based on the literature. Team members must be committed to the mission or goal of the team and commit the time that it takes to support the process. The team members need to have an interdependence on one another and be willing to participate equally and share feelings and responsibilities, this needs to be developed with time and with conscious effort on the part of the members of the team. The members of a team must have a respect for each other and their individual differences and be able to respect and deal with differing opinions. Communication skills are a key factor for good teamwork; members need to feel that they can express themselves and be heard by the other members of the team. Members also need to recognize that good communication skills are learned. Teams need to have organizational support and adequate resources, including time, to meet their goals. Teams need



leadership and clear roles and expectations need to be defined. All team members should have a role in the decision making process and there needs to be accountability for the decisions that are made. And last but not least, team members need “training in team participation, including skills such as communication, leadership, decision making, and problem solving” (p.151).

Tuchman (1996, pp. 151-154), also identifies the following as barriers to an effective team process. The author writes that scheduling and time is one of the major barriers to an effective team process. Lack of commitment and individual differences can also prove to be barriers. Individual differences can present as a major barrier if the team members do not know how to or are unable to work through their differences. If there is poor communication between the members of a team, the team process will be inhibited and there may be hard feelings among the team members. Poor communication will also inhibit the decision making process of a team. This author identifies poor communication as the biggest barrier to effective teamwork. The final barrier noted by the author is poorly-run meetings; if team members feel they are wasting their time they will not stay committed to the process.

Multiple authors have addressed the issues of how teams develop and there are multiple works that include activities for team building. “The literature on team development suggests that teams follow a specific, developmental sequence, with each team going through the sequence in its own unique way” Tuchman, 1996, p. 158).

Tuchman (1996), again describes the stages of team development in her description of the early intervention team and included key questions that the team asks at



each stage. The stages in, sequence, are identified as; forming, storming, norming, performing, and adjourning or reforming. "However, teams do not necessarily move through the stages in a linear fashion, because teams are constantly accommodating to changes" (p. 158).

Forming is the stage in which team members get to know each other and deal with the logistical issues of the team. The key questions for the team members at this stage are: "Who are we?, Why are we here?, How should we behave?, and What part will I play?" (Tuchman, 1996, p. 159).

Storming is the stage where team members begin to define their tasks and roles this can lead to conflict so problem-solving and conflict management strategies may be needed during this time. The key questions for the team members at the storming stage are: "Do we still think this is a good idea?, What's going on among us?, What are we trying to accomplish?, Why should we change?, and How will we resolve differences?" (Tuchman, 1996, p. 159).

Norming is the stage of productivity for the group. Team members communicate with each other and are comfortable with the routine for the team. The questions that are asked by the team members at this stage are: "How can we work more effectively together?, How can we support each other?, What do we understand about our members?, and How can we make good decisions together?" (Tuchman, 1996, p. 160).

The performing stage is a time of good interpersonal relationships and the focus is on decision making and problem solving. It is at this stage where team members begin to look at new tasks and creative ways to meet new challenges. Key questions are: "What

do we do really well?, What can we work on?, What do we want to accomplish?, and What are we thinking about for the future?" (Tuchman, 1996, p. 160).

The fifth and final stage described by Tuchman (1996) is the stage of adjourning or reforming and it is the stage in which the team activity is either coming to a close or the team members are looking at new directions. This is the time when the team reflects and evaluates. The key questions here are: "What have we accomplished to celebrate?, What comes next—closure or new activities?, If new activities, what do we want to do?, and What do we want to change?" (p. 161).

When examining team process and dynamics, it is important to remember the following that is written by Garland and Frank (1997):

Although the needs of children and families often require an interagency approach to service delivery, frequent changes in membership make it especially hard for teams to establish trust, ensure communication, transfer knowledge and skills, and work together to solve problems. As personnel change, teams must repeatedly reconstitute themselves around new members, teaching them the norms, culture, and procedures that characterize their teamwork. These changes make team development a spiraling rather than linear process as experienced team members leave and are replaced by new members who may lack the most basic information about teamwork. (p. 365)

### Two Models of Student Learning

The concepts of the student as an active learner and collaborative learning are intertwined. Collaborative learning cannot be addressed without examining the issue of the student as an involved and active learner. Active student learning can take place within multiple types of classroom settings and collaborative learning is only one of the models used to promote the learner-centered classroom. Collaborative learning does not happen if student-centered, active learning is not at the heart of it. "The use of active



learning strategies, such as cooperative learning, is growing at a remarkable rate. Professors are incorporating cooperative learning to increase students' achievement, create positive relationships among students, and promote students' healthy psychological adjustment to school" (Johnson, Johnson, & Smith, 1991, p. iii).

### *Active Learning*

Dewey (1938) was an early proponent of active learning. In his description of a new philosophy for education, he advocated for quality personal learning experiences to support student learning. Dewey (1916) notes that teachers can not hand ideas to students as if they were bricks (p. 4). Fishman (1998) writes:

The upshot of Dewey's metaphor is that education requires the attention and effort of the learner. It is not simply motion in one direction, from the curriculum via the teacher to the student. Rather, learning involves interacting processes, energy moving in a variety of directions: from student to the curriculum and vice versa, from teacher to student and vice versa, and from student to student as well. As a result, Dewey wants instructors, not to present already established truths via lecture, but to teach indirectly, to structure classes so that they and their pupils will identify genuine problems, use the curriculum to investigate and discover solutions to these problems, and, as a result, establish connections with course subject matter. (p. 20)

According to Huba and Freed (2000), "in a learner-centered approach, professors and students learn together" (p. xv). Huba and Freed (2000) and Johnson, Johnson, and Smith (1998), suggest that the shift for faculty from using a teacher-centered focus to a learner-centered focus is a difficult one that causes instructors to re-think what their role in the classroom. There is a change from being an instructor who conveys knowledge to being an instructor who encourages and helps students to be actively involved in their own learning; faculty must make a paradigm shift in how they teach. This statement is

based on literature that indicates that the lecture method of teaching, with students as passive learners, is not as effective as methods that focus on student learning; research shows that students learn more when they are actively involved in the learning process in the classroom (Huba & Freed, 2000; Johnson et al., 1998).

The idea of focusing on learning rather than teaching requires that we re-think our role and the role of students in the learning process. To focus on learning rather than teaching, we must challenge our basic assumptions about how people learn and what the roles of a teacher should be. We must unlearn previously acquired teaching habits. (Huba & Freed, 2000, p. 3)

Johnson et al. (1998) write:

The old paradigm is to transfer the instructor's knowledge to a passive student so instructors can classify and sort students in a norm-referenced, competitive way. The assumption was that if you have content expertise, you can teach. Many instructors consider the old paradigm the only alternative. Lecturing while requiring students to be passive, silent, isolated, and in competition with each other seems the only way to teach. The tradition of the old paradigm is carried forward by sheer momentum, while almost everyone persists in the hollow pretense that all is well. All is not well. Teaching is changing. The old paradigm of teaching is being dropped for a new paradigm. (p. 1:7)

Johnson et al. (1998) describe the old paradigm of teaching with the following:

The old paradigm of teaching is based on John Locke's assumption that the untrained student mind is like a blank sheet of paper waiting for the instructor to write on it. Student minds are viewed as empty vessels into which instructors pour their wisdom. Because of these and other assumptions, instructors think of teaching in terms of these principal activities;

1. Transferring knowledge from instructor to student. . .
2. Filling passive empty vessels with knowledge. . .
3. Individuals learn and are motivated to do so by extrinsic rewards. . .
4. Classifying and sorting students into categories. . .
5. Conducting education within a context of impersonal relationships among students and between instructors and students. . .
6. Maintaining a competitive organizational structure. . .
7. Assuming that anyone with expertise in their field can teach without training to do so. (pp. 1:5 - 1:7)



Huba and Freed (2000) include the above factors in their description of the old paradigm or "teacher-centered" paradigm and also include; "teaching and assessment are separate" and that "assessment is used to monitor teaching", "emphasis is on acquisition of knowledge outside the context in which it will be used", "emphasis is on the right answers", "focus is on a single discipline", "only students are viewed as learners", and "desired learning is assessed indirectly through the use of objectively scored tests" (p. 5).

"College teaching is changing. We are dropping the old paradigm of teaching and adopting a new paradigm based on theory and research that have clear applications to instruction" (Johnson et al., 1998, p. 1:9).

All is not well. Students often do not learn what faculty think they are teaching. Student performance on exams or students' questions may indicate that they do not understand the material in the way or the extent that faculty would like them to. Furthermore, students often ask boring questions such as, "What do I have to do to get an A?" or "Will it be on the final exam?" Students ask the latter question to determine if the material is important. What matters, of course, is not whether or not it will be on the exam but rather do professionals in practice use the concept or procedure regularly. Such problems wear professors down. There is a way to break out of the old paradigm of teaching and define in more creative ways what it means to be an instructor. The way is known as the new paradigm of teaching. (Johnson et al., 1998, p. 1:8)

What then are the components of the new paradigm of teaching or the learner-centered paradigm? According to Johnson et al. (1998, p. 1:6), knowledge is "jointly constructed by students and faculty," students are an "active constructor, discoverer, transformer of own knowledge," "learning is fundamentally social," the faculty purpose is to "develop the student's competencies and talents," "there is a personal relationship between faculty and students, the classroom is one of cooperative learning," and "teaching is complex and requires considerable training." Huba and Freed (2000) include

the above characteristics and add, "assessment is used to promote and diagnose learning," the "approach is compatible with interdisciplinary investigation," the "professor's role is to coach and facilitate," "emphasis is on using and communicating knowledge effectively to address enduring and emerging issues and problems in real-life contexts," "professors and students learn together," and "desired learning is assessed directly through papers, projects, performances, portfolios, and the like" (p. 5).

O'Banion (1999) advocates for the learner-centered approach to teaching at the college level:

Colleges that refocus their basic systems on learning by expanding learning options for students, engaging students as full partners in the learning process, designing educational structures to meet learner needs, defining the roles of learning facilitators based on the needs of learners, and measuring their success based on increased and expanded learning for students, will create an educational enterprise that can help students make passionate connections to learning. (p. 37)

"The shift from a professor-centered to a student-centered learning situation allows students to construct new knowledge by building on existing schema" (Ventimiglia, 1995, p. 19). Bonwell and Eison (1991) write, "most important, to be actively involved, students must engage in such higher-order thinking tasks as analysis, synthesis, and evaluation. Within this context, it is proposed that strategies promoting active learning be defined as instructional activities involving students in doing things and thinking about what they are doing" (p. 1).

As professors and students shift from a teacher-centered to a learner-centered paradigm, ideas and practices will be put in place that support a comfortable view of mutual feedback. Professors will begin to view themselves more as partners in helping students learn than as expert information givers. They will welcome students' active involvement in their own learning, and students will learn new



roles and take more ownership of their learning. As the course climate changes, the environment will be more supportive of a mutual feedback loop in which clear and accurate information is shared in a timely and supportive manner, There will be mutual trust, a perception that feedback is a joint effort, and the type of conversation that encourages the learner to be open and talk. (Huba & Freed, 2000, p. 143)

Bonwell and Eison (1991) note that the shift from teacher-centered to student-centered is not an easy one. They identify some specific obstacles and barriers to the process:

But certain specific obstacles are associated with the use of active learning including limited class time; possible increase in preparation time; the potential difficulty of using active learning in large classes; and a lack of needed materials, equipment, or resources.

Perhaps the single greatest barrier of all, however, is the fact that faculty members' efforts to employ active learning involve risk—the risks that students will not participate, use higher-order thinking, or learn sufficient content, that faculty members will feel a loss of control, lack necessary skills, or be criticized for teaching in unorthodox ways. Each obstacle or barrier and type of risk, however, can be successfully overcome through careful, thoughtful planning. (pp. 2-3)

### *Cooperative/Collaborative Learning*

Johnson et al. (1998) and Huba and Freed (2000) write that collaborative student learning is one of the methods that can be used to shift the focus from the old paradigm which is teacher-centered to the new paradigm which emphasizes students as active participants in their own learning. Adams and Hamm (1990) note, "cooperative learning is a good example of how schools can build on the tendency of students who enjoy actively working together in groups" (p. 3). They also state, "within cooperative learning groups the student's role as collaborative researcher replaces the traditional notion of student as a passive knowledge recipient. Learning starts with curiosity, moves toward

students' interpretation of the subject's meaning in their lives and is then connected to other areas of knowledge" ( p. 17).

Slavin (1983, 1987) has researched and written about cooperative learning primarily at the K-12 level, but the theoretical basis of cooperative learning that he presents in his work can also be applied in higher education classrooms.

Cooperation is one of the most important human activities. Elephants have survived as a species because of their size; cheetahs because of their speed; human because of their ability to cooperate for the good of the group. In modern life, people who can organize as a group to accomplish a common end are likely to be successful in business, in sports, in the military or in virtually any endeavor.

One area in which cooperation is not a primary focus is in the classroom, where helping between students may be viewed as cheating. (Slavin, 1987, p. 7)

He suggests that cooperation among students in the classroom is not cheating, but a way for students to support each other's learning. In a typical classroom students compete with each other for grades and approval, but in a cooperative classroom students are encouraged to support and encourage each other's learning efforts. He also writes that there are multiple cooperative learning methods that often vary based on the philosophy of the person who created and researched them .

What unites them is their applications of the basic principles of cooperative incentive and task structures to achieve cognitive as well as non-cognitive goals in typical classrooms. The cooperative learning researchers are also united in their belief that the optimal instructional system may not be found within the range of variation among traditional classrooms, but must be created based on sound psychological and pedagogical theory and rigorously evaluated in classroom practice. (Slavin, 1983, p. 3)

Slavin (1983) defines four basic principles of cooperation: cooperative behavior, cooperative incentive structure, cooperative task structures, and cooperative motives.



Cooperative behavior is when two or more individuals work together and help each other achieve a common goal, and cooperative incentive structure is when rewards are based on the efforts of the group as a whole and not on individual performance. "Cooperative task structures are situations in which two or more individuals are allowed, encouraged, or required to work together on some task" (p. 5). Some tasks require that individuals work together while other tasks can be done by one person, but are easier if they are accomplished cooperatively. Cooperative motives are a preference shown by some individuals to work cooperatively rather than in competition with each other. "In the cooperative learning group, academic status is no longer the most important determinant of status, as group membership becomes more important and all students can participate as members of the group" (p. 94)

Johnson, Johnson, and Holubec (1993) use the following rationale to support collaborative learning:

Groups have existed for as long as there have been humans (even before). Groups have been the subject of countless books. Every human society has used groups to accomplish its goals and celebrated when the groups were successful. It was groups that built the pyramids, constructed the Temple of Artemis at Ephesus, created the Colossus of Rhodes, and the hanging gardens of Babylon. It is obvious that groups outperform individuals, especially when performance requires multiple skills, judgements, and experiences. Most educators, however, overlook opportunities to use groups to enhance student learning and increase their own success. (p. 1:1)

Cooperation is working together to accomplish shared goals. Within cooperative activities individuals seek outcomes that are beneficial to themselves and beneficial to all other group members. Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. (p. 1:5)

According to Hilke (1990):

Cooperative learning is an organizational structure in which a group of students pursue academic goals through collaborative efforts. Students work together in small groups, draw on each other's strengths, and assist each other in completing a task. This method encourages supportive relationships, good communication skills, and higher-level thinking abilities.

The goals of cooperative learning are; 1) to foster academic cooperation among students, 2) to encourage positive group relationships, 3) to develop students' self-esteem, and 4) to enhance academic achievement. (p. 8)

Johnson, Johnson & Smith (1991) define cooperative learning in the following way:

Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. Considerable research demonstrates that cooperative learning produces higher achievement, more positive relationships among student, and healthier psychological adjustment than do competitive or individualistic experiences. These effects, however, do not automatically appear when students are placed in groups. For cooperative learning to occur, the professor must carefully structure learning groups. (p. iii)

A major portion of the literature found on cooperative and collaborative learning refers back to the works of David and Roger Johnson and others, therefore the model will be described using their writings. In a comprehensive review of research on cooperative learning methods used in the schools, Johnson, Johnson, and Stanne (2000) found "the widespread use of cooperative learning is due to multiple factors. Three of the most important are that cooperative learning is clearly based on theory, validated by research, and operationalized into clear procedures educators can use" (p. 2). "The combination of theory, research, and practice makes cooperative learning a powerful learning procedure" (p. 4).

Johnson et al. (1998) outline five essential elements that are required to make cooperation work in the classroom:



- ▶ The first and most important element is positive interdependence. You must give a clear task and a group goal so students believe they “sink or swim together.” (p. 1:20)
- ▶ The second essential element of cooperative learning is individual and group accountability. The group must be accountable for achieving its goals. Each member must be accountable for contributing his or her share of work (which ensures that no one can “hitch-hike” on the work of others). (pp. 1:21- 1:22)
- ▶ The third essential component of cooperative learning is promotive interaction, preferably face-to-face. Students need to do real work together while promoting each other’s success. Promotive interaction occurs when members share resources and help, support, encourage, and praise each other’s team efforts to learn. (p. 1:22)
- ▶ The fourth essential element of cooperative learning is teaching students the required interpersonal and small group skills. (p. 1:22)
- ▶ The fifth essential component of cooperative learning is group processing. Group processing exists when group members discuss how well they are achieving their goals and maintaining effective working relationships. (p. 1:22)

Johnson et al. (1998) point out that “in cooperative learning groups students are required to learn academic subject matter (taskwork) and also to learn the interpersonal and small group skills required to function as part of a group (teamwork)” (p. 1:22).

According to Lyman (1995, pp. 177-178):

Students frequently come to the college classroom from classrooms where content was presented in a rigid manner by the instructor with little invitation or opportunity for critical or creative thinking about the content with others. These experiences leave students ill-prepared for successful interaction in Cooperative Learning [*sic*] activities. Group-building activities provide opportunities for students to become accustomed to new expectations and to learn the benefits of interacting with other students.

Ventimiglia (1995) writes that in order for student collaboration to occur, students need to learn group dynamics. “A healthy interaction begins with an awareness of the

social skills needed for successful cooperative work: leadership, shared decision making, trust, effective communication, and conflict management" (p. 31).

### The Collaborative Teaching Model

"Collaborative teaching is not, by any stretch of imagination, a new idea in education in general, but the changing character of everyday life's reality makes it especially relevant today" (Włodarczyk, 2000, p. 73). Austin and Baldwin (1991) write, "in many fields of study, the image of the solitary scholar working alone in a library carrel or laboratory is no more than a fond memory or historic artifact. . . . Today collaboration is clearly a fact of academic life. More and more professors teach cooperatively" (pp. 19-20).

Much of the literature on collaborative teaching addressed this issue at the elementary and secondary level. This section includes a review of literature with a focus on collaborative teaching at the post-secondary level. At the university level, collaborative efforts are not a new phenomena especially in the areas of teacher preparation and interdisciplinary studies, and there is not a great deal of literature for collaborative teaching efforts across the professional disciplines, but efforts are being seen in the area of allied health. A great deal of the literature is more descriptive in nature rather than being research based. According to Austin and Baldwin (1991):

While an extensive literature systematically evaluating and assessing the outcomes of faculty collaboration in teaching does not exist, the various articles and reports describing approaches and examples of team teaching taken together provide some evidence of the strengths and drawbacks of team teaching. (p. 57)



Austin and Baldwin (1991) indicate that collaboration is both empowering and controversial, and Davis (1995) writes that interdisciplinary team teaching is a significant collaboration between disciplines to integrate information. In this section of the literature review, the process of collaborative teaching will be described first and then the positives and negatives will be addressed.

Austin and Baldwin (1991) define collaboration as a more structured form of cooperation among individuals. "... people who collaborate work closely together and share mutual responsibility for their joint endeavor. According to this conceptualization, collaboration not only involves cooperative action. It emerges from shared goals and leads to outcomes that benefit all partners" (p. 4). According to Thayer-Bacon and Brown (1995):

The best definition that we can offer for what collaboration means, a definition that tries to look at the act of collaboration from as many angles as we can collectively think of, is: collaboration is the interaction that takes place between and among people who are in a changing relation with each other and are able to mutually communicate through a shared verbal and non verbal language; therefore, they are potentially able to influence each other. (pp. 7-8)

"By collaborative teaching, we do not simply mean 'team' teaching where instructors alternate days in the classroom. We define collaborative teaching to be a truly joint effort in curriculum design, instruction, assessment, and administration" (Lehmann & Gillman, 1998, p. 97).

The literature indicates that the process of collaborative teaching takes extra time and effort on the part of the faculty members who are doing the teaching (Austin & Baldwin, 1991; Cole, Ryan, Severe, & Tomlin, 2001; Cruz & Zaragoza, 1998; Fennich &

Liddy, 2001; Fey, 1996; Lehmann & Gillman, 1998; & Wilson, & Martin, 1998). If this is the case, why is this model becoming more popular and why are faculty putting forth the extra effort that it takes to be involved in a collaborative teaching team? "In short, collaboration offers a source of support for improving performance, maximizing potential, and achieving the goals that attracted many to the academic profession" (Austin & Baldwin, 1991, p. 7). Lehmann and Gillman (1998) point out that having more than one instructor in the classroom provided a model of collaboration for students, which was a behavior that the authors wanted the students to demonstrate in completing classroom activities. Fey (1996) indicates that collaboration helped eliminate the isolation of teaching in a traditional classroom. Austin and Baldwin (1991) note:

Faculty who collaborate tend to be more prolific and in many cases produce higher quality scholarship than academics who conduct research and write independently. Evidence also suggests that collaborators tend to be more creative and less averse to risk than those who work alone. Personal benefits, such as greater satisfaction with work and overall psychological well-being, are correlated with collaborative activities as well. (p. 83)

#### *Team Building and Guidelines for Collaborative Teaching*

Lehmann and Gillman (1998) write the following:

By collaborating long before the first day of class in the development of the goals, objectives, and pedagogical techniques of the course, even individuals with differing personalities can successfully do this. Essentially, each individual develops a sense of ownership of the course and is willing to work towards a consensus with his or her partners to make the effort successful. (p. 101)

Austin and Baldwin (1991) suggest that in order to understand the evolving process for collaborative teaching it is important to understand the basic dynamics for successful teamwork. "Although each collaborative arrangement is distinctive,



collaboration generally follows a common pattern. Small-group theory helps illuminate the dynamics of collaboration" (p. iv). The same authors write that there are four basic stages or steps in the collaborative process; choice of colleagues, division of labor, establishing guidelines, and terminating a collaboration (pp. 63-65). The interactions of the team members described in these four stages are the same as those described by Tuchman (1996) in her description of the stages of team development; forming, storming, norming, performing, and adjourning or reforming, which were described in detail earlier in this chapter. The only difference in the stages is that Austin and Baldwin's (1991) stage of establishing guidelines includes the activities described in the norming and performing stages described by Tuchman (1996).

Wlodarczyk (2000) completed a qualitative study that studies collaborative teaching by three different faculty teams, two teams of two faculty members and one team of three faculty members teaching in a major Midwestern research university. The author collected data through interviews, observation and document review to determine if there were commonalities among the three teams. Data indicated that there were six themes common to all three teaching teams; cross-case themes. Four of the identified cross-case themes were: collaborative teaching was evolutionary in nature and it was a developmental process, collaborative teaching enhanced professional growth and development, collaborative teaching was a tool to enrich student's learning in collaboration through faculty modeling and "real world" experiences, and collaborative teaching required that faculty have flexibility in their teaching and learning philosophy. The other two cross-case themes had to do with faculty relationships. The first was

identified as task completion and centered around the fact that there had to be a significant amount of time allowed for faculty to develop the courses, and to build relationships; the amount of time allowed had a direct impact on the success of the collaborative teaching effort. The second was identified as relationship building. "The development of trusting relationships among the members of the teaching team has been found to be 'glue', keeping together all other aspects of their work" (p. 272).

Based on their experiences, Cruz and Zaragoza (1998) note that there are ten guidelines for successful collaboration. The authors write that the first four guidelines deal with issues of time and that for a collaborative efforts to be effective a substantial amount of time needs to be allotted for communication and planning. The first guideline is to take time to develop the course. "Because basic course development is so important, faculty must be willing to devote a considerable amount of time giving thought to issues of content, pedagogy, and evaluation" (p. 56). Second is the fact that time is needed to establish mutual respect and trust; faculty members need time to get to know each other as people. "Conversations must be seen as a critical part of all collaborative efforts, not just an extra 'if there's time'" (p. 57). Third, the faculty must make time to meet regularly as a team. The time it takes to teach collaboratively is greater than the time needed for teaching alone. The regular meetings allow the faculty time to debrief after each class and plan for upcoming classes as well as time to discuss problems and successes. The fourth guideline is that faculty need to take time to reflect on the course as a whole once the course has been completed. Faculty need to address the issues of what



went well, what needs to be changed, what was learned, and was the collaborative teaching arrangement more successful than teaching the course alone.

The fifth guideline deals with the fact that equal levels of commitment must be shared by all faculty. According to Cruz and Zaragoza (1998, p. 58):

Collaborative endeavors require an enormous amount of emotional, intellectual, and physical energy for all involved. Because of the high level of energy and large amount of time that must be devoted to any collaborative arrangement, all faculty involved must have the same levels of commitment to the endeavor and it must be mutually perceived that this is the case. If this is not established from the very beginning, there are bound to be hurt feelings, feelings by one or more members that they are being taken advantage of, or resentment that not everyone in the experience is "taking it seriously."

The sixth guideline points out that evaluation policies of individual faculty must fit with the team teaching model. The faculty members must be able to agree on how to evaluate the students' learning and this happens through discussions and communication. The seventh guideline deals with administrative support. "We cannot stress enough that there needs to be financial and moral support from the administration—everything from released time for course development, to agreements about the funding credit to be assigned to individual academic departments, to the unspoken value that is given to collaboration" (Cruz & Zaragoza, 1998, p. 59). The eighth guideline is that faculty need to understand that the collaboration involves risks. The authors pointed out that collaborative teaching is a nontraditional model and it may involve taking a professional risk in a traditional setting.

The ninth and tenth guidelines involve course content and teaching styles. The ninth guideline is that faculty need to not only model collaboration in their teaching, but

they need to expect the students in the course to also display collaboration to complete course assignments and activities. The tenth and final guideline indicates that time is needed by both faculty and students to reflect on the process.

Part of the evaluation scheme for our course included a reflection log we asked students to keep throughout the semester. Students revealed that they felt comfortable first reflecting and responding to critical issues in a personal log and then having the opportunity to share those thoughts in the safe, respectful classroom environment that we endeavored to create and maintain. (Cruz & Zaragoza, 1998, p. 60)

### *Challenges of Collaborative Teaching*

Bess (2000) notes that one of the greatest challenges faced by most faculty is they are not trained in the types of communication skills that are needed for good team building; traditionally teaching and research are isolated and individualistic efforts in the university setting. According to Fey (1996) students often resist collaborative orientated teaching because they are more comfortable with the traditional models where they function as independent learners, again this involves the issues of not having learned the skills that are involved with learning in collaboration with others. Wilson and Martin (1998) write that the greatest barrier they faced in their team teaching was the amount of time that it took beyond their normal course loads. A second issue addressed by these authors was the issue of comparison of faculty members by students. "An additional and unanticipated problem is the increase in vocal and written comparisons of the teachers by the students. Areas of comparison include teaching style, difficulty of testing, and perceived dominance in the classroom" (p. 10). This is a risk that faculty members who are teaching collaboratively need to be willing to take.



Cole et al. (2001) and Baloché, Hynes and Berger (1996), address challenges to collaborative teaching at the institutional level. One of the issues addressed was that faculty traditionally are expected to focus on a specialty area and promotion and tenure are often based on this focus, thus collaborative efforts may not be seen as productive. Another issue was the one of the time it takes for successful collaboration, and how individual departments deal with the time devoted to the collaborative efforts versus the time committed to the department. A third issue was the problem of validation of efforts across the disciplines for collaborative teaching in a setting in which the disciplines are traditionally isolated by individual departments.

Austin and Baldwin (1991) also address the challenges to collaborative teaching. As previously noted by other authors, lack of time was a barrier; time in addition to regular responsibilities for course planning and to nurture the trusting relationships that make a successful collaborative teaching team. The authors note collaborative teaching also means a loss of autonomy which is part of being a collaborative teaching team and there may be a certain level of discomfort when teaching with other faculty members in the classroom. The faculty members must share space and authority in the classroom and blend their teaching styles. These authors also indicate that collaborative efforts may conflict with disciplinary expectations to specialize and publish for advancement. If the collaborative teaching team or a collaborative research team do publish, the issues of authorship can cause conflict among the members of the team and conflict management skills are required to deal with this issue. The final challenge addressed by these authors

was that if faculty do not take the time to plan and coordinate as a team, the course can be a disorganized and negative experience for students.

In a qualitative study of faculty perceptions of team teaching at one institution by Davis (1995), faculty indicated that there were several areas of dissatisfaction that came from the team teaching experience. The lack of appreciation and support from the institution on an administrative level led to frustrations with the process. Faculty interviewed indicated that there was a time conflict between hours spent in teaching versus hours devoted to research and how load was counted and credited. The question of course ownership can also lead to conflict. One team member interviewed stated, "When I teach alone, it's my class, my grades, my disputes, and I create the atmosphere. On a team, I lose my control of those things. I can't do anything about colleague who hands papers back late. I can't do anything about a low course evaluation" (p. 120). Other issues for some of the faculty were that their teaching was under scrutiny by others and that they had to make compromises in teaching methodology and student evaluation. According to Davis (1995):

All those losses, frustrations, and dissatisfactions are important. This sample of faculty portrayed these complaints as fairly minor concerns—no long speeches, no intense emotion—but they serve as the beginning of a good list of what faculty are likely to find troubling about team teaching. Frustrations about time demands, decreased autonomy, and loss of flexibility are inherent problems with team teaching, and unless they are managed carefully, expressed dissatisfactions will grow stronger. (pp. 120-121)

### *Advantages of Collaborative Teaching*

Multiple authors have addressed the positives and the advantages for faculty and students with the collaborative teaching model. According to Austin and Baldwin (1991),



“when faculty collaborate around their teaching, three kinds of benefits occur: development of their teaching ability, new intellectual stimulation, and a closer connection to the university or college as a community” (p. 41). “As faculty members team teach or observe in courses outside their specialty, they may gain an enhanced appreciation of the contributions that other disciplines and perspectives can make to the students and to their own work” (p. 44). Additionally, collaborative teaching efforts across the disciplines can be a way to establish new courses. Cruz and Zaragoza (1998) noted that a variety of studies on collaboration and team teaching point out, “teaming reduces teacher isolation, increases satisfaction, improves teachers’s sense of efficacy, and can increase student achievement and motivation and create a positive affective classroom environment” (p. 56). Fey (1996) writes that collaboration allows time for students to reflect on their learning and to become more active learners.

Lehmann and Gillman (1998) note that the most important aspect of their collaborative experience was that the faculty modeling allowed them to demonstrate the collaborative behaviors that they wanted the students to demonstrate in the classroom. Balonche, et al. (1996) also indicated that modeling faculty collaboration was a beneficial way to help students learn problem-solving skills and peer collaboration. These authors point out that the collaborative teaching model allowed students to understand the differences in disciplines, and also gain an appreciation for how different disciplines can be connected thus helping students integrate knowledge across disciplines.

Wilson and Martin (1998) describe the positive aspects of collaborative teaching for faculty and for students. The faculty benefits include faculty mentoring and modeling

or improved teaching and achieving higher standards, faculty members become sounding boards for each other, the experience allows for creativity and generation of new ideas, faculty learn from each other and gain multiple perspectives, the model supports risk-taking and reflective teaching and it is fun. Student benefits include learning collaborative and team building skills as modeled by the faculty, learning multiple perspectives, and an improvement in faculty-student relationships.

The data in the qualitative study done of faculty perceptions of team teaching completed by Davis (1995) includes several areas of satisfaction for faculty. Faculty indicate that team teaching allows them to gain new knowledge by learning from each other about other disciplines and that the new knowledge makes their subject area more interesting. Team teaching gives them an excuse to talk about teaching and that in turn helps them to improve their own teaching. Those interviewed indicate that the process of learning how a team functions is a valuable experience in itself; it improves their communication skills, listening skills, and problem solving skills. The faculty also say that the professional support is valuable and that the social aspects of the teaming experience creates good friendships and good times together. An additional area of satisfaction is that they were creating positive experiences and successes for students. One faculty member reports that "his greatest satisfactions have come from creating something new that is good" (p. 123). According to Davis (1995):

These interviews make obvious the important satisfactions most faculty draw from their involvement in interdisciplinary courses, and show these satisfactions to be directly related to the interactions that come from being on a team. It was not surprising to hear that faculty enjoyed interdisciplinary conversation and that dialogue about teaching, but it was somewhat amazing to hear so many comment



on their new friendships, and astounding to hear faculty comment on the influence that this experience has had in providing personal growth and renewal for their career. All in all, the balance of dissatisfaction and satisfaction, perhaps with the exception of one person, is tipped in the direction of satisfaction. These faculty believe that colleagues who are not involved in team teaching are really missing something important. (p. 123)

In summary, according to Austin and Baldwin (1991) "more faculty collaboration will not eliminate the work faculty do independently; rather, it will diversify and enrich professors' work lives" (p. 91), and:

Above all, collaborators must learn to maximize mutual gains. Collaborative arrangements must respond to the distinctive circumstances and needs of the individual partners and ensure that each benefits from the joint effort. By pooling their intellectual resources or dividing a task too large for one person to complete in a timely fashion, collaborators can all achieve a level of quantity and quality impossible alone. But to achieve this objective, academics must learn to coordinate their efforts and forgo some of the unqualified recognition that accompanies individual achievement. (p. 85)

#### *The Family Role on the Teaching Team*

"The participation of family members in the training process is a logical activity because parents are the primary recipients of service and will be most affected by the knowledge and skills of personnel who work with them and their children" (McBride, Sharp, Hains, & Whitehead, 1995, p. 343). Capone, Hull, and DiVenere (1997) write that parent-professional partnerships for preservice teaching have a positive impact and foster the implementation of the family-centered model of service delivery in early intervention. They also note that having families involved in preservice training helps model collaboration between families and professionals; it supports the concept that families have value and are competent partners in planning and implementing services for young children with disabilities.

McBride, et al. (1995) find that including family members in the training process helps both students and faculty learn about family-centered practice and that students report the family involvement to be a positive experience. "Student evaluations of courses that have used co-instruction and evaluation of student learning outcomes have validated the efficacy of co-instruction" (p. 344). The authors also report that parents see this model as a positive experience, they cite from one parent who said, "I always like to take the opportunity to enlighten anyone willing to listen to me regarding families who have children with disabilities. The university class is a prime opportunity to educate and sensitize students to families' needs, concerns, and knowledge" (p. 344). "As the primary consumers of early intervention services, families' perspectives are very important in the preparation of professionals with whom they will be working" (McBride et al., 1995, p. 345).

The literature contained in this chapter was reviewed throughout the course of this study and it supports the components of the teaching model designed by the collaborative faculty team. This literature base was also used to help support the findings of this research.



## CHAPTER III

### METHODOLOGY

Qualitative researchers are interested in understanding the meaning people have constructed, that is, how they make sense of their world and the experiences they have in the world. (Merriam, 1998, p. 6)

This chapter presents the methodology used to complete this study. The chapter is divided into the following sections; purpose of the study, rationale for the choice of a qualitative case study, details of the research design itself, and the expected significance of the study.

Planning a research project can be compared to planning for a vacation trip. Before starting out, you consider what sort of trip most appeals to you, what you like to do, what it might cost, where you want to go, how best to get there, how long to stay and so on. So too, there are things to think about before you begin a research project. (Merriam, 1998, p. 3)

This qualitative research project is the study of a group of faculty who developed and are teaching an innovative interdepartmental pre-service course and the students who have taken the course; the story of a journey that was taken together. This research was approved by the University of North Dakota Institutional Review Board and copies of the faculty and student consent forms are included in Appendix C.

#### Purpose of the Study

At the present time, professionals who provide intervention services to infants and toddlers with disabilities are required to provide those services through a family-centered,

multidisciplinary team model. This requirement is defined in Part C, § 636 of the Individuals with Disabilities Education Act Amendments of 1997 (20 U.S.C. 1400 et seq.). I have participated in the development and teaching of an innovative interdepartmental course at the University of North Dakota. The focus of the course is to train students from a variety of professional programs, at the pre-service level, to understand the collaborative family-centered model of early intervention service provision for infants and young children with disabilities. The original purpose of this research was to study the perceptions of students' and faculty experiences with the course and to determine the impact of those perceptions on the course as a whole. As early data analysis was completed and data collection progressed a more important set of questions emerged: 1) what are the dynamics within the faculty collaboration that have led to the longevity and the success of the course as defined by student evaluation and interviews and faculty interviews; 2) how did this happen and why has it lasted? The interview questions that guided this study can be found in Appendix D and the section on the interview protocol in this chapter addresses the rationale for the development of the interview guides.

#### Rationale for Choice of Methodology

The rationale behind the use of qualitative inquiry is the research-based belief that behavior is significantly influenced by the environment in which it occurs. In other words, behavior occurs in a context and a more complete understanding of the behavior requires understanding of the context in which it occurs. (Gay, 1996, p. 209).

According to Merriam (1998), "qualitative research is an umbrella concept covering several forms of inquiry that help us understand and explain the meaning of



social phenomena with as little disruption of the natural setting as possible" (p. 5). The research questions of the proposed study are best addressed through the qualitative method of research using a case study approach. Creswell (1998) defined a case study approach as a tradition of inquiry that is used in "developing an in-depth analysis of a single case or multiple cases" (p. 65). According to Miles and Huberman (1994), "Abstractly, we can define a *case* as a phenomenon of some sort occurring in a bounded context. The case is, in effect, your unit of analysis. Studies may be of just one case or of several (p. 25). For this research project, the case is a specific program, an innovative course that is being taught at the University of North Dakota. Stake (1995) writes the following;

A distinction between what knowledge to shoot for fundamentally separates quantitative and qualitative inquiry. Perhaps surprisingly, the distinction is not directly related to the difference between quantitative and qualitative data, but a difference in searching for causes versus searching for happenings. Quantitative researchers have pressed for explanation and control; qualitative researchers have pressed for understanding the complex interrelationships among all that exists (p.37).

Stake (1995, pp. 47-48), also lists four defining characteristics of qualitative study:

- ▶ it is holistic,
- ▶ it is empirical,
- ▶ it is interpretive, and
- ▶ it is emphatic

It is a distinction between research to find explanations as opposed to research to facilitate understanding; the proposed research will hopefully lead to a better understanding of how faculty and students experience an innovative interdepartmental class. According to Von Wright cited in Stake (1995), there is a difference in quantitative

and qualitative case study research; "a difference important to us, the difference between case studies seeking to identify cause and effect relationships and those seeking understanding of human experience" (p. 38).

Qualitative case study research is designed to answer how and why questions and to give understanding and an every-day life perspective to a specific system, it is knowledge gained from experience and aims at "understanding, extension of experience, and increase in conviction in that which is known" (Stake, 1978, p.6). This author also wrote, "a case need not be a person or enterprise. It can be whatever 'bounded system' (to use Louise Smith's term) is of interest" (p.7), and further explained that what becomes useful to the researcher and reader in a case study is the thorough and full knowledge, knowledge that is gained from experience. According to Stake (1995), "the case is a specific, complex, functioning thing" (p. 2). "We are interested in it, not because by studying it we learn about other cases or about some general problem, but because we need to learn about that particular case" (p. 3).

The real business of case study is particularization, not generalization. We take a particular case and come to know it well, not primarily as to how it is different from others but what it is, what it does. There is emphasis on uniqueness, and that implies knowledge of others that the case is different from, but the first emphasis is on understanding the case itself. (Stake, 1995, p. 8)

Positive attributes of case study research are also embedded into the definition of case study by Yin (1989, p. 13):

*A case study is an empirical inquiry that*

- ▶ investigates a contemporary phenomenon within its real-life context; when
- ▶ the boundaries between phenomenon and context are not clearly evident; and in which



- ▶ multiple sources of evidence are used.

Yin (1989) also stated that research asking how and why questions best leads to use of case studies. "This is because such questions deal with operational links needing to be traced over time, rather than mere frequencies or incidence" (p. 18).

According to Stake (1995), the amount of data that is collected during case study research leads well to triangulation "to minimize misperception and invalidity of our conclusions" (p.134). According to Creswell (1998), the data analysis in a case study provides an in-depth picture rich in context of the case. The multiple forms of data collected can provide a wealth of information and resources for the researcher and the reader. The analysis of the data collected can be used for the formation of theoretical models.

Case study research is descriptive and explanatory and can lead the researcher and reader to a better understanding of what is happening in the situation being studied. It studies real-life situations and findings are based on a matrix of data collected over a period of time. The findings of a case study research project can be valuable to others who are interested in similar cases and phenomena.

### Research Design

This study was designed to answer the following research questions:

- ▶ How do faculty and students experience an innovative interdisciplinary course which is based on collaborative teaching and learning across professional programs?
- ▶ Are course objectives, as outlined in the course syllabus, being met with the collaborative teaching and learning model?
- ▶ How, if at all, was the course planning process engaged in by faculty affected by the collection of data?

As early data analysis was completed and data collection progressed, a more important question emerged: what are the dynamics within the faculty collaboration that have led to the success and longevity of this course? How did this happen and why has it lasted? This then became the focus of the final data analysis. The original questions became secondary to the more important question and data that supports the answers to the original questions is summarized in Chapter V of this study.

The questions we ask will always to some degree determine the answers we find. This point is important in designing a qualitative study. The research questions that guide a qualitative study reflect the researcher's goal of discovering what is important to know about some topic of interest. A qualitative study has a focus but that focus is initially broad and open-ended, allowing for important meanings to be discovered. (Maykut & Morehouse, 1994, p. 43).

"Ideally, for example, the design of a qualitative study is emergent and flexible, responsive to changing conditions of the study in progress" (Merriam, 1998, p. 8).

### *Preparation*

In preparation for this study, I completed a brief qualitative case study as part of the requirements for an advanced course in qualitative research. That study focused on student's perceptions of a university course. Data collection for the study included student interviews, student journals, researcher field notes and observations, and personal notes and reflections. My goal for completing the study was to answer the research questions and to learn and refine skills needed for qualitative research including, but not limited to: research design, confidentiality, interviewing skills, data analysis, and documentation of the data.



### *Entry Into the Site*

For this particular study, site entry was not an issue because it was the hope of all of the faculty involved that the research would have the potential to enhance continuing development of the course. The research was explained to the faculty, and their consent was obtained prior to the data collection and interview stages of the research. According to the research design, students were informed of the ongoing research at the beginning of the semester and their participation in the data collection phase of the research was voluntary; see Appendix C for copies of the consent forms. Prior to beginning the actual study, I obtained approval from the University of North Dakota Institutional Review Board.

### *Participants*

The subjects of the research study were 27 students who were enrolled in the course during the first two years of the study, and 9 of the participating faculty members. Students who participated were pursuing the following majors at the University of North Dakota: Communication Sciences & Disorders, Early Childhood Education and Special Education, Nursing, Occupational Therapy, Recreational Therapy, Physical Therapy, and Social Work. The number of males and females and the ages range of the students varied; some of the students were graduate students while others were undergraduate students. Most of the students were enrolled full time in their discipline-specific courses and took this course in addition to their regular course load. The students also had varied personal lives; they were young and single, young and married, single parents, students with full time jobs, and older than average working on a graduate degree or in college for

the first time. During the interviews, some of the students said that they did not really know what to expect but took the class because it sounded different and interesting. In a few of the disciplines there have been more students than there were places, so not all students who have wanted to take this course have been able to. In the interviews, the majority of the students said that they enrolled in the class because they were interested in working with young children with disabilities and their families and that they were also interested in learning about the other disciplines that provided services to this population.

The nine participating faculty in this research came from the departments of Communication Sciences & Disorders, Medicine, Nursing, Physical Therapy, Social Work, and Teaching and Learning; I represented the Occupational Therapy Department on the faculty. In addition to the departmental faculty, the course parent coordinator, who is also employed by the Family-to-Family Project at UND, was a research participant. In addition to her role as parent coordinator she has been involved in course planning and teaching since 2000. The original faculty came together as part of the University of North Dakota team for participation in the North Dakota SCRIPT Project. The faculty were all asked to be involved in the SCRIPT Project because of their background in working with and teaching about young children with disabilities. Some of the faculty knew one another because of other campus activities, but others had never met prior to their participation in the SCRIPT Project and the development of the course at the University of North Dakota. Two additional faculty members from Communication Sciences & Disorders joined the course faculty when the original faculty member from that department retired; they were also participants in the research. The participants were all



female, with varying professional backgrounds and experiences in early intervention programming. The length of time that each faculty member has been involved in higher education is also varied. Each of the research participants was asked to provide a description of her background and seven of the nine provided the information in the following paragraphs.

Carla Hess, PhD who has now retired from the Department of Communication Sciences and Disorders wrote:

My daughters' amazing and amusing development of language spawned my interest and supported my early research in child development. Responding to needs in both education and health, I spent the 1970's and 1980's validating screening and diagnostic measures of child language performance. Concurrently, in the mid-1980's I began participating and teaching in the area of program evaluation. These fields merged for me in 1989 when I became the program evaluator for the North Dakota Early Childhood Tracking System, a position that I held until 1996. The ND Tracking System forged the earliest interdisciplinary teams concerned with early intervention for children in this state.

Janet Schauer, MSPHN, RN, CPNP provided the following:

My nursing background has focused on the care of children, mostly in community-based care settings. In my early practice as a Pediatric Nurse Practitioner, in the 1970's, I was, for my patients with special needs, primary care provider, "case manager," and "early interventionist" before the latter two were part of the health care/educational systems language. Since I began teaching pediatric nursing twelve years ago, my focus has been on health promotion, growth and development, and care for children in the community who have special needs, from chronic illness to disabilities. My passion is the holistic care of the child and their family to optimize the health and well being of both the child and family, and to coordinate the best possible care within the community context for that child.

Mary (Ebertowski) Riske, RN, MS wrote:

I am an assistant professor and nurse geneticist in the Department of Pediatrics in the UND School of Medicine and Health Sciences. I have 18



years of experience teaching medical genetics and coordinating genetic counseling services to families with children with disabilities.

This position, as well as, my prior experience as an infant development home therapist piqued my interest in the development of this collaborative course.

Vivian Dress the family coordinator for the course wrote:

I am the parent of seven children - five are adopted and six have special needs. My husband and I were also foster parents for twenty plus years and several of our foster children also had special needs.

I have been the Intake Specialist for ND Family to Family Network for five years. Family to Family Network is a state wide program that matches families that have children with disabilities or special needs for a one-on-one support system.

As I raised my children, I became very aware of how very important it was for parents to be advocates for their children but especially important for children with special needs. I believe that the very best possible scenario for these children is for them to have all of the people involved in their lives come together as a team for the good of the child. Therefore I, as a parent, became involved with the Collaboration in Early Intervention class to teach students to become a collaborative team and to help them understand the importance of parents being a working part of that vital team.

Mary Jo Schill provided the following information:

I am a faculty member at the University of North Dakota in the Department of Communication Sciences and Disorders. I am in my 26th year at the University and previously had been employed by a public school district. During my years at UND I have been directly involved with young children and their families through our clinical program at the UND Speech, Language and Hearing Clinic. I have also supervised our students as they have completed practicums at a local Head Start Program. I volunteered to participate in the Collaboration in Early Intervention course because of my interest and expertise in serving young children with disabilities. I believe that the most appropriate service delivery model for young children needs to be transdisciplinary and this was an ideal way to provide students with this experience at the pre-service level.

Peg Mohr, PhD, PT described her interest and experiences by writing:

I have served as a faculty member in the Physical Therapy Department with responsibilities for the pediatric course work. My involvement in the regional



Midwestern Faculty Development Consortium stimulated a strong interest in interdisciplinary and transdisciplinary teaching as a means of incorporating authentic practical experiences into the curriculum. Through the development of the Parents as Trainers and Family to Family Network projects, the importance of the family's perspective and the degree to which family co-instructors enhance students' academic experience was reinforced. My role as a member of the North Dakota team participating in the multi-state System Changes and Reform in Interprofessional Preservice Training (SCRIPT) project provided additional support for transdisciplinary practice and the impetus for the subsequent development of the early intervention course on which this research was based.

Margaret (Peggy) Shaeffer noted:

She has had a variety of positions working with children and their families. She was an Associate Professor of Early Childhood Special Education at the University of Wyoming and was responsible for developing curriculum and teaching courses for interdisciplinary approaches to working with families and children. She has been an Associate Professor of Early Childhood Special Education at UND since 1996 and has taught courses and advised graduate students. She has also served on the Interagency Coordinating Council in both Wyoming and North Dakota.

Although the families were not research participants, it is important that their participation in the course be mentioned here. Most of these families have participated in the course teaching for four or more years. The original research proposal anticipated interviews with the families. Interviews ultimately were not done because these are families with children with disabilities, and I felt the issues of confidentiality outweighed the benefits of the knowledge I would have derived from interviewing them. The involvement of the families has had a definite impact on the faculty, students, and the course content and this was apparent as the data for this study was analyzed. As a faculty, we have met with the parents as a group twice, once after year three and once after year five, to get input and feedback from them. A parent coordinator who has been a member of the faculty planning and teaching team since year two has also provided a means of

getting feedback from the families involved with the course and an interview was done with her as part of the data collection process.

### *The Role of the Researcher*

My role in this research was that of a participant-researcher. As a participant-researcher, I was aware that the evaluation was a self study and that there was inherent bias. I felt that the temporary involvement with the students would only enhance and enrich the development of the hypothesis of this research. Because the working relationship with the faculty participants in this study was of a longer duration than with the students and because I was involved in the course planning and teaching, another researcher skilled in the interview process conducted all the faculty interviews in order to, hopefully, facilitate responses that were not influenced by being interviewed by a fellow faculty participant in the course.

Multiple authors address the role of the researcher as a participant in the setting and the use of reflexivity as a strategy to deal with understanding how the research is shaped by one's own background and the issues of researcher bias (Ahern, 1999; Eaves & Kahn, 2000; Frank, 1997; Hasselkus, 1997; Primeau, 2003; Sword, 1999). Primeau (2003) dates this strategy back to the late 1930s and defines it in the following way:

Reflexivity is a qualitative research strategy that addresses our subjectivity as researchers related to people and events that we encounter in the field. Reflexivity also addresses the subjective nature of the research account as a narrative constructed by us as researchers. Reflexivity enhances the quality of research through its ability to extend our understanding of how our positions and interests as researchers affect all stages of the research process. (p. 9)



As a participant researcher I attempted to use this strategy to keep my focus on the research questions and to help me understand how my own interests impacted the study. Hertz (1997) writes, "to be reflective is to have an ongoing conversation about experience while simultaneously living in the moment" (p. viii), and Hasselkus (1997) states, "ours is a view that research is a personal endeavor. Ours is a view that all of us, as researchers, are inevitably shaped by our own culture and our own needs (p. 81). Part of my role as a reflective researcher was to look for the meanings in the participants' responses while being aware of how my background and experiences impacted my views as I interpreted the data to find themes and assertions. To help me become aware of myself as the researcher, I wrote my thoughts and reflections throughout the process.

According to Daly (1992a, 1997) the challenge for the researcher is to preserve participants' meanings while being aware of personal and professional meanings that permeate analysis. I was cognizant of the fact that my professional background and familiarity with the literature and, to a lesser extent, my personal experiences were influences on my interpretation of data." (Sword, 1999, p. 4).

Although this research was not done by the entire faculty teaching team, our interactions over the course of the study, both formally and informally, facilitated my ability to be a more reflective researcher. As a faculty team we often discussed what was happening in the class and our feelings about our involvement and how we evolved into a transdisciplinary teaching team. Hearing the opinions of the other faculty during these discussions helped me fit my perspectives into the picture as a whole.

Although some would criticize the subjectivity that is inherent in interpretive work, no research is free of biases, assumptions, and personality of the researcher. We cannot separate self from those activities in which we are intimately involved. I believe that disclosure of how one is inherently enmeshed in the research enhances the legitimacy of findings and new insights. Qualitative methodologies

are guided by rules and procedures that serve to maintain the scientific integrity of theoretical descriptions. However, it is the researcher's familiarity with previous works and sensitivity to participants that deepens understanding and enhances the creation of meaning. Locating self in the research endeavor does not lessen the credibility of its product as a representation of the experiences of others. Rather, it makes explicit how our stories are context bound and strengthens one's integrity as a researcher. (Sword, 1999, p. 6)

### *Data Collection*

The collection of the data took place over a six year period and 27 students and 9 faculty members participated. The data collection process for this study was to use the strategy of triangulation of data, or collection of data using multiple strategies and sources; this strategy was used to facilitate the researcher's ability to gain a better overall picture and to cross-check the information gathered (Creswell, 1998; Lincoln & Guba, 1985; Merriam, 1998; Miles & Huberman, 1994).

Triangulation of data is crucially important in naturalistic studies. As the study unfolds and particular pieces of information come to light, steps should be taken to validate each against at least one other source. . . . No single item of information (unless coming from an elite and unimpeachable source) should ever be given serious consideration unless it can be triangulated. (Lincoln & Guba, 1995, p. 283)

The data was collected from multiple sources and included student and faculty audio-taped interviews; the students were interviewed after the first two semesters that the class met and the faculty were interviewed during year two and year three. With their permission, copies of the participating students' journals were kept during the first two semesters the course was offered and the content was part of the data analysis process. There were 15 students in the first class, 14 signed consent forms, 11 granted interviews, and 14 provided journals. There were 18 students in the second class, 16 signed consent



forms, 11 granted interviews, 14 provided journals. Two students who signed consent forms chose not to do an interview or provide copies of their journals. Because the focus of the research changed after the early data analysis, student satisfaction and input was tracked through review of the course evaluations that were a part of the course structure as addressed in the course syllabus. Sample copies of course syllabi are included in Appendix A. Course evaluation included Small Group Instructional Diagnosis, a semester end course evaluation, and classroom assessment techniques as described by Angelo and Cross (1993). Students did not identify themselves on any of the course evaluation documents and completion of the evaluations was not mandatory.

Faculty meeting notes and summaries were maintained and collection of these notes began at the earliest stages of faculty discussion and planning. Faculty also communicated and planned via an e-mail list serve and copies of these communications were saved. Personal notes and reflections of class meetings and faculty interactions were also kept and were used in the data analysis process and throughout the study to maintain a focus on the research questions and emerging data and information that was gathered throughout the time the study was conducted. Observations were not done during class meetings because that activity would have taken away from my role as a team participant; personal notes were made of significant happenings after the class session when necessary. According to Maxwell (1996), "When your thoughts are recorded in memos, you can code and file them, just as you do your field notes and interview transcripts, and return to them to develop the ideas further. Not writing memos

is the research equivalent of having Alzheimers disease; you may not remember your insights when you need them" (p. 12).

### *Interview Protocol*

"The purpose of in-depth interviewing is not to get answers to questions, not to test hypotheses, and not to 'evaluate' as the term is normally used. At the root of in-depth interviewing is an interest in understanding the experience of other people and the meaning they make of that experience" (Seidman, 1991, p. 3).

In-depth interviews were done with both student and faculty participants to allow them to express their thoughts and feelings about their experiences with the course. The interviews were not highly structured and many of the questions asked were in response to what the interviewees said. Interview guides were developed prior to the interview sessions, see Appendix D. Kvale (1996) writes, "an interview guide indicates the topics and their sequence in the interview . . . the guide will contain an outline of topics to be covered, with suggested questions" (p. 129).

Seidman (1991) advises interviewers to "listen more, talk less, and ask real questions", to "use the interview guide cautiously", and to remember "the truly effective question flows from an interviewer's concentrated listening, engaged interest in what is being said, and purpose in moving forward. . . . The most important personal characteristic interviewers must have is a genuine interest in other people" (pp. 58-71). These are excellent suggestions and an attempt was made to follow this advice during the interview sessions. For the purposes of this study the interviewers attempted to ask open



ended questions with subsequent questions to follow-up on answers given and to clarify information. Reflective notes were also made after each interview session.

### *Student Interviews*

The course met during the fall semester each year and the interviews were done at the end of the semester the first two years the course was offered. The students were interviewed once and the same interview guide was used both years. Additional questions were asked during the interview to clarify responses and to get the students to expand on their responses. Reflective notes were made after each of the student interview sessions. The interviews were done in my office and were scheduled at the student's convenience. Because the original research questions was, "How, if at all, was the course planning process engaged in by faculty affected by the collection of data?" there were summative course evaluation questions built into the interview guide.

### *Faculty Interviews*

As stated previously, the faculty were interviewed by another researcher skilled in the interview process. Six of the faculty participants were interviewed twice, during year two and year three of the collaboration. The other three faculty participants were only interviewed once because they did not join the collaborative teaching team until year three of the course. If a faculty member had not been interviewed as part of the first round on interviews, the second interview began with questions 1 and 2 from the first interview guide.

The guide for the second interview was developed after analysis of the responses to the first set of questions. In the first interview, people talked about positive things of

working together and the informal structures that developed. The second interview session was introduced with a statement similar to: "During the first interview we talked about what brought you together as a group so today we are going to focus on your experiences of being part of the group - what's it like?" Additional questions were asked during the interviews to clarify and expand the responses. During the second interview, a set of affect cards was also used. The words on the cards were: success, important to me, moved or touched, anxious, frustrated, torn between, lost something, strong conviction or belief, sad, and angry. The respondents were asked to select at least one or two of the cards that had meaning for them in relation to their experiences with the course and to explain why they choose the particular card or cards.

#### *Reliability, Validity, and Generalization*

The issues of reliability, validity and generalization as they apply to qualitative research are reminders of the importance of having a sound research design for a study. Wolcott (1995) writes that in the traditional sense where reliability means the research can be replicated with the same measure and have the same results is not applicable to qualitative research. "It is awkward to have to admit to those following strict adherence to a quantitative tradition that fieldwork does not lend itself to what reliability is all about" (p. 167). Wolcott (1995) also writes, "We do need to recognize the circumstances that render reliability essentially irrelevant as a central concern in fieldwork; we do not need to apologize for it (p. 168). The same author also recommends that as researchers we follow the advice of Kirk and Miller(1986), "that we handle the problem through carefully documented ethnographic decision-making" (p. 168).



On the topic of validity in qualitative research Maxwell (1992) writes, "understanding is a more fundamental concept for qualitative research than validity" (p. 281). For the purposes of this research project issues of validity will be dealt with using Maxwell's (1992 & 1996) guidelines for "descriptive validity, interpretive validity, and theoretical validity." Descriptive validity means that the researcher needs to take care to describe accurately what was actually seen and heard. Interpretive validity means that the researcher must be careful not to impose her own meaning on the understanding of what the data means. The researcher needs to understand "the perspective of the people studied and the meanings they attach to their words and actions . . . how the participants you study make sense of what's going on" (Maxwell, 1992, pp. 89-90). Theoretical validity means that the researcher needs to collect and pay attention to literature and other research on the subject being studied. The design of this research project with multiple sources of data that can be cross-referenced and analyzed should lead to valid qualitative research.

Many of the authors have addressed the issue of generalization in qualitative research, but Gay (1996) provides an excellent summary of the issue.

The conclusions in a qualitative study are the insights the researcher believes she or he has gleaned as the result of a lengthy, intensive effort. They are presented as Rod Serling would say, "for your perusal" and consideration. (That is not to suggest in any way that qualitative research takes place in the "Twilight Zone!") Further, since sampling is purposive and the "sample" size is small (representing, not atypically, a single case), no attempt is made to generalize findings to a larger population. The issue of generalizability is left up to consumers of the research and to other researchers. (p. 229)

It is also important to remember this advice from Maxwell (1996), "some validity threats are unavoidable; you will need to acknowledge these in your proposal or in the conclusions to your study, but no one expects you to have airtight answers to every possible threat" (p. 98).

### Data Analysis

Strauss and Corbin (1990) describe three levels of interpretation for data analysis: gathering and presentation with low interpretation (p. 21), interpreting and selecting data in order "to present an accurate description of what is being studied" (p. 22), and interpretation of the data for "building theory" or the concept of "grounded theory", "one that is inductively derived from the study of the phenomenon it represents" (pp. 22-23). Maykut and Morehouse (1994) write, in their description of the work of Strauss and Corbin, that "these three approaches to analysis can be thought of as varying along a continuum ranging from a low level of interpretation and abstraction engaged in by the researcher, to a high level of interpretation and abstraction required for theory building" (p. 122). Because this study is based on a single case, the data analysis follows more closely the second approach that was described by Strauss and Corbin (1990). "The illustrative materials are meant to give a sense of what the observed world is really like; while the researcher's interpretations are meant to represent a more detached conceptualization of that reality" (p. 22). "Although description is the primary aim of this second approach to the data, some of the interpretations found in descriptive research suggest an interest in theory building" (Maykut & Morehouse, 1994, p. 122). In order to



get to the point of "grounded theory" (Strauss & Corbin, 1990) cases similar to the one in this study would need to be studied and the phenomenon compared.

The purpose of the early data analysis for this study was focused on the original research questions: 1) How do faculty and students experience an innovative interdisciplinary course which is based on collaborative teaching and learning across professional programs, 2) Are the course objectives, as outlined in the course syllabus, being met with the collaborative teaching and learning model, and 3) How, if at all, was the course planning process engaged in by faculty affected by the collection of data from the students? As early data analysis was completed and data collection progressed, a more important set of questions emerged and the final in-depth data analysis took its focus from the more significant questions that evolved during the course of the study. What are the dynamics within the faculty collaboration that have led to the success and longevity of this course? How did this happen and why has it lasted? The student perceptions of their experiences in this course are summarized in Chapter V.

The student and faculty interviews were the foundation of the study, and the additional data collected was used to verify information from the interviews. Because I recognized that I came into the study with my own biases and viewpoints, the strategy of reflexivity was used throughout the data analysis process. Maykut and Morehouse (1994) write "the qualitative researcher's perspective is perhaps a paradoxical one: it is to be acutely tuned-in to the experiences and meaning systems of others – to indwell – and at the same time to be aware of how one's own biases and preconceptions may be influencing what one is trying to understand" (p. 123). As ideas and themes emerged

with the data analysis they were discussed with my advisor and the other faculty team members in order to help me keep my perspectives focused on the "big picture" and the research question. Miles and Huberman (1994) state that the drawing of conclusions may start at the beginning of the data collection process and they are refined throughout the analysis of the data. They also write that "conclusions are also verified as the analysis proceeds" and that verification can be returning to the notes and data or in some cases replication of the project (p. 11).

### *The Process*

The actual in-depth data analysis process followed "the constant comparative method" (Maykut & Morehouse, 1994). "Our procedure for categorizing data presented in this section is based primarily of the description of the constant comparative method provided by Lincoln and Guba, with some adaptations of our own" (p.134). The process began with what the authors describe as the discovery process. "Discovery occurs throughout data collection, as recurring ideas are recorded in one's journal, and begins the formal process of data analysis" (p. 132). The interview tapes were transcribed as close to verbatim as possible, and I listened to the tapes and re-read the transcriptions several times. In the ongoing stages of the data collection the student interview transcripts, the first faculty interview transcripts, and my notes and reflections were reviewed to look for recurring ideas, similar experiences and evolving themes or concepts; this early analysis was what led to the shift to the final research question. The information gathered was used to develop the concept map, Figure 1, that became a focus for the in-depth data



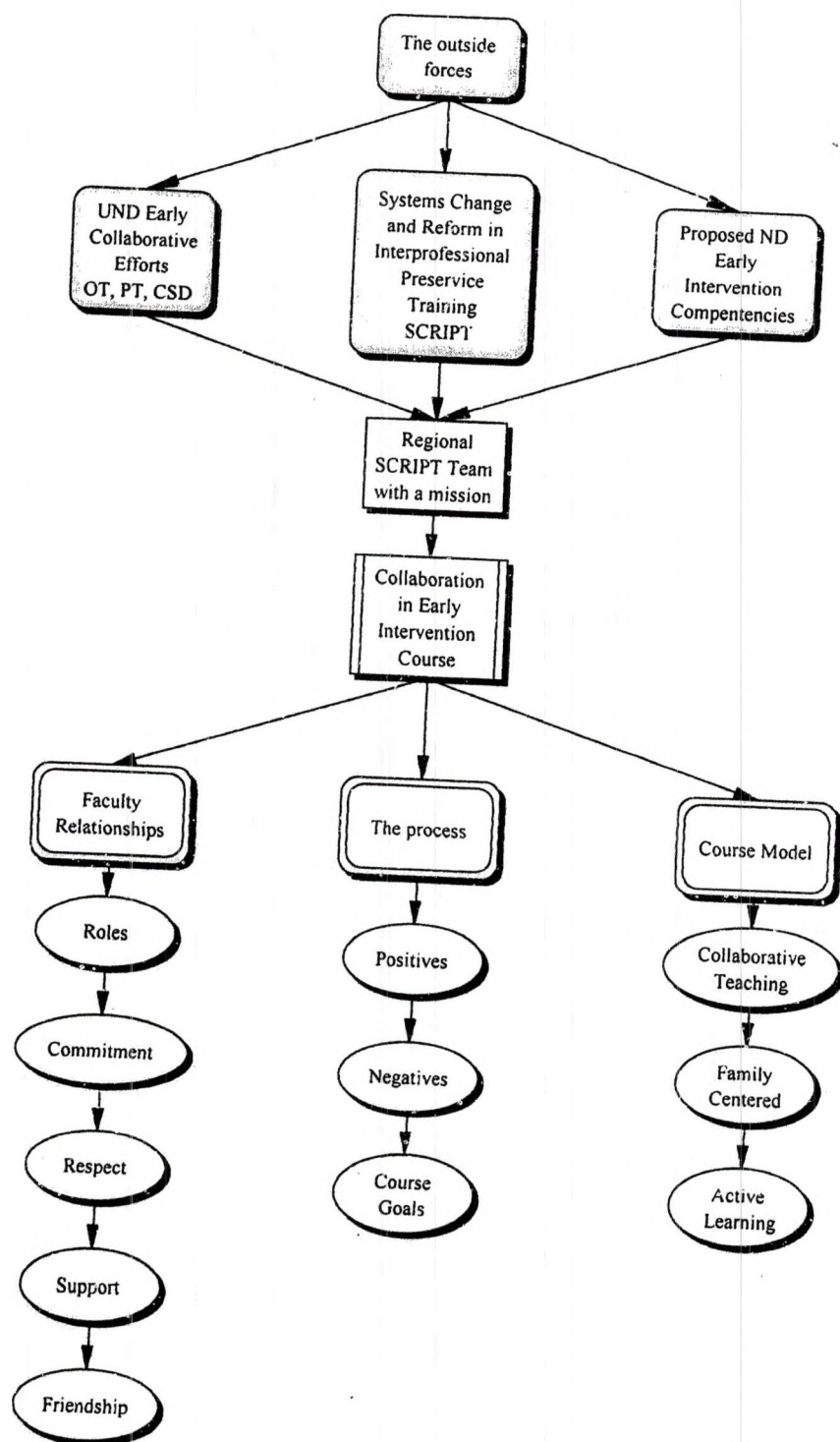


Figure 1. Concept Map: Evolution of a Course and Teaching Team.

analysis. The concept map provided me with a visual overview of the factors that were part of the evolution of the course. It starts with outside forces that were in place prior to the actual creation of the "Collaboration in Early Intervention" course and then shows the factors that came into play as the course was planned and taught.

### *Codes and Categories*

Prior to doing any final coding of the data, the collected materials were again reread and reviewed. My notes and reflections, the e-mail correspondence on the faculty list-serve, and other supporting documents were not coded, but margin notes were made in the review process and these notes were used later to find the information that confirmed and supported the themes and assertions that were derived from the interview data. The in-depth coding process of the interview transcriptions yielded over 60 code words, which were too many to be meaningful for analysis. The initial code words were grouped and narrowed down to 28 codes which were then analyzed and grouped to create the categories. This was done using the cut-and-paste method described by Maykut and Morehouse (1994). In order to identify the sources of the data, all of the transcribed and printed data was copied onto different colors of paper to indicate the type of data, faculty interviews, student interviews, journals, etc. As the data was cut apart to create the unitized cards for analysis, each was labeled with the source code (e.g. F12 - faculty interview 1 subject 2) and page number from which it was taken. As I worked with grouping the coded data by recurring concepts that seemed to fit together, the rules for inclusion, two major categories of information emerged; data that had criteria related to the process of creating and teaching the course and data that had criteria related to the



faculty relationships that developed through creating and teaching the course. Also, as the categorization process evolved, it became apparent that some of the data had an impact on both of the major categories; this data was placed in the center of the visual cut-and-paste display.

### *Themes*

The rules for inclusion of data into the categories were then refined and became the themes; "... you need to make the shift from categorizing units of meaning, to preparing a statement that reflects the collective meaning contained in the cards within each category" (Maykut & Morehouse, 1994, p. 140). The themes that evolved are a description for each of the two categories.

### *Summary*

Figure 2 outlines the data analysis process; this schematic is also found in Chapter IV with the thematic findings of the study. The first column contains the final 28 code words. The code words fit into three major groupings that were the basis of the two major categories that emerged, the process and relationships. The first group of code included the criteria that was related to the process of creating and teaching the course and a second group of codes included criteria that was related to the relationships within the faculty. The third group of codes had criteria that overlapped into both of the major category areas. The two themes that emerged through the data analysis process describe the categories: Positive aspects/outcomes appear to supercede the negative influences/barriers. The relational dynamics between the faculty have had a positive influence on the development of the course. The themes and supporting data led me to

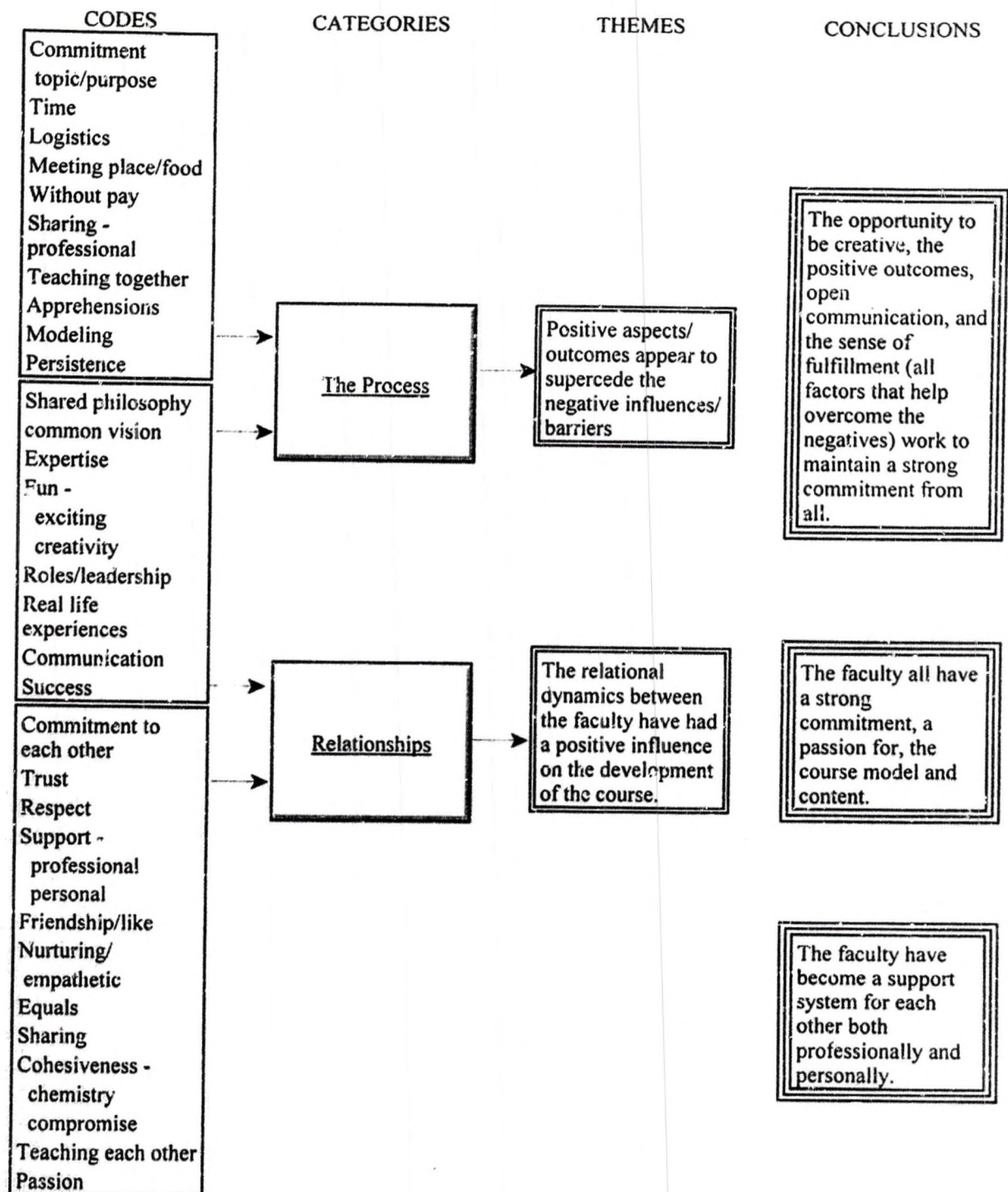


Figure 2. Data Analysis.



form the following conclusions: 1) The opportunity to be creative, the positive outcomes, open communication, and sense of fulfillment (all factors that help overcome the negatives) work to maintain a strong commitment from all. 2) The faculty all have a strong commitment, a passion for, the course model and content. 3) The faculty have become a support system for each other both professionally and personally.

## CHAPTER IV

### PRESENTATION OF FINDINGS

“A good collaboration, somewhat like a garden, requires careful nurturing to achieve its full potential.” (Austin & Baldwin, 1991, p. 29)

The purpose of this chapter is to present the thematic findings based on the collaborative faculty team members' perceptions of experiences their experiences creating and collaboratively teaching the “Collaboration in Early Intervention” course at the University of North Dakota. The interview questions were designed to allow the respondents to express their feelings of how this course evolved and to facilitate a description of their perceptions of the dynamics within the faculty collaboration. The thematic findings address the research questions: What are the dynamics within the faculty collaboration that have led to the success and longevity of this course. How did this happen and why has it lasted? According to Austin and Baldwin (1991) the success of a collaboration tends to decline as the length of time the collaborators work together increases. Teams tend to become less cohesive and communication declines after 4 to 5 years; this faculty collaboration began seven years ago, and the course will be taught for the seventh time in the fall of 2004.

This chapter is divided into three sections. Section one is an overview of the course “Collaboration in Early Intervention”, and it includes descriptions of: the course, the classroom settings, a typical class, a typical family, and a student team home visit.



Section two describes typical faculty activities that have occurred while planning and teaching the course. The third section is a presentation of the two themes as supported by the faculty interview data, meeting notes and summaries, communications, and my personal notes and reflections.

### Collaboration in Early Intervention

#### *The Course*

The course has been taught once a year during the fall semester since 1998 and faculty anticipate offering the course for the seventh time in the fall of 2004. The course content is focused on the provision of collaborative and family-centered learning experiences for students enrolled in Social Work, Nursing, Occupational Therapy, Physical Therapy, Communication Sciences and Disorders, Recreational Therapy, and education programs. When asked why she took the course one student said, "I guess I thought it was interesting and it would be a way of getting more experience in working with other disciplines. I like pediatrics and so it was just a way of getting more experience in working with other disciplines that we don't know a lot about".

In the beginning, the class met in the evening for 2 hours a week and students did not have a scheduled class during the three different weeks that home visits were scheduled. Currently there are six 3 hour class periods during the semester and the course concludes the week of Thanksgiving. During the other weeks, students make three home visits, one agency visit, and there are three scheduled team meetings outside of class with the team faculty. The team meetings outside of class allow the students time to plan for and discuss the home visits, to review course information with faculty and ask questions,

and to discuss and develop the final class presentation. The collaborating faculty made this change the third year the course was taught and the decision to make the change was based on faculty discussions and student input.

Each discipline-specific faculty member has a large notebook in her department that contains copies of all the handouts and reading assignments for each class session. These notebooks are made available to the students in her department so that they can read the assigned articles and copy the course handouts. A textbook has not been used for the course, but the faculty as a team have selected materials that address the course issues from multiple sources. I have kept the copy of the master notebook and it is updated on an annual basis prior to the beginning of a new class. Once the changes have been made, based on input from all the faculty, the master notebook is routed to each faculty member so they can update her departmental copy. This has been a logistical problem in the past, because if handout or reading assignment gets put back in the wrong section or if something gets lost in the process, not all students have the correct information in the correct order. For the coming year, the faculty have decided to update each departmental notebook together as a group; hopefully this will solve the problem. If there are additional new student handouts for a class session, the faculty member who is presenting the information will make copies for all the students, the discipline-specific departments have been willing to support this. Since fall of 2000, the course faculty have also used the Blackboard system at the university to post messages, journal assignment reminders, and to facilitate student faculty team communications.



Prior to the first class period, students and faculty members are divided into four learning teams by the faculty responsible for planning the class; each team includes a family of a child or children with disabilities; whenever possible, there is one student from each discipline on each team. Faculty stay with the same student team throughout the semester and interact with the students on the team during all classroom activities. The students and families also receive an informational packet before the semester begins. The family packet has an informational letter, overview of the course, and a copy of the syllabus. The student packet contains an informational letter and a copy of the course syllabus and assignment handouts.

There have been four family teams each semester since the beginning; two of the families have been participants since the first time the course was offered. Families include parent(s), the child or children with disabilities, siblings, and, on occasion, extended family members. The families attend and are involved in the first class session and the last class session during the semester. They do not attend the other classes, but the students come to their homes for three home visits during the semester. At the parent workshop/dinner, in June, 2001, two of the parents present told the faculty that they knew other families who would like to participate in the class if we ever need more families.

The first class session is a supper and it was designed as a time for the families, students, and faculty to get to know each other. Each student, family member, and faculty member is given a name tag, color coded by team, when they arrive for the first class. At the beginning of the class period, each family is given time to introduce themselves to the entire group. During dinner, each team sits around their own table(s) and eats together as

a group. In the introductory letter each family, student, and faculty member is asked to bring an object that represents their own family, a family symbol, to class and introductions are made by each person on the team describing how the object represents them as a family or family member. The last part of the class is devoted to a review of the syllabus, course assignments, materials, and issues of confidentiality.

Each student team has additional contact with the families through three home visits during the course of the semester; faculty do not accompany the students on the home visits but do help the students plan for each visit. The purpose of the home visits are for students to learn from families about their experiences of having a child or children with disabilities to gain an awareness of the expertise and authentic experiences of the families. The intent of the course is not to have students provide intervention as a team, but to give them the opportunity to listen and learn from the families; to hear the family's story. One student remarked in an interview, "the class has been instrumental in painting us a picture through the family's eyes and it's been ideal to work with other students on common goals".

The topics of the last class are sharing with families and student sharing. Families attend this class and the faculty provide snacks. The first part of the class is devoted to the final team project. The project is a family story compiled and presented by the students and their family as a collaborative activity. The family story is described in a class handout in the following way:

This project/class involves richly describing a family-community culture by becoming an informed participant observer in the context of the family's life. Over the course of this semester you will have the opportunity to interact on four occasions with a family with a child with special needs. Our primary goal is to



have you listen and learn from these families as they teach you about their family, their culture and world view, and their hopes and dreams for their children as they manage their day to day lives. A secondary goal would be to learn about yourselves, your strengths and abilities, both personal and professional, through your interactions with this family and fellow team members. The family stories will emerge over time through both direct and indirect activities, interactions, and processes. Course content is designed to help you understand and support families, and fellow professionals as they in turn nurture and support these special children..

The format of the presentation is left up to the students and their assigned families and over the years there have been some very creative and informative presentations. The formats have included, but have not been limited to, power point presentations, videos, narrated slide shows, poetry, and reflective readings. The remaining class time is used for students to talk about their learning experiences with students on the other teams and to do the final course evaluation.

It needs to be noted here that the faculty share in providing the meals and snacks that are a part of these two class sessions that are attended by the families. The cost of the sub sandwiches that are served for the dinner at the first class is shared by the students and the faculty. The faculty members provide salads, chips, beverages, desserts and the paper products for the rest of the meal. The faculty also share in providing the cookies, bars, snacks, and beverages that are available for the last class when the families are present.

Course content during the other scheduled classes includes topics such as: teaming and family stories, intervention in the natural environment, team goal setting, role release, and an overview of legislation. (See Appendix A Sample Course Documents). Course instruction is a combination of short lectures, small and large group

discussions, and small group learning activities. The faculty share the responsibilities for lectures and leading classroom discussions and activities. Collaborative teaching and learning have been the basis of the teaching methodologies for the course.

Formative student course evaluation is an ongoing process during the semester. In addition to the standard end-of -semester course evaluation, classroom assessment techniques (Angelo & Cross, 1993) are used regularly throughout the semester. Two of the assessment techniques that have been used are the one minute paper and the double entry journal. For the one minute paper, students are asked to write one significant thing they learned in the class and then write what was a problem for them or a question they had. For second technique, the double entry journal, students are asked to choose several sentences or phrases in a reading assignment and reflect on what it means to them professionally and personally. At the end of the course, students are asked to write a short reflection in response to the question; "What is the most significant thing you have learned in this class and how will you use what you have learned in future practice?" One student summarized his/her experience by saying, "I really enjoyed the class and I had a really good time with it, and met some really nice people and our family was great. I think the family adds so much to the course that you wouldn't have otherwise. And it is just amazing the families who want to volunteer to do this. And I really was not disappointed with the class". Faculty have used the student feedback during the course planning and revision process. It is within the framework of the course evaluation process that this research project had it origins; the participating faculty, as a whole, desired to know more about faculty and student experiences in the course.



### *The Classroom Setting*

For the first two years that the course was taught, we met once a week in the Physical Therapy department and the classroom was a large room that was use by the Physical Therapy students as a learning lab. It was a large room, but there were several support pillars that ran down the center of it and partially blocked sight lines. The room was equipped with a screen and presentation equipment, but there were no tables in the room. Each team of faculty and students sat in chairs or on therapy stools around a separate large treatment plinth, a large padded treatment table that could be adjusted down to table height. The first class, the dinner meeting with the families, was held in the small gymnasium at the North Dakota School for the Blind the first two years because the Physical Therapy classroom was not appropriate for a dinner meeting. The final class, with the families, was held in the Physical Therapy classroom and we were able to make do with the space, but it was crowded and difficult for everyone to see the student presentations of the family stories. Because the Physical Therapy classroom setting was not very conducive to the class activities and collaborative student learning, the classroom location was changed to the Nursing Building in the fall of 2000; it is this classroom that we have used since that time.

The current classroom is a very large room equipped with presentation equipment, whiteboards, and a screen. There are several large tables in the room which can be pulled together to comfortably accommodate all the members of each learning team, including the families for the first and last class. There is also a second room with a large conference table and sink that is connected to the classroom. This room is used as a

buffet type serving space for the meal that is served during the first class and the snacks served during the final class. There is also a coffee pot in this room and coffee is available for students and faculty during the class sessions, there are vending machines in the building for pop and other snacks.

### *A Typical Class*

When students and faculty arrive for a typical class, they move the tables into four group settings and the students and their team faculty sit around the tables as a group for the entire class. The faculty member(s) who is presenting information or leading a discussion stands at the table in the front of the room. Most classes begin with announcements, "housekeeping" items, and a review of the goals for the evening. Each student has a printed agenda that includes the course goal(s) which will be addressed during the class session, and the planned class activities and topics. (See Appendix A, Sample Course Documents for agenda examples.)

Typically, the second activity will be a short lecture or presentation of information by one faculty member. This is then generally followed by a small group activity or discussion that is completed by each learning team. The faculty role on the student teams during small group activities and discussions is that of a facilitator, but not as a group leader or instructor. The dynamics within the small learning groups are as varied as are the students; we have had groups with very dominant members and groups where responsibilities and leadership roles change from week to week. Not every group has functioned smoothly and this has been part of the learning process for faculty and students. These activities are generally followed by sharing with the large group. Each



student will choose someone to share what they did or discussed with the whole class. Two or three topics are covered in this way during a class period. The final fifteen to twenty minutes of the class is used to review the journal assignments and to plan for a home visit if that is scheduled to occur during the following week. The journal assignments include a reflective question about the content of the evening's class and a double entry journal based on one of the reading assignments for the class period. Because the class is three hours long, there are breaks built into the agenda. There are "munchies" available for faculty and students, and the cost for these are shared by students and faculty.

In addition to the formal classes, students meet outside of class as a group with their team faculty members. There is no formal class the weeks that these meetings occur. This time is spent talking about the home visits that have been made and planning for upcoming home visits. The faculty members do not accompany the students on their home visits so this is a good time to visit with the students about their visits and answer their questions if needed. These team meetings also allow the students to discuss the topics that have been covered in class and their reading assignments if they want to. These sessions are more casual than a class and a lot of what happens during this time depends upon the needs and questions of the students in the groups. There have been situations when this time has been used for problem solving and facilitation of team building skills in the groups if they have been experiencing problems communicating or working together; this has been the exception rather than the rule. Some of the learning teams have worked together better than others and over the years. There has only been

one team of students that had significant problems, and it was the students who asked their faculty team members to help them resolve their issues. This happened during the second year that the course was taught. Most of the students from that group who were interviewed talked about their problems but also reported that in the end it was a positive learning experience. In responding to the question about what was learned in the class one student, who happened to be on this team, responded by saying, "conflict resolution and following through by talking about issues".

### *The Families*

Due to confidentiality issues, I am not able to describe any of our families. A typical family that is involved with the class may have one or more children with disabilities. The child/children with disabilities are generally not infants or toddlers because those parents are not at a point in their lives where they can share their experiences with a group of students. They are only just learning to cope with the fact that they have a child with a disability. Some of our families have two parents and others are single parent households. Most of the families have other children in the home that do not have identified disabilities. We have also had extended family members who are present when the students make a home visit, and they will talk to the students about their experiences. The majority of the children with disabilities have had some form of early intervention service such as occupational therapy, speech therapy, physical therapy, nursing services, education services, social work services, or any combination of the previous services. They all attend public schools. Each of the families have shared



openly with the students throughout the years, but they do not share more than they are comfortable with.

A typical family visit takes place in the family's home, and in most cases the parent(s), the child with disabilities, and the siblings are gathered with 4-6 students on the team. The faculty do not accompany the students on the home visit, but help them plan for the visit prior to it taking place and debrief with them during the next class time after the visit. The purpose of the home visits is for the students to learn from the families about their experiences of having a child or children with disabilities. The home visit allows the students to gain an awareness of the expertise of parents and authentic experiences of families. In planning for the home visits, the students will often prepare questions for the family based on course content. Typical questions may address the family's experience during an intervention planning meeting with professionals or their experience with professionals in the medical setting. The families also have a copy of the course syllabus and they may have an activity planned for the students. One example was after intervention in the natural environment was covered in class, one of the families had the student accompany them to a pizza place. The students were then able to observe the child's behaviors in a public setting and the parents interventions. The parents also talked about other experiences they had with their child during public outings. One of the students described the family interactions by saying: "One of the most important things I have learned in this class is to really listen to the family's priorities and goals for their child. A second thing I learned from the family visit is the real-life experiences of

families who have children with a disability. I feel that it is important for professionals to be able to really understand the everyday experiences of families”.

### Faculty Activities

The majority of the collaborative faculty team’s activities center around course planning and revision, and teaching the course. The collaborative faculty team meets on a regular basis throughout the year. We usually meet weekly during the fall semester when the course is being taught and less regularly during the spring semester and the summer months. The meetings often occur outside of the typical working day and many of the faculty are not on contract during the summer months when we meet.

During our planning meetings, we discuss a variety of issues. Some of the meetings are for planning the course for the following semester. These meetings generally take place during the spring and summer months. During those meetings we talk about the student evaluation information and about our perceptions of what went well and what was problematic with the previous semester’s course. Time is spent listening to each other’s ideas about why something did or did not work. We also discuss the course content and decide together if we want to make any changes or add new information. We discuss the merits of the changes and talk about how new content information could enhance the course. When a faculty member has an idea for new content it is shared with everyone and the decision about whether or not to use the new content is made by the collaborative faculty team. This holds true for changes in student reading assignments, class activities, and/or lecture information.



During the fall semester, when the course is taught, the collaborative teaching team generally tries to meet on a weekly basis. The discussions that take place during these meetings generally focus on debriefing about the class that was just taught and planning for the next class. Many of the issues that are brought up are the same types that were discussed in the paragraph above, but the focus tends to be on individual classes and not the course as a whole. We also talk about our different student teams and share our perceptions about how we feel each interdisciplinary team group is working together.

During some of our meetings, we will discuss future plans and dreams. We will also discuss possible presentations that individuals have the opportunity to do. When one of the members of the collaborative faculty team writes a proposal, it is shared with all other faculty on the team. We are asked what we think about the proposal and if we have anything to add. We also share presentation content with each other as a new presentation is being developed. The actual collaborative faculty team member(s) who attend the conference where the presentation is being made are listed as primary authors, and the rest of the faculty are credited as secondary authors. Because the majority of our meetings occur in the early morning at the campus coffee shop or in the evening or at noon at a restaurant, social time has become a part of our meetings. This time has allowed us to get to know each other as individuals.

Once the syllabus is completed for the coming fall semester, the collaborative faculty team members decide as a group who will coordinate each class and present the information. Generally two or three faculty members will coordinate a class and the responsible faculty change from class to class. The faculty members who are responsible

for coordinating the activities of a specific class will often get together as a smaller group to develop the agenda for the night. The agenda is sent to the other members of the collaborative faculty team for comments prior to the class session. The lecture information and class activities are often carried over from year to year. There may be mutually decided upon modifications in the content taught or with a group activity. If new information or activities are added to the class content, we have usually discussed and agreed upon them as a collaborating faculty team before they are included in the class session.

In the beginning, individuals on the collaborative faculty team often choose to teach class content that was either discipline-specific or familiar to her. Currently, we all seem to be comfortable with the information that is presented and are willing to teach a wide variety of the content. Individual collaborating faculty team members may present the same topic from year to year or they may switch the class they help coordinate and teach. The bottom line is that as far as class coordination and teaching goes we have become a very flexible group over the years.

Team building is a complex and dynamic process. Effective teams do not develop overnight, but build over time. Members need time to get to know each other, to understand their team's purpose, and to establish communication channels in order to develop trust. From trust flows creativity, flexibility, accomplishment, and satisfaction. Team members accustomed to working together become adept at understanding the dynamic process of teamwork. They learn to identify and anticipate their own roles and those played by their colleagues. They anticipate the challenges and recognize the situational factors that affect their functioning. (Tuchman, 1996, pp. 147-148)



## Thematic Findings

The two themes that are presented in the following sections are the overarching themes that emerged from the study of this single case; the faculty perceptions of their involvement and experience in planning and teaching the Collaboration in Early Intervention course; see Figure 3. Much of the supporting data is presented in the faculty members' own words in order to convey their story of the evolution of the course and the teaching team. The faculty responses were edited to make a grammatically correct translation from the spoken language to a written format; the content of the responses was not changed in any way.

### *The Process*

*Theme 1: Positive aspects/outcomes appear to supercede the negative influences/barriers.*

As with any type of teaching activity, this course has had its positive aspects and negative influences/barriers that are a part of the process of creating and teaching a course in higher education. The fact that the course was taught collaboratively by faculty from several disciplines to students from those same disciplines created more challenges than with a single course taught alone within a single discipline. The process was the first category that evolved in the analysis of the data. I have defined the process as the activities that go into planning and teaching a course; examples are activities such as setting goals and objectives, creating a syllabus, developing student assignments and coming to consensus on the grading of the assignments, class session planning and

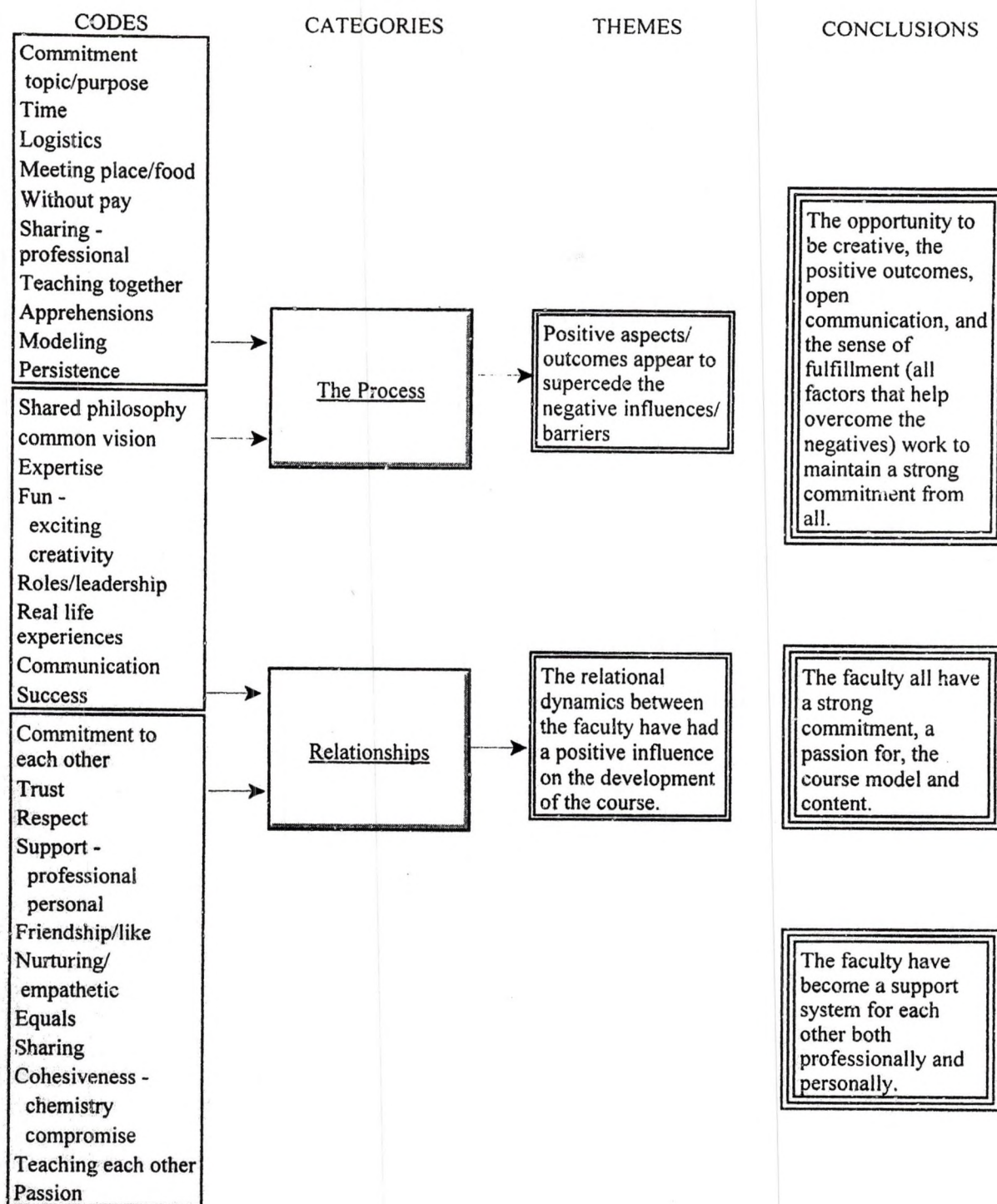


Figure 3. Themes and Conclusions.



deciding who will teach each topic, resolving issues of course evaluation and change based on evaluation, and using student input to create a better course. In our meetings and conversations we spent a great deal of time dealing with logistical issues involved in this collaborative process and talking about the positive aspects of this experience.

### *The Positive Aspects*

The positive experience of being part of a faculty modeling collaboration as a model for students to learn from real life experiences was a common thread in many of the interviews. One person said, "I think almost on every occasion we talked about it, people said that this makes the reality evident to my students, this makes me a better teacher because they are seeing the reality, they are seeing us model that collaboration and students are giving us feedback that they enjoyed and benefitted from what we were doing. So then it is not hard to keep on going." When asked about her insights gained from the collaborative teaching experience a faculty member said, "how much we have lived what we have taught and all the things we have taught the students about teaming we have done. This is the focus of what we are teaching. It is just like running a parallel experience, you know, what we are teaching with what we are living."

A second aspect of the real life experiences that was positive to us as faculty, because it was positive for the students, was the involvement of the families. The role of the families was to tell their stories and experiences to students about being a family with a child or children with disabilities. In her response one of the faculty members described this aspect of the course very well.

I think that we came to the table with the idea that the students were missing something, and maybe missing a taste of the reality that families are living. I

think it was emphasized when we got feedback from the students that that is what they were getting from it and so people would reinforce this by saying this is providing something I can't teach my students. This is providing the students with that understanding of the parent, that understanding of how you work together, that I could not do alone.

The analysis of the interview and meeting data indicates that the faculty have an underlying commitment to the topic and purpose of this course, and, in their opinions, this is one of the factors that has led to success and positive feedback from the students. It is also one of the factors that has led to the success of this type of teaching model. When asked to describe some of the factors that contributed to the success of the collaboration, the interviewee responded by saying:

I think it is because of dedication, a common vision from multiple perspectives, which doesn't mean that they use the same words or maybe have the same strategies, but the same end result in mind. I think that they developed a lot of trust as a group and support for each other. It seems to me that they respect each discipline and they see how each discipline feeds into and supports the other. I don't think there is anyone that sees themselves as the lead discipline. I think that is really important so there is a true sense of common vision and trust and support.

It was also said by a different respondent, "these are colleagues that are affirming and are on the same page with you and have the same concerns in terms of what you are teaching." Another perspective is how the commitment to the project helped in the early planning stages.

When we started this group we went to our first meeting in Twamley and I came back thinking this is never going to fly because there were too many barriers and when we came back to the next meeting those barriers were resolved, about 50% of them, and that came from faculty members just believing in the project and taking care of what they needed to take care of to give it a chance for life. And if you don't have that in place, you can forget about it.

Many of the faculty members commented that the process itself was a fun and exciting experience. Throughout the interviews respondents have said "it is fun" or "it is



a fun group". One person said, "it has been one of the most exciting things I've done in the last five years, so it's been extremely rewarding, very interesting, it's been wonderful to work together with a group of people outside of my own department who have the same general purpose and interests." Another view was, "I think my worry was always that people could not continue to give their time, and we had to make it more time efficient for those that are participating because we really were taking a lot of time, but I found out we had a lot of fun together and that is probably why we took more time." The ability to be creative in what we were doing added to the excitement of the class. "It has given me a place to be creative;" and "this has given me a real creative outlet that has been helpful for me to stay invigorated when things might get boring, it is emergent and the creative mix of ideas from people." Many of our conversations as faculty have been about what else we would like to do in the future; how we can expend this at other levels. One respondent said, "I think these people are very creative, but we also want to see this project grow . . . We also think that it is a very effective way of teaching. We feel like we have gotten good outcomes from it and so there is nothing along the road to say that we shouldn't do this."

#### *Negatives/Barriers*

In the ten guidelines for successful collaboration presented by Cruz and Zaragoza (1998), five of them deal with time: course development time, time for faculty to get to know one another and develop trust, time for regular team meetings while teaching the course for planning, time at the end to reflect on the course and time for reflection on the

process by students and faculty. The analysis of the data shows that the issue of time is likely the greatest barrier faced by this collaborative teaching team.

First and foremost, most of the faculty are planning and teaching this course in addition to their regular departmental teaching load and responsibilities. Meeting times need to be scheduled outside of times committed to individual departmental responsibilities. As a faculty we met in the evening over dinner, during the summer when some of the faculty were not on contract, and in fall of 1999 we started meeting early in the morning before we had classes to teach. During the fall semesters, when the class was being taught, we met on a weekly basis when possible and during the spring and summer we continued to meet on a regular basis. Faculty members who were planning individual class sessions would meet in addition to the regular weekly meetings of all the faculty during the fall semesters.

When asked if this was a stepping stone to other things, one of the faculty members responded with; "I think the other thing you have to understand is that most of the faculty did this above and beyond their current load. This was not something that their departments have accommodated for and said this is one class that you are teaching so that you will have one less class to teach. This is a barrier." When asked if this had an impact on her experience with the class, she went on to say; "well I enjoyed it a lot, in fact, I think it was one of my favorite things to do during the semester so to me it was more energizing than it was energy draining, and I think that other faculty have very directly said that as well so I think it works okay." Another respondent said, "we had to find time outside of class time to do this, and when you work in academia the only time



you can do this is after work, so we started working after work and sometimes with dinner together and so it just sort of evolved into, you know, a general fun group to be with". Another interviewee said

Well, I was amazed at the number of faculty members that would meet voluntarily and consistently to develop this curriculum. I've run into other faculty members that won't do anything they are not paid for. I was amazed at the commitment of these people to get this going and the persistence of working through all the bugs, and how everyone divided out the work and would come prepared to the meetings and carry their load.

Other faculty members said: "It is an overload, it is something extra, it takes time to collaborate", "You have to build in the time to plan or it is not very effective.", and "I think the barrier was the time, time to communicate, get together."

During one interview the interviewer asked a faculty member if there had been any bumps in the road and the faculty member answered by saying, "there's a bump in the road occasionally, and I think that any bumps that we have had come from a lack of communication." She was then asked if communication was a problem, and the response was "the time for communication." She went on to say, "it's been very helpful to have the list-serve so we could communicate that way and stay involved and up to date without taking a lot of time, so that has been real important." Another faculty member said that the list-serve muddled communications for her because there were often messages meant for one or two specific people, and they were sent to the entire list. She then was unsure if it was something she needed to deal with or something to ignore.

In another interview, the issue of meeting around food was brought up and the response relates well to one of the guidelines for successful collaboration developed by Cruz and Zaragoza (1998). Time is needed to establish mutual respect and trust; faculty

members need time to get to know each other as people. "Conversations must be seen as a critical part of all collaborative efforts, not just an extra 'if there's time'" (p. 57). The interview went this way:

Interviewer: So did somebody pick up the phone and say let's go out and get to know each other or as a team did you say let's all get to know each other?

Response: No, it was interesting we got together over at Twamley to start out and somehow the topic of food came up (laughter) and that led to meeting where we would have dinner together and that took place with a conversation. Through the process we got our business done and we also got to know each other because we had a little more time and everybody's sense of humor kinda stimulated that too. It was a natural evolution that happened with this group. It wasn't really designed more than the fact that we knew that if we had food we would get more people there.

Interviewer: So the food wasn't really to create bonding it was just to get people there?

Response: It was to get people there and then to create an occasion to have time to visit. I think those people would have been there had we continued to meet over coffee, and we certainly have done many of those meetings, but I think that the ones that were really beneficial for getting to know each other were those when we had a meal together and spent time together and talked about what we would like to do in the future and where we see this going and how it is working in departments.

Interviewer: You liked to dream together a little bit?

Response: and commiserate.

Another issue involving time that was problematic was the students' issues with time. Many of the students took this course in addition to their regular course schedules, and there were students who would have liked to have taken the course but could not because of scheduling conflicts or the fact that it would be an increase in their academic load. In response to the interviewers statement so it all comes back to time; the interviewee said, "time in our schedules and in the students schedule."



Many of the logistical issues that come into play when planning a course of this nature were barriers that had to be overcome by the collaborative faculty team. One of the faculty members responded to a question about sitting down with several people to develop the initial syllabus and course by saying, "it was very torturous. I think we spent 3/4ths of our time on the logistics of getting this class set up." The interview continued as follows:

Interviewer: Like what?

Response: Well scheduling for all these different students and for faculty. And what course number, where; it seemed like that there were an inordinate number of logistics to be worked out. What worked for one discipline did not work for another discipline and we finally had to decide that that was okay, just however it worked in whatever discipline that is how we were going to do it. For some disciplines it became part of a class and for other disciplines it became independent study. We just had all of the course numbers across the top of the syllabus which was a little confusing for the students.

Interviewer: But you had to come to the place where everyone could be themselves.

Response: Right. So the course at first took a lot. The content seemed to come together much more easily. I think what we discovered is there is a lot of overlap between disciplines. We didn't seem to have much trouble deciding upon the content area.

Interviewer: It was more logistics?

Response: Right, and we might have had more differences over the processes of the class than the content. (In this response process relates to logistical issues.)

Interviewer: What do you mean the process?

Response: Well, the best example I can think of is that some disciplines are more assessment oriented than others and I remember, for instance, stressing toward getting the family story before we started any formal assessments and is this what this class is all about anyway. Formal assessments and all of those kind of discussions so we evolved to a point where we decided that formal assessments were really to be secondary to our goal. There were a lot of discussions about

what outcomes are we looking for here and what are we trying to accomplish? How do we want to do that? Some people are more lecture oriented and some people more discussion oriented. (The references to formal assessments in this response are evaluations used by professionals.)

Similar responses were also given by other faculty members; the issues of how to teach the content, the types of assignments, and scheduling a time for the course were more difficult than coming to a consensus about the basic goals and content of the course.

When talking about the syllabus and the course content, another faculty member said "we needed to go back , back up, and orientate each other as to what we did. What we brought to the combined approach of the disciplines."

Based on course evaluations, the issues of clarity of assignments, course expectations, and availability of reading material were issues for the students as well. The focus of many of the faculty planning meetings over the years has been how to deal with the logistical issues of the course and the issue of faculty time. One of the milestones in overcoming the time barrier was the opportunity to have a full day planning workshop away from campus May 31, 2001. During this workshop, faculty had the time to revisit and revise the original course goals, to examine student feedback of the course, to look at the logistical issues that seemed to be positive and those that were problematic, and to spend a considerable amount of time discussing the topic of where we wanted to go from here. Two of the faculty members also had a shared summer professorship and many of the tasks that were completed evolved from the planning workshop and focused on the logistical issues of the course. They developed detailed assignment directions, grading forms, a class planning form, and a form to document summaries of faculty



planning meetings. These were reviewed and approved by the entire faculty prior to use with the course.

When talking about the collaborative teaching one person said, "to me it has been a really natural kind of progression, very enriching from the teaching, and also a little scary. You put yourself out there and teach in front of seven or eight other faculty members." During each class period, all faculty are present; those who are not teaching are sitting with their student team. This differs from when we teach our discipline specific courses in our own departments where we generally teach alone. When asked to elaborate about the scary piece she responded by saying:

Well you are pretty much alone with your students in the classroom (reference to teaching discipline specific courses), and although they are pretty good consumers and will let you know what they think one way or another, you don't have many opportunities to be actually critiqued by your peers. I would say we really didn't do a lot of that in the first year, we were sort of building relationships and whatever. But I think that this year when we taught it we were getting to the point where we could be a little more direct about the things that seem to be working and not working. We can determine, by observing each other's style, what seems to be helpful in the class and not so helpful. We really compliment each other, some of us are more structured, some of us are more process orientated. It's been fun.

She then went on to say that it got less scary over time. Another person said, "I've never been so nervous as standing up in front of that group of people; the first time." When asked about where she thought the nervousness came from, she responded by saying, "As a person who is used to being somewhat of an expert in your own field teaching with a whole bunch of other people who are experts in their field, not knowing if you are going to measure up." She went on to say, "and we talked about that later, I think most of us went through the same feeling of being really quite threatened by people we saw as

people doing outstanding things and suddenly, you know, we are trying to do something together and not sure if we can measure up to their standards.” Another faculty member said, “I think it has made me a better instructor within my own department. It has given me some confidence and it was very scary at first to stand in front of other faculty.”

### *Relationships*

*Theme 2: The relational dynamics between the faculty have had a positive influence on the development of the course.*

Any time a group of people work together to accomplish a task, relationships and their ability to work together comes into play. In this study, the second theme centered around the relational dynamics within the faculty participating in the collaborative experience.

In the beginning, one person fell into the coordinating role for the teaching team. “I don’t know how I ended up being in somewhat of a coordinating role for UND, because I wasn’t the one chosen to be that. It seemed to fall into my qualifications.” Because of this study, I did the course evaluation and kept master copies of all the materials. One person said, “there are a lot of roles, people can step in and out of roles.” When asked if this was a positive thing, the response was, “yes, absolutely otherwise it is not doable. You know, if you can’t fill in for each other. Two of the faculty members described the leadership and roles in the group in the following way. The first one said, “We use the metaphor of the geese, when the lead goose gets tired they can drop and they will be in the wind path of the other geese and someone else comes out and takes the lead. I think that has been to some degree how the group has operated. We all take on



different pieces.” The second person said, “The metaphor we used is geese, you know, when one of us gets tired then somebody else comes to the forefront and keeps it going.”

When asked about leadership, other faculty members said:

I think that has been one of the really nice parts of this process, that people have sort of stepped to the forefront in that area. We now have a list-serve where we can contact each other and any one of us might say is anyone up for a meeting at Dagwoods on Thursday? I think it's kind of a mutual process of getting together. There is either a task that gets us back together or a personal invitation of some kind.

I think there has been some formalized leadership, but there has also been shifting leadership. At one point, there were a couple of people who really made sure that minutes were kept and there were other people that kind of took ownership of little pieces of things. I'm sure everybody went to their strengths so this was something they could do. . . . So at first it was a little bit more defined, but I think as time has gone on now as somebody has gotten really busy with something somebody else has picked up and taken on that role as it needed to be done.

I think we have had different leaders with different pieces of it and that maybe was one of the real pluses. There wasn't any one person who was like out in front telling people. . . . Logistically speaking [faculty name] really helped keep us on track and took that kind of organizational leadership, but other leadership came from other people.

Analysis of the meeting notes and communications indicated an evolutionary process in the teaching roles that faculty took on. In the early classes, faculty members tended to teach the topics that fit within their area of expertise or discipline, and currently some of the faculty still help with the same topics that they started with. On the other hand, faculty began volunteering to help with topics that were out of their discipline specific role as the number of times the course was taught increased. There are also times when a faculty member is going to be gone or is sick, and another faculty member will say something like “oh I can cover that information”. It appears that the longer we teach this course the faculty comfort level with all the material taught increases. When talking

about teaching roles one interviewee said, "We're just all beginning to evolve into those processes. We don't stereotype each other by discipline quite as much as we used to." One of the faculty described the team teaching as teaching each other, and learning other teaching styles. Many of the respondents talked about roles as being a sharing experience. Another said, "it has been a lot of fun watching other people teach and picking up teaching tips from one another. You really don't have much opportunity to do that in academia; you're usually on your own so this is very different in terms of teaching."

Faculty roles and relationships have also had an impact on publishing and presentations that have come out of this collaboration. Austin & Baldwin (1991) point out in their writing that issues of conflict can arise over works that come out of a collaboration. Some of the issues included who were listed as the authors, what order the names were listed in, and were there major and minor contributors to the work. This issue was not addressed in the interviews, but notes of faculty meetings and communications show that, up to this point, all presentations and publications list all the faculty as co-authors. When faculty members have submitted a proposal for a presentation, a draft of that proposal has been sent to the other faculty for comments. As a general rule, for the presentations, the faculty members who actually attended the meeting or conference have been first authors and the other faculty are listed in alphabetical order as co-authors. At this time, no major publications have come out of this collaborative effort.



During the interviews, faculty talked about the support that came from this group both professionally and personally. One person said, "several of us have said that through this collaboration it has become such a strong support system for each of us." Another said, "there is just no difficulty, no control issues, it was just very supportive and maybe that's unique to this group, just very nice people, but I think it should be the model of what you expect students to practice out on the playing field or in their profession. You have to have that kind of relationship or it won't work." A third person stated, "I think it has really evolved into a support group for one another as well as classroom mentors. We think so much of each other that something special happens." One other faculty member put it this way when she spoke of support that grew out of the collaboration:

Part of it was as you begin to get to know each other better. We are sharing both professional and personal situations and providing support to one another, and that is something that is sometimes hard to come by in an academic setting because again you're out there working all the time and you really, I mean I can be here and hardly see any of my colleagues during a period of the day so there might not even be the opportunity to share personal things.

In relation to personal support one person said, "we have talked about an amazing number of things, some of which I won't repeat. We are all about the same age, we all have about the same physical ailments; it has been fun that way, too. So it has certainly evolved beyond just a class, teaching a class together."

As an answer to a question about some of the informal gatherings after work, one of the faculty members described the interactions by saying:

Yeah, that was real supportive and we kind of did not talk shop at those things, I mean we did somewhat, but we kind of got to know each other more on a friend basis or a support basis. This person was having surgery or this person was going through grieving so we kind of became a support network for each other in our personal lives. We added another dimension to the group and that group I would

say was a more intimate group. It wasn't always everybody, it was whoever was free. . . . I think it got us to know each other better.

Still another faculty member said, "we often would meet at restaurants for our meetings, and it just kind of evolved. And you know it probably started out as shop talk and it just kind of developed into more of a support system."

Throughout the interviews faculty made references to the dynamics within the group and some of that has been reflected in many of responses that have already been used in this chapter. One of the comments made was, "I think one of the things that happened is that we all really liked each other and we work with each other on other projects as well as this project so that interaction was continued both informally and formally by having regular meetings." When talking about what was important to her about the class a faculty member said, "well, like I said it could be the chemistry of the group. That doesn't always happen in groups, but somehow this chemistry of the people involved clicked." When talking about the longevity and cohesiveness of the group, one respondent said, "I think we all have a passion for it and see that it can work."

The issues of trust and respect were also threaded through the interview responses. "I do have a lot of respect for the people that are involved in this. I think they are all very competent and fun, as I said, to interact and teach with" was a comment made by a faculty member when speaking about the other faculty involved with the course. When talking about her feelings on the success of the course, a faculty member stated, "I think we have learned how to team despite our differences. I think we would acknowledge that we're not all the same but each of us bring strength to the situation and we're respectful of that and that goes beyond the class time." A respondent also said, "I feel that I have



established relationships, there's a level of trust and comfort." Another faculty member was talking about what she saw as stumbling blocks and in that response she also said, "I think that when I say there's a level of trust, a level of understanding that there are not any turf issues." One of the faculty member's response sums up the dynamic in this way:

If any of them knew my husband well enough or had an opportunity and said what do you think is the thing that pushes [name] and makes her feel the best? He will say, she talks about her friends in the interdisciplinary group. I'm not even sure all the other faculty members know how strong I feel about them as friends and as colleagues, because like I said I'm kind of more out here. But I truly believe they are a phenomenal group of people professionally let alone personally. I would love to spend more time with them.

When asked by the interviewer what assurances would need to be in place for you to do this again in another location or with another group, a faculty member responded:

Well, if I had free reign and if they hired me and said this is what you need to do to develop and interdisciplinary program, I think there are lots of things that would have to happen, but I don't think you can assure anything. If I were to say assurances, I would say that you would support the group financially. That you would recognize their efforts and things that are important to them like promotion and tenure. That you would support them in terms of not expecting them to do more, you just really see this as part of what they would do, therefore reduce class loads. And that you would also make sure that there were opportunities for professional development. I would look at it and say, we are going to go on a three year plan and the first year we are just going to get to know each other, we're going to develop our vision. And the second year, maybe, we will implement and the third year we will see how to evaluate it. I would try to do it in a way that supported people. You can't do things to create relationships. I think you could support the development of them.

Another faculty member simply stated, "You have to have creative people who are willing to extend themselves and who believe in the project."

The following chapter contains a summary of the research and the conclusions and recommendations that evolved through the data analysis process. It concludes with my personal reflections concerning this study and the research findings.

## CHAPTER V

### SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND REFLECTIONS

“Coming together is a beginning; keeping together is progress;  
working together is success.” – Henry Ford

This chapter is divided into four sections that are used to present an overview of the research study. The first section includes a summary of the problem that was investigated, the research questions, and a summary of the findings. The second section is devoted to the conclusions and a summary of the data that supports them. The third section contains the recommendations that are supported by the findings of the study. The fourth and final section is devoted to my reflections as a participant researcher.

#### Summary

This is a qualitative study of a single case, the study of the perceptions of a group of faculty who designed and have taught an innovative, interdisciplinary course in a higher education setting. As stated in Chapter I, professionals who provide intervention services to infants and toddlers with disabilities are required to provide those services through a family-centered, multidisciplinary team model. This requirement is defined in Part C, § 636 of the Individuals with Disabilities Education Act Amendments of 1997 (20 U.S.C. 1400 et seq.).

“State policy makers are beginning to recognize that no matter how progressive their early intervention service delivery system may be, they will not be effective unless



there are competent and qualified personnel to implement them (Winton & McCollum, 1997, p. 7). The same authors supported training at all levels, but advocated for university programs that provide specialized training in the area of early intervention. The course that was developed and taught by a collaborating interdisciplinary faculty was based on the need to provide training at the university level for students from a variety of disciplines who want to work in the area of early intervention. This collaborative teaching effort started in the fall of 1997, and continues today.

The course will be offered for the seventh time in the fall of 2004.

This study was designed to answer the following research questions:

1. How do faculty and students experience an innovative interdisciplinary course which is based on collaborative teaching and learning across professional programs?
2. Are course objectives, as outlined in the course syllabus, being met with the collaborative teaching and learning model?
3. How was the course planning process engaged in by faculty affected by the collection of data from the students?

As early data analysis was completed and data collection progressed, a more important set of questions emerged:

1. What are the dynamics within the faculty collaboration that have led to the success (as defined by student evaluation and interviews and faculty interviews) and longevity of this course?
2. How did this happen and why has it lasted?

These questions then became the focus of the final data analysis.

The data for this study was collected from multiple sources and included student and faculty audio-taped interviews; these were then transcribed for data analysis. The student interviews were done after each of the first two semesters the course was taught, and the faculty interviews were completed during years two and three of the collaboration. With their permission participating students' journals were kept during the first two semesters the course was offered and the content was part of the data analysis process. After year two, student satisfaction and input was tracked through review of the course evaluations. Faculty meeting notes and summaries were maintained and collection of these notes began at the earliest stages of faculty planning and discussion. In addition, faculty communicated with each other via an e-mail list serve and these communications were saved. I also kept personal notes and reflections; these were later incorporated into the data analysis process. The faculty and student interviews were the foundation of the study, and the additional data that was collected was used to verify information from the interviews and to create a history of the evolutionary process of the collaborative team effort.

The faculty interview transcriptions were coded. The initial code words were grouped and narrowed down to 28 codes which were then analyzed and grouped to create the two categories, process and relationships. Two major themes emerged from this process: positive aspects/outcomes appear to supercede the negative influences/barriers, and the relational dynamics between the faculty have had a positive influence on the development of the course. The major findings of this study that were identified and



documented are the conclusions that are addressed in the following section. These conclusions are the answers to the research questions: What are the dynamics within the faculty collaboration that have led to the success and longevity of this course? How did this happen and why has it lasted?

### Conclusions

Conclusion 1: The opportunity to be creative, the positive outcomes, open communication, and the sense of fulfillment (all factors that help overcome the negatives) work to maintain a strong commitment from all.

According to Austin and Baldwin (1991), "People who collaborate work closely together and share mutual responsibility for their joint endeavor. According to this conceptualization, collaboration not only involves cooperative action, it emerges from shared goals and leads to outcomes that benefit all partners" (p. 4). The fact that this course was taught collaboratively by faculty from several disciplines to students from those same disciplines created more challenges than with a single course taught alone within a single discipline. During our meetings and conversations, we spent a great deal of time dealing with the logistical issues involved in this collaborative process, but our conversations always seemed to come back to the positive aspects of this experience. This was also heard in the interviews; the respondents would talk about things that were barriers or negative aspects; lack of time, scheduling difficulties, anxiety about teaching in front of peers, and the logistical issues, but the conversation generally seemed to come back to the positive aspects and the benefits of the collaboration.

In the faculty interviews, the respondents talked about how they felt that this was a success and with that came the sense of fulfillment. They also talked about how the positive affirmation from the students was a powerful motivator to keep on going despite some of the problems that we faced. One of the faculty respondents said it best;

“You know the first year around we weren’t sure how this was going to go but from the feedback we got we felt it was successful and we made some changes the next year to improve it. I think, once again, it was successful and now the third time around we have changed some things again and I think each year it’s getting better. And now students are asking us to get into the program”.

This same person went on to say, “I think that the success of the program and the dedication and commitment of all the faculty members to keep improving is great.” This was also addressed when one faculty member said, “Students are giving us feedback that they enjoyed and benefitted from what we are doing. So then it is not hard to keep on going”.

During her interview, one of the faculty members chose the prompt card success and described the success at the student level. She talked about being able to see student growth in their conversations and journals throughout the semester. “I think that we truly have been able to encourage /facilitate students’ development of and understanding of the team concept and the importance of families in real situations.” She also said, “If I had my druthers, I would like to put all my time and energy into this activity, but I can’t.”

Based on interview and course evaluation data, the majority of students indicated that the positive aspects of the course experience outweighed the negative aspects. This affirmation from the students has been a strong motivating factor for the faculty to



continue their efforts to provide this learning experience; this was confirmed by the research data in this study.

The students' input has also been an affirmation to the collaborative faculty team of the success of the course teaching model: 1) students as active learners on a collaborative team, 2) collaborative teaching as a transdisciplinary team, and 3) families as teachers. The class structure of the "Collaboration in Early Intervention" course is designed to promote collaborative learning, students are placed in teams (with one student from each discipline, two faculty members, and a family), and they work together as a team throughout the entire semester. Opportunities are built into the class time for activities to facilitate cooperative learning. The assignments are designed to help the students become active learners. Students set their own learning goals and provide evidence of their learning in the final portfolio assignment and they write reflective journals throughout the semester. Overall, student responses about the class and the design of the class have been positive. One student summarized her feelings about the class by saying:

I loved the structure—or lack of structure in the class. I really did because I work best being able to (inaudible). I think it was so individualized to our needs, where we were at in our education, and I know every team member on my team was at a different place looking for a different goal. And I just think the class like that is set up so much more to meet each person's needs rather than meet the needs of the person who designed the course.

A second student described what was good about the class by saying:

I liked the way we were set up in groups. It was good to hear from different faculty instead of just having one professor, you know, telling us what this discipline does because really, you know, they may be familiar with it but it's better to hear it from the person who is teaching it or who knows the most about it. And I did like the family experience. I mean that is something that I haven't been able to have in any

of my other classes. It is an experience; not just in the classroom and I liked that aspect of it.

Conclusion 2: The faculty all have a strong commitment, a passion for, the course model and content.

In the interviews, all of the faculty talked about how important early intervention and training students to function in this setting was to them; their interest in the issues surrounding early intervention training are what brought them to the original SCRIPT institute. From the beginning, the faculty involved expressed their feelings that if students are expected to work together in teams they should learn about the team process by functioning as a team. The issues of providing students opportunities to learn about the other professions before going out into the practice setting were also a topic of the early discussions. The faculty all talked about the importance of the role of the family in early intervention from the beginning of our planning. One person said, "I think that we came to the table with the idea that the students were missing something, maybe missing a taste of the reality that families are living." The teaching model and content for the course had its origins within these commonalities, and that seemed to lead to a commitment to the course and to the teaching model. One faculty member described it as a "passion" for the project.

The affect cards that were most often chosen during the interviews were strong conviction and important to me. One of the comments made was, "This is what I believe in. . . . I really like it because it's a strong belief I have that we have to have interdisciplinary approaches". Another person chose the affect card important to me and explained her choice by saying, "it's important to me because of the collaboration and the



opportunity to meet other faculty; work with other faculty, see how they're doing things and then get to know them on a personal level too. I have not had that experience with other faculty. . . . I mean I don't have a chance to interact with other faculty so this is a structured way of working with other faculty that developed into personal things. It's important to me, I've enjoyed it, I want to continue it". When asked, "What makes a colleague?", the interviewee responded; "The shared interest, the shared philosophy and there is certainly commitment here. I mean the commitment is really high here. There is certainly support for that you do good work, but it's the shared philosophy and shared interest, indeed shared experience that in this group is another strong cord."

Conclusion 3: The faculty have become a support system for each other both professionally and personally.

The other common thread that ran through all of the interviews was that of support both professionally and personally. Faculty talked about the fact that within this group there was a sharing of ideas, and the members talked about teaching and professional endeavors. Professional presentations have been developed and presented as a collaboration; credit for all the material presented has been given to everyone on the faculty team. Teaching together has been described as a growing experience by several members of the group. In the interviews many of the faculty talked about how this experience has helped them to become a better teacher within her own department. "I found a group that was willing to extend themselves to share their teaching strategies and techniques, their knowledge and their expertise. And so not only did they provide that to

the students, but they provided that to me and I'll be forever grateful for that. I think that that has been why the project has been beneficial to me as a faculty member."

Most of the faculty members confirmed through the interviews that trust and respect for each other happened over time. The time that we made to meet together and how we used the time to work on the course and to have social time was instrumental in the building of these relationships. Our relationships then evolved into those of personal support for each other, we became friends who felt they could talk openly to each other. "Part of it was just you begin to get to know each other better, we are sharing both professional and personal situations and providing support to one another and that's also something that is sometimes hard to come by in an academic setting."

#### Recommendations

Based on the findings and conclusions of this study, the following recommendations are being made for further research.

1. Cases that are similar to the one in this study should be compared to it in order to make generalizations and to discover the grounded theory.
2. A study of how the dynamics of a collaborating group change when current participants leave the group and/or new participants join the group should be completed. This study should include how the new participants are orientated to the collaboration and to the task.
3. A follow-up study with the employers of students who have taken the class and with the students themselves would indicate whether this course experience had an impact on students in the actual practice setting.



## Reflections

My role in this process was that of a participant researcher. As a participant researcher, I was aware that the evaluation was also a self study. As I read the faculty responses to many of the interview questions, I could not help thinking of how I would respond to the same question. The faculty responses gave me greater insight into the dynamics of the collaboration that was taking place and my thoughts about it. Their responses also confirmed and clarified my feelings about what was happening. The process helped me to become a reflective researcher, and I have a greater understanding of the meaning of the statement from Hertz (1997); "To be reflective is to have an ongoing conversation about the experience while simultaneously living in the moment" (p. viii). As a faculty team, our discussions about what was happening in the class, our feelings about our involvement, how we evolved into a transdisciplinary collaborative teaching team, and our dreams for the future helped me fit my perspectives into the picture as a whole. I have found this experience a truly positive one, and I consider the faculty members who took this journey with me not only my peers but my friends. I respect these individuals as professionals and value the relationships we have built over time both professionally and personally. As I reflect back over the time that we have worked together, I am amazed to see how far we have come since the beginning. I also look forward to the activities that are the dreams of our future.

### *The Evolution of a Team*

Tuchman (1996) points out "team building is a complex and dynamic process. Effective teams do not develop overnight, but build over time. Members need time to get

to know each other, to understand their team's purpose, and to establish communication channels in order to develop trust. From trust flows creativity, flexibility, accomplishment, and satisfaction" (p. 147). When we first came together as part of the University of North Dakota's regional team for the SCRIPT Project, we were a group of professionals all of whom had an interest in how we could facilitate student training to help them become better service providers and thereby improve the quality of services to infants and young children with disabilities and their families. We fit within the first stage of team building, forming (Tuchman, 1996), and dealt with the questions: "Who are we?, and Way are we here?" (p. 159).

Our discussions quickly moved us into Tuchman's (1996) second stage, that of storming. We began to look at the issues of what we wanted to accomplish and how we wanted to do it. Tuchman writes that this can be a stage that creates conflict among the team members. I do not recall conflict during this time, nor do the faculty interviews indicate any major conflicts during this period. We spent a lot of time brainstorming and discussing options open to us at the university level, but did not disagree about the basic goal to provide better training for the students. I think, one significant factor that came into play here is that we were all involved because we had an interest in this area. I feel it was also beneficial to us as team, that prior to this time four of us had already been discussing collaborative training efforts for students in our disciplines; Occupational Therapy, Physical Therapy, Teaching and Learning, and Communication Sciences & Disorders; we had planted a seed, so to speak.



Once the decision to explore the option of offering an interdisciplinary class was made (see the history section in Chapter I), the faculty members who became a separate collaborative teaching team went back to the forming and storming stages. We went back and spent time learning about each other and about our disciplines. We spent time talking about what we taught our students about teaming and early intervention in our discipline specific courses, and time discussing our own experiences and backgrounds that brought us to the table. We then brainstormed about course content and how we wanted to present it to the students; we entered the stage that Tuchman (1996) calls norming. We talked about how we could do this effectively together. Based on our own experiences, I feel that we easily came to a common consensus that if students needed to work in teams as professionals, they would benefit from an experience that would help them function as a team member. Additionally, we decided that it was important to help students explore the differences and similarities between their professions and to explore the issues of role release on an early intervention team. We also came to a common consensus that the family was at the heart of early intervention and that students needed exposure to families and family stories to help them better understand family centered care in early intervention. The most time-consuming issues that we dealt with at this stage in the group process were the logistical issues of offering this type of course. During the planning sessions, in the summer of 1998, it felt like we spent most of our time working out the logistics (e.g., scheduling issues, how to write the syllabus to meet specific discipline accreditation standards, how to get materials to students and to each other efficiently, where to hold the class, reading assignments—one textbook or readings from multiple

sources—and how would we make them available to the students, funding for course materials and supplies, and how to get support from our individual departments). A lot of our planning time is still spent working through the logistical issues, even after we have taught the course for six years.

Once we began teaching the course we entered the fourth stage of team development, performing (Tuchman, 1996). We seemed to work easily together as a group sharing responsibilities and leadership on the team. We have evolved to the point where we are comfortable teaching any of the course content; in the beginning when we planned each class individual faculty members choose to teach the topics that were more discipline specific. We spend time discussing what went well with the classes and what was problematic. At the end of each semester we take time to reflect on the course and talk about what we can work on to make this an even better experience for the students. We discuss what we would like to do with this in the future. These discussions have led us into the fifth and final stage described by Tuchman, adjourning or reforming. We are planning to teach the course again in the fall so we are reforming rather than adjourning.

Why did this work? The answers to this question presented in this section are my thoughts and feelings, and are based on what I found by doing this study and my own reflections on the experience; in a sense, it is my response to some of the interview questions that were posed to the faculty participants.

I believe that one of the most important factors that helped make this collaboration work is that, as collaborating faculty, we all came to the table with a commitment to the idea that in order to provide quality services to infants and toddlers with disabilities and



their families, students need training experiences in this area at the university level. Somewhere in our professional experiences we had all been exposed to early intervention programs, working with families, and the provision of intervention services following a team model. We all came from different training in a variety of disciplines, but had commonalities in our professional experiences. Our commitment to the idea was foundational for making the experience a positive one for us as faculty and for the students. But commitment alone can not maintain a collaboration like this that has lasted over a longer than average time frame, even in light of the barriers that had to be overcome; or as one faculty member put it, "the bumps in the road". There are other key factors that kept the commitment to the course strong.

The most powerful factor that I see is that because of our commitment to the course and the content of the course, we as a faculty found the time to facilitate the relationship building process that is key to working together as a team. For all of us this experience has been an addition to our own departmental teaching loads and responsibilities; our schedules are full during the day and in many cases into the evenings. We have met consistently early in the morning, and additionally for dinner and lunch meetings. Faculty who are not on contract with the university during the summer months have been willing to meet in the summer, and those who are teaching in the summer have made time to meet. It has been through the time that we have spent together outside of class, that has led to the trusting relationships that have evolved, and, in turn, the professional and personal support that has developed. We have become friends, some

better than others, and we seem to enjoy the time that we spend together in and out of class.

I believe that the fact that our meetings were held in more social settings, the campus coffee shop and a variety of restaurants in the community, facilitated this relationship building; when we came together it was not always all business. We got our business taken care of, but there was also social time. We had the opportunity to talk and get to know each other better, not just as professionals, but as people who now trust and respect each other. Our group has become a safe group where we can discuss other stressors we are facing in our lives, where we can get advice, or where we can just share thoughts and ideas. We listen to each other and do not criticize; as we deal with course planning and course issues, we are able to look at all aspects of someone's idea and discuss the good and the bad points and come up with a solution or a compromise. It is the time that we have spent together that has helped us evolve to this point, and I do not feel this would have happened if the only thing we did when we got together was focus on the business of the class.

An interesting social group has evolved out of this collaboration; we call it our "Dagwoods group"; Dagwoods is a local gathering place that serves food and beverages. It started when two of the members of the group just went there to visit and relax and when we got together as a group again they extended an invitation to the rest of us by saying something like, "hey, we are going to Dagwoods next Thursday after work does anyone else want to join us?" The time we spend in this setting is generally social, once and a while there will be some business to discuss but that is rare. What happens now is



someone will send a message to the listserve for the group asking is anyone up for Dagwoods, and people who can attend come. We do not stay for a long time, but these social gatherings have helped strengthen our relationships. As a group, we do not have planned social events; we do not celebrate things like birthdays or holiday events together.

We have learned from each other as we have taught the course, we have each shared our ideas about what works best in our classrooms. Faculty have talked about how this shared experience has helped them to become better teachers in their own individual courses. We have also been able to be creative in our teaching, we have been able to take ideas for class content and activities and develop them to meet the unique needs of the variety of students in the class. Someone also noted that we were teaching the students what we are experiencing, the process of becoming and working together as a team. We are modeling an experience for the students and this makes it more real for them. In the beginning, we functioned as an interdisciplinary team. We communicated well and shared information for course planning and teaching, but we were still very discipline-specific in our teaching and in our input into the course development and planning (Briggs, 1997). Over the time that we have been together I believe that the collaborative faculty teaching team has evolved into a transdisciplinary team. We no longer view our role on the team as associated with our specific discipline, and we have flexibility in our duties, roles and responsibilities within the team. In the long run, this enriches our teaching and ability to model teaming for the students in the course (Briggs, 1997).

A final factor that has helped keep our commitment to the collaborative experience strong is the fact that feedback from students and the families who have participated

indicates that the course is a positive experience for them. Informal feedback that we have gotten from administrators and other professionals in the field is that students who have taken this course are better team members. This brings forth a feeling of success and fulfillment for us as a faculty. The positive feedback is affirming to our efforts and facilitates dreams of doing bigger things with our teaching model.

*My Recommendations for Successful Collaborative Teaching*

As a result of their work Cruz & Zaragoza (1998) developed ten guidelines for successful collaboration; these were summarized in Chapter II of this document. The following are my recommendations for a successful teaching collaboration. Some of my recommendations are similar to those developed by Cruz & Zaragoza, especially the two that have to do with time, but they are my own recommendations that have evolved from my research findings.

1. First and foremost find time to build relationships between the members of the teaching team. Individuals need to get to know each other not only as professionals, but as individuals.
2. Find time for planning and reflection. Faculty need to make time to not only plan for the course, but to reflect on the process afterwards.
3. Participating individuals should have some level of similar background experience and interest and commitment to the topic area.
4. Keep avenues of communication open, talk about your feelings concerning the collaboration, share positives and concerns with the group.



5. Sell your idea to the administration at the departmental and university level, support from these levels will make your goals easier to accomplish. Collaborative teaching efforts across disciplines is not a new idea, but it is also not the norm for teaching at the university level and may be seen as taking away from departmental responsibilities and commitments.

6. Recruit faculty who are committed to the idea and willing to share the responsibilities equally. A collaborative effort takes time and effort to make it work. My final recommendation for a successful teaching collaboration is to learn a lesson from the geese. The following poem has been used by the collaborative faculty team during our class on teaming and we often say that it is our guide for success. The poem was written by Dr. Robert McNeish (1992) for a lay sermon he delivered in Northminster Presbyterian Church in Reisterstown, MD and is used with the author's permission. (See Appendix E)

#### Lessons From Geese

As each bird flaps its wings, it creates an "uplift" for the bird following. By flying in a "V" formation, the whole flock adds 71% greater flying range than if the bird flew alone.

Lesson: People who share a common direction and sense of community can get where they are going quicker and easier because they are traveling on the thrust of one another.

Whenever a goose falls out of formation, it suddenly feels the drag and resistance of trying to fly alone, and quickly gets back into formation to take advantage of the "lifting power" of the bird immediately in front.

Lesson: I we have as much sense as a goose, we will stay in formation with those who are headed where we want to go (and be willing to accept their help as well as give ours to others).

When the lead goose gets tired, it rotates back into the formation and another flies at the point position.

Lesson: It pays to take turns doing the hard tasks, and sharing leadership; as people, as with geese, we are interdependent on each other.

The geese in formation honk from behind to encourage those up front to keep up their speed.

Lesson: We need to make sure our honking from behind is encouraging - and not something else.

When a goose gets sick or wounded or shot down, two geese drop out of formation and follow it down to help and protect it. They stay until it is able to fly again or dies. Then they launch out on their own, with another formation, or catch up with the flock.

Lesson: If we have as much sense as geese, we too will stand by each other in difficult times as well as when we are strongest.



## APPENDICES

Appendix A  
Sample Course Documents



T & L 590, SW 493, PT 490, Nurs 400,OT 491, CSD 497/501:  
Transdisciplinary Family-Centered Collaboration in Early Intervention

This document is a valuable description of this course. It contains information that you will need regularly. Please bring it with you to every class meeting.

- I. Descriptive information:
  - A. Course Number(s): See above
  - B. Course Name: Transdisciplinary Family-Centered Collaboration in Early Intervention
  - C. Course Description: Transdisciplinary preparation of early intervention professionals to serve families with infants, toddlers, and preschoolers at risk or with identified disabilities. Collaborative experiences for students in social work, nursing, occupational therapy, physical therapy, communication sciences and disorders, and education.
  - D. Credits: 1- 2 credits
  - E. Prerequisites: - Permission of instructor in specific discipline of student
  - F. Intended Audience: Preservice students who are preparing to work in the field of intervention with children with disabilities and their families.
  - G. Instructors: Assigned faculty from the following: (for students this lists faculty and contact information)
    - Occupational Therapy
    - Pediatrics/Medical Genetics
    - Communication Sciences & Disorders
    - Social Work
    - Physical Therapy
    - Office of Medical Education
    - Family and community Nursing
    - Teaching & Learning
  - H. Course Meeting Time and Location: Tuesdays, 6:00 p.m. - 8:00 p.m. (unless otherwise specified in the syllabus), Room 1551, Department of Physical Therapy, North Unit of the Medical School. (South door to Medical School will be open; PT Dept. is located on the main floor, in the center wing of the building.)
- II. Course overview: Focus on the facilitation, implementation, and coordination of comprehensive integrated services for infants, toddlers and preschoolers and their families. This course is competency based, family centered and transdisciplinary utilizing a case study approach with parents as trainers in community and home settings.

- III. Course objectives: At the completion of this course, the student will be able to:
- A. Identify strengths and roles of transdisciplinary team members in terms of function and process.
  - B. Demonstrate effective skills as participants on a transdisciplinary team.
  - C. Demonstrate awareness of the expertise and authentic experiences of families who have children with disabilities.
  - D. Demonstrate knowledge of the legislative and policy foundations of family centered service coordination
- IV. Required Course Materials:
- A. Texts Readings will be assigned/shared by instructors and families, as well as students.
  - B. Additional Required Materials
    1. A very large three-ring binder to contain portfolio materials;
    2. Divider pages with tabs for sectioning your portfolio;
    3. Three overhead transparencies and two different-colored pens (bring to each class); and
    4. One pack of 5"x 8" cards (bring to each class).
- V. Description of Instructional Procedures:
- Course instruction will be divided into large group discussions, small group discussion, and field experiences with families and children. The format for this course will include the following instructional methods:
- A. Individual and group completion of assigned activities and projects using cooperative and guided discovery learning strategies;
  - B. Direct dissemination of information through lectures, informal presentations, and reactions by the professors;
  - C. Sharing of information and perceptions through individual and group presentations by class members and teams; and
  - D. Group and instructional discussions of selected topics.
- VI. Course Requirements:
- A. Academic requirements
    1. Development of a portfolio that will include:
      - a. Copies of all course documents such as the syllabus, handouts, and assigned articles (as specified by instructors);
      - b. All written activities, assignments, evaluations, and reflections;
      - c. A written case study of a family and child participating in this course; and
      - d. Documentation of student development of the competencies identified in the course objectives.



B. Administrative Requirements:

Student Evaluation:

Grades (A, B, C, etc.) will be assigned based on the quality of the following:

1. student participation in and contributions to class activities;
2. student participation in and contributions to team activities; and
3. student portfolios.

A team of faculty members, including the faculty member from that student's discipline will assess a student's work. Any student whose performance falls below an excellent quality (B level) during the semester will be asked to meet with a team of professors to review expectations and actions needed to elevate performance to an appropriate standard.

C. Class Attendance:

Attendance of each entire class period and participation in each assigned ~~activities are expected and necessary for student learning since this course~~ is based on interactions among the families, students, and professors.

D. Course Evaluation

In addition to the standard end-of-semester University procedures for evaluation of course content and instruction, a mid-semester Small Group Instructional Diagnosis (SGID) and regularly administered class assessment techniques (CATS) will be conducted in this course. Oral or written student ~~evaluation of the instruction/learning in this course may be submitted personally or anonymously to any of the professors at any time~~ throughout the course. Recommendations will be implemented as deemed fair and appropriate to all the families, students, and faculty involved in the course.

VII. Topical course outline and assignments:

Family Mentors will assist in the implementation of this course and will ~~participate in classes marked with an asterisk.~~

8/25/98	Pick UP and review Informational Packets and Course Syllabus prior to the first class on 9/1/98. Packets will be available for pick-up at each participating faculty member's office. Students should contact the faculty member in their discipline. (Please refer to attached list of faculty members.)
9/1/98*	4:00 p.m. - 6:00 p.m. - Orientation Picnic: Introduction of participants (students, families, and faculty). Location: TBA
9/8/98	Teaming Across Disciplines

9/15/98	Independent study as assigned (No class will be held)
9/22/98	Information Gathering Techniques
9/29/98*	Family Visit(s): Complete at least one family visit (approximately two hours) during this week, fulfilling criteria as assigned in class on 9/22/98.
10/6/98	IFSP/IEP Procedures and Requirements Discussion and follow-up on family visit, Small Group Instructional Diagnosis (SGID)
10/13/98	Identifying Priorities, SGID feedback
10/20/98	Agency/Institutional Visit(s)
10/27/98*	Family Visit(s): Complete at least one family visit during this week, fulfilling criteria specified during class on 10/13/98.
11/3/98	TBA
11/10/98*	Family Visit(s): Criteria TBA
11/17/98*	Sharing with Families
11/24/98	Student Sharing (Course Summaries) and Course Evaluation All Faculty
12/1/98	Portfolio Due in to team faculty for grading



University of North Dakota  
Collaboration in Early Intervention

T&L 590, SW 493 or 593, PT 490, NURS 387 or 590, OT 599, CSD 497  
Fall 2003

This document is a valuable description of this course. It contains information that you will need regularly. Please bring it with you to every class meeting.

I. Descriptive Information

Course Number(s): See above

Course Name: Collaboration in Early Intervention

Course Description: Transdisciplinary preparation for early intervention professionals to serve infants, toddlers, and preschoolers at risk or with identified disabilities and their families. Collaborative experiences for students in social work, nursing, occupational therapy, physical therapy, communication sciences and disorders, therapeutic recreation, education, and other selected disciplines.

Credits: 1-2 credits

Prerequisites: Permission of instructor in specific discipline of student

Intended Audience: Preservice students who are preparing to work in the field of early intervention for children with disabilities and their families.

Meeting Time and Location:

Tuesdays, 6:00 - 9:00 pm (unless otherwise specified in the syllabus)

Room 201 Back - College of Nursing (look for signs)

Instructors: (For students this section contains names and contact information)

Occupational therapy

Early Childhood Special Education

Family Coordinator

Pediatrics/Medical Genetics

Communication Sciences & Disorders

Infant Development, Northeast Human Services

Family and Community Nursing

Social Work

- II. Course Overview: Focus on the facilitation, implementation, and coordination of comprehensive integrated services for infants, toddlers and preschoolers and their families. This course is competency based, family centered and transdisciplinary using a case study approach with parents as trainers in community and home settings.

- III. Course Objectives: At the completion of this course, the student will:
1. Demonstrate awareness of expertise and authentic experiences of families who have children with disabilities.
  2. Identify strengths and roles of transdisciplinary team members in terms of function and process
  3. Demonstrate increased understanding of family-centered services coordination in natural environments across disciplines.
- IV. Required Course Material
1. A supplemental packet with course readings and handouts will be available from your discipline faculty for. Some items may be posted in the "Blackboard" course documents or be on reserve in campus libraries. Consult the Topical Outline for details.
  2. Materials and supplies of your choice to create a student learning portfolio (3-ring binder, accordion folder, page dividers, etc.).
- V. Description of course learning activities
1. Individual and group completion of assigned activities and projects using cooperative and guided discovery learning strategies;
  2. Direct dissemination of information through lectures, informal presentations, and reactions by the faculty members;
  3. Sharing of information and perceptions through individual and group presentations and discussions by class members and teams;
  4. Student learning through interaction with a family;
  5. Reflective journaling by the students throughout the semester with faculty feedback;
  6. Individual student objective setting and development of activities to meet the course and individual objectives as documented through a portfolio process.
- VI. Course Requirements
- A. Academic requirements
1. Completion of all reflective journal assignments (see handout Journal Directions and weekly class agenda)
  2. Completion of all class activities, evaluations, and reading assignments
  3. Active participation in team activities



## Topical Course Outline

The class will be divided into teams. Each team will consist of several students from various disciplines, 1-2 UND faculty members, and a family. The family members will be an integral part of each team within this course and will participate in classes marked with an \*

Weeks that are noted as Family Visits, Agency Visits, or Team Meetings/Self Study may meet at other times and locations than the usual class time; arrangements are to be made by the team members.

- 8/26/03      Pick up and review Informational Packets and Course Syllabus prior to the first class on 9-2-03. Students should *contact their discipline-specific faculty member for readings, handouts, and for any additional information.* (Please refer to the attached list of faculty members). There will be a reading assignment for the first class.
- 9/2/03\*      6:00 p.m. – 9:00 p.m. – Orientation “Picnic”  
Introduction of participants (students, families, and faculty). Activities will facilitate your orientation to the overall course and as a team member and help you get acquainted with your family and other team members.
- 9/9/03      Teaming & Family Stories  
Activities will include a review of types of teams and the team process. Additional activities will address family stories and information gathering techniques. This class will include planning for the 1<sup>st</sup> family visit.
- 9/16/03\*      Family Visit #1  
Complete your first family visit (approximately 2 hours) utilizing guidelines presented in class on 9-9-03. Your reflective journal from this visit is due before 9-23-03.
- 9/23/03      Intervention in Natural Environments and Team Goals  
Activities will include information on working in natural environments, and writing family-centered goals as a team. This class will include planning for the agency visit and 2<sup>nd</sup> family visit.
- 9/30/03\*      Family Visit #2  
During this week your team will complete a second family visit utilizing guidelines from class discussions. Your reflective journal from this visit is due before 10-7-03.

- |           |  |
|-----------|--|
| 10/07/03  | <p>Team Meeting and Self Study (no class)</p> <p>Team meeting to plan next visit.</p> <p>Self study, work on goals and portfolio.</p> <p>Meet with discipline-specific faculty as needed this week</p>   |
| 10/14/03  | <p>The IFSP and IEP, Intervention in Natural Environments, Role Release and Service Delivery</p> <p>Activities will include and overview of the IFSP and IEP and a case study exercise with focus on natural environments and the role transition process for transdisciplinary teams in service delivery.</p>   |
| 10/21/03  | <p>Agency Visit</p> <p>If you have not yet made your agency visit, do so during this week.</p> <p>Complete a reflective journal based on your agency visit and submit before 10/2/03.</p>  |
| 10/28/03  | <p>Team Meeting</p> <p>Meet independently with your team members and team faculty to:</p> <p>Discuss the agency visit</p> <p>Review progress on portfolios</p> <p>Plan final family visit and family case study presentation</p>   |
| 11/04/03  | <p>Self Study</p> <p>Independent time to work on your portfolio. Meet with discipline faculty as needed.</p>   |
| 11/11/03* | <p>Family Visit #3</p> <p>Develop case study for the "family sharing" portion of the 11/25/03 class in collaboration with the family. Your reflective journal from this visit is due before 11/18/03.</p>  |
| 11/18/03  | <p>Team Meeting/Self Study</p> <p>Time to work with your team to finalize your presentation for the 11/25/03 class. Independently complete portfolio for the 11/25/03 class.</p>   |
| 11/25/03* | <ol style="list-style-type: none"> <li>1. Sharing with Families: Families will attend and participate in this portion of the class. Refreshments will be served.</li> <li>2. Student Sharing: sharing experiences with class members, course summaries, and course evaluation (students only)</li> <li>3. Portfolios are due to team faculty for grading.</li> </ol> |



## Transdisciplinary Family-Centered Collaboration in Early Intervention

### Class Activities for November 4, 1999

- I. Recap of Family Visit: Identifying Priorities  
Each team will review the priorities of their family outlined by their family.

Students from each discipline on the team will illustrate how professionals in their discipline might address those priorities.

### BREAK

Within teams, share with your team members your progress toward meeting your Learning Goals.

Student recap of Agency Visits

Teams will plan for the final visit with their family and their *Sharing With Families* during class on 12/2/99.

Each team member will evaluate their progress toward meeting the objectives established prior to this family visit as a journal reflection. Remember you need to write a reflection regarding your agency visit and include it in your journal.

REMINDER: Journals are to be turned into the faculty member from your discipline during the week of 11/18/99 for their review.

## Intervention In Natural Environments: 10-24-02

Course objective: Student will demonstrate increased understanding of family-centered services coordination in natural environments across disciplines.

### Course Goals

1. Increased integration of understanding families authentic experiences
2. Increased understanding of what natural environments are and how they are incorporated into service provision
3. Increased understanding of how profession contributes to the overall team environments

### Class Schedule

- I. Introduction and debriefing on family visit (Mary 6:00 -6:25)
  1. Guidelines for agency visits
  2. Teams share their reflections on the first family visit - share a brief synopsis of the visit from each group identifying as a group one reflection that you had in common as a group and one or two that were unique observations perhaps held by one or two group members
- II. Introduction of natural environments (Peg M 6:30 - 7:00)
  1. What do we mean by natural environments
  2. Activity (7:00-7:15)
- III. The Pyramid Model (Peg M 7:15 - 7:30)
  1. Overview
  2. Activity
- IV. Break 7:30 - 7:45
- V. Community mapping ( Peg M 7:45-8:25)
  1. Activity
- VI. Planning for the 2<sup>nd</sup> home visit & wrap-up (Gail)
  1. Using the form information about my child
  2. Case study assignment for next class
  3. Double entry journal: From the article "Therapy in the Natural Environments: The Meas or End Goal for Early Intervention - identify one challenge and one benefit as presented in the article. Discuss and react to each from your perspective and/or the perspective of your discipline
  4. Reflective Journal: Discuss how you will need to adapt or change as a team member when the focus of the services (both assessment and intervention) is in the natural environment.



Collaboration Class Agenda  
November 25, 2003  
Family Sharing & Evaluation

- 6-6:10: Welcome & Introduction
- 6:10-6:45: Presentations by two family teams
- 6:45-7:10: Break for snacks  
Mini-discussion: students informally share information about agency visits with their team.
- 7:10-7:45: Presentations by two family teams
- 7:45-8: Break, families leave
- 8-8:35: Evaluation & student sharing
1. Final group exercises: 15 minutes (attached)
  2. Completion of confidence level survey: 10 minutes
  3. Final written evaluation of the class: 10 minutes (attached)
- 8:35-8:45: Wrap-up: All faculty

Portfolios turned in. If extension needed, the portfolio must be in the discipline faculty office by noon, Tuesday, December 2.

Collaboration in Early Intervention  
Final Group Exercises

Each team will:

I. Team Process

1. Each member of the group will write down one adjective that describes the group's "team process" this semester (1 minute). Note: this is not an adjective that refers to the individual but to how the team functioned.
2. Each group will then come to a consensus about one thing that they would change about their group process and briefly discuss ways in which members could bring about that change (5 minutes).
3. Each group shares their "adjectives" and the aspect they would change with the larger group (6 minutes).

II. Team Members (Team Roles Summative Activity)

1. Each student will write his/her name at the top of note cards provided (one for each of the other team members) and give one to each of the other team members (1 minute).
2. Students will provide feedback to each of the other members of his/her team by identifying a particular strength that individual brought to the team or by describing the role (see 4 below) that student was particularly well suited for on the team (6 minutes). You are not limited by the list below
3. Each student will get his cards back for personal review (1 minute).
4. In a handout earlier (Hybels & Weaver), some of the team roles identified included: (this is not a comprehensive list)

Task roles

- Initiators-expeditors
- Information givers and seekers
- Critics-analyzers

Maintenance roles

- Encouragers
- Harmonizers-compromizers
- Observers

Negative Roles

- Aggressors-resistors
- Recognition-seekers
- Help-seekers
- Withdrawers



Collaboration in Early Intervention  
Course Evaluation

Please complete the following evaluation of the overall course

1. Did you feel that the course helped you to meet your learning objectives? Please explain your answer.
2. Describe at least two aspects of the course that you found most beneficial. Include why you felt these things helped you to learn.
3. Provide at least two suggestions that you have for making this course better. Be specific
4. Did you use Blackboard to supplement your course activities? If yes, what aspects were most helpful? If not, why not?
5. Please provide any additional comments on the back of this page.

## Collaboration in Early Intervention Portfolio Directions

### General Information

The purpose of the student portfolio is to help you become an integral and conscious participant in your learning process by recognizing both your individual responsibility and ownership within that process and by becoming an interactive partner with the faculty in shaping that learning process. The portfolio will provide the faculty with the possibility of examining the learning process and performance outcomes from the point of view of you, the learner. (Adapted from M. Huba and J. Freed, Learner-Centered Assessment on College Campuses, 2000, p. 233) Your portfolio will be evaluated by the faculty members on your team and your discipline specific faculty member.

The portfolio will be an organized, goal-driven documentation of your achievement of two of the following course objectives:

1. Acquisition of your skills as a participant on a transdisciplinary team
2. Development of your awareness of the expertise and authentic experiences of families who have children with disabilities
3. Acquired understanding of family-centered services in natural environments across disciplines

In addition, the you will document one personal learning objective related to course content applicable to families within the Early Intervention system. This objective should be developed in consultation with your discipline faculty member.

### Content and Organization

Place 3 copies of the Portfolio Evaluation and Faculty Feedback Form in the front or the portfolio. Your portfolio will include the following sections:

1. A Table of Contents
2. The course syllabus.
3. For each objective you will use the Learning Objective Form. Following the form, you will include the products to support your activities done to reach this objective. (See paragraph below.)
4. Copies of all assigned journal entries.
5. A reflection and selected products supporting your Team's Case Study.
6. A short reflective paper (one to two pages) that addresses how you will use what you have learned in this class in your future practice.



### Suggested materials for products

1. Reflective journals for additional readings done to address your objectives. (Not a summary of an article.) Please include appropriate reference citation.
2. Class assignments and activities that you feel support your achievement of the objectives.
3. Selected materials shared by team members that support your achievement of the objectives.
4. Selected additional materials that represent your learning for each of the objectives, such as written reflections, pictures or diagrams, tapes or videos, or a summary from a related course or experience.

Use these guidelines, but be creative—this is a highly personal process. It provides you an opportunity to make judgements and choices and to focus on what is unique about you as a student. (Adapted from Huba, p. 247.)

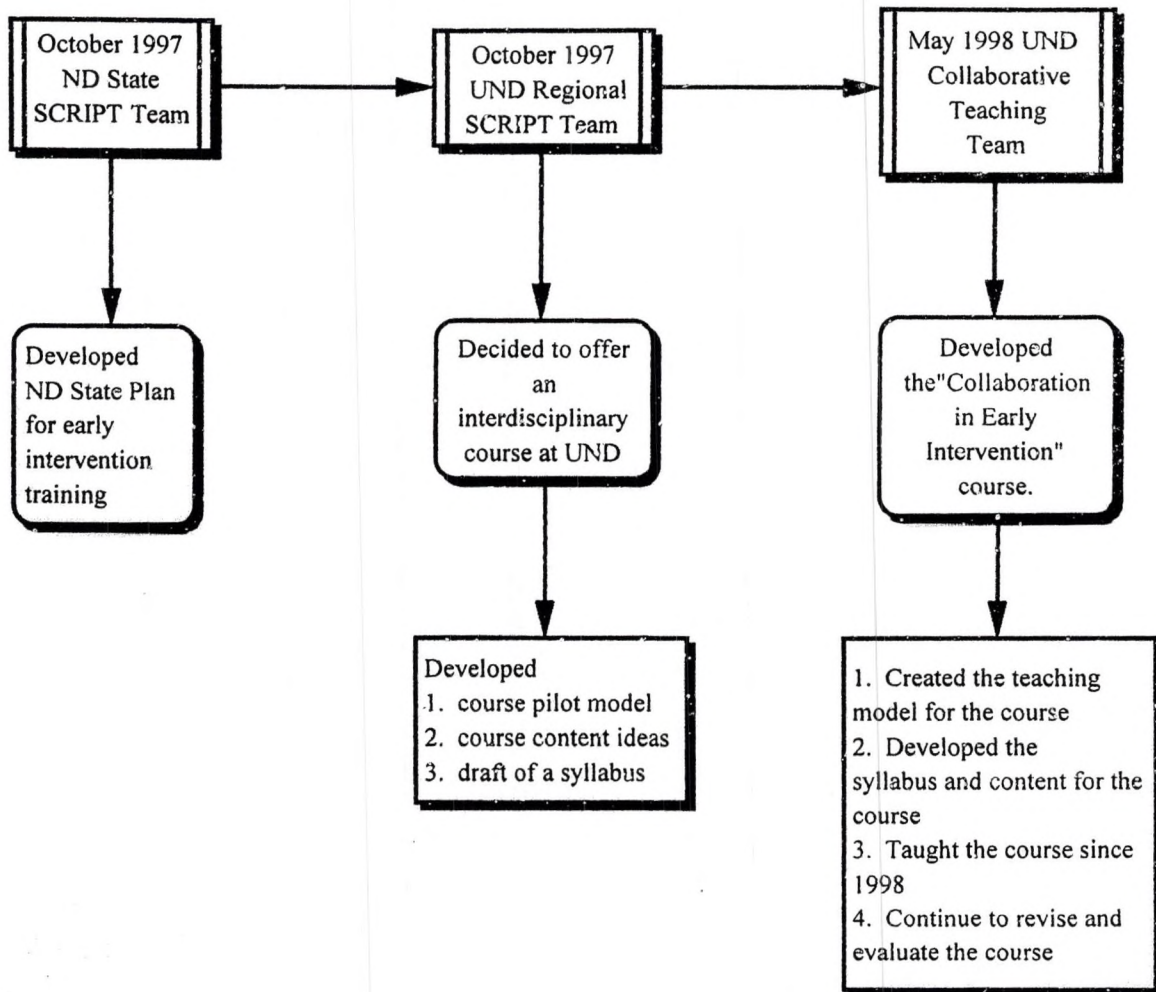
### Hints

1. Begin your portfolio immediately by saving materials that you feel will reflect your learning.
2. Create your portfolio over time contributing to it regularly. Do not leave its development until the end of the course.
3. Take time after each class to assess and record your learning related to your learning objectives.
4. Your portfolio will be different from everyone else's. But it is expected that you will consult within and between the Teams as you share and learn from each other.

Appendix B  
Detailed Historical Outline



## Responsibilities of the Teams That Evolved Through the ND SCRIPT Project



## Detailed Historical Overview

- 6-96 UND Occupational Therapy, Physical Therapy and Speech and Communication Disorders faculty wrote a US Department of Education grant to develop and implement 4 interdisciplinary courses - not funded
- 10-1-97 First Supporting Change and Reform in Interprofessional Preservice Training (SCRIPT) state meeting in, the invited attendees became the ND State Resource Planning Team  
University of North Dakota regional team established; first team meeting to review recommendations from state plan and look at regional goals - two team members selected to act as coordinators
- Increased faculty knowledge, skill in early intervention content areas
  - Increased faculty skill in providing family centered intervention training in pre-service and in-service contexts
  - Increased networking among faculty, families, state agency representatives and practitioners (interest expressed in interdisciplinary classroom activities)
  - Access to innovative training resources
  - Increase knowledge of connections with the state early intervention system and the comprehensive system of personnel development
- 10-31-97 First brown bag lunch of the university representatives from the UND regional SCRIPT team - discussion about ways to collaborate on campus and how discipline could address early intervention in their own curricula
- 2-6-98 Second brown bag lunch of university representatives with continued discussions of possible campus efforts to meet regional and state goals.
- 2-9-98 UND regional SCRIPT team meeting (all regional members invited) to discuss goals from 10-1-97 meeting.  
- first discussions of the possibility of a pilot interdisciplinary course at UND  
- two committees formed one to look at funding sources and one to develop a template for the proposed course
- 2-23-98 Template for the proposed course was developed by committee.
- 3-9-98 UND regional SCRIPT team meeting to continue discussion of regional goals and review the template for the proposed course.
- 3-13-98 A draft of a syllabus for the course was developed.



- 4-20-98 The decision was made to attempt to teach the course at UND in the fall of 1998. The original name of the course was Professional Family Centered Collaboration in Early Intervention.
- 4-27-98 Meeting of UND faculty who wanted to be involved with the course to begin discussions of the logistics of offering the course in the fall.
- 5-12-98 The UND Bush Planning Task Force accepted our proposal and awarded \$1,000 for start up resources, materials, and supplies to teach the course.
- Summer 98 Multiple meeting of the UND faculty who were going to be involved in teaching the course for planning and course development. The course name was changed to Transdisciplinary Family-Centered Collaboration in Early Intervention.
- Fall 98 The course was taught for the first time; there were 15 students, 9 faculty members, and 4 families of children with disabilities involved.
- 9-10-98 Three day North Dakota Early Intervention Institute that included a meeting of all the regional SCRIPT planning teams. UND faculty presented a poster describing our course at this meeting.
- 12-15-98 Social get together of faculty to celebrate success of the completion of the first class
- 3-1-99 The participating faculty made the decision to offer the class again in the fall of 1999. Based on the student input the same basic format would be used with modifications suggested by students. Course name changed to Collaboration in Early Intervention.
- 3-15-99 Planning sessions began for the fall and meetings took place through the summer.
- 3-30-99 Recreational Therapy students were added to the student groups and a faculty member from that discipline joined the faculty group.
- 4-11-99 State SCRIPT meeting
- Fall 99 The course was taught for the second time; there were 18 students and 10 faculty members from: OT, PT, CDS, Social Work, Recreational Therapy, Nursing, Education and 4 families of children with disabilities involved.

- 10-99 Faculty began to meet early in the morning weekly during the fall semesters when the course was being taught and at least monthly during the spring semesters.
- 10-13-99 Three day state SCRIPT follow-up meeting
- 4-6-00 Participating faculty decided to offer the class in the fall of 2000 and planning meetings began and continued into the summer months. Decision made to have 3 hour class sessions (based on student input) and not meet during the weeks that students had family visits, agency visits, etc.
- Fall 00 The course was offered for the third time with 26 students and 9 faculty members from: OT, PT, CDS, Social Work, Recreational Therapy, Nursing, Education and 4 families of children with disabilities involved. V. Dress joined the faculty in the role of parent coordinator—she also joined us in planning and teaching the course. C. Hess retired and she was replaced by 2 faculty members from CSD who shared the faculty role for the department.
- 9-12-00 Faculty met with the director of the UND Interdisciplinary Studies Program to discuss if the course would fit into the program to create a common course number.
- 9-27-00 Second meeting with the director of the UND Interdisciplinary Studies Program; there was not a fit and no further discussions were attempted.
- 10-10-00 Faculty met with a the director of the UND Office of Instructional Development to discuss options for funding for the course and for faculty training.
- 10-00 Course brochure was developed
- 11-7-00 Second meeting with the director of the UND Office of Instructional Development to discuss options for funding for the course and for faculty training.
- 12-5-00 Faculty met for a dinner meeting to grade the course portfolios as a group using a common grading form.
- 12-00 Faculty wrote two proposals for UND Office of Instructional Development funding; a flexible grant and a shared summer professorship. The flexible grant was for faculty and parent training, and course materials and



supplies. The summer professorship was to work on logistical issues for the course. The proposals were funded. With the flexible grant we were awarded \$1,000 for FY'01 and \$1,000 for FY'02.

- 5-31-01 Faculty full day planning workshop for course revision and continued development and to discuss issues of where do we go from here. The faculty met off campus through dinner; funded through the OID flexible grant.
- Summer 01 Two faculty members with the shared summer professorship met during the summer to work on the logistical components of the course (assignment forms, grading forms, planning forms, etc.). The work was based on needs defined at the planning workshop in May and on student and family input.
- 6-26-01 Family planning and input workshop with dinner. Funded through the OID flexible grant.
- Fall 01 Course offered for the fourth time with 24 students 8 faculty from: OT, PT, CSD, Social Work, Nursing, and Education and 4 families of children with disabilities participation. No students or faculty participated from recreational therapy. There was only one faculty member from CSD.
- 6-7-02 Three day faculty training with C. Catlette from the Frank Potter Graham Child Development Center, University of NC. (Ms. Cutlette was the ND SCRIPT Project facilitator and a researcher and author in the area of early intervention). Funded with OID flexible grant funds.
- Fall 02 Course offered for the fifth time with 19 students and 8 faculty from: OT, PT, CSD, Social Work, Nursing, and Education and 4 families of children with disabilities participation. The original faculty member from the Department of Social Work moved out of town and was replaced by another faculty member from that department..
- Aug 03 Second family dinner planning and feedback meeting
- Fall 03 Course offered for the sixth time with 28 students and 8 faculty from: OT, PT, CSD, Social Work, Nursing, and Education and 4 families of children with disabilities participation. P. Shaffer was unable to participate and she was replaced by another faculty member from Education.
- 9-17-03 Faculty presented "Collaboration Across Disciplines" at the UND Reflection on Teaching Conference.

**Appendix C**  
**Consent Forms**



### Student Consent for Participation

You are invited to participate in a study of the participants in a new interdisciplinary, interdepartmental course to determine if the course meets the objectives as stated in the course syllabus and to provide information for further course development. The study is being completed by Gail Bass as doctoral student research in anticipation of dissertation research.

You will be asked to share your journal assignment with the researcher and you will be asked to participate in one or two one hour interviews with the researcher. The interviews will be during the class experience and at the conclusion of the class. The time and place of the interview will be at your convenience and you may refuse to answer any of the questions asked or to withdraw from the study **without** any consequences to you or your standing at the university. You will be asked for your permission to share your input with the faculty of the class; this sharing of information will **not** identify you personally in anyway. As a student you will have the opportunity to express your opinions regarding participation in the class; this information, with your permission, will be shared with the class faculty as part of a formative process in developing future class activities.

Every attempt will be made to assure your anonymity; neither your name or the name of anyone else involved in the study will be used in any documentation. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Data will be maintained in a locked office on the UND campus and will be destroyed by the researcher three years after completion of the study.

Risks to you have been minimized and the amount of time outside of your regularly scheduled class can be anticipated to be approximately one to two hours needed for the interviews.

Your decision whether or not to participate will not change your future relations with UND. If you decide to participate, you are free to discontinue participation at any time without it being held against you.

The investigator involved is available to answer any questions you have concerning this study. In addition, you are encouraged to ask any questions concerning this study that you may have in the future. Questions may be asked by calling the student researcher, Gail Bass at 777-2897, or the student advisor, Kathleen Gershman at 777-2171 . You will be given a copy of this signed consent form for your records. If you desire, a summary of the findings of this study will be made available to you upon completion of the study.

All my questions have been answered and I am encouraged to ask any questions that I may have concerning this study in the future. I also understand that I may refuse to answer any of the interview questions or discontinue my participation at any time without it being held against me.

I Have read all of the above and willing agree to participate in this study explained to me by Gail Bass.                      Yes   No

I am willing to have the researcher share information with the class faculty.   Yes   No

---

Student Signature

---

Date



### Faculty Consent to Be Interviewed

You are invited to participate in a study of the participants in a new interdisciplinary, interdepartmental course to determine if the course meets the objectives as stated in the course syllabus and to provide information for further course development. The study is being completed by Gail Bass as doctoral student research in anticipation of dissertation research.

You will be asked to participate in one or two one hour interviews with the researcher. You will be asked if you are willing to allow the researcher share your information with the other faculty of the class; the shared information will not identify you personally in any way. The interviews will be during the class experience and at the conclusion of the class. The time and place of the interview will be at your convenience and you may refuse to answer any of the questions asked or to withdraw from the study without any consequences to you or your standing at the university. As a faculty you will have the opportunity to express your opinions regarding participation in the class; this information, with your permission, will be shared with the other class faculty as part of a formative process in developing future class activities.

Every attempt will be made to assure your anonymity; neither your name or the name of anyone else involved in the study will be used in any documentation. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. There are no anticipated risks to you and the amount of time can be anticipated to be approximately one to two hours needed for the interviews.

Your decision whether or not to participate will not change your future relations with UND. If you decide to participate, you are free to discontinue participation at any time without it being held against you.

The investigator involved is available to answer any questions you have concerning this study. In addition, you are encouraged to ask any questions concerning this study that you may have in the future. Questions may be asked by calling the student researcher, Gail Bass at 777-2897, or the student advisor, Kathleen Gershman at 777-2171. If you desire, a summary of the findings of this study will be made available to you upon completion of the study.

**Note: interviews and transcription of interview tapes will not be done directly by the researcher in-order to maintain faculty confidentiality.**

All my questions have been answered and I am encouraged to ask any questions that I may have concerning this study in the future. I also understand that I may refuse to answer any of the interview questions or discontinue my participation at any time without it being held against me.

I Have read all of the above and willing agree to participate in this study explained to me by Gail Bass.                      Yes   No

I am willing to have the researcher share information with the other class faculty.   Yes   No

---

Faculty Signature

---

Date



### **Faculty Participant Permission**

You have my permission to use my name in your documentation for the study "The Evolution of a Collaborative Teaching Team in Higher Education." I understand that my name will be used only to acknowledge my participation and role as a member of the collaborative teaching team for the course "Collaboration in Early Intervention" and that I am not identified by name in any of the interview data that is used in the study. I have also provided the information that is used for the biographical sketch that is included in Chapter III of the study.

---

Name

---

Date

## Appendix D Interview Guides



## Faculty Interview Guide

### First Interview:

1. What is your understanding of how this all got started; the history as you understand it?
2. Talk about your background as it contributes to the project.
3. Talk about your personal involvement in it, your role.
4. How this works, week to week, group dynamics, team process, reflections on the project.

### Second Interview:

If a faculty member had not been interviewed as part of the first round on interviews, the second interview began with questions 1 and 2 from the first interview guide.

The guide for the second interview was developed after analysis of the responses to the first set of questions. In the first interview, people talked about positive things of working together and the informal structures that developed. The second interview session was introduced with a statement similar to;

1. During the first interview we talked about what brought you together as a group so today we are going to focus on your experiences of being part of the group - what's it like.
2. From the first interviews it seems that the group has made a commitment to understand each other both formally and informally. How did this happen?
3. In terms of roles, in terms of how this commitment happened do you see any particular roles in the group?
  - a. What would happen if we were to replace \_\_\_\_\_ ?
  - b. If an emergency happened who would get the team together?
  - c. If a student were in tears, how would each respond?

- d. How might faculty resolve a disagreement?
  - e. If a student came to a faculty member and wanted to change teams?
  - f. What if someone makes a mistake and slips up; what happens? Does someone take the person aside and talk to them? How does it feel safe?
4. Prompt cards: Choose one or two issues in the program that elicit this affect for you and talk about it.
- a. important to me
  - b. strong conviction or belief
  - c. validation/feeling "heard"
  - d. success
  - e. lost something
  - f. alone/loneliness
  - g. sad
  - h. "moved" or "touched"
  - i. angry
  - j. torn between
  - k. frustrated
  - l. anxious
5. If you had a chance to do this again with another team, like at another university, what kind of assurances would you need?
- a. What would be needed to kick things off?
  - b. What formal and informal structures would need to be in place?
  - c. If someone else wanted to replicate this somewhere else, what would be needed?
6. Is there anything else you want to say or reflect on?



## Student Interview Guide

1. Why did you take the class?  
What did you know about the class before you registered for it?
2. What expectations did you have going into the class?  
Were your expectations met?
3. What did you learn from the family?  
How valuable is the interaction with the families to you?  
Did you have enough time with the family?
4. How did you feel about setting you own learning goals?
5. How did you feel about taking a class that has students and faculty from different disciplines?  
How did you feel about your team?
6. What about the agency visit?
7. How would you best describe the overall learning you are taking away from the class?  
What was good?  
What could we do better?
8. Course evaluation questions:  
The assignments: journals, portfolios, readings, case study

Appendix E  
Author's Permission



X-Sieve: CMU Sieve 2.2  
From: PardnersWVOH@aol.com  
Date: Thu, 25 Mar 2004 19:48:57 EST  
Subject: Re: geese  
To: gabass@medicine.nodak.edu  
X-Mailer: 6.0 for Windows XP sub 10500  
X-Spam-Level: Spam-Score=\*  
X-Spam-Checker-Version: SpamAssassin 2.63 (2004-01-11) on  
smtp.med.und.nodak.edu  
X-Spam-Status: No, hits=1.3 required=5.0 tests=BAYES\_30,HTML\_20\_30,  
HTML\_MESSAGE,NO\_REAL\_NAME autolearn=no version=2.63

Ms Bass: You have my permission to use my Geese poem. I wrote this to use when I preached a sermon in the Northminster Presbyterian Church in Reisterstown, MD. I still teach the adult Sunday School Class, am an Elder , and chair the Christian Education Committee. I retired in 1992 from the Baltimore County Public Schools where I started as a science/math teacher and finished my career as the associate superintendent for the Division of Instruction. Our three daughters teach and all have framed copies of this and other poems I have done. In James Michner's book, "Chesapeake", he does an entire chapter on a pair of geese.  
Best Wishes, Bob McNeish

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