INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road. Ann Arbor. MI 48106-1346 USA
313/761-4700 800/521-0600

TEACHER PERCEPTIONS OF ISSUES IN THE IMPLEMENTATION OF COOPERATIVE TEACHING IN MIDDLE SCHOOL TEAMS

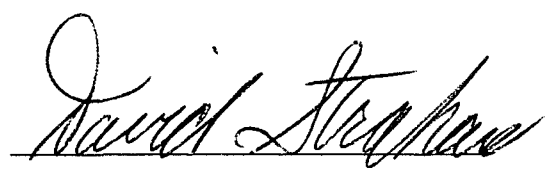
by

Mary B. Hamlin

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirement for the Degree
Doctor of Education

Greensboro
1995

Approved by



APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Dissertation Adviser: David Strahan

Committee members: Ada L. Vallecorsa

Judith A. Kleinman

Samuel D. Miller

April 10, 1995

Date of Acceptance by Committee

HAMLIN, MARY B., Ed.D. Teachers' Perceptions of Issues in the Implementation of Cooperative Teaching in Middle School Teams. (1995)
Directed by Dr. David Strahan. 224 pp.

This study examined critical issues affecting the implementation of cooperative teaching in 16 middle schools in North Carolina from the perspective of general and special education teachers. Key variables investigated were joint planning time, roles and responsibilities, instruction, and evaluation of students, examining differences in programs described in most and least positive terms by participants. A three-phase methodology included Phase I interviews with a teacher in each school, from which common factors were extracted to create the Phase II survey; distribution of the surveys to 56 special and 216 general teachers at these 16 schools who were teaching in cooperative programs; and Phase III team interviews at 4 schools. The response rate to the survey was 48%. An index of satisfaction was developed, schools with at least a 50% response rate to the survey were examined with this index, and four were chosen for team interviews, in order to clarify or receive further elaboration of survey responses. One had a high positive response, two had medium levels of positive responses, and one had a low positive response.

Overall findings suggested that the following key factors lead to higher teacher perceptions of success: adequate preparation of teachers, whether by joint training and development of a shared vision, or by teacher involvement in preplanning of roles and responsibilities; willingness of teachers to participate and compatibility of teaching style and philosophy as key considerations in setting up programs; and a continuum of services for exceptional students and adequate staff to maintain them. Other schools which did not have enough special teachers to sufficiently staff resource rooms and cooperatively teach in content classes, had less scheduled common planning and teaching, and insufficient time

for due process paperwork. Those who had daily cooperative planning had higher levels of positive responses.

Overall, teachers expressed a desire to do more team-teaching, and to have more training in working together and in refining new roles and responsibilities with two teachers in the room. In most schools studied, a lead-support style initially prevailed, but this changed as teachers had the time to plan, and became adjusted to the program. Teachers gained empathy and skills from working together, and became more comfortable in their relationships with time. Schools wishing to implement cooperative teaching programs could benefit from heeding these findings, in choosing teachers who are compatible and willing, providing training for these teachers, and in getting both general and special teachers actively involved in planning programs.

ACKNOWLEDGMENTS

Many thanks go to my dissertation advisor, Dr. David Strahan, whose encouragement and support were vital throughout my research and writing. I would also like to thank the other members of my committee, Dr. Ada Vallecorsa and Dr. Judith Niemeyer, and Dr. Samuel Miller, who volunteered at the end to help finish the process. Their help and support are greatly appreciated. Thanks also go to my dear friend, Dale Brinley, whose calm manner and useful knowledge helped me overcome many a computer "glitch" throughout the writing process.

To my children, Sara Beth and Jonathan, I express my thanks for helping out around the house when Mom did not always have time, and for their love and support and faith in me. To my husband, Tom, my special thanks go for all the hours and days and years of support, patience, love, and help. Without him, I could not have endured.

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

Preface

My special education career spans twenty-five years, and one critical issue facing special education teachers during that time has been the question of how to be accepted as a partner in educating students with disabilities by general classroom teachers. Special and general teachers for too many years have operated separate programs in separate locations in school buildings, with few times to meet and discuss what the other was doing to meet the needs of a student. If the idea in the education of students with disabilities is to eventually help them to make the transition back into mainstreamed classes, communication between general and special education teachers is vital. Teachers who have in common the students' welfare must have in common information, ideas, and methods to achieve common goals.

I have been interested for many years in the topic of collaboration between special and general education teachers. I have wanted to find ways that teachers could work together better to meet the needs of all students. With the combined expertise of both teachers, many students can be helped to learn better. The cooperative teaching program has become more and more prevalent in the last several years. It is beginning to be implemented in many places with too few guidelines and with very little empirical research to support procedures, and is a perfect approach for exploring this issue. Since many years of my career have been spent teaching in middle school special education programs, I am particularly interested in looking at how the organizational framework of a middle school

affects the cooperative approach. I think it will contribute to the knowledge base for teachers and administrators wishing to implement or improve cooperative programs.

Overview

In some middle schools, cooperative teaching programs have replaced traditional resource rooms as the way to provide services to students with mild disabilities. Special education teachers who had previously taught solely in their own resource rooms began a new role of teaching in teams with general education teachers and working within the regular classes to provide services. Unfortunately, many faced a lack of training in consultative skills and few guidelines or concrete data to support procedures. This was also a new venture for general education teachers in middle schools. Decisions concerning what and how to teach, discipline, and evaluation had to be made jointly. These newly implemented cooperative programs paired teachers faced with the difficulty of having two instructors in the same room, with concerns about leadership and control (Nowacek, 1992). Many teachers began implementing a new type of program not sure of how to accomplish this goal and unsure of its outcome.Teaming has not been easy to accept (Bean & Eichelberger, 1985).

New programs also found that modifications in their instruction were necessary. Special students benefitted most from small group instruction, appropriate pacing, and specialized strategies, for which general teachers sometimes felt unprepared (Bean & Eichelberger, 1985). Special and general teachers had to be working on agreed-upon objectives, strategies, and materials. Evaluation had the potential to be a problem, as general teachers sometimes resisted making changes in requirements. Decisions had to be made about whether different students would have differing requirements, and who would take the role of evaluating special students. Faced at the same time with increasing

demands for meeting the goals of state curriculum, being cost-effective, producing students who perform well on standardized measurements, keeping parents satisfied that their children are receiving the best education possible, they wondered how this new program was going to affect their classes. This study investigated how special and general teachers in selected middle schools, and junior high schools operating with a middle school structure for the seventh and eighth grades, implemented cooperative teaching programs. It looked at factors contributing to the implementation of such programs. Of particular interest were the issues of time to consult, roles and responsibilities of teachers, instruction, and evaluation. The study sought to identify major differences in programs described in most positive and least positive terms by participants.

The issue of time

Teachers have reported that lack of time to consult is the biggest barrier to developing cooperative relationships and to effectively planning for cooperative teaching (Bauwens, Hourcade, & Friend, 1989; Glomb & Morgan, 1991). It takes time to plan adequate instruction, and without a set time to meet and plan, teachers may have to act on their own perceptions of instructional needs. General teachers who have had no training in individualizing instruction and developing learning strategies may feel at a loss for meeting the needs of an ever-diversified class. When the special teacher comes into the general classroom without having had the benefit of planning instruction and roles for each teacher for implementing that instruction, then only part of that teacher's unique skills and expertise in helping the students and the general teacher are being used. In this case, the special teacher may end up acting in the role of an aide, and possibly being treated as such, to monitor seat work, handle discipline problems, or check papers. Even with daily planning, teachers may feel a lack of time to adequately plan modifications in curriculum and instructional methods, or to acquire or make modified materials.

Developing cooperative relationships also takes time. Teachers who have had no experience in working with another professional in the same room may feel awkward and uneasy, threatened, or stressed at first. Teachers who have traditionally worked alone with their own autonomy now must share decision-making and instructional roles with someone else who may not share their philosophies. Teachers need time to learn to work together. A key element in program success would seem to be the issue of how long the program had been in existence, and thus how long had the participants had to work out roles and responsibilities, instructional procedures, and organizational structure of the program.

The issue of instruction

Instruction for students with diverse needs is a complicated issue. General and special teachers approach this issue from differing backgrounds, training, and experience (Glatthorn, 1990; Haynes & Jenkins, 1986). General teachers are trained in a content subject and are used to teaching large units of instruction, at times lecturing to a whole class, and meeting state adopted curriculum goals. They may feel threatened and fear the dilution of the standard curriculum if forced to slow the pace, change the sequence, or alter the scope of what they have always taught. They are not used to individualizing instruction, and may feel that certain techniques and modifications belong in a special classroom, and not with *their* students. In addition, they may feel inadequate or untrained to teach students with disabilities.

Special education teachers are not used to a general content curriculum. They have not been trained to teach the content, and may feel uncomfortable and threatened in facing a whole class of students. They are used to teaching small groups of students, whom they have usually gotten to know very well, techniques and strategies to help them acquire certain skills. They are used to reading tests to students, teaching in small increments, and

giving lots of hands-on experiences, projects, mnemonics, and visual and auditory cues to aid students' learning. In a general classroom, the special teacher may have trouble implementing his/her unique skills to help students, and may feel frustrated and helpless to intervene. They may fear the loss of status as a provider of specialized services.

The Individualized Education Program (IEP) for students with disabilities, an instructional plan for the coming year, is mandated by law to be written by a team. This team should include the student's teacher or teachers, a representative of the school other than the teacher, and the student's parents (Heward & Orlansky, 1984). It should be a foundation of shared decision making between teachers, and a source of information that will aid in instruction and evaluation. But many times teachers regard the writing of IEPs as a chore to be completed yearly, and despite this mandate, special education teachers typically have written the documents without real involvement of general teachers or parents ((Lynch & Beare, 1990; Pugach, 1982). If a student's educational program is to be coordinated and cohesive, and appropriately reflect the goals the student needs to succeed in every class, it must be the result of cooperative planning between all of the student's teachers (Bauwens & Korinek, 1993). It is hoped that the emphasis on a team approach that cooperative teaching brings, will facilitate the cooperative planning of IEPs.

The issue of roles and responsibilities

The issue of roles and responsibilities overlaps all of the other areas. Teachers who have not worked in a teaming relationship before may have trouble accepting and becoming accustomed to sharing decisions, instructional and behavioral duties, grading, and most of all, leadership and control with another person (Bauwens, et al., 1989; West & Idol, 1990). Some teachers lack interpersonal skills in working with another teacher or in sharing responsibilities. They may have a hard time accepting an outsider in their domain.

In some cases, teachers may be paired with no forethought to compatibility of organizational, behavioral, or instructional styles. In addition, administrators may select teachers for the program without preparing them for the change or providing training in needed skills to set up a program and work cooperatively. The issues of management of routine, grading, instructional arrangements, class rules, parent communication, and acquisition and use of materials among other things, need to be negotiated between the teachers in a cooperative relationship.

The issue of evaluation

Students with disabilities many times need modifications in evaluation methods and standards (Christenson, Yseldyke, & Thurlow, 1989; Reisberg & Wolf, 1986). The special and general teachers need to come to an agreement concerning the manner and extent to which they will modify tests and grades, and who will take the responsibility for developing modified tests. They need to discuss and define responsibilities for grading papers and doing interim reports and report cards before a program begins. Usually these topics are not discussed, leaving teachers unsure of roles in evaluating students. As they become accustomed to working together, the issue of who will grade papers, record grades, communicate progress to parents, or decide on final grades is not decided. The question of logistics for giving modified tests, some perhaps orally, may present a problem also.

General teachers may feel that expectations should not be altered, and that students with disabilities should be expected to do what other students are expected to do. Special teachers many times are accustomed to modifying tests and assignments, and may believe that students should be taught the way they learn, and not be expected to learn the way that particular teacher teaches. Another question that arises concerns whether or not the

modifications that are allowed for students with disabilities should be allowed for all students.

Statement of the Problem

Special and general education teachers at the middle school level have been asked to implement cooperative teaching programs within their teams. Teachers report that they are asked to do this with few guidelines, training, or empirical data. Changes in long-established roles and implementation of innovative programs may cause confusion and/or resistance among special and general teachers. Descriptive research is needed to explore these issues. Such research may provide teachers and administrators with information for implementing or improving cooperative teaching programs.

Purpose of the Study

The purpose of this study was to describe how special and general education teachers in selected middle schools were implementing cooperative teaching programs, and to investigate the factors contributing to the implementation of such programs. Of particular concern were the issues of time, instruction, roles and responsibilities, and evaluation. The researcher investigated programs that had been in existence for at least one year to discover how implementation had been accomplished at those schools and how those particular teachers had negotiated the issues of time, instruction, roles and responsibilities, and evaluation. Research was conducted in three phases, interview of a key informant at each of the 16 schools, survey of each of the special and general teachers doing cooperative teaching, and an interview with 4 of the teams with at least a 50% response

rate, having differing degrees of positive responses. The following questions were addressed:

1. How are teachers in selected middle schools currently implementing cooperative teaching programs?
2. How do the special and general education teachers in these middle schools address the issues of time, instruction, roles and responsibilities, and evaluation?
3. What are the major differences in programs described in most positive and least positive terms by participants?

Approach

The participants in the study were special and general education teachers in middle level schools from three school systems. These schools were identified by a state official in the office of exceptional children as using a cooperative teaching team approach to co-teach students with mild disabilities. Programs selected had been in existence for at least a year, and some are in their second or third year or beyond. In Guilford County, seven middle schools had approximately 18-20 special education teachers and 70-80 general teachers working together with sixth, seventh, and eighth graders. These schools were Allen, Lincoln, Guilford, Jamestown, McLeansville, Northeast, and Northwest.

In Durham County, five schools were originally chosen, Carrington, Chewning, Neal, Sherwood Githens, and Lowes Grove Middle schools. Carrington was deleted during the study because they no longer were participating in a cooperative teaching program, the teachers having decided to discontinue it. The other four in Durham County had approximately 15 special and 68 general teachers teaming.

In Cumberland County, Hillcrest, Hope Mills, Lewis Chapel, Southview, Stedman, and Westover Jr. Highs had approximately 20 special and 65-70 general teachers teaming.

Despite the fact that these schools had retained the labels of "junior highs", they were operating under the same organizational structure for grades six through eight as the middle schools in other districts. These schools were in the process of making the transition to a total middle school structure. In all, the total sample surveyed was approximately 58 special and 225 general teachers. The special education teachers who are members of general sixth, seventh, and eighth grade teams at identified schools and the general teachers with whom they work were included in the study.

The research had three phases. In Phase I, during the Spring prior to surveying all the teachers, a representative from each school was interviewed to obtain a description of the program at that school. In Phase II, in the fall of 1994, all special and general teachers in the sample (those teachers in the school who were participating in the cooperative teaching program) received a survey, designed as a result of data obtained from the interviews, with the purpose of determining how they addressed the critical issues of cooperative teaching in their school. In Phase III, teams of teachers at four sample schools responding with at least 50% response rate, in similar districts in urban or rural populations, and close geographically were selected to be interviewed again, this time as a group.

Definition of Terms

Collaboration - Collaboration is the process of teachers working together on a regular basis to share expertise and responsibilities for decision-making, to cooperatively meet students' learning needs. Collaboration does not imply co-teaching, but a coordinated effort to help students that is different from efforts that would be produced by teachers' individual attempts. Although collaboration is more of a consultation approach, teachers

engaging in successful collaboration practice role reciprocity, interactive communication skills, and organized problem-solving skills.

Cooperative teaching - Cooperative teaching is an educational approach in which general and special education teachers work together in the same room to jointly teach an integrated group of non disabled and disabled students in a cooperative and coordinated manner (Bauwens, Hourcade, & Friend, 1989). Teachers have joint responsibilities for instruction, materials, and evaluation, and are simultaneously present in the classroom. The service delivery setting is the general classroom, the structure of the class is cooperative teaching, and the teachers' interactive style is collaborative (Bauwens & Korinek, 1993).

Significance of the Study

This study sought to determine both special and general middle school teachers' perceptions of the implementation of cooperative teaching programs in their schools, exploring the critical issues of time to meet and plan interventions, roles and responsibilities for teachers, instruction, and evaluation of students. Data was gathered first by audio-taped interviews with a key person in each school. These interviews were transcribed, coded and categorized, and that information used to construct a survey which went to each special and general teacher involved in cooperative teaching in the selected schools. Information was gathered across the state of North Carolina, in three different school systems. Teachers had the opportunity to voice their perceptions of the programs at their schools, including their views on needed training and skills, the success of and the importance of specific aspects of implementation, and to describe what skills they had gained and what changes had been developed in instruction, curriculum and in evaluation procedures.

Most previous studies have been very limited in empirical results or said that such data was not yet available. In addition, many were limited by examining cooperative programs at the elementary level only, or studying reading programs, or other ways to meet students' needs. The few studies that included middle school teachers as well as elementary and secondary, did not concentrate on the middle school level. This model would seem to fit best at the middle school level, due to the team structure of the middle school which includes a co-planning time each day. Some studies limited their research to general teachers' perceptions, and did not include special teachers. Others made suggestions for implementation of ideal programs, but did not provide empirical data. Previous studies have also discussed rationales for integration of general and special education, described various options for service delivery, elaborated on barriers to collaboration, and suggested ways to overcome these barriers, with little or no empirical data (Adams & Cessna, 1991; Adamson, Cox, & Schuller, 1989; Bauwens & Hourcade, 1991; Bauwens et al., 1989; Howell, 1991; Katchman & Mills, 1989; Lessa, Bitner, & Beily, 1990; Meyers, Gelzheiser, & Yelich, 1991; Nowacek, 1992; Simpson, Myles, & Friend, 1989; Zigmond & Baker, 1990).

Strength for pursuing this topic came from previous studies, which have suggested that researchers investigate ways to improve the opportunities for students with disabilities to be educated in regular settings and investigate how implementation can be successful (Ammer, 1984). They have suggested that studies investigate new roles for specialists in regular classrooms (Bean & Eichelberger, 1985); and investigate a redefining of special and general teachers' roles in order to establish special teachers as part of the total education community and to erase general teachers' feelings that they are not qualified to teach students with disabilities (Glomb & Morgan, 1991). The cooperative model is definitely a new role for special and for general teachers, one for which they were not necessarily prepared. With this new role comes a juggling of responsibilities, as special and

general teachers negotiate who will be responsible for grading, instruction, planning materials, and behavior management. This study will seek to answer the question of just how much integration of roles and responsibilities takes place.

Friend (1984) suggested that future studies explore ways that training and an increase in time to consult affect general teachers' perceptions of mainstreaming programs. This study asked for teachers to list extent of training as well as to describe amount of time allotted to plan interventions. Meyers, Gelzheiser, and Yelich(1991) cautioned that studies must not compare pull-in programs (educating disabled students in regular classes for all or part of the day) to pull-out programs (educating these students in resource rooms, separate from non disabled peers). They urged instead that future research consider the impact of a specific type of pull-in program (which this did), the survey of special and general teachers (this did that also), and a larger sample than their 23 teachers, in order to improve generalizability.

This study sought to sample approximately 270-280 general and special teachers at 16 different schools in three different school systems. Heron and Kimball (1988) suggested that studies seek to draw conclusions from descriptions of effective efforts to integrate special and general education, which could be use to guide instigation of collaborative programs. It is hoped that the results of this study can be used to improve existing programs as well as guide implementation of future programs.

Limitations

Since the study took place in 16 middle and junior high schools in three school systems across North Carolina, it may not be generalizable to other middle and junior high settings with different populations and in different locations. The fact that some of the schools were still named junior high schools rather than middle schools did not affect their

philosophies of education and the procedures followed for implementation. This includes the scheduling for team and individual planning times, a key factor in facilitating that implementation.

A second limitation is the limited personnel to be interviewed, and the discrepancy between those interviewed and those surveyed. For Phase I, one teacher at each school was selected for the initial interviews. Although efforts were made to identify a key informant in each school who would most likely be best able to describe the program, that person may not represent the views of other teachers in the school. Also, survey results were also across several teams and grade levels in each school, and not necessarily were the respondents to the survey, the team members interviewed in Phase III interviews.

A third limitation is that although surveying all the special and general teachers participating in cooperative teaching at each school was an effort to validate results of Phase I, response results were only 48%. There is no way to be sure that responses received were representative of the majority of the teachers at the schools.

Another limitation is the subjectivity of surveying teachers' perceptions. Teachers' perceptions have the potential to be influenced by many variables. Some teachers may have been or may still be resistant to the idea of cooperative teaching, in that they do not wish to share their classroom or teaching duties with anyone. They may feel threatened by the other teacher's presence or by the thought that they are not fully in control. Some special and general teachers may feel that students with disabilities do not belong in general classes under any circulmsances. Others may be willing participants, but feel untrained to deal with students with disabilities and unsure of how to share roles and responsibilities. Some may have had more training and/or experience in cooperative programs and may be more likely to believe in positive possibilities. Bauwens, Hourcade, and Friend (1989) reported that participants in cooperative teaching programs completing their first year in such a program reported that concerns over cooperation disappeared

when participants received training in cooperative teaching, gained experience in the procedures, and developed specific guidelines for their programs.

Chapter Summary

While implementation of cooperative teaching programs has been explored and described more fully at the elementary level, there have been considerably fewer studies at the middle school level. More research at this level is warranted to determine what teams of special and general teachers are doing to implement cooperative programs. Studies conducted at the elementary level suggest that the four critical issues of time to meet and consult, instruction, roles and responsibilities of teachers, and evaluation will emerge in the middle schools implementing cooperative programs (Cochrane & Ballard, 1986; Glomb & Morgan, 1991; Grady, Casey, & Bonstrom; Meyers, Gelxheiser, & Yelich, 1991; Morrison, Lieber, & Morrison, 1986; Nolet & Tindal, 1993). The organizational structure of the middle school provides a team structure with a regularly scheduled time to meet, and encouragement to discuss students' needs. It would seem to facilitate shared decision-making and duties, and provide a time when teachers can plan.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Integrating students with mild disabilities into regular classes has been implemented on a broader scale in the last few years, encouraged by Public Law 94-142 mandating services for students with disabilities in the least restrictive environment, and by concerns expressed in national reports such as A Nation At Risk, asserting that educational reform is necessary if we are to meet the challenges of educating the students in schools today (National Commission on Excellence in Education, 1983). The National Joint Committee on Learning Disabilities (NJCLD), in 1991 developed a list of suggestions for providing services to students with mild disabilities within general classrooms (Nowacek, 1992). They advocated system-wide plans for the education of these students in general classes, with responsibility for the planning to be shared between special and general teachers. Many programs have begun to be restructured, with the result that many special and general education teachers have been asked to assume a role that is new to them. In some programs this means that teachers who have previously taught independently in their own classrooms are now teaming with another professional to teach a heterogenously mixed group of students. These programs are termed cooperative teaching. Cooperative teaching has become more and more prevalent as a service delivery model for students with mild disabilities within regular classes. It has been viewed by some professionals as an essential element of changing schools for the better for students with disabilities and for those who are at risk for school problems (Braaten, Mennes, Brown, & Samuels, 1992; Friend & Cook, 1990; Idol, 1990).

As special and general teachers began this new venture, many may not have been sure of where to begin to accomplish this goal of cooperative teaching. While some may have been forewarned and prepared to accept this new situation by administrators who petitioned for their input, others were not a part of any advance planning or preparation, and may have simply been told they were to begin serving students in this new way. Most did not have any training in collaboration and may have felt uneasy sharing instructional roles and responsibilities with someone else. Guidelines concerning how to set up such a program or concrete data to support any proposed procedures are limited.

Special education teachers' perceptions

Special education teachers now have a new role. Traditionally, they had their own resource classrooms, where students came to them to build skills in which they were deficient, or to be taught a modified version of a content course. Now they have to shift their focus to developing ways within general classrooms, to help teachers modify instructional methods and materials so that students can succeed in content courses. Suddenly they are not in charge of their own classroom, with their own discipline policies, materials, curriculum, evaluation procedures or record-keeping, but are expected to make those decisions jointly with one or more general classroom teachers. Unless they were previously general classroom teachers, most special education teachers have only had a general overview of each of the content subjects taught in schools, having been trained instead in strategies for evaluating and meeting special learning needs. They also have been used to teaching a small group of students, whom they usually got to know very well, in a small setting. They were familiar with their materials and with their students' needs. Now they are asked to stand up in front of a large group of students, some of

whom are above average, and are expected to be able to answer questions and direct and instruct this very different group of students.

Special education teachers beginning a cooperative teaching program may have many concerns. They may be worrying about those students whose problems are more serious. Will they be able to keep up with the curriculum of the general classes? What will the materials will be like in a general class? Will their students be expected to use standard texts, and if so, how could they as teachers help? Will they, as special teachers, be able to help modify instruction enough so that these students, some of whom have very low reading levels, can handle the content of the classes? If not, they must now find or make materials that supplement the curriculum, and enable students with disabilities to compete in the mainstreamed settings. Due process paperwork must still be done by special education teachers, despite the fact that many have schedules in cooperative teaching programs that keep them in general classes throughout the day, and there is no time to do this. General teachers really have no conception of this task or its demands, and may not understand the importance of sacrificing time with students to get necessary paperwork done (Braaten, et al. 1992).

In addition to little time to complete due process paperwork, the special education teacher is now in a situation where she must plan instruction and evaluation with another teacher. Unless teachers are given the time to plan cooperative activities and shared roles and responsibilities, the general teacher who is more experienced in the content of the classes may assume a dominant role and the special teacher may feel unsure of his/her role in the general classroom. Special education teachers may worry that they may not be respected as teachers in general classrooms, but be treated as aides or assistants to do whatever the general teacher suggests (Howell, 1991). Even if schools implementing cooperative teaching programs schedule team planning for the team that usually includes one special and three or four general teachers, teaming doesn't come naturally. Teachers

who are not used to working together, and who approach the educational process from very different perspectives, have difficulty at times learning to interact and build relationships and a sense of shared ownership of students and of the program. And even though the special education teachers may be very good at the service delivery model of the resource room, they may not be able to transfer skills learned there to the very different role of cooperative teaching. Most have not been trained to consult and plan with others. Without sole control over the scope and sequence of the curriculum used, they must be continuously watchful of the requirements of each class and of advocating for the needs of the students with disabilities (Braaten, et al. 1992).

General education teachers' perceptions

General classroom teachers may have taught students who did not qualify for special education but were somewhat "slow", or at risk for learning problems, or they may have taught some students with mild disabilities in the past. Although they have been well-trained in content courses and standard methods of instruction and evaluation for average students, most are unfamiliar with special learning strategies, are not knowledgeable concerning modifications in the standard materials and/or curriculum they are mandated by the state to use, and are unused to and uncomfortable with making modifications to meet individual needs. Ongoing concerns expressed by many general classroom teachers are that they may be expected to make too many classroom adaptations (Howell, 1991).

Evaluation is also a potential problem. General teachers may fear their procedures for evaluation, if modified, may become too diluted. Therefore, they may have a negative attitude towards a mainstreaming, cooperative teaching model, and resist making changes in requirements. To complicate matters, they are faced with pressure from the public, and

therefore the school administration, to raise standardized test scores and "cover" the curriculum each year.

Other problems may also inhibit the enthusiasm of general teachers for diversifying their classes with many ability levels. Class sizes seem to prohibit individualization, materials do not seem flexible enough to meet the variety of reading levels or ability levels in the classes, and they feel untrained and unsure of themselves in meeting special needs of students with disabilities. The teachers may fear that students with disabilities may disrupt their classes, be inattentive, unable to keep up, and require a lot of individual help when there is no time to devote to doing that.

General classroom teachers may be resistant to having someone else in their classroom who may observe, and possibly, in their perception, criticize their methods, as suggestions for modifications may be viewed. They may already feel frustrated by teaching conditions, disillusioned about teaching, and tired of their many responsibilities. Any new demand on their energy may be seen as an unwanted intrusion (Friend & Bauwens, 1988). Some general teachers feel unsure of the role they or the special teacher should play, and do not know how to plan with another person who will be in their room. The give and take of planning with another person, and giving them credit for ideas and differing perspectives is not easy for some teachers not used to team-teaching. Others may feel uncomfortable sharing duties, and have concerns about leadership and control (Bean & Eichelberger, 1985). They may seek to keep things as they have always been, and be resistant to any change. Decisions they have always made on their own now have to be made jointly, and problems that arise will have to be solved in a team problem-solving process. Conflict and resistance are natural, but not necessary consequences of this new situation.

Middle school implementation

Many middle schools have tried the cooperative teaching model for serving students with disabilities. It would seem to be an optimal place to implement such a model. The middle school has a unique organizational structure of teachers teaming with a few other teachers to teach the same group of students all day long. The team structure provides a regularly scheduled time for teachers to meet and jointly discuss instructional, behavioral, social, and emotional needs of young adolescents (White & White, 1992). The Carnegie Council of Adolescent Development's Task Force on Education of Young Adolescents recommended that schools "create small communities for learning," where students and adults can develop closer relationships. It recommended that, to ensure success for all students, middle schools promote cooperative learning and flexibility in instruction (Jackson, 1990).

Despite this middle school philosophy, some general teachers feel that teaching students with disabilities in their mainstreamed classes puts an extra burden on them, with more demands for attention, extra lesson plans to make to accommodate individual needs, and more adjustments for them to make. In Zigmond, Levin, and Laurie's (1985) study of teachers' attitudes, sixty-eight percent had these responses. The study found that forty-one percent of those surveyed had no problems accepting the students themselves, but that 26% felt that this was the wrong place for the students. An additional 27% were willing to try mainstreaming if an acceptable level of support from the resource staff was available, if they had time for individualized instruction, and if the rest of their students were cooperative and under control. Unfortunately, these conditions are seldom in existence in most mainstreamed secondary classes. Many authors have suggested that mainstreaming can be successful in meeting students' needs when special and general teachers have the

time to work together to maximize instruction (Liberman, 1985; Stainback & Stainback, 1984; and Will, 1986).

The issue of time

An important element of successful cooperative teaching programs is time. Previous studies have shown that time for teachers to meet, plan, and complete due process paperwork is a problem (Bauwens et al., 1989; Evans, 1980; Friend, 1984; Glomb & Morgan, 1991; White & Calhoun, 1987). Evans (1980) found that even though 80% of special teachers responding to her survey saw the importance of consultation with regular teachers, they were only able to include it in their duties 5% of the time. The lack of a joint planning time can be one of the biggest obstacles in implementing a collaborative, cooperative program. Without it, general teachers must rely on their own perceptions of a students' abilities and needs. They have no opportunity to question special teachers about certain behaviors or to discuss alternative methods of instruction. Special teachers have no time to hear general teachers' concerns, ask questions about or give their input concerning appropriate curriculum sequence, pacing, or depth, or to suggest particular modifications in methods, materials, evaluation, or curriculum (Johnson, Pugach, & Hammitte, 1988). Teachers need time also to share successes and failures, reflect on activities that occurred, and discuss alternatives (Cole, 1992).

It has been recommended that principals provide scheduled time for teachers to meet and plan as a normal part of their professional duties (Bauwens, et al., 1989; Idol & West, 1987; 1991). It should not be added as an afterthought or inserted as a voluntary, after-school activity (Cole, 1992). But time to meet and plan is not necessarily a part of cooperative teaching programs. Due to large numbers of students to be served and not enough personnel available to serve them, time to plan takes second place in prioritizing

teachers' activities. Cole (1992) suggested that administrators and teachers work together to find other solutions to the problem of time to meet, including creative and flexible scheduling and use of resources. It has been suggested that time is valuable, and one solution could be the utilization of school funds to hire aides or permanent "floating substitutes" to relieve teachers when they need to plan (Cole, 1992; Gerber, 1991). West and Idol (1990) suggested that the funding for this aide or floating substitute may come from business community sponsors who "adopt" the school, and may not cost the school at all. The cost, although not negligible, is minor in comparison to the benefits to be gained from freeing teachers to collaboratively plan (Gerber, 1991).

Other approaches to finding time include planning when many of the students are engaged in special activities such as assemblies, cooperative learning or research group projects in a multipurpose room, computer room, or the library, guest speakers, or plays. They could be supervised by an aide, a teacher from another team, an assistant principal or principal, counselor, or other staff person during this time (Cole, 1992; West & Idol, 1990). Students could also be taught for one period a day on a regular basis by an administrator or support person, a volunteer from the Parent-Teacher-Association, a retired teacher, or a student teacher (Gerber, 1991; West & Idol, 1990). Time can also be found when students are at lunch or having study periods.

These solutions may not always be easily found or ones that will satisfy everyone. It may be difficult for teachers to find a mutually convenient time to meet that does not conflict with other responsibilities for either the special or the general teacher. General teachers have to serve on committees, attend grade-level curriculum meetings, or serve as advisors to extra-curricular clubs. With the variety of duties necessary for special teachers to perform as part of his/her job description, in monitoring and expediting referrals, conducting assessments, assuming responsibilities for due process compliance and Individual Education Plans for students, and conducting school-based assessment

committee duties, time management and prioritizing duties may be one of the most difficult skills for a special teacher to manage (Braaten, et al., 1992). Gerber (1991) suggested that teachers do a self-searching of their schedules and time management, to find time that may be hidden in misplaced priorities, inefficient use of available time, or an inappropriate and negotiable overload of responsibilities.

Even when a team planning time is scheduled, other administrative matters such as planning for team field trips, discussing which students should get awards, discussing school-wide testing programs, handling matters handed down from the principal for discussion, and discussing behavior problems often take precedent over discussions of curriculum and instruction. Teachers report having to continually adjust their schedules to find more time to meet together to plan (Howell, 1991). Meyers, Gelzheiser, and Yelich (1991) studied general teachers' perceptions of collaborative planning sessions in cooperative teaching programs, referred to in their study as "pull-in" programs. They found that since teachers were spending substantial amounts of time co-teaching, that co-planning was a requirement. The experiences that teachers had in informal contact in the classrooms in 5-minute planning sessions were also useful, and the authors contend that time to plan doesn't have to be considered an unmanageable amount of time. Longer meetings of 11 to 60 minutes were useful in long-range planning. They also found that teachers spent time planning with increasing frequency as they became more experienced in cooperative teaching.

Time is needed by the teachers to openly discuss and plan instruction, analyze curriculum and evaluation methods, and to develop collegiality. Idol and West (1987) reported that even teachers trained in consulting spent little time in doing so because of time constraints. Teachers are not used to working together and may feel uncomfortable in sharing decisions and planning. Having a regularly scheduled, common planning time enables teachers to begin to develop these relationships. Many of them have never had the

time, before the implementation of cooperative teaching programs, to meet and discover what curriculum and materials the others were using, or how they were attempting instruction or evaluation of students with mild disabilities. Some even had the additional barriers before of being housed in separate parts of the building. Gulledge and Slobe (1990) suggested that moving the special education teachers' rooms to the area of the building where the team that teacher will be teaming with is located is the first step in helping to initiate a sense of shared ownership and teaming. When the special teacher's room or office is located on the same hallway as the general teachers' rooms, frequent contact and collegiality is easier.

If contacts between special and general teachers are brief and infrequent, teachers may fail to develop cooperative relationships. In fact, teachers reported that lack of time to meet to evaluate and discuss students' needs, and plan strategies for implementation, prevented them from adequately implementing new programs (Ammer, 1984; Bean & Eichelberger, 1985). Gulledge and Slobe (1990) emphasized the need for administrative support in developing a schedule that promoted cooperative planning time by assigning teachers to teams with a common planning time. This shared planning time was necessary for general and special teachers to develop relationships, and for the special teacher to feel like an active participant of the team.

The issue of instruction

Shared planning time is also necessary for general and special teachers to plan instruction (Zigmond & Baker, 1990). In previous pull-out, resource programs, special and general teachers were not sufficiently aware of what curriculum and materials were used in the alternate settings. They had very few opportunities to interact and share ideas or methods. In past pull-out programs, special and general teachers have been found to be teaching the same group of students with no coordination of services, using different and

even incompatible materials and methods (Glatthorn, 1990; Haynes & Jenkins, 1986; Idol-Maestas, 1983). As more and more students with special needs have been included in the mainstream, special and general teachers have had to communicate more concerning coordination of instruction. Meyers, et al. (1991) found in interviews with teachers in pull-in and in pull-out programs, that the pull-in programs fostered collaborative planning of instruction and solving of instructional problems by necessity. As a result, the teachers interviewed had perceptions that the interactions improved their skills in instructional delivery. Both teachers were contributors to plans for new skills and content, reinforcement and reteaching activities, and whole class and individualized instruction. In another related study, when teachers were asked to make suggestions to improve programs, special teachers were in favor of cooperative programs because they would be more aware of the general curriculum, and be better able to help students succeed in their general content subjects (Meyers, Gelzheiser, Yelich, & Gallagher, 1990).

Cooperative teaching has been described as a joint responsibility between the special and general teachers, with decisions concerning who will lead instruction in any particular class period based upon an individual teacher's strengths and skills, and not on some predetermined hierarchy or even student category of disability (Bauwens, Hourcade, & Friend, 1989). In this setting, teachers use their unique strengths and skills to do what they do best. Many times, this means that the general teacher, who is more knowledgeable about the traditional academic curriculum and in large group management, may take the lead in teaching. The special teacher, skilled in targeting specific difficulties within the curriculum, developing modifications to sidestep these difficulties, and in analyzing materials for appropriateness, may work with the teacher to better individualize the instruction to meet the needs of all students. Bauwens and Hourcade (1991) stressed that teachers should plan lessons jointly, determining the format and responsibilities for the lesson and who should assume primary responsibility for each part of the lesson. For

example, the teacher most familiar with the topic could present the lesson and the other monitor students' reactions and responses. Another time, the teacher most knowledgeable about identified needs of the students could present the main parts of the lesson, and they both could rotate and monitor during the guided practice portion of the lesson.

Lockledge and Wright (1993) described a cooperative teaching program where teachers planned lessons jointly and took turns delivering content lessons. The general teacher was responsible for making sure that all state and local curricular goals were met, while the special teacher took the responsibility for suggesting modifications. White and White (1992) suggested ways that lesson presentation could be the responsibility of both teachers. One suggestion was that the general teacher could present new information to the class, while the special teacher wrote notes on the board or overhead to model notetaking of important points of the lesson. Then the special teacher could review the main points from the notes as the general teacher added special points in the discussion. They stressed that one teacher should not be made to feel like the aide or helper to the other, but that leadership should be joint.

Nowacek (1992) described a cooperative teaching arrangement where the teachers discussed the curriculum and each volunteered their own particular strengths. One teacher felt that she had the experience and skills as well as adaptable materials, to teach literature at varying levels. Another was comfortable in teaching the writing process, and felt that this was an area that could be adapted to any capability. Together they decided that, even though spelling was not part of the seventh grade curriculum, their students needed a phonetic approach. Since the special teacher was familiar with this approach, she took the lead in instruction in that area. The teachers continually talked about lessons and how they could be improved. They learned from each other and helped each other, sharing ideas and insights.

The "House Plan" approach to cooperative teaching in a middle school provided for teachers to collaboratively plan, present, and check assignments (Wiedmeyer & Lehman, 1991). Both teachers made adaptations to the curriculum, gave input in developing Individual Education Plans for students with disabilities, monitored student behaviors and notetaking, and could pull out a small group when necessary to review, check for understanding, or re-teach specific points. Each teacher helped develop materials and demonstrated special techniques and strategies for any students who needed them.

The Academic Intervention Model (AIM) for cooperative teaching of at-risk students in middle school was a team approach with a menu of options (Howell, 1991). In some instances, special teachers made supplemental materials such as vocabulary cards and study guides for students, and placed them in the school's Learning Center to be made available to any student who needed them. At other times, teachers met in teams to develop strategies, or shared teaching responsibilities in content classes. Classes were sometimes split for reviewing for a test or drilling on certain skills. This flexible program began on a small basis and spread to all classes by the second year of implementation.

The Anwatin Middle School cooperative teaching program was popular with most of their teachers (Braaten et al.,1992). Benefits included the opportunity that special teachers had to be more involved daily, more teachers were working on curriculum modifications, and more adapted materials were available. The authors found that teachers were more willing to share materials, instruction and remediation were more coordinated, and the learning processes of low-achieving students were more easily monitored. An extra benefit was that prereferral interventions were more easily implemented and students who were suspected of having disabilities received help without having to go through the referral process. The study found that all teachers, however, were not suited to cooperative teaching. Some teachers were still more comfortable having their own classroom. In addition, special teachers found they had to be constantly advocating for

students with disabilities to ensure appropriate instruction, and they lacked the control over the scope and sequence of the curriculum that they once had in self-contained or resource rooms.

Cooperative planning of instruction has not been easy. One dilemma for teachers in cooperative or teaming programs has been the question of whether to use the same curriculum, with the same materials and instructional procedures for special students in general classes, or to have different expectations and different methods for different students (Adamson, Cox, & Schuller, 1989). General education classes are growing more diverse in general, and the inclusion of students with mild disabilities only increases the challenges felt by the general classroom teacher, who may already feel stretched in her/his ability to meet changing needs (Gable, Arllen, & Cook, 1993). On the other hand, many general classes have long contained populations of students who are at-risk for learning problems, but are not identified as exceptional students. Many general education teachers have been dealing with diverse needs and students with problems learning already, and cooperative teaching may increase their ability to cope with these needs since it adds another trained person in the room. This changes the pupil-adult ratio, gives two professionals' expertise that can be used to cooperatively plan ways to handle behavioral and learning needs, and two persons in the room to carry out those plans. Fuchs, Fuchs, and Bishop (1992) gave evidence that on average, general education teachers are already dealing with student performance levels that vary by five grade levels.

General and special teachers who are working together for the first time in a cooperative relationship many times are not prepared or motivated to share instructional planning duties (Marshall & Herrmann, 1990). Reasons include ownership of programs, feelings of inadequate preparation, and lack of appropriate experiences. They have had little or no opportunity to become aware of each others' educational ideas and methods or to work together in planning instruction. In addition, there are few policies or suggested

guidelines for decisions concerning what and how to teach (Nolet & Tindal, 1993). The planning of IEPs for student with disabilities is a vehicle to facilitate shared ideas for instruction. It should provide an opportunity for professionals and parents to collaborate in planning effective instruction using their combined knowledge and skills, and to determine and set reasonable expectations for the coming year (Pugach, 1982). Despite the mandate by law to have this be a shared process, special education teachers typically have written the documents without real involvement of general teachers or parents (Lynch & Beare, 1990; Pugach, 1982). Ammer (1984) found that 48.6% of respondents in his study indicated that they had no role in IEP development. Only 3% of junior/senior high teachers had active involvement. Teachers in that study suggested that general teachers provide an awareness of the curriculum, and particular problems of the students with disabilities in their classes to the teachers writing IEPs. If a student's educational program is to be coordinated and cohesive, and appropriately reflect the goals the student needs to succeed in every class, it must be the result of cooperative planning between all of the student's teachers (Bauwens & Korinek, 1993). Whereas the IEP has traditionally been written for implementation primarily by special education teachers in a special setting, IEPs for cooperative teaching programs should be written in a coordinated manner by a team of teachers who will cooperatively carry out the objectives and evaluate their effectiveness. Gately and Gately (1993) suggested that special and general teachers develop a list of possible objectives for the subject matter, and then go over it together, discussing curriculum needs and student strengths and weaknesses, and to prioritize the objectives. This should begin helping them each see the others' perspectives. It is hoped that the emphasis on a team approach that cooperative teaching brings, will facilitate the cooperative planning of IEPs.

Teachers working together for the first time may have a difficult time adapting to each others' methods of instruction. Many times, when special teachers suggest

modifications in certain materials or suggest specific interventions, the general teachers may have trouble understanding or accepting the explanations of why those interventions should be used (Johnson, et al., 1988). The interventions may not match their perceptions of how a class should be operated. The interventions may seem to be more in line with a special class, as too time consuming, unlikely to produce results in a timely manner, incompatible with the needs of other students, only partially understood, and imposed on them without opportunities for their substantive input (Margolis & McGettigan, 1988). General teachers may be more flexible if they help plan strategies and if the strategies are more in line with their own ideas about education (Johnson, et al., 1988). They are more likely to feel ownership and responsibility for implementing interventions when they have participated fully in designing them (Margolis & McGettigan, 1988). Zigmond et al., (1985) conducted several studies of high school programs where students with disabilities were mainstreamed. One of these studies looked at the accommodative powers of general teachers and found that even though 75% of those surveyed believed that learning disabled students were different and particularly lacking in academic skills, most (55%) did not see this as an added burden on them. Results indicated a possible reason for these responses, in that most of the teachers did very little to change their standard way of operation, with one lesson for the whole group and the same demands for reading and written work. Any changes made required little effort or expenditure of time. Bender and Ukeje (1989) suggested that it does very little good to teach general teachers how to use effective strategies if their attitudes prevent effective intervention. They suggested that attitudes of personal effectiveness may be a major factor in general teachers' use of these strategies. The results of their study pointed to the possibility that if teachers choose particular strategies, the success of the strategies may improve their attitudes toward mainstreaming.

In the past, in classes where students with disabilities have been mainstreamed, there has been very little change in methods of instruction. General and special teachers have

been approaching these issues from different perspectives (Gans, 1985). Special education teachers have been accustomed to adapting instruction and materials as needed by students, including using lower level, supplementary texts, projects in the place of long reports, and more multisensory and hands-on learning. General teachers have been accustomed to teaching with one, standard, state-adopted textbook in primarily a lecture method. This has been reinforced by the training teachers have had. General teachers were trained to stress subject matter content rather than techniques (Kunzweiler, 1982). Kunzweiler (1982) pointed out that previous studies showed that general teachers spent 75% of their class time lecturing, adversely affecting the levels of achievement of students with disabilities. The special education teacher approaches the issue from the background of providing individualized instruction for each student in a small group setting. The general teacher, having been trained primarily in the content subject, is concerned with covering the standard, state-adopted curriculum in order to prepare all students in the class for standardized testing (Glatthorn, 1990; Meyers, Gelzheiser, & Yelich, 1991). This manifests itself in the special educator approaching the task of instruction from the idea of developing a wide range of learning and coping strategies, and the general educator from a focus on academic skills and the core content of the subject (Glatthorn, 1990). White and Calhoun (1987) found that special educators who responded to their survey described the difficulty of providing helpful suggestions for techniques and materials to general teachers, and that the effectiveness of these techniques influenced the general teachers' inclination to ask for help in the process of referring a special needs child in the future. Studies have found that general teachers felt that special education teachers did not understand their needs and priorities, or have any idea of the demands of the general class (Gans,1985; Johnson et al., 1988; Reisberg & Wolf, 1986). These general teachers value the class as a group, and have attempted to meet each student's needs within that group. Special educators have not had to deal with the demands of teaching a large, diverse group, and

their credibility as being able to offer ideas on curriculum and instruction is sometimes weak.

This issue of the credibility of special educator's suggestions to general education teachers is not a new one. This has been due partly to the brevity of their contacts due to time constraints and partly to the lack of experience of the special teacher in the general classroom. The special education teachers were forced to make suggestions to the general teachers based upon their own perceptions of the problems and intervention possibilities. For the special education teachers with limited experience in general classes, this may have been difficult. Reisberg and Wolf (1986) suggested that the same curricular and instructional methods used in the resource room setting may not be appropriate in the general classrooms, and may be resisted by teachers. Interventions suggested may seem too complex, time-consuming, or disrupting to established classroom routine.

General teachers in content classes have relied highly on curricular content in textbooks, which has proven to be insufficient for students with problems learning. Studies have shown that 98% of all curricular content used in classes, determining what is taught and how it is taught, was found in the commercial content materials (Simmons, Fuchs, & Fuchs, 1991). These materials become the primary instructional tool in too many mainstreamed classes. The commercial materials make a teacher's job easier because they organize ideas and topics, suggest assignments, and even give a script for questions to use to probe students' understanding. Even though some teachers' guides give suggestions to use with gifted and with special needs students, they are geared in content and design to average students. Sequences of instruction may be inadequate and suggestions too vague for students who need a slower pacing, more examples, and more opportunities to practice target skills (Simmons, et al., 1991). Another concern is that teachers' guides give much more information and many more objectives to be presented than can be covered completely by the teacher or mastered by the student. Teachers many times try to present

it all, focusing on quantity of information and a wide scope of a topic. It has been suggested that teachers instead present a condensed curriculum, in which they select the most important information from the total given in the teachers' manuals, on which to base instruction and activities (Simmons, et al., 1991). Parmer and Cawley (1993) analyzed textbooks that provided specific suggestions for students with disabilities, and found that manuals may give only one recommendation for a modification for one type of disability, despite the fact that there may be students with varying disabilities in the mainstream. In addition, they found that suggestions made were not adequate modifications of the given lesson, but a substitute activity which the student with disabilities could do after the lesson was completed, or possibly an inappropriate or impractical suggestion completely. The study also found that many times, readability levels in textbooks were too high for students whose main limitation was reading. Textbooks also are often arranged in a disorganized manner and contain questions for students that are not directed to the most relevant points (Nolet & Tindal, 1993). Teachers seeking to meet the needs of students with disabilities in the mainstreamed setting must examine closely the materials used for appropriateness. Unfortunately, often the textbooks are already adopted district-wide, and teachers have no choices. In those cases, strategies for adapting and modify materials should be used. Teachers can make audio recordings available, provide study guides, use visual and graphic aids, introduce mnemonics, and allow students to engage in hands-on and other interactive projects by which to learn (Nolet & Tindal, 1993). Other materials could be filmstrips and videos, alternate textbooks, workbooks, highlighted textbooks, and outlines (Reynaud et al. 1987).

In additions to materials, Bauwens and Hourcade (1991) suggested that instructional considerations consist of two main areas, what to teach and how to teach. Within these areas are the elements of what skills and knowledge are most important to that course, the scope and sequence of the curriculum, the pacing of what is taught, and the instructional

delivery approaches used to teach the information. Becoming familiar enough with the curriculum to feel competent and confident in teaching it is important for the special education teacher whose training did not include information on the content courses. The special teacher needs to know and understand the scope and sequence of the content subject (Gately & Gately, 1993). Unfortunately, many special education teachers are not usually aware of what curricular materials or instructional methods are used in regular classes until they begin cooperative programs, and this can be a source of conflict (Glatthorn, 1990; Idol, West, & Lloyd, 1988; Meyers et al., 1991). Gately and Gately (1993) suggested that special teachers should take the initiative to learn the curriculum and become more familiar with the materials, increasing their credibility with general teachers. As the cooperative program develops, the special teacher should feel more and more confident in teaching the curriculum, and the general teacher should feel more comfortable in sharing instruction and more willing to modify.

The cooperative teaching arrangement is also in danger, in developing instructional interventions and modifications, of becoming a hierarchical relationship in which the "less knowledgeable" general educator receives instruction from the "expert" special educator (Johnson, et al. 1988). In the past, general educators have had a minimal role in planning for students with disabilities, suggesting that they were perceived as not having as much knowledge or expertise concerning the students' instructional needs. In addition, the norm for teachers has always been to be self-sufficient, limiting communication on instruction (Meyers et al., 1991). Some general teachers have, in the past, considered themselves more able to meet the learning needs of students with problems than the special teacher, while the special teachers considered themselves to be more effective (Glatthorn, 1990). Johnson et al. (1988) suggested that chances for the success of the cooperative relationship would increase if it were based on a two-way partnership of shared expertise, with each teacher having as much to share in developing instructional ideas. West and Idol

(1990) described this reciprocity as the key to successful collaboration, as teachers bring complementary skills to the program with which they can jointly design instruction and curriculum. Sharing expertise in different areas, the special teacher in adapting instruction to individual needs and the general teacher in the content subject and whole-group instruction, they can jointly plan practical and useful curriculum and instruction.

The issue is complicated by the competing cultures and "languages" of the groups from which the teachers come. Special educators use a jargon of special education terms that may or may not be fully understood by general educators. Glatthorn (1990) suggested that special educators using terms and acronyms from their special education culture may not realize that this may help create a barrier between them and general educators. Little (1987) noted that teachers who work together successfully have adopted a shared language by which to communicate concerning instructional issues and classroom occurrences, that facilitates this sharing of information and strengthens the bonds between them.

Some authors suggested that there are not two separate sets of instructional methods according to whether the class is special or general, but simply good teaching that meets the unique needs of all students in a comprehensive, unified system (Christenson, Ysseldyke and Thurlow,1989; Reynaud, Pfannenstiel, & Hudson, 1987; Stainback & Stainback, 1984). "Good teaching" has been described as using appropriate goals and objectives, differentiating materials, grouping students effectively, and using a variety of strategies to reach instructional goals (Reynaud, et al., 1987). Stainback and Stainback (1984) strongly feel that a dual system of education has encouraged competition and duplication of services rather than cooperation, and urge implementation of shared expertise and resources. They also urge educators to look at a student as a whole individual, with a problem learning in some way. The problem is only one of a number of characteristics of that student, and is not a set of overriding characteristics that label a

student as a "learning disabled person", or as "educable mentally handicapped". It has been suggested that educators assess these individualized characteristics that all students have, in order to select appropriate instruction or types of materials. Because a student may need adaptations or modifications in instruction should not be a reason to segregate them from other students. They urge careful planning within one system to meet the needs of all students. Lockledge and Wright (1993) suggested that instructional rationales should be the same for all middle school students, whether disabled or nondisabled. These could include the provision of hands-on materials, experiential learning, the chance to apply basic skills in meaningful contexts, critical thinking skills, data processing, and human relations. Other instructional techniques suggested that are appropriate for all students in middle schools include peer tutoring, cooperative learning groups, curriculum-based measurement, instructional alignment, and learning strategies (Vergason & Anderegg, 1991).

Hueffner (1988), seemed to concur with this idea of concentrating on using good teaching to teach all students, regardless of whether or not they were labeled. In describing skills needed for special teachers consulting in mainstreamed classes, it was suggested that techniques need not be highly specialized, but good teaching skills of questioning, listening and strategizing. In addition, the special teacher must be familiar with the general content curriculum and the demands of large group instruction, possibilities for curricular modifications and behavioral strategies. Other skills may include evaluation of many different kinds of students without disabilities, procuring specialized materials if needed, team-teaching, and curriculum design of units of instruction (Hueffner, 1988). It was suggested that both teachers would benefit from the interaction, in that some of the talents and challenges both teachers face could be recognized, some of the stigma of special education could be reduced, better communication between teachers could be instigated, and general teachers may adopt methods and skills from the special

teacher by which students without disabilities could benefit also. Hueffner (1988) warned that teachers must be trained to accept these new roles of teaming and not enter the relationship under prepared. In-service training of special and general teachers will build collaborative skills and enable teachers to become better informed of modifications in instructions that may be successful. It will also help prevent the conversion of the model to one where the special teacher becomes an aide to the general teacher, reducing the potential for success. The author also warned that cooperative programs should not be viewed as a panacea for previous programs that were unsuccessful in meeting the needs for all students with mild disabilities, in that some students will need the added support of pull-out instruction longer than others.

The issue of roles and responsibilities

A third important issue in cooperative teaching that overlaps all of the others is the issue of teachers' roles and responsibilities. Bauwens et al.(1989) asked 46 general and special educators in several pilot sites to evaluate cooperative teaching, and found that prior to beginning their programs they identified the ability of professionals to develop cooperative working relationships as a significant potential obstacle. Questions could be raised concerning shared decision-making, shared space, academic and management duties, adaptation of materials, implementation of the IEP, mutual trust, and open communication of ideas and information (West & Idol, 1990). But the climate of a school is not always receptive to change, and the initial year of collaboration in a cooperative teaching program may be one of resistance, uncertainty, and frustration (Friend & Bauwens, 1988; Gerber, 1991). Braaten et al. (1992) reported that expansion of the cooperative teaching program the second year resulted in improved communication and rapport between teachers. How is this rapport and mutual trust built? What leads to shared decision-making? The Park Hill Program viewed teacher selection as a major ingredient

for successful implementation of a cooperative program (Reynaud et al., 1987). It was viewed as essential to cooperation and shared roles that teachers be compatible. Program organizers looked for similarity in discipline, organizational and teaching style, for willingness to be flexible and adaptable, for willingness to teach with another professional in the room, interest in participating in the project, a common understanding of students with disabilities, and a willingness to change and adopt new strategies. The authors stated that teachers should be chosen who had demonstrated effective teaching strategies. It was deemed preferable that participation be voluntary or that administrators carefully select teachers who were concerned or interested.

White and White (1992) described teacher selection and match as critical for success of a cooperative teaching program. They stated that teachers who have already developed relationships in the school may be paired together. They reported that teachers should have a common interest and willingness to participate, and share common behavior management strategies. They suggested a teacher survey to assess attitudes prior to program implementation, and mentioned several that could be used. In addition, they suggested an informal meeting of interested teachers, prior to implementation also, to discuss concerns and willingness to work in teams. Another suggestion was to assist teachers in adjusting to change with ongoing in-service workshops, training both general and special teachers together so as to develop common understandings. They mentioned a school system that implemented such a support program, in Cobb County, Georgia. Activities in training sessions included a repertoire of communication strategies, bonding exercises and role playing to develop active communication and rapport. No data was given to support their suggestions.

The Anwatin Middle School Collaborative Teaching Program identified characteristics for effective collaborating teachers as strong communication skills, a high level of trust, flexibility, knowledge of problem-solving techniques and effective behavior

management techniques, good organizational skills and time management, knowledge of due process issues and a willingness to attend to documentation of details (Braaten et al., 1992). With all the variety of duties expected of teachers collaborating, flexibility and ability to manage time wisely became very important. The administrators of the program found that teachers must be selected carefully for the program, and given prior to implementation, as clear an explanation of what will be required as possible. The administrative commitment must include adequate staffing to handle the new roles and responsibilities, careful selection of teachers, and ongoing in-service training aimed at fostering communication and acquisition of new strategies. The school's philosophy was teaming and shared decision-making, but no evaluative data was given, other than to indicate that an evaluation was done to identify problem areas. Expansion of the program the second year resulted in improved communication, monitoring, and rapport between the special teacher and general teachers (Braaten et al., 1992).

Lockledge and Wright (1993) assessed the roles of teachers in six teams of general and special teachers in three middle schools. Job descriptions for special teachers ranged from assisting in instruction, suggesting modifications, developing lesson plans and tests, to giving tests, and maintaining classroom discipline. The general teachers' responsibilities were to make sure that all state and local curricular concerns were covered. Each team of teachers modified the roles and responsibilities as the year progressed, to suit the teachers involved, but all decisions were jointly made as a team. A measured benefit was the feeling by the special teachers of being a part of the school for the first time. In addition, the general teachers liked having another teacher in the room to aid in instruction. The authors stated that results showed that teachers involved in a cooperative program should be flexible, willing to listen and share ideas, should share similar philosophies, be committed to being organized each day, be good listeners, and be willing to accept constructive

criticism. They stated that above all, teachers must be willing to share a classroom with another professional who has differing strengths and skills (Lockledge & Wright, 1993).

Cole (1992) described programs at eight model elementary, junior high, and secondary schools around the country. She reported that relationships between secondary teachers in one school of her study evolved over time. The roles became more defined as strengths of each teacher emerged. Incorporating a common planning time into the schedule early into the program was viewed as essential, as was the voluntary participation. Personal characteristics such as the individual flexibility of participants, their willingness to listen, to take risks, and their mutual respect for each other helped achieve effectiveness. Teachers also gave each other frequent constructive feedback. The author stated that relationships cannot be forced and that teachers' respect for one another's ideas and teaching styles was essential. Also important in developing cooperative relationships was a good sense of humor and friendship (Cole, 1992). Another school described by Cole (1992) was a new junior high that began a cooperative teaching program when it opened, with a staff that was receptive to new ideas. The special and general education teachers cooperated in a number of ways. The general teacher came into the study skills and peer tutoring classes to give students some individual help. During regular content classes, special teachers circulated and helped students individually, or took a small group aside to re-teach a lesson or read texts and tests orally. Various other cooperative options showed the teachers' flexibility and willingness to share skills and expertise to make the program work. Benefits and difficulties were described for students and faculty, but no evaluation data was given for this or any other of the programs described by Cole (1992).

How do teachers sharing space, students, and duties begin the process of becoming partners? Gately and Gately (1993) stated that cooperative teaching is a developmental process in which teachers progress from stage to stage. To begin and to maintain any program, communication among all personnel involved helps to ensure that they all have

the same goals and purposes, and it is essential to collaboration (Simpson & Myles, 1990). Gately and Gately (1993) reported that at first, communication is stilted, as teachers begin to develop a relationship. General educators may feel that special teachers are invading their domain, and are intruding in their classrooms, and special teachers may feel uncomfortable and unimportant. The initial communication between these teachers may be more closed, as conversations reflect the uneasy feelings of teachers. General and special education teachers have to talk to each other, with adequate time to nurture a shared commitment and discuss the roles and responsibilities they each feel comfortable in performing (Miller, 1990).

As they begin to work together and develop a relationship, the communication becomes more open and interactive, and teachers feel more comfortable in sharing responsibilities (Gately & Gately, 1993). Problem-solving for students mainstreamed in general classes necessitates good communication and listening skills in both teachers, rapport building, effective questioning, and knowing how to identify, clarify, analyze, and evaluate problems, as these skills form the foundation of the collaborative relationship (Graden, Casey, & Christenson, 1985; Semmel, Abernathy, Butera, & Lesar, 1991). Bauwens and Hourcade (1991) stated that the general and special teachers should sit down together and negotiate the mechanics of procedural matters for the program. These include who will teach what, when, classroom rules and management of behavior, paperwork responsibilities, assignment of grades, and acquisition and utilization of materials. Interviews with cooperating teachers indicated that it was essential to specifically review these procedural issues at the outset of the program in order that miscommunication and frustration do not develop (Bauwens & Hourcade, 1991).

Specific functions of each member of the team must be clearly outlined, and teachers must have the necessary training in order to deal with changes in role function and definition (Bean and Eichelberger,1985). Teachers completing the first year of cooperative

teaching reported that concerns about cooperation were no longer in evidence when teachers were trained in cooperative teaching and had experience with the program with individual guidelines specific to their own programs (Bauwens et al., 1989). Evans (1991) reported the results of an in-service training program in peer collaboration, where teachers had to work together to rethink and clarify classroom problems and then jointly develop interventions to solve the identified problems. Results of the training were that teachers were more tolerant of each other and of students' needs, and more likely to see problems as solvable.

Different individuals have different problem-solving styles and their own particular strengths and weaknesses, and a cooperative relationship must respect each teacher's style, drawing from their strengths (Evans, 1990). Adams and Cessna (1991) also found this to be true in programs they observed. They wrote that teachers must develop a common understanding of roles in order to be effective. In Colorado an emphasis on collaboration due to the national interest in this topic resulted in a push to encourage and sometimes mandate special education teachers to begin collaborative/cooperative programs (Adams & Cessna, 1991). Many special education teachers were unsure of what this meant and of what to do. Without clear guidelines, results in many cases were less than successful. Even when programs were defined as "cooperative," special teachers found that only the general teachers made decisions concerning what and how to teach, and they many times found themselves in the roles of grading papers and handling discipline problems. Even assertive special education teachers who made collaboration a priority found that they seldom worked directly with students, but worked instead as support persons to get students through general classes. Adams and Cessna (1991) identified the weaknesses in this program as the lack of a clear understanding of how and what needed to change, a concentration on one type of service delivery model to the exclusion of all others, and attempts to change individuals without changing the school structures that supported

them. They stressed that it was imperative for all concerned to have a common understanding of program goals and objectives, including a knowledge of how this overlaps and interacts with the overall program goals of the school. Another point was that each person involved in the program must have a clear idea of their own strengths and weaknesses, and of how they themselves could best contribute to the program. No empirical data was given to support these suggestions, although the Colorado program has been in existence for six years.

The Park Hill Program began with general and special teachers agreeing on certain assumptions (Reynaud, et al., 1987). These were that classroom expectations should not change unless a student is totally unable to succeed, that the role of the special teacher is to provide support and resources to enhance student success within the general classroom, and to allow the general teacher to teach content curriculum, with which he/she was more familiar. Part of the Park Hill Program philosophy was that special teachers should be allowed to use their knowledge and skills to keep students with disabilities from reaching the point of failure in the inclusive setting. Likewise, the general teachers, who are knowledgeable concerning the content of the curriculum, should be able to utilize their expertise and skills. It was felt that a partnership should be developed between the general and special teachers to cooperatively assess the needs and cooperatively develop strategies to meet these needs for the students with disabilities (Reynaud et al., 1987). Responsibilities listed for the special teacher included adapting tests and assignments, re-teaching complicated concepts, teaching mnemonic strategies, reading assignments orally, assisting students in note-taking, outlining textbooks, reading tests aloud to students with poor reading skills, and making diagnostic and prescriptive decisions about students' levels of learning. Cooperative responsibilities with the general classroom teacher included giving individual help to students, grading papers and recording grades, sharing ideas, making decisions concerning grades, cooperatively developing worksheets and tests,

giving feedback to each other concerning effective teaching practices, and maintaining contact with parents. Information concerning this project came from an implementation manual, and gave no empirical data concerning success or problems in the Park Hill Program.

Teachers should view themselves as equals in solving instructional and behavioral problems, sharing not only their resources, ideas, and skills, but their responsibilities also. They must decide upon the roles they each will play in implementing and evaluating interventions they have jointly planned. In previous programs where students with mild disabilities were taught in mainstream classes, collaboration between general and special teachers in developing the IEP was limited. Pugach (1982) surveyed 33 general teachers to investigate their involvement in and utilization of the IEP. Results indicated that most often, involvement consisted of suggestions made to the special teacher concerning current levels of student performance, but not on goals that needed to be attained. In addition, 67% reported that no goals were written in the IEPs for the time the students spent in the general classroom. Even though one teacher specifically asked the special teacher to include specific goals and objectives, she stated that she had never seen the IEP and was not sure if her suggestions had been included. Teachers expressed concerns that there was not coordination between the general and special programs. It has been found that there is a strong correlation between the degree to which responsibility for developing and carrying out instructional and behavioral plans is shared by the cooperating teachers, and the extent to which modifications are made in the curriculum once the IEP is made (Ammer, 1984; Margolis & McGettigan, 1988). Based on this, Margolis and McGettigan (1988) stated that general teachers should have more of a role in designing programs for students with disabilities, giving them ample opportunity to help shape decisions with which they can feel comfortable and which they feel will be successful, maximizing their commitment to commonly agreed-upon instructional modifications.

Morrison, Lieber, and Morrison (1986) surveyed 16 general and 13 special teachers concerning attitudes and perceptions of experiences related to the special education process, asking for ratings of episodes on 18 bipolar scales ranging from one to seven. The researchers found that general teachers gave high ratings to pre-identification activities and low ratings to post-identification activities. Special teachers' ratings were opposite these, rating post-identification activities more positively. The authors explained that even though teachers were supposed to collaborate and share responsibilities, each group viewed different activities as more their responsibility. The authors concluded that more true collaboration and sharing of duties is necessary for students with disabilities to be fully integrated in general classes. They found that in meetings, such as IEP planning conferences, where teachers were supposed to interact with other professionals, there was a great deal of anxiety. Teachers felt ill-equipped to cope in these situations where they had to work with each other. It was suggested that this should be a focus of future training.

Zvolensky and Speake (1988) reported on a secondary cooperative teaching program in which special and general teachers worked together to develop a partnership, which combined the best features of both the special and the general programs. Teachers planned daily, a factor reported to be critical to the success of the program. They were able to continually learn instructional skills from each other as well as give feedback to each other. As the class progressed, they were able to jointly monitor students' progress and discuss modifications and alternate materials. Teachers reported a honing of their skills as a result of the program. Other benefits reported were shared responsibilities for instruction, a better awareness and understanding of learning and behavior problems, less duplication of services, fewer referrals, opportunities to serve more students, opportunities for teachers to share ideas, knowledge, and skills, improved communication, and the development of a mutual support system among teachers (Zvolensky & Speake, 1988)

Wiedmeyer and Lehman (1991) described their middle school's collaborative options, which could be carried out in the resource or general classroom. Activities included shared planning, instruction, and evaluation, the possibility of shared curriculum adaptation, shared monitoring of students, and incorporation of general teachers' input into IEP implementation. Evaluative data was limited. At the end of the first year the four participating eighth grade teachers were surveyed and agreed that the program was a viable option to a pull-out program. The study suggested that more experience in using the collaborative process should yield solutions to problems encountered. The authors warned that real teaming is necessary, and that the special teacher should not be seen as an aide to the general teacher. More study of the topic was suggested.

The sharing of responsibility is vital to positive perceptions of the special education program itself, but sharing of duties and responsibilities is not always easy for teachers who have traditionally worked alone (Ammer, 1984). Ammer (1984) found in his study of 37 elementary and 33 middle and senior high school general educators that those who cooperatively planned with special teachers were more likely to make specific accommodations for students with disabilities in their classes. Elementary education teachers were more likely than middle or senior high teachers to make these accommodations, and 78% of the middle and senior high teachers indicated that no cooperative relationship existed between them and the special teacher. When asked for examples of modifications made, 29% of those responding either ignored the question or professed to have no knowledge of special students in their classrooms who needed individualization. The study identified communication and shared responsibility as factors that influenced general educators' attitudes toward integration of special students. These factors also improved their abilities to obtain information needed to design individualized learning activities so that students would be able to master content material. The study recommended increased communication and interaction between teachers, direct

assistance in the general classroom, peer teaching in the middle school to increase the use of strategies to enhance mastery of content material, and a coordinated effort to successfully implement integrated programs.

The expanding roles and responsibilities of a cooperative teaching program may cause uncertainty in teachers. General educators may fear the added responsibilities and challenges of working with more students who have disabilities (Evans, 1990). Many teachers are not flexible and open to change, or wish to have their job descriptions changing and seemingly more demanding. Many are unwilling and unprepared to adapt to a new program (Evans, 1990). Special teachers may fear the loss of status since they are no longer the sole provider of special services. They may be intimidated by a role for which they may feel unprepared, or may feel an ambiguity in their role as a specialist working in another teacher's room. A teacher does not necessarily become collaborative or skilled in consultation, simply by participation in a cooperative teaching program (Braaten et al., 1992; Reynaud et al., 1987). A special or general teacher may have been thrust into this role because of district or school adoption, and may have had no training in working with others. Wiedmeyer and Lehman (1991) warned that real teaming is necessary, and that special teachers should not be seen as an aide in another teacher's classroom. Howell (1991) reported special teachers having this feeling of being an aide in another's classroom in a program he described. He also reported, however, that no time was set aside for cooperative planning, and consultation was optional. Placed involuntarily in a general classroom, special teachers may wish for their own classroom back, with familiar materials at hand and their own autonomy.

Attention to these needs of teachers participating in such programs can help. Reynaud et al. (1987) reported that in-service training is vital to change the way teachers perceive their roles and responsibilities, and that changes in attitudes would not happen without changing teachers' mind-set and preconceived notions. Evans (1990) suggested that

cooperative teaching and collaboration take time and experience to learn. Results of the survey of 381 special and general teachers by Semmel et al. (1991) showed that less than a third of the teachers perceived that the general classroom placement with special education consultation was the best model for educating students with disabilities. The study did not ask the extent of experience with this model, but the authors pointed out that simply shifting service delivery from resource to consultation without the support and cooperation of those involved was counterproductive due to predisposition and attitudes of teachers. Adams and Cessna (1991) reporting the implementation of cooperative programs in several Colorado schools, advised those seeking to implement like programs to start early, even as early as a year, to plan for a program. They also advised a series of planning meetings, scheduled with plenty of non-hurried time in a relaxed and social atmosphere, for participants to discuss all relevant issues. Training and practice in interpersonal problem-solving, team building, and group dynamics were said to be needed. The authors stated that efforts in implementing programs were doomed to failure unless teachers developed a shared understanding, provided for an array of services, and made necessary structural changes in the school.

A very important part of support from the overall structure of the school is support from the building principal, who sets the tone for the school. A cooperative teaching program should be supported or encouraged by the administration of a school and the school's philosophy (Braaten et al., 1992). This support can be in the form of time set aside for training, planning, or discussions. It can mean reduced caseloads or paperwork, or flexible schedules in order to permit teaming (Evans, 1990). Gerber (1991) stated that "Until you get people believing, they won't change" (p. 48). The principal was viewed as someone to raise the awareness levels of the staff, making sure that information and training was provided to them to develop a climate of shared understandings and mutual trust and communication. Three factors were stressed as vital for the administrator to

perform. These were to support the program through advocacy, staffings, resources, and encouragement, to visibly participate in the program personally, and to support the maintenance of the program as an ongoing part of the school. Gerber (1991) also pointed out that an administrator's pressure viewed as overbearing and authoritative did more harm than good. It was stated that to be effective, the administrator needed to be supportive and helpful without being overbearing.

Within a school culture, each individual has a unique role or job function. Most of the time, this means that each one operates independently. Or, as is the case in middle schools where cooperative teaching is not the model, the team operates independently of the resource teacher. In a cooperative program dedicated to providing the best education possible, the roles and responsibilities of teachers who provide services must be clearly defined and coordinated, with each teacher having a clear idea of what their own role and the roles of other teachers will be (Simpson & Myles, 1990). Without this clear role definition for teachers attempting to work together in the same room, conflict and duplication of services can occur.

The issue of evaluation

The final issue to be investigated is classroom evaluation of students in cooperative programs. The ability to evaluate the students has been called one of the most necessary skills a teaming teacher can have because it reflects whether or not instructional goals are being met (Christenson, Ysseldyke, & Thurlow, 1989; Reisberg & Wolf, 1986). How students are assessed in content classes is a critical issue. It is also one of the most difficult components to develop in cooperative programs because evaluation is relative to maintaining course integrity (Gately & Gately, 1993). It is important to have a grading system that accurately reflects students' actual achievements (Braaten et al., 1992). In order to promote the success of students with disabilities in content classes, special teachers must know the demands on those students and how they are expected to

demonstrate mastery (Idol, West, & Lloyd, 1988; Nolet and Tindal, 1993). In developing a program manual for special education administrators, Cole (1992) reviewed the literature and observed eight model programs. She suggested that special and general teachers address the issue of grading and evaluation early in a cooperative program, to ask first how alternative measures are going to be developed, and then how can the success of all students be measured on the basis of performance, rather than on standardized measures.

From the general teacher's perspective, assessment is a consideration of the standards by which to measure learning. Success in their perspective has always been measured by how well students can recall information presented, usually assessed by performance on a written test (Cole, 1992). From the special teacher's perspective, assessment must be considered according to the demands made upon the students (Nolet & Tindal, 1993). Success for them must be determined on an individual basis (Cole, 1992). Students with disabilities should not be assessed only on standardized tests, or in comparison to and in competition with students with whom they should not have to compete academically, but in the material with which they have been working and in ways that fit their individual learning styles (Cole, 1992; Idol et al., 1988). Not necessarily should all students be tested in the same way at the same time (Cole, 1992). Within the cooperative relationship, the students receive their instruction primarily from the content teachers. The special teachers are responsible for supporting the students within this content and helping them to succeed. They need to be familiar with the curriculum as it relates to the general teacher's demands and criteria for success, and know how assessments will be made (Nolet & Tindal, 1993). They will seek to aid in that process by helping to adapt tests to formats that fit the needs of students with disabilities. This may be difficult at first for the general teacher to accept, as adjusting standards and performance expectations may be hard if they have not done it in the past (Gately & Gately, 1993). In addition, general teachers tend to

teach in the way they were trained to view curriculum and factual knowledge, and this perspective influences how they plan to carry out content in their classrooms (Nolet & Tindal, 1993).

General teachers have had many concerns in implementing mainstreaming programs. They may feel defensive about modifying modes or levels of assessment, especially for students whose instruction was individualized or for whom accommodations were made (Howell, 1991). They already are faced with keeping up with new innovations in education and increasing demands for excellence and achievement in end-of-grade or other state tests. In addition, it may be confusing to individualize for students with identified exceptionalities as well as those "at-risk" for other problems. Teachers who received their training in the content areas of their chosen subject may feel a sense of inadequacy in trying to individualize. Large class sizes also complicate the problem, as does the limited scope and flexibility of available materials. General teachers may view alternative assessment methods as too time consuming or contingent on training they have not had. They may feel that these methods are not compatible with the needs of the rest of the students, or are not possible within the confines of the general class, or are imposed on them without their control or major participation in selection (Margolis & McGettigan, 1988). It has been suggested that in considering any intervention or evaluation methods, the time demands on the general teacher, the modification's applicability to the curriculum and effective teaching methods for all students, the complexity of it, and how disruptive it is to the classroom routine must be considered (Christenson et al., 1989; Reisberg & Wolf, 1986). General teachers need to have sufficient opportunity to participate in making the decisions concerning alternative assessment procedures. Their participation helps ensure that decisions are aligned to their perspective of key concepts of the curriculum to be learned (Margolis & McGettigan, 1988).

Chalfant, Pysh, and Moultrie (1979) found in their survey that general teachers perceived that classroom problems were compounded when special students who had been educated in resource rooms, but were still in need of special help, were returned to general classrooms. Teachers expressed a need for help in developing alternative evaluative methods with realistic expectations for special students. In these general classes, consulting help from special teachers was limited by heavy caseloads and conflicting responsibilities, and cooperative teaching programs where the special teacher worked in the classroom with the general teacher did not exist. Implications of the study were that in-service training would not solve the problem, as needs were highly individual. Teachers responded that they learned best by doing, that there was considerable knowledge among teachers themselves, and that they could resolve more problems when working together than by working alone. These implications suggest that a cooperative program of teachers working together to share knowledge and expertise would be beneficial in meeting needs of students.

These factors were found to be important in the collaborative program in the Anwatin Middle School in Minneapolis (Braaten et al.,1992). It was found that the special teacher should not present herself/himself as the "expert" on students' needs, and impose his/her beliefs on the general teacher. Special teachers needed to be flexible and to try to be objective as they worked with the general teacher to solve evaluation problems. But at the end of the first year of the Anwatin Model, it was realized that the general teachers do not always have the welfare of the special students as their primary concern. It was found that special teachers had to be continuously assertive in advocating for these students as they worked in mainstreamed classes. In addition, special teachers were concerned that the general teachers had the control over scope and sequence and pacing of the curriculum, making advocacy for the special students' needs even more of a necessity. Teachers participating in a cooperative program do not necessarily agree concerning evaluative

criteria. This can work for the good when those who disagree with innovations provide helpful suggestions for improving evaluation (Howell, 1991). But it can be bad when disagreements cause stress. General educators may fear that they may be expected to make too many modifications or adaptations in how they have evaluated achievement in the past (Howell, 1991). Even when secondary teachers express that they think modifications are necessary and should be made in evaluative procedures, they may not in actuality make these adjustments if they cause increased time or effort (Zigmond et al., 1985).

The Anwatin Model for cooperative teaching was perceived to be a success in general, after a big expenditure of energy and problem-solving to establish it (Howell, 1991). It was thought that students' needs were being better met and general teachers were becoming more familiar with ways to vary their techniques and develop alternative assessment tools for students. As general teachers become more knowledgeable and familiar with the needs and characteristics of students with disabilities, more modifications are considered and more discussion takes place concerning ways to look at performance (Gately & Gately, 1993). Gately and Gately's (1993) discussion of cooperative teaching called this the "developing phase" of the relationship, as general educators begin to realize that modifications in grading are necessary. The relationship between the general and special teacher must be characterized by open communication. The content teachers need to make clear the specific concepts and principles which they see as critical to success in that class, so that the special teachers may give suggestions as to how that content can be put in a format that can be learned by students with disabilities. Special students learn best through such techniques as modeling, hands-on experiences, projects, and conceptual clues or visual diagrams to aid learning (Nolet & Tindal, 1993).

The next stage is described as collaborative, when a variety of options become the routine (Gately & Gately, 1993). These options include objective and subjective measures.

Some evaluation measures that have been used include lowering expectations and standards for a passing grade, allowing extra time, giving extra credit for additional work, and giving credit for effort (Zigmond et al., 1985). Other assessment methods may include drawing pictures or sketches or responding to oral questioning. Nolet and Tindal (1993) found that both students with and without disabilities tend to retain information better when they regard it as important. They suggested that special teachers use this information and periodically do quick checks throughout the curriculum to have students list terms they think are important. This would act as a check of their attention as well as their acquisition of relevant information. In order to help develop the relationship with the general teacher to a collaborative level, the special teacher can stress accountability of assignments, keeping a record of attendance, homework handed in on time, and completed classroom assignments, sharing information with the general teacher. The special teacher should also make the general teacher aware of the students' IEPs and urge their co-workers to consider these in determining grades (Gately & Gately, 1993).

The attitude of the teachers in a cooperative program sometimes are conducive to collaboration when they begin the relationship. Nowacek (1992) in a case study, examined the experience of two teachers in a cooperative program at the middle school level. Teachers reported that they made a conscious decision personally to cooperate and share expertise when they began their program. They started with the regular seventh grade curriculum and worked together to make decisions based on students' needs, with each teacher making compromises and modifications in the approaches they had previously used. They learned from each other, shared ideas, asked each other for input, and communicated sometimes on the spot to adapt assignments and assessments. They observed each other and gave each other feedback and opinions as to content, pace, and mode of presentation. As the year progressed, they gradually learned from each other and adapted materials and methods.

Teachers working in a cooperative relationship must also work out the question of responsibilities for grading. Many times special teachers simply give input to general teachers concerning grades, with the general teachers having the final decision. Wiedmeyer and Lehman (1991) found that at the end of the first year of a cooperative program at a middle school in Wisconsin, teachers re-negotiated this issue, to make the grading responsibilities more of a collaborative effort. Reynaud et al. (1987), in describing an implementation model called the Park Hill Secondary Learning Disability Project in Missouri, listed the responsibilities for special teachers as being the one to adapt the format of tests, teach mnemonic devices to aid in test preparedness, and to read tests orally to students with poor reading skills. Both special and general teachers had the cooperative responsibilities for grading papers and recording grades, reviewing material before tests, determining grades, and developing tests that accurately reflected the level of comprehension at which instruction was presented. A joint curriculum committee of special and general teachers developed guidelines for test format that included no more than 10 to 15 test items grouped together, matching items always presented with the longer phrase to the left of the page followed by the one word matching item on the right, and a word bank from which to choose for fill-in-the-blank questions to aid students with retrieval and spelling problems (Reynaud et al., 1987). More input such as this concerning successful implementation is needed to guide future programs.

Summary

While implementation of cooperative teaching programs has been explored and described more fully at the elementary level, there have been considerably fewer studies at the middle school level. More research at this level is warranted to determine what teams of special and general teachers are doing to implement cooperative programs, and how they are working out issues of time to meet and plan, roles and responsibilities,

instruction, including instructional procedures, materials, and curriculum, and evaluation of students with disabilities. Studies conducted at the elementary level suggest that these four critical issues will emerge in the middle schools implementing cooperative teaching programs. The organizational structure of the middle schools may affect implementation and collaboration, since it provides a team structure and a regular time to meet, and encouragement to discuss students' developmental and individual needs. The middle school structure would seem to facilitate shared decision-making and shared duties, and provide a time when teachers can share ideas and knowledge, but more information on how this is actually taking place is needed.

CHAPTER 3

RESEARCH PROCEDURES

Introduction

This study was designed to obtain a description of implementation issues of cooperative teaching programs at the middle school level from the perspective of general and special teachers. An initial interview of a key informant in each school obtained a description of existing programs. From these results, a survey with a four-part likert scale was written addressing issues discussed by these teachers, and encompassing issues deemed important from previous research mentioned in the literature. These surveys were sent to 272 teachers in 16 schools in three school systems. Percentages of responses for each of the 4 choices for each question, and total positive and total negative responses for each question were reported. Using crosstabs, results were examined for particular responses for special and general teachers and between teachers at different schools.

An index of satisfaction was developed from a list of 19 questions concerning teachers' perceptions of success for certain areas of the program. For these questions, total positive responses were compared to see differences in programs that were rated in least or most positive terms. Four ot the schools having at least a 50% response rate, having similar populations and location, located geographically near each other, and having differing levels of positive responses on the index of satisfaction were chosen for comparison. These four schools were chosen for team interviews, using a set of 22 questions derived from basic issues on the survey that warranted further elaboration or clarification.

This chapter includes a description of participants in the study, a description of each phase of the study and procedures for gathering data in each, the instruments used in each phase, and the analysis procedure used for each. Research questions were:

(1) How are teachers in 16 middle schools currently implementing cooperative teaching programs?

(2) How do the special and general teachers in these middle schools address the issues of time, instruction, roles and responsibilities, and evaluation?

(3) What are the major differences in programs described in most positive or least positive terms by participants?

Participants

The participants in the study were special and general teachers in middle level schools from three school systems. These schools were identified as using a cooperative teaching team approach. Programs selected were those which had been in existence for at least one year at those schools, and some had been in operation for several years. In Guilford County, seven middle schools had 20 special and approximately 79 general teachers working together in teams in grades six through eight. The schools were Allen, Lincoln, Guilford, Jamestown, McLeansville, Northeast, and Northwest. In Durham Public Schools, five schools were originally a part of the study, but one was omitted from Phase II and III because teachers in that school decided not to participate in a cooperative teaching program any longer, preferring a resource program instead. The others continuing to participate were Chewning, Neal, Githens, and Lowes Grove Middle schools, which had approximately 15 special and approximately 68 general teachers teaming. Participants in Cumberland County included 21 special and approximately 69 general teachers in Hillcrest, Lewis Chapel, Southview, Stedman, and Westover. Overall number of subjects to whom surveys were sent was 272. The special education teachers

who were members of general 6th, 7th, and 8th grade teams at identified schools and the general teachers with whom they work were included in the study. Table 1 illustrates this.

Table 1

Study Participants

School System	School	Number of Special Teachers Teaming	Number of General Teachers Teaming
Guilford County	Allen	3	6
	Guilford	3	29
	Lincoln	3	8
	Jamestown	3	13
	McLeansville	2	8
	Northeast	3	6
	Northwest	3	9
Durham Public Schools	Chewning	4	15
	Lowes Grove	3	23
	Neal	4	14
	Sherwood Githens	4	16
Cumberland County	Hillcrest	3	11
	Lewis Chapel	5	12
	Southview	5	19
	Stedman	5	12
	Westover	3	15
Totals		56	216

Procedures

The research had three phases. In Phase I, conducted in May of 1994, a representative from each school was interviewed to obtain a description of the program at that school. From these results, surveys were developed that addressed the critical issues from the literature and focused on key factors mentioned in information received in Phase I interviews. In Phase II, conducted the following November and December, all special and general teachers in the sample (those teachers at the school who were participating in the cooperative teaming program) received a survey. Surveys were designed to determine how teams in each school addressed these key issues of cooperative teaching.

In Phase III, an index of satisfaction was developed from a list of 19 survey questions asking whether or not teachers felt that certain areas of the cooperative program had gone well or been successful. For these questions, total responses were summed to find percentages, and questions were compared to see differences in programs. Four teams with at least 50% of teachers surveyed responding, and having differing levels of positive responses on the index of satisfaction were chosen for comparison. One had a high level of positive responses, two had medium levels of positive responses, and one had a low rate of positive responses. These four schools were chosen for team interviews, using a new set of 22 questions derived from basic issues on the survey that warranted further elaboration or clarification.

Phase I: Initial Interviews

The Directors of Exceptional Children and/or Directors of Research in Cumberland, Durham, and Guilford counties were contacted by phone and letter to explain the study and request cooperation. Procedures for obtaining research approval in each system were followed. When approval was granted and principals contacted by each director to inform them of the study and urge cooperation, the principals were contacted by this researcher

by phone to request cooperation, information, and the name of an appropriate key informant who would best be able to give a description of the program. These key informants were called, explanations were made as to the purpose, importance, and nature of the study, confidentiality was assured, and appointments were set up for interviews.

The purpose of the interview was to obtain a description of the cooperative teaching program in that school, focusing on the key issues of time to meet and plan, instruction, roles and responsibilities, and evaluation. A jury of educators who were familiar with cooperative teaching programs reviewed the contents of the interview beforehand. They included a general middle school teacher, a former principal of a middle school, a special education teacher with middle school experience, a well-known researcher in the field of special education, and university professionals. They each had the opportunity to make suggestions for modifications, deletions, or additions, and to make suggestions for clarity and appropriateness of the questions. Items were revised until these suggestions were implemented concerning content and wording.

Interviews were semi-structured, with questions and follow-up probes to clarify information given. Questions such as, "How did the idea of cooperative teaching get started in your school?", "What process was used to do scheduling?", "How do you and your partner teacher schedule planning time?" were asked. The researcher attempted to avoid any bias in questioning, tone of voice, or facial expressions that would influence answers. The interviewees were allowed to respond freely, but probes were used to stimulate further explanations if the questions were not answered fully. Initial teacher interview questions are included in Appendix A.

Interview procedure

Interviews took place at the selected schools in the spring. The interviewer explained the purpose of the study again and answered any of the interviewees' questions They were

thanked for their time and cooperation and assured again of confidentiality. The researcher explained that notes would be taken and obtained permission to audio-tape the interviews to assure accuracy and prevent misinterpretation or mistaken memory. Afterward they were thanked and each received a small gift for their trouble.

Interview analysis

During the summer, interview information was transferred onto typed transcripts, with the written notes that were taken used to clarify inaudible spots in the tapes. According to a research method used by Meyers et al., (1991), the researcher and a colleague then each read one-fourth of the transcripts (call them part A and part B) and organized lists of responses to each question. These two researchers then met and compared lists and combined responses into categories where possible. When no new categories developed and agreement was reached for the coding of the material a saturation point was declared. The two colleagues then each took another fourth of the transcripts (call them part C and part D), and independently sorted the information according to the categories previously developed. They then met again and compared results and any inconsistencies to have a common coding of answer categories. Answer categories were very consistent throughout the transcripts and agreement between raters for similarity of grading was easily reached.

Since the interview was structured according to the key issues of time, instruction, roles and responsibilities, and evaluation, the responses also were organized around those topics and the issues that arose from the interviews within those topics. Information derived from this process was used to develop the questionnaire for Phase II of the research.

Phase II: Questionnaire

The survey was based on research methods developed by Jaeger (1984), the objectives of which were to describe and to explain certain characteristics of this specific group of special and general teachers, intended to represent the larger group of special and general teachers participating in cooperative teaching programs elsewhere. Using important information derived from the interviews concerning topics about which teachers were concerned, the questionnaire was carefully developed by the researcher. Its development was supervised by a research consultant. In addition, education colleagues had the opportunity to make suggestions or modifications for clarity. Jaeger (1984) stresses the importance of clarity and precision in formulating and stating questions so that they are understood and interpreted in the same ways by respondents. Items and format were revised as necessary to gain agreement among reviewers concerning content and format.

Questionnaire procedure

The questionnaire format included a cover page with an attractive, eye-catching graphic to gain attention, the title and name of the researcher. Another graphic and "thank-you" to teachers completing it was inside, and another "thank-you" and graphic faced the last page, accompanied by the address to which the completed survey should be mailed. The format also included boxed directions and explanations on the first page, including a definition of cooperative teaching. Key instructions were in bold-face print.

A four-part likert scale of "not at all," "somewhat," "to a good extent," and "definitely yes," was used. Questions were phrased as, "To what extent do teachers in your school.....", "To what extent does your school's cooperative teaching program do this..?". Some questions were to be answered by either special or general teachers, and these were divided into sections labeled, "only special teachers answer questions in this section," or

"only general teachers answer questions in this section." In these cases, instructions were in bold-face print and the words, "special," or "general," were in all capitals to gain attention. In addition, these sections were separated by spacing from the rest of the survey. Question number four concerning how the program got started in their school was open-ended, in case the given choices in the first three questions were not sufficient to answer the question. The questionnaire ended with a set of demographic questions for teachers to answer asking if they were a special or general teacher, and the schools' name and district.

The questionnaire was accompanied by a cover letter explaining the purpose and importance of the study, that it was endorsed by the school system, and telling respondents that the researcher was very interested in their opinions of how the cooperative teaching program was going in their school. Teachers were assured that they would not be asked to give their names. The definition of cooperative teaching was given and instructions were briefly given. They were told that the questionnaire was based on current research and on information gained from interviews with key persons in each school. In an attempt to show collegiality, the researcher mentioned that she was a fellow teacher, and also interested in these topics based upon her teaching. A date by which the surveys should be completed was given, and it was mentioned that a self-addressed, stamped envelope was included for their convenience. The letter ended by thanking teachers for their help and again describing the importance of their input in improving cooperative teaching programs.

Questionnaire Analysis

Information from the surveys was put into a worksheet file in Microsoft Excel in order to be managed and sorted. Each survey was a row and each question a column in the worksheet, allowing each question to be examined for total numbers and percentages

of responses for each choice. Results on particular questions were tabulated. A database was also made and UNCG Computer Center's VAX computer was used with the SPSS Statistical Program to compile frequencies and analyze data with crosstabs. Results were examined to find any trends and/or particular implementation problems and/or things going particularly well with a high percentage of teacher responses. The single open-ended question was content-analyzed to see any particular trends. Demographic data on the surveys included the categories of type of teacher, school, and school system. Numbers of teachers in the special and general categories was totaled and noted. Demographic information was used in the database to run the crosstabs in SPSS. A copy of the Teacher Questionnaire is included in Appendix B.

Phase III: Group Interviews

Group interview procedure

Following analysis of the data from the questionnaire, a general index of satisfaction from the teachers responding was drawn from a list of questions asking teachers about the cooperative teaching program's success. For 19 questions, total responses were summed to find percentages, and questions were compared to see differences in programs that were rated in most or least positive terms. From these comparisons, one school with a high positive response rate was selected, two with medium levels of positive responses, and one with a low rate of positive responses were selected for follow-up interview with the teams. All had a response rate of at least 50%, similar populations and geographic locations of their schools, and the schools were in close proximity to each other. The purpose of the interviews was to validate questionnaire responses with an in-depth look at selected programs. Phone calls were made to principals to request permission and to set up appointments for the group interviews, again answering any concerns and stressing confidentiality. The researcher met with teams and/or groups of special and general

teachers during their team meetings or after school, and got group responses to clarify issues already questioned. With permission of the teachers, interviews were audio-taped to insure accuracy and overcome the problem of interviewer memory lapse or misinterpretation.

Group interview analysis

The interview was semi-structured, with specific questions in mind, but allowing interviewees to respond freely. The 22 questions were derived from responses on the questionnaires warranting further elaboration concerning how teachers perceive specific issues included in the survey concerning their cooperative teaching programs. The interviewer asked questions such as, "Many teachers responded on the survey that they do not feel they have enough special teachers at their schools to make the cooperative program run smoothly. Would you comment on that?" Another question was, "Do you see staff development as a need?" and, " What aspects of the program have been the most successful?" A copy of Team Interview Questions is included in Appendix C.

The 4 taped interviews were transferred onto typed transcripts for coding of the content into categories. The researcher and a colleague each read the transcripts and listed responses to each question. They then met and compared lists and combined responses into common categories for each team. A saturation point was reached when no new categories developed, and agreement was reached for coding of responses. Teacher responses to team interview questions were clear-cut, and agreement to categories of responses was easily reached. Categories were addressed in summary descriptions of team interviews. These responses were compared to initial interview results and to school survey results for similarity and differences of response, and conclusions were drawn based upon these comparisons.

Summary

Using three sources of data, individual interviews with key informants, surveys to special and general teachers participating in cooperative teaching programs, and team interviews with teams at four schools with at least 50% participation, information was gathered on cooperative teaching programs in 16 middle and junior high schools in three school systems. Each successive phase served to validate responses to the previous one, as the instrument used in Phase II was derived from responses to Phase I, and the instrument in Phase III was developed from responses in Phase II.

From typed transcripts of initial interviews, responses were coded and categorized to determine main response categories to each question, and from these categories the survey for Phase II was developed. It was sent to 272 teachers and 47% of them responded. These responses were examined for total numbers of responses and percentages of response from the total were reported, and in some cases graphed or charted. When responses of special and general teachers differed, these were examined separately using crosstabs from SPSS and reported and charted or graphed. An index of satisfaction was developed from a list of 19 questions asking whether or not teachers felt that certain areas of the cooperative program had gone well or been successful. For these questions, total responses were summed to find percentages that were positive, and questions were compared to see differences in programs that were rated in least or most positive terms.

Four schools with at least 50% participation, one with a high positive response rate, two with middle levels of positive response, and one with a low rate of positive response were chosen for team interviews, which took place in Phase III. Typed transcripts of these taped interviews were examined for categories of responses, and results were compared to initial interview and survey responses for similarity and differences. Team interviews gave the researcher a chance to clarify survey responses with probing questions.

CHAPTER 4

RESULTS

Introduction

The purpose of this study was to investigate general and special classroom teachers' perceptions concerning (1) how implementation of cooperative teaching programs in their middle schools had been accomplished, (2) how they addressed the issues of time, instruction, roles and responsibilities, and evaluation, and (3) what the major differences were in programs at different schools. Key teachers at each of 16 schools were interviewed to obtain a description of programs, focusing on the implementation of cooperative programs and these 4 issues. From these results, a questionnaire was developed that addressed issues discussed by these teachers, and encompassed the 4 issues deemed important from the background research. The questionnaire was designed to discover how teachers in cooperative teaching programs perceived the issues.

Finally, an index of satisfaction was developed from 19 questions on the survey, which were thought to measure teachers' perceptions of the program's success, and total responses to these questions were examined for each school. Schools with at least 50% response rates were compared for levels of positive responses, and four with differing levels were chosen for team interviews in Phase III. The purpose of these interviews was to obtain clarification of issues from survey responses. Twenty-two new questions were developed, and interviews were held with teams of special and general teachers at these four schools to discuss these questions.

Information will be reported in order of research questions, including data from the research phases that apply to each question. Question 1, concerning implementation, was

examined in data from Phase I, II, and III, and will be reported phase by phase. Phase I interviews will be summarized first. Information about implementation from phases II and III will be grouped for reporting purposes.

Question 2, concerning the four major issues of time, instruction, roles and responsibilities and evaluation was examined in Phase II teacher questionnaires, and will be reported issue by issue. Question 3, concerning the major differences in programs, will be examined school by school according to results of the team interviews, comparing results to questionnaire responses. Phase III team interviews will be summarized and charted.

Research Question 1- Phase I, II, III - Implementation

An examination of data from all three research phases provided information about the first research question: How are teachers in selected middle schools currently implementing cooperative teaching programs?

Phase I - Initial Interviews

Interviews were conducted in May with key general or special teachers (two general and 15 special), identified by principals of the selected schools, at each of the original 17 selected schools in three school systems, (one in Durham Public Schools was later dropped for the above mentioned reasons). Interviews were held at times scheduled by the teachers, either during planning times or before or after school. Teachers were very responsive, giving thorough descriptions of programs and elaborating on answers to questions. Interview times ranged from 45 minutes for succinct descriptions, to 1 1/2 hours for detailed descriptions or opinions. There were 12 questions with several probes each, receiving a variety of answers. Audio-taped interviews were reproduced into typed transcripts for examination, and notes taken during the interviews were used to clarify

inaudible places on the tapes. Researchers listed categories of answers on graphing paper for each teacher. As transcripts were examined, answers were graphed according to these categories. The research method described in the previous chapter was used to reach interrater agreement on categories of answers. Later, the resulting information was used to form survey questions for the total sample population of teachers at all schools in the study.

In general, issues focused on implementation and selection of participants; lack of sufficient training to feel comfortable; team and teacher cooperation and cohesion, and delineation of roles and responsibilities; dealing with content knowledge by the special teachers and modifications for special students by the general teachers; time to plan together; and delineation of curriculum and instructional methods considering constraints of special students' individual needs, end-of-year testing, state curriculum guidelines, and grading paperwork. Individual questions and the range of responses for each will be described next.

Question #1: "How did the idea of Cooperative Teaching get started at your school?"

Programs were instigated by principals or assistant principals, School-Based Chairs, Exceptional Child Services administrators for the system, and special teachers. Some teachers interviewed did not know how programs were instigated, they were just told to begin doing it. The reasons given for programs' initiations, if they knew, were that initiators had heard about similar programs in the district, state, or nation, had been introduced to the idea at conferences, or had previously been involved in a similar program at another location. Programs were started because they were "the coming thing," they were thought to be the best way to serve students, or because the school principals were urged to begin them by ECS Program Administrators.

Question #2: "What process or procedure was used to do the scheduling for your program?"

Although some teachers were not aware of how the scheduling was done, most responded that they participated in the scheduling, a few in the previous spring, most during the summer, or sometimes in the fall as classes began. Scheduling was done most of the time in these instances by hand, scheduling students into classes for which they qualified for special service, into those teams that had been chosen to be cooperative. In some instances, the teachers' willingness was considered. At other times, students were scheduled by normal school-wide procedures and had to be re-scheduled when school started. Balancing classes may have been a consideration of an administrator, but was rarely considered in the opinion of those interviewed. At one or two schools, a teacher's training was considered. When asked if they would make any changes in this process, responses were scattered. Suggestions included to schedule earlier, preferably in the spring; to institute a more flexible scheduling procedure to meet students' needs and teachers' schedules; to balance classes according to percentages of special students better; to hire more special teachers; and to match teachers in the beginning who would work together better.

Question #3: "What pre-implementation training did you and your co-teachers have?"

Teachers interviewed had either not had any training in cooperative teaching (35%), or training had been limited to visits to other schools, a one-time speaker in their school, or previous experience in a similar program. The majority of teachers in Cumberland County had participated in local workshops in the summer sponsored by the Office of Exceptional Children for the system. Most of the teachers said that they felt that the training they had taken been useful, especially for the general teachers participating. It had served, according to the teachers interviewed, to alleviate the fears or anxieties of the

general teachers, and had helped special and general teachers taking the workshops together to approach the program with similar information and therefore work together better as a team.

When probed to see if there were any other skills they still felt they needed to be more successful in the cooperative teaching program, two areas were mentioned most often. When interviewed 6 of the 15 special teachers mentioned knowledge of content subjects, and 9 of the 17 teachers interviewed mentioned skills in cooperation and how to develop rapport with others. Other skills mentioned included flexibility, how to plan with and coordinate activities with others, how to share space with others, communication skills, willingness to apologize, to see both sides of an issue and to accept others' opinions. One teacher suggested "diplomacy".

Another probe asked if there were skills they felt they needed to better meet the needs of the students, and answers included knowledge of more modifications and strategies to help students in general classes, how to have consistent expectations, how to work with a larger group of students, acceptance, and organization skills. From a general teacher came the wish to be better able to recognize weaknesses, how to have more patience, and how to re-state information on a lower level.

When probed to see if they had learned any particular skills while in this program, special teachers especially mentioned ideas for teaching content subjects, and said they had gained a lot from being teamed with a general teacher. Along with this was a frequently mentioned skill of how to work with nondisabled students, a knowledge of how students with disabilities fared in general classes and an empathy for general teachers. Approximately half of the teachers also mentioned skills gained in working with others and communicating.

Question # 4: "Would you explain what it is like working with another teacher in the room?"

Teachers had to be probed in several ways to answer this question. The first probe asked if it had turned out they way they expected it to. Approximately half of the teachers responded that it had turned out better than they had expected. Another said there were "bumps" at first, but the students with disabilities were very happy and the other students accepted her. Two other teachers said that the program had cut down on referrals to exceptional services.

When probed to see if they felt the program had been successful, 65% of those interviewed said it had. One other said it had been a negative arrangement and needed much improvement. Two others said it had been successful in some ways and also had included some problems. Other areas mentioned were that general teachers were supportive and had a better understanding of special teachers' jobs, that it was rewarding, that it was "great" for slower students who didn't qualify for exceptional services, and that it was "great" for students with disabilities. Several said that it had been good for discipline purposes, especially to have two persons in the room.

When asked what needed to be done to make it a true partnership, 65% of those teachers interviewed mentioned more co-planning and co-teaching. Other areas mentioned were more willingness to change, shared vision or goals of what the program should be, the special teacher being viewed as a "teacher", more personnel, no teacher "trying to spy" on the other or "evaluate" others, and teachers willing to team.

Another probe used was to ask if the unique skills of each teacher were used, and 53% of those interviewed said definitely yes. One teacher said that she really felt like a part of a team, where advice and expertise was shared. Qualifying aspects of this positive answer to the probe, mentioned by some, were when the regular teachers felt comfortable, or when they had the opportunity to do co-planning. Others mentioned that sometimes

they felt like an assistant and they felt that their skills were wasted. Another said that she felt she was able to use her skills now, but that it took a "growing period" in the program for that to happen.

When probed to se if they could mention any particular ways they had changed since they began, teachers responded in scattered areas. Ways include the fact that they had become better at handling classroom management for large groups, were more confident in their ability to help all students, were frustrated, had changed their teaching style after having been exposed to other ways of teaching, were more assertive, or understood learning disabilities better. Most of the teachers (60%) reported that before they began the program they were willing to try it and were optimistic. Others said that they were intimidated by a more experienced teacher or not sure of how it would work. One said that she didn't want the general teacher to think that she was trying to take over her classroom or spy on her.

The probe asking if they ever had differences of opinion with their cooperating teachers brought a 53% response of yes. Differences revolved around treatment of students with learning disabilities and how to teach, for the most part. Behavior management was also mentioned, as was the fact that one teacher felt she was treated like an assistant. The majority of those interviewed (60%), said that these differences were resolved by talking it out one-on-one to seek a compromise. Others talked out differences in team meetings (35%). One or two other teachers said that they kept quiet concerning differences or ignored the problem, especially if it would help their students.

When asked what had gone well in their program, there were many ideas from each teacher. Approximately half of the teachers felt that the biggest benefit was that to the students from having two teachers in the room at the same time, to benefit from the expertise of both. At the same time they expressed this as a benefit to themselves. Having two teachers in the room allowed them to have someone "to bounce ideas off" and

someone to whom they could turn to for help when a student was having problems. Several also mentioned the benefit of having general teachers understand students with disabilities better and of being accepted as a "teacher" by those in the school. Seeing the students succeed in general classes and seeing their self-esteem raised was mentioned by several teachers.

When asked what had not gone well, 41% of those interviewed said that not having time to plan with general teachers was a problem. Other responses were scattered and varied. They included, no time to do paperwork, general teachers saying they were willing but not changing, general teachers having trouble with modifications, general teachers' expectations, teachers not willing to collaborate, the special teacher being treated as an assistant or taking a lesser role in teaching, too many students with disabilities on one team, and no time to plan and do ECS paperwork. To change, or improve programs, teachers suggested more training, with special and general teachers attending sessions together, more co-planning time, more ECS teachers, secretarial help with paperwork, intervention by a consultant or administrator, or limiting the cooperative teaching to just language arts and math.

Question # 5: "How do you and your companion teacher schedule planning time?"

Approximately half of the teachers interviewed said that they met daily with their team. Others met informally whenever they could catch a few minutes, after school or on the phone at night, for five minutes after class, or made long-range plans on teacher work days. Some teachers had daily team planning as well as individual planning times each day. One teacher said that "administrative" responsibilities and ECS paperwork interfered with time to plan, that general teachers were not willing to plan and she was often on her own. Others assigned to more than one team, skipped classes with one team at times, to plan with teachers on another team. Although 60% of those interviewed said they felt this

planning when it was done was productive, many of these felt it was not enough. Some teachers said that team planning was not always the best time to plan for instruction because team administrative duties interfered, such as behavior or social problems of students, decisions on good citizens, field trip plans, etc.. These teachers said that their individual planning period was the time when they could meet with the individual teachers with whom they co-taught in order to plan. Not all teachers had the benefit of two planning periods.

Question # 6: "When do you find time to complete special education paperwork?"

Some teachers had already answered this, but 11 more teachers responded that this was done during their individual planning periods. One answered that she did this at home or during team planning if she felt that matters discussed during team planning did not concern her. Two responded that they sometimes had to do it in class when they were not needed, six teachers answered that they did theirs after school, and another answered that she did it whenever she could. Another teacher does paperwork during Enrichment, a special period in some middle schools, and another does it on teacher work days.

If they could make changes in this, the biggest suggestion (60%), was to have more scheduled time to complete paperwork. Other suggestions included to have clerical help, a more flexible schedule, more staff, better public relations so general teachers would understand the need to do paperwork, less paperwork, and two planning periods (for teachers with only one presently).

Question # 7: "Would you tell me about your curriculum, as it pertains to students with disabilities in your class?"

A majority of the teachers (76%) immediately responded that they were bound by the North Carolina Standard Course of Study in planning their curriculum. The only changes

are in modifications to this. Some of these changes included more hands-on materials and activities, a slower pace in some classes, reduced assignments, more review, teacher flexibility, material taught in chunks, not as much depth in topics, the addition of extra and/or different activities, material was read orally to students, or expectations were lower. Problems included the difficulty some students had with critical thinking, and the fact that sometimes classes did not cover as much of the curriculum as teachers had planned. Most teachers interviewed did not suggest any changes, saying that it pretty much had worked out as planned. A few changes suggested included more modifications, more input from the special teacher, more supplemental and hands-on materials and more practical emphasis.

When asked if the curriculum had proven effective for all students, those with and without disabilities, 59% said yes, that there was no problem. One teacher said that some students without disabilities were held back in a math class that was conducted at a slower pace, and that some academically gifted students were bored. another said that the non disabled students do not notice the difference and don't resent exceptional students. another teacher said that the stronger students are used as peer tutors, and that the general teacher challenges all of the students. She also mentioned that at times reading orally slows some students down and that sometimes more repetition is needed for some students than for others.

When asked if Individual Education Plans have been incorporated into the curriculum, 94% said yes, they had, but that this was more that the IEPs were written to coordinate with the curriculum. They mentioned that modification are made to suit individual needs. Teachers responded, when probed about general teachers' participation in developing and implementing IEPs, that general teachers did help develop these (59% said yes). In one school, the special teacher said that she did not ask for general teacher participation and that they did not know IEP goals and objectives. This teacher described how she sat down

with general teachers and explained strengths and weaknesses of individual students, but teachers gave her very little input. While one teacher said that she got oral and written input from general teachers, most said that they considered it their job but that they did make general teachers aware of IEP objectives.

Question # 8: "Would you tell me about your instructional materials as pertains to integrating students with disabilities?"

Teachers had many things to say about materials. Although 76% are using standard textbooks, most are making modifications in worksheet format and tests, have individual expectations, including shorter assignments, and are using hands-on materials and a variety of classroom activities. In some instances, students are allowed to write basic answers to complex questions, have the added help of "word banks" from which to choose for fill-in-the-blanks, can dictate answers to the teacher instead of writing them, have the benefit of study guides, or have alternate assignments. In some cases students are allowed to re-take tests. Many teachers (41%) said that students with and without disabilities are allowed to have modifications

When asked if any changes need to be made in materials, teachers again enumerated a variety of suggestions. These included more hands-on materials (47%), highlighted copies of books, lower level reading and math books, more variety in materials to make things more interesting (59%), more student input, more writing activities, more life-centered materials, more novels with individual copies per student, more videos, and more audio-taped books.

Question # 9: "What kinds of grading or evaluation methods are used?"

Many suggestions were given by interviewed teachers. Although 65% of the teachers said that both teachers openly discuss grading and evaluation, with special teachers giving

input, 53% said that most of the time regular teachers do report cards. Many interviewed (41%) said that they as special teachers volunteer to grade papers, including daily grades and notebooks, and record grades in the grade books regularly, especially if the grade is for something they taught. Of those interviewed, 35% responded that all students are allowed flexibility in grading, including the option to re-do tests, and that effort was considered in giving grades.

Question # 10: " Would you describe the types of instructional procedures your team uses?"

For this question, teachers were read descriptions of five types of instructional procedures and asked if they used each type and to what degree they were used. For team-teaching, with both teachers sharing responsibilities for presentation of the instructional lesson, perhaps alternating presentation of parts of the lesson or each taking responsibility for presenting material, leading a discussion, or demonstrating concepts or strategies, 58% of those interviewed said they used this method for at least one or two classes. More teachers (76%) said that lead-support teaching was more likely to be used. In lead-support teaching, both teachers are in the room, but one teacher leads to present the lesson and the other supports by helping students as they participate and respond to lesson requirements.

Teachers (70%) said that they used alternative teaching a few times. In this method, one teacher works with a small group of students to pre-teach, re-teach, supplement, or enrich while the other teacher instructs the rest of the group. This was mainly used to re-test students or teach a particular strategy to a small group who needed it. Learning station teaching, when teachers divide the content to be learned, and each takes responsibility for separate parts, was only said to be used by 23% of the teachers some of the time. Parallel teaching, when teachers simultaneously teach the same material to two

separate groups of students, mostly when abilities of students vary widely requiring significant adaptations or alternate curriculum, was used at one time or another by 29% of the teachers. Most of the time this method is not used, because in many of the schools in the study, students who vary significantly in ability are in separate resource settings, and not in the cooperative teaching setting.

When asked what changes were needed in instructional procedures, 41% of the teachers responded that more team-teaching was needed. Along with this was the wish for more co-planning, whatever the method. More flexibility was desired, including a full continuum of services in schools where this was not an option, a desire to try various instructional models, a more active role for special teachers, more use of the computer lab, and more use of parallel teaching with two groups for skill development.

Teachers were probed to find out what skills they thought were needed to strengthen instruction, and teachers reiterated suggestions previously given, with a variety of suggestions. Suggestions included knowledge of strategies, a background in content subjects, ability to motivate all students, accommodation to individual needs, flexibility, the ability to relate subjects to real life, and more pull-out for those who needed it.

Question # 11: " Do you have a system for solving problems concerning procedural issues or student problems?"

This question was designed to see if a formal, team decision-making procedure was used. Many teachers (41%) reported that no formal system was used, but the teams made decisions as needed. Several teachers said that teachers decide on the spot how to handle student problems, many times using the school discipline procedure. One teacher mentioned that if she sees a problem she thinks about it first, then talks to the regular teacher about it. Another said that it was the job of the Case Manager in her school to handle problems.

When asked what kinds of decisions are made with input from both special and general teachers, teachers responded that a variety of decisions are jointly made. These include discipline (35%), grades, awards, seating, modifications, referrals, social problems of students, testing decisions, and instructional decisions concerning what and how to teach (29%).

Question # 12: "Would you describe a typical procedure for handling misbehavior?"

Teachers interviewed (41%) said that either teacher, whoever is not teaching or is closest to the student usually handles discipline. A few special teachers said that they usually take the initiative and may take the student out of the room. In most cases class and/or school rules are posted, and the special teachers said that they follow these. Changes these teachers would make would be more consistency in discipline matters school-wide. Other suggestions include getting general teachers to relax and not "over-react", respect for other teachers' views, and more administrative support.

Phase II - Questionnaire Surveys and Phase III - Team Interviews

Taped interviews were converted into typed transcripts, and part of them were examined separately for categories of responses by two researchers, who later met and developed a common code. They then each examined the rest of the transcripts according to this code, and the results were used to develop the survey for Phase II. In addition to original issues of time, instruction, roles and responsibilities, and evaluation, teachers discussed implementation concerns such as scheduling and selection of participants and lack of training and preparation.

Questionnaires were mailed or hand delivered to each school October 27 in packets containing enough surveys for all special and general teachers doing cooperative teaching in that school. Attached to surveys were covers thanking teachers for their help and listing

November 10 as the date by which surveys were to be completed, cover letters explaining the study and assuring confidentiality, and self-addressed, stamped envelopes for mailing back to the researcher.

By the date surveys were due to be returned, November 10, 61 surveys, or 22% had been returned. A personal follow-up letter was sent on November 9 to contact teachers who had been interviewed in Phase I, or to School-Based Chairpersons for exceptional children in each school. The letters thanked them for their help in distributing the surveys and asked that they post an enclosed notice to teachers on a prominent bulletin board to encourage more responses. The notices were formatted with a cute graphic of a bookworm at the top, spacing to delineate important points, and a statement saying, "Your input is needed," with "your" in all capitals. Another reminder to mail completed surveys as soon as possible was at the bottom of the notice, in bold letters.

By November 21 response rate was at approximately 30%, or 83 surveys. At this time, a second follow-up letter was sent to each school, with another notice to post for teachers to see. This notice was accompanied by a hand-written note to contact teachers/SBC Chairpersons, listing the particular number of surveys that had been received from that school so far out of the total number sent, and entreating these contact teachers to help encourage more responses. The notice sent at this time had "HELP!" in bold letters across the front, and asked teachers to, "please, please, please" send in the surveys, that their input was needed to find out what is and is not working in cooperative teaching programs. In addition, follow-up calls were made on November 21 to each school, to the contact teachers or in some cases a principal or assistant principal if the contact teacher was not available to come to the phone.

By early December response rate was at 38%, or 105 surveys, and a second and final call was made to each school. This time this researcher talked to a principal if possible, and if not then an assistant principal, describing attempts to elicit responses and asking for

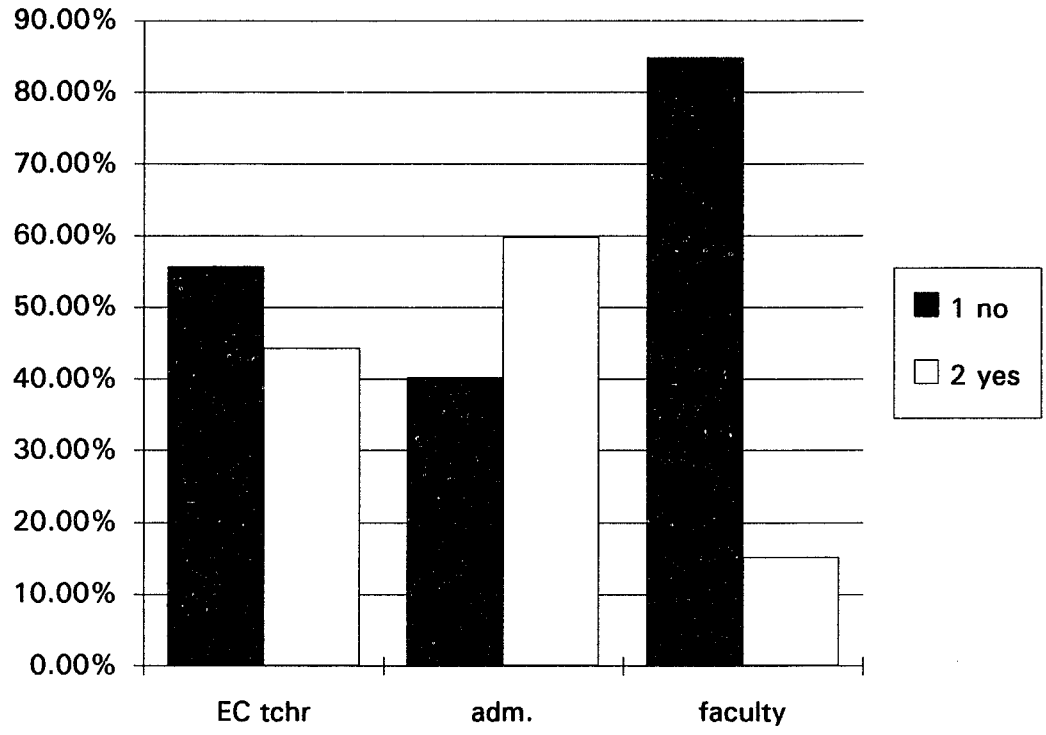
their help in encouraging teachers. For two of the sample schools, notes on the returned surveys indicated that teachers at these two schools had not received the surveys until December, despite the fact that contact teachers had earlier confirmed that surveys had arrived. Final response rate was 47%, or 128 surveys returned out of 272 sent.

For each question, total responses were summed according to negative (not at all, somewhat) or positive responses (to a good extent, and definitely yes). Responses will be reported according to these totals. Crosstabs using SPSS separated special from general on each question, but special and general teachers' separate responses will only be given for those questions where responses differ.

Cooperative programs began because of differing reasons in schools. The first four questions were designed to find out how these programs were initiated. Choices were as follows: (1) an exceptional child services teacher, (2) an administrator, or (3) the faculty in general. Question (4) gave teachers a space to write in any other ways programs might have begun. It was thought that teachers would select one or the other of these choices, to which they were to answer, "yes," or "no", but some teachers gave affirmative responses to more than one question. In addition, responses from the same school sometimes differed, making it difficult to pinpoint at each school how programs were initiated.

The survey showed that 60% of respondents indicated that the cooperative teaching programs in their schools began with an administrator who suggested teachers explore the idea, 44% responded that the suggestion came from a special teacher who was interested, and 15% more responded that the faculty in general initiated it. Principals sometimes heard about the program at conferences or knew of such a program, and informed teachers that this program would begin, and changed their schedules to include students with disabilities into their classes. This information is represented in Figure 1.

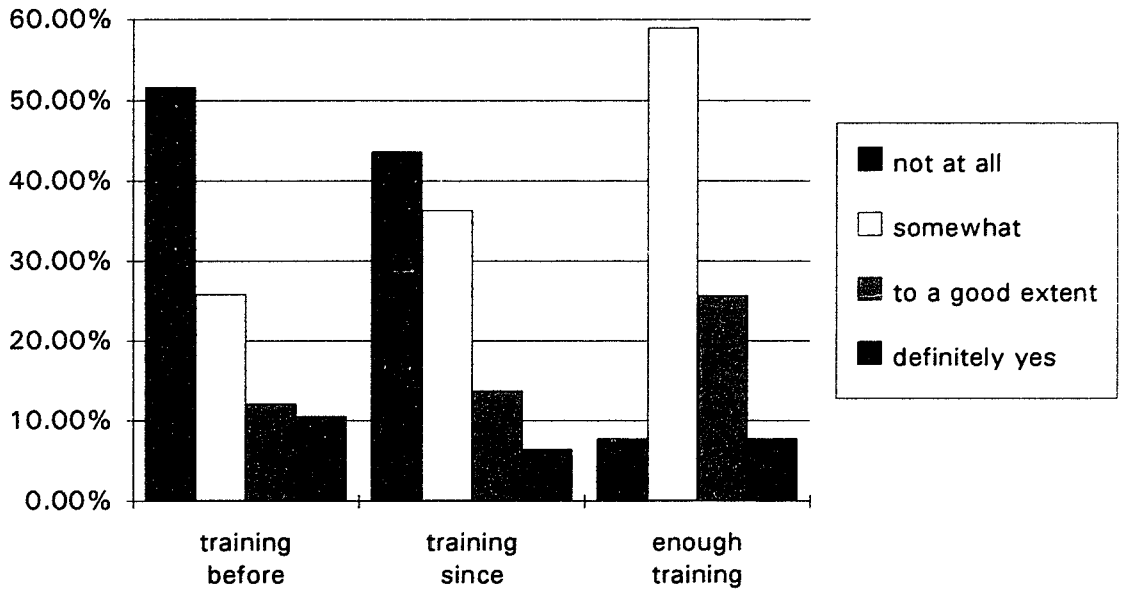
Figure 1



Programs Initiated By:

Results showed that 77% of respondents had little or no training before implementation, and 45% were only somewhat familiar with what cooperative teaching meant. More of the special teachers (48.5%) had some training or knew of the program before beginning. One school system had been providing in-service training for several years and encouraged special and general teachers who would team together to attend sessions together. On the survey, 67% of the teachers who had received training said that it was not sufficient or only somewhat sufficient. Extent of training is graphically illustrated in Figure 2.

Figure 2

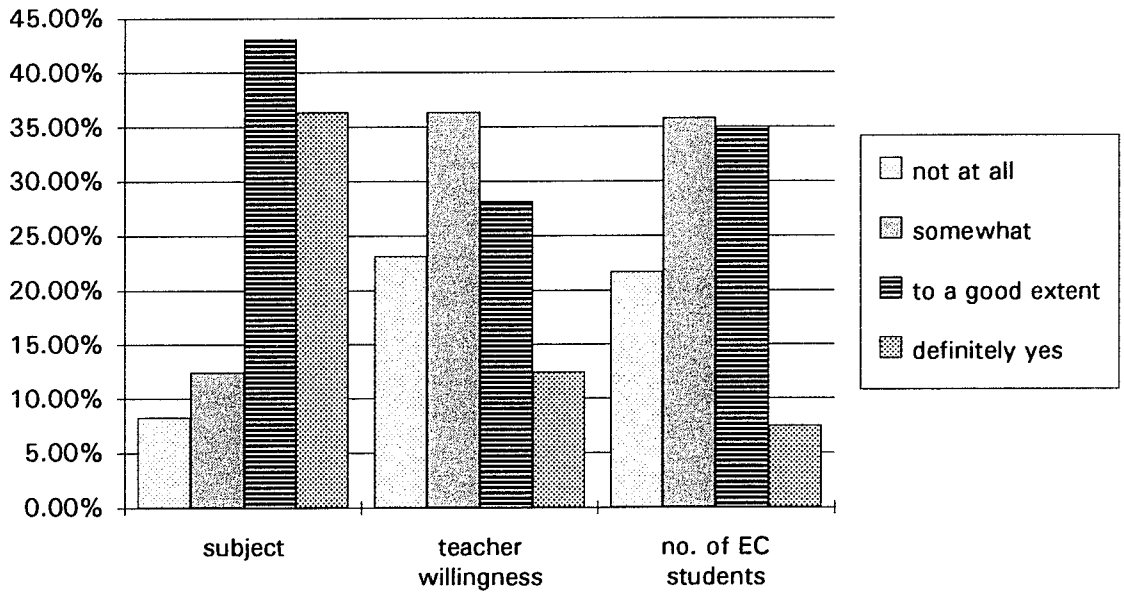


Extent of Training

Despite their lack of training, 67% of survey respondents said that they were willing to work with another teacher in the room, although willingness of teachers to participate as a consideration for scheduling received only a 40% positive response. The main consideration for scheduling special students was by the subject in which the student qualified for exceptional services, with a 79% response rate. Many times this was math and/or language arts. Response was 53% who said they were not happy with the scheduling of students into classes. It was a difficult procedure, according to those initially interviewed, sometimes requiring teachers to go in to the schools during the summer and hand-schedule students with disabilities, rather than letting them be randomly scheduled by the computer system. Scheduling considerations are represented in Figure 3.

The balancing of students with and without disabilities in classes when scheduling them was a problem. On the survey, 76% of those teachers responding said that class size had not gone well, and 64% said that the mixture of students with and without disabilities had not gone well. Some schools did not provide any resource classes at all. In interviews, general teachers expressed their frustration with trying to meet the wide variance in skill level in their classes. Other teachers indicated that their schools tried to discontinue resource services and realized that there were students who needed to be pulled out for resource help for one or two subjects. Often, special teachers had to divide their time between a resource room and helping students within a team of general classes for several periods per day. On the survey, 59% of those responding were not happy with the special teachers' schedules, and 71% said that they did not have enough special teachers to make the program run smoothly. At all four of the schools interviewed in Phase III, teachers commented that one of the things that would improve their program the most would be an extra teacher. This would give one special teacher the responsibility of the resource room and allow others to cooperatively plan and teach with the general teachers.

Figure 3

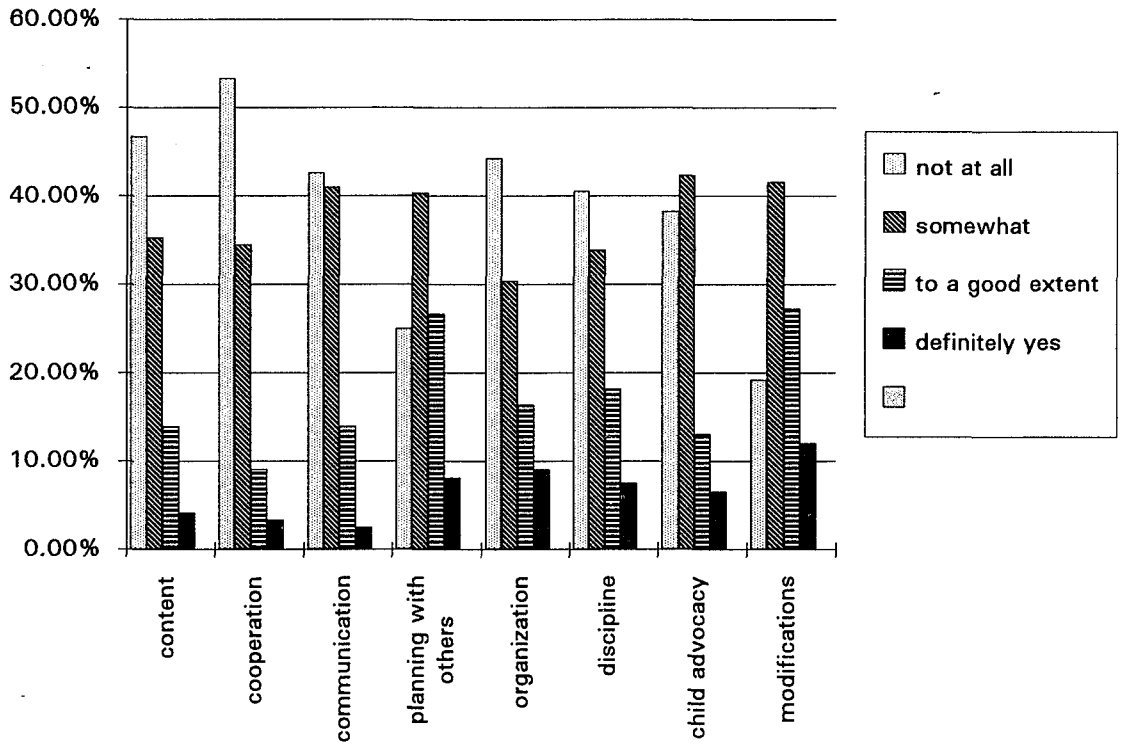


Considerations In Scheduling

Since training had been so limited for many teachers, this topic was explored to see if teachers felt they needed more training. It was thought that special teachers would request training in the content subjects, since they were having to work in math, science, and social studies for which they were not trained. But on the survey, only 44% of the special teachers responding expressed a need to have this training. It was thought that general teachers would ask for training in modifications, but only 42% of the general teachers responding saw this as a training need, although this area had the highest percentage of positive responses. When teachers were asked in a team interview if they would like training in modifications, the response was minimal. The special teacher at one school explained that these teachers were already using many types of modifications to help students. The need for staff development in the area of modifications received a 60% positive response from all teachers later in the survey, when instructional changes were investigated.

The training need with the next highest percentage of positive responses was 35% for planning with others. Teachers in the team interviews expressed a desire to have training in how to set up a cooperative teaching program, and how to plan with two teachers in the room. They wanted to see teachers who had been successfully teaming to tell them how they worked out their program, giving them practical suggestions instead of theory. Negative responses were stronger than positive ones in each of the areas listed as possible training needs. This information is represented graphically in Figure 4.

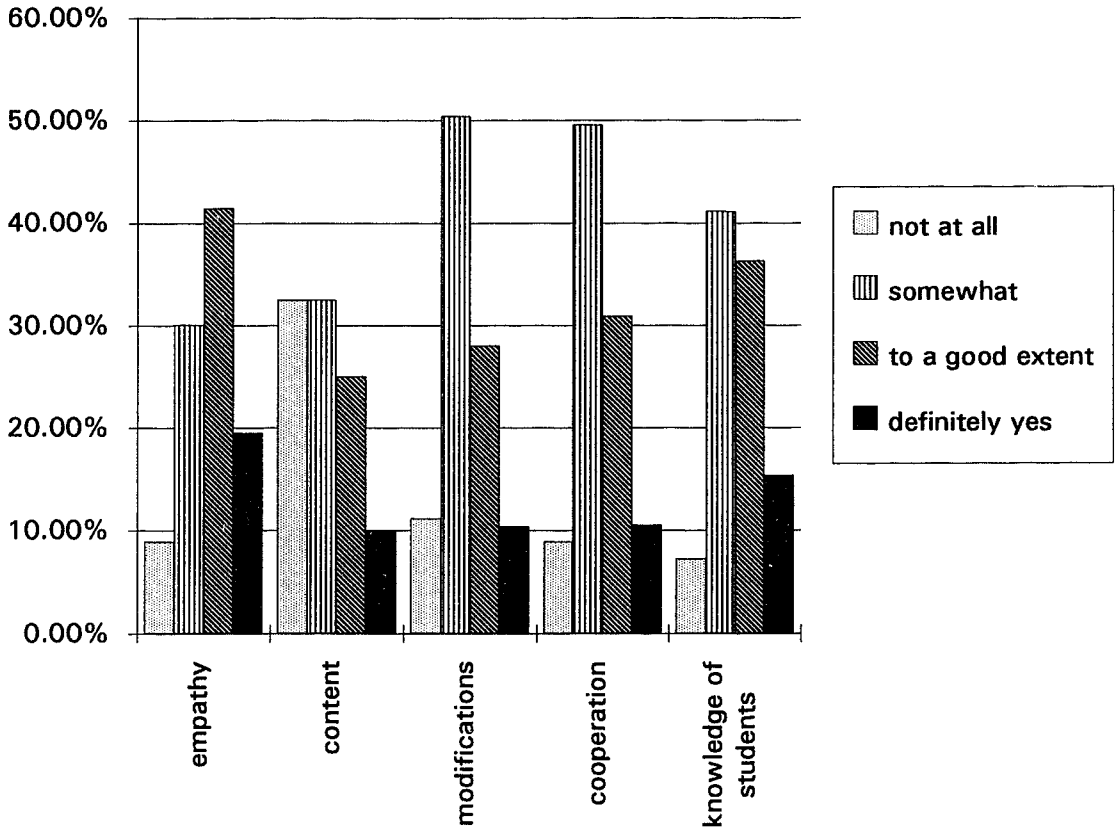
Figure 4



Teachers' Perceptions of Training Needs

Empathy for the special/ general teacher had the highest percentage of positive responses (61%) from special and general teachers for skills gained through working in the cooperative program. Special teachers had higher percentages of positive responses to most questions. They gave 70% positive responses concerning skills gained in content subjects, 70% positive responses concerning knowledge of the students with/without disabilities, and a 55% total positive response in the area of modifications to meet individual needs. General teachers only responded 38% positively when asked if they had gained skills in modifications to meet individual needs, and 44% positively concerning knowledge of students with and without disabilities. This information is represented graphically in Figure 5.

Figure 5



Areas In Which Teachers Feel They Have Gained Skills

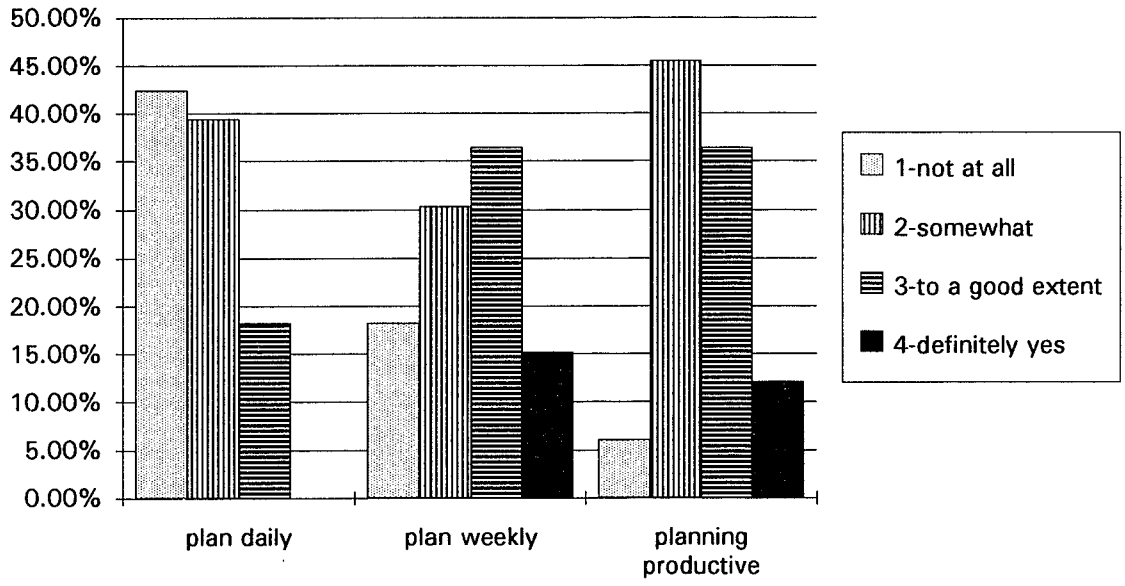
Research Question 2- Phase II- Four Issues

Results from teachers' responses to the questionnaires were used to answer research question 2, How do the special and general education teachers in these middle schools address the issues of time, instruction, roles and responsibilities, and evaluation?

Time

Time to meet and plan is not necessarily scheduled for general and special teachers, and is more likely to occur weekly than daily. On the survey, 18% of special teachers responded that they planned daily, to a good extent. No special teachers responded definitely yes to the question of daily planning. In team interviews, only two of the teams responded that they were able to meet daily. Special teachers on the survey gave a 51% positive response to weekly planning. Special teachers' perceptions of planning time can be seen graphically represented in Figure 6. General teachers gave 10% positive responses to the question of daily planning, and 29% responded positively to weekly planning. Many teachers responded that they had to meet informally whenever they could catch a few minutes. This may have been for five minutes after class where they hurriedly discussed the next day's plan, after school, or on the phone at night. Some said they only got to plan on a long-range basis on teacher work days, perhaps monthly.

Figure 6



Special Teachers' Perceptions of Planning

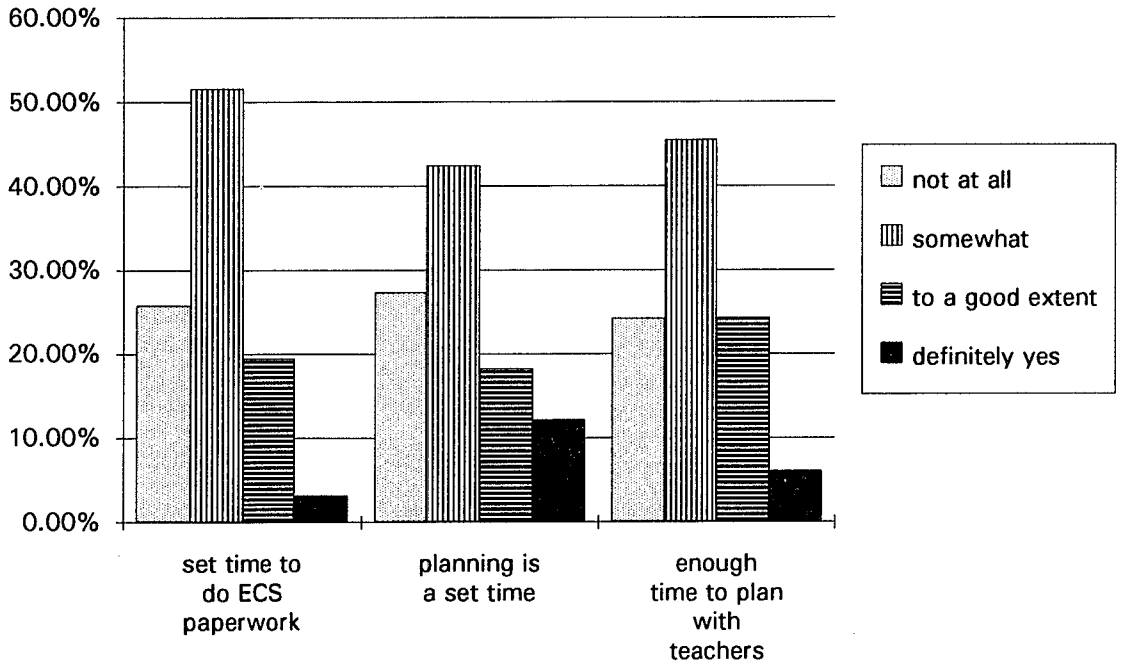
Most teachers (75%) responded that they did not have enough time to complete paperwork. Special teachers often had to fit testing and paperwork into planning periods, due to the fact that not all had an individual planning period in addition to the team planning. Other teachers assigned to more than one team had to skip classes with one team at times, in order to plan with teachers on another team. In initial interviews about 60% said that planning time was productive, but that it was not sufficient. Enough time to plan received a 30% positive response from special teachers on the survey, but only 45% of special teachers said that this had been somewhat productive. Most answered that it was not a set, scheduled time. Only 13% of general teachers felt that they had enough time to plan with special teachers. Despite the fact that they had so little time to plan together, 34% of the general teachers said this time was productive to a good extent, and 7% said it definitely was, for a total positive response of 41%.

During team interviews, teachers described typical planning sessions at one school that had three teams working cooperatively. At the interview, general teachers from all three teams and special teachers from two of the teams gave input. One team reported that they met when they could, perhaps monthly, to plan by units of study. At that time the general teacher told what was coming up in the curriculum and teachers said what they would feel comfortable teaching, dividing the instruction accordingly. Another team in that school had very informal planning, and the special and general teacher had no common planning. The special teacher came into the classroom and supported the instruction planned by the general teacher, who felt strongly that it was her responsibility. When asked about this more directly, the special teacher on this team said she has testing and resource responsibilities also, and does not have time, anyway, to plan with that teacher. She seemed satisfied with this relationship. The third team in that school planned daily, usually after school or as they taught. They were doing more teaming in every respect, and interacted as partners.

At other schools, teams who had been planning together daily all year described their planning similarly. At one school, the team was still lead-support, with general teachers who informed the special teacher of upcoming curriculum and lessons so that she could prepare to help. At the other school, the team completely planned together daily, and *as a team* decided where they were headed for that day and that week.

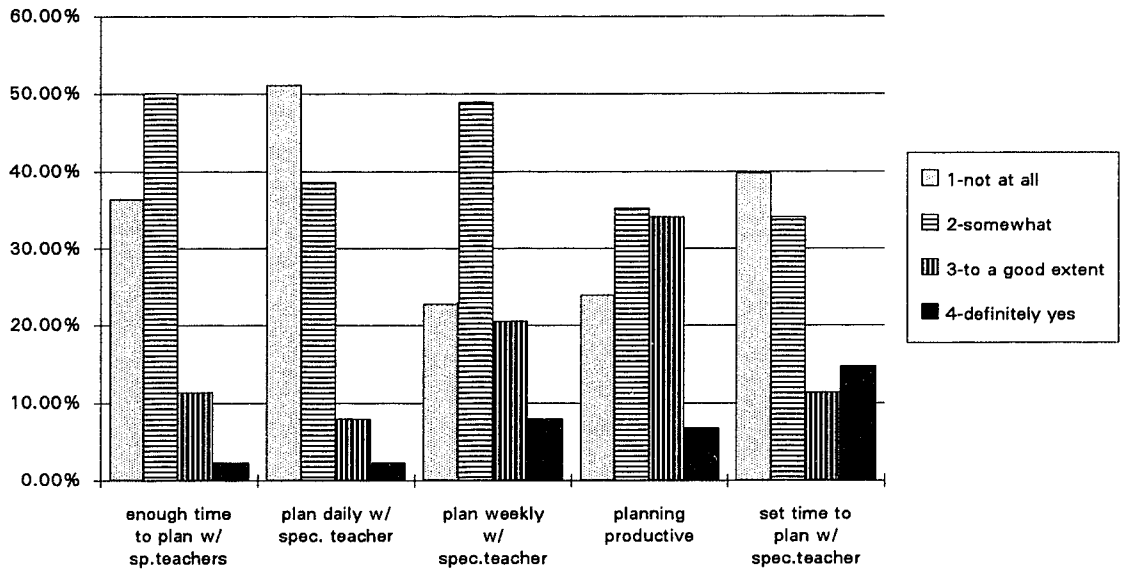
At another school, the team interviewed reported they had not been able to plan together this year because of added responsibilities of the special teacher (dealing with three students who had been in a self-contained class). Typically, what had been the case was the special teacher asked what was coming up, and the general teachers told her what they had planned. This would give her the opportunity to prepare any special materials or modify any tests, or to look over anything before class started. Before a test was scheduled, they gave her a list of the times they needed her to give tests orally, and she adjusted her schedule to allow her the time to do it. They were assigned a new teacher to take over some of these responsibilities, and would be able to do more common planning. Whatever teachers' schedules, planning time at all schools was limited, and only somewhat productive because of many other factors. The results of special teachers' perceptions of time issues can be seen graphically in Figure 7, and for general teachers in Figure 8.

Figure 7



Special Teachers' Issues of Time

Figure 8



General Teachers' Issues of Time

Instruction:

Instructional Procedures:

Lead-support teaching is more prevalent, but 65% of teachers would like to do more team teaching if they had the time to plan. During the team interviews, teachers described a mixture of team teaching and lead-support within the same team, depending upon the personality of the teacher, personal relationships between special and general teachers, and the content of the curriculum. Some special teachers confided that they felt unsure of presenting content at that level because of not having a background in the subject, and were happy to provide a supporting role to a general teacher. Others with experience in certain content areas felt comfortable sharing instruction. Teachers on the survey responded with only a 23% positive response when asked if they used team teaching, with both teachers taking part in the planning. Teachers were more likely to team teach in language arts classes because of an easier familiarity with the content. Some special teachers confided that they felt unsure of their abilities to teach social studies, math, or science, although some teachers felt more comfortable with these content classes than did others.

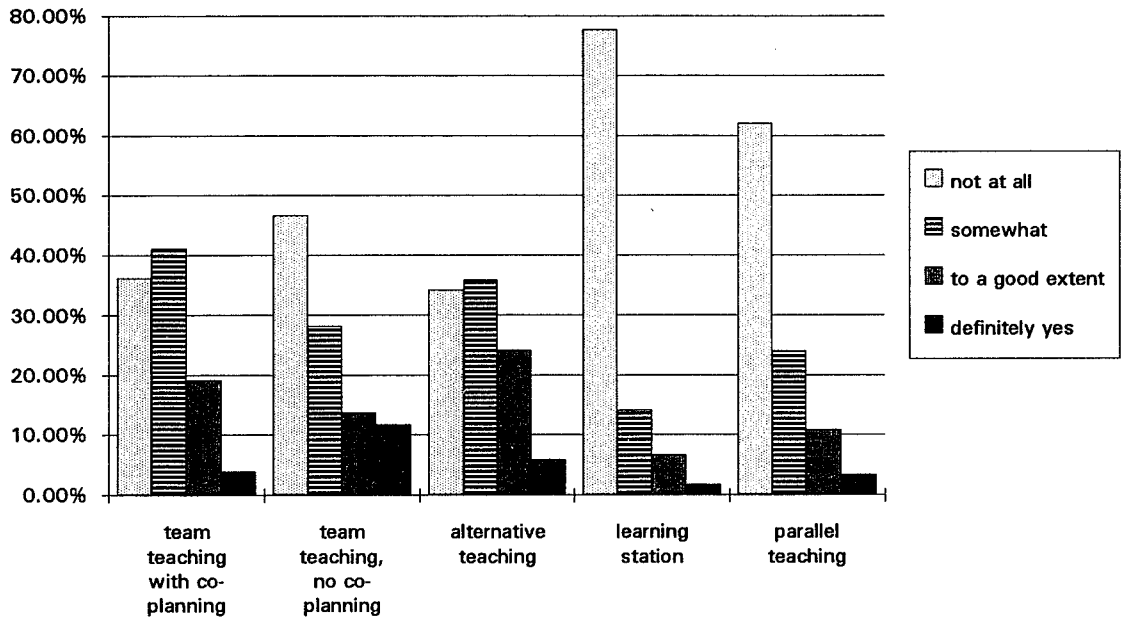
Teachers in team interviews reported that alternative teaching was used occasionally. One teacher sometimes worked with a small group to pre-teach, re-teach, supplement, or enrich, while the other teacher instructed the rest of the group. This was mainly used to re-test students or to teach a particular strategy to a small group who needed extra help. On the survey, alternative teaching received a 30% positive response.

Learning station teaching, when teachers divide the content to be covered, and each takes the responsibility for separate parts, was reported in team interviews to be used by one of the teams. This team divided up the language arts content, and the special teacher taught the vocabulary. On the survey, the positive response rate for this approach was only 8%. The last procedure was parallel teaching, when teachers simultaneously teach the

same material, which has been planned cooperatively, to two separate groups of students, used primarily when abilities vary widely. Although some of the teachers interviewed had used this procedure at some time for a specific purpose, it was not used regularly at any of the schools. On the survey, the positive response was only 14% to this approach. Teachers' perceptions of instructional approaches used can be seen graphically represented in Figure 9.

Teachers often reported they would like to do more shared planning. On the survey, more co-planning as a suggestion for improvement received a 71% positive response. Many of the teachers during team interviews said that they would like to do more shared planning and shared teaching, but due to the restraints of the schedule it was not possible at this time. More flexibility in trying various instructional models received a 55% positive response on the survey.

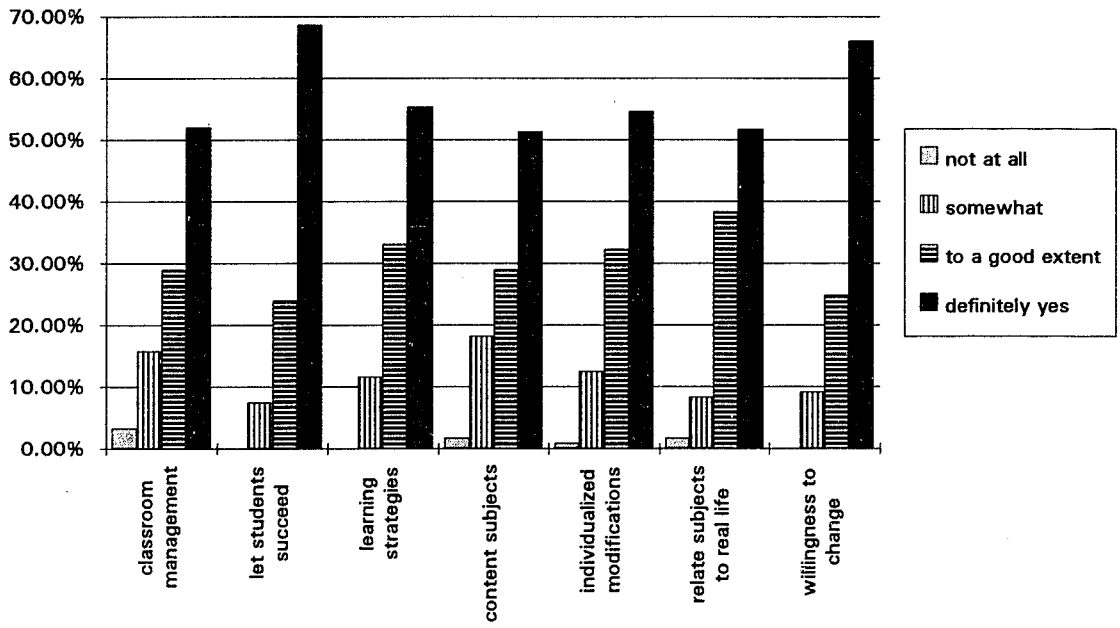
Figure 9



Instructional Approaches

Teachers were asked on the survey to rate the level of importance to given skills. Teachers gave over 50% positive responses to all listed suggestions. Results, in order of highest positive responses were: to let students experience success, having a willingness to change, learning strategies, individualized modifications, relating subjects to real-life, classroom management, and knowledge of content subjects. These suggestions were taken from teacher responses in initial interviews. Figure 10 illustrates this information.

Figure 10



Skills Needed To Strengthen Instruction

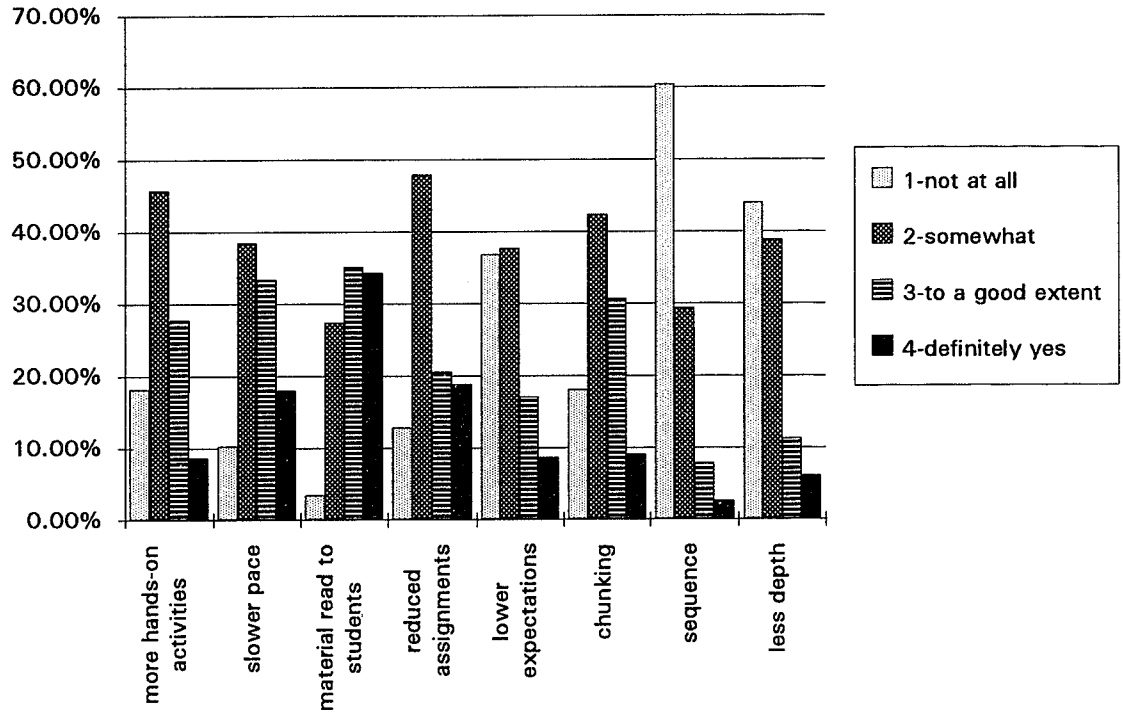
Curriculum:

The curriculum used in cooperative teaching programs was the same as it had been before implementation of the cooperative teaching program. Total affirmative responses were 68% that it was the same. Teachers told in interviews that they were bound by the North Carolina Standard Course of Study in planning their curriculum. The only changes are in modifications to this, which received a 54% positive response. The majority (62%) of the teachers responded positively that these modifications had gone well, and 92% of teachers responded that they did not have differences of opinion about these modifications. The kinds of modifications, in the order of frequency of responses on the survey included: material was read to some students who needed it (69%),a slower pace in some classes (51%), material was taught in chunks (40%), more hands-on activities (36%), expectations were lower (25%), the curriculum was not explored in as much depth (17%), and the sequence of the curriculum had been changed (10%). In interviews, teachers also mentioned adaptations of more review, reduced assignments, teacher flexibility, and additional activities to clarify. Problems described included the difficulty some students had with critical thinking, and the fact that sometimes classes did not cover as much as the teacher had planned.

On the survey, teachers as a whole gave a 50% positive response to the question of whether or not the curriculum was meeting the needs of all students. Some teachers mentioned that the slower pace was holding some students back, especially in math, and that some AG students were bored. Another teacher commented that students without disabilities did not notice the difference and did not resent exceptional students. In some classes, stronger students were used as peer tutors, and in some classes cooperative learning groups with mixed abilities gave every student a chance to contribute. On the survey, the use of peer partners received a 41% positive rate, and the use of students working in cooperative groups received a 49% positive response.

Teachers at different schols had different opinions concerning the appropriateness of the curriculum. Teachers in one team described their curriculum as innovative and developmental, and said that it integrated adolescent developmental theory with concerns from the outside world and with the state mandated curriculum, giving them a three-part thematic curriculum. Because it was developed from student input, it was student-centered and generated, and teachers described it as totally appropriate for all students at their own level. At other schools, teachers spoke of their frustration in trying to teach standard curriculum to the students in their general population who were high-risk for social, behavioral, and academic problems. Other teachers commented that with their adaptations, the curriculum was meeting the needs of all students. It was the way they taught, adapting to individual needs. Teachers' perceptions of curriculum modifications used can be seen graphically represented in Figure 11.

Figure 11



Curriculum Modifications

Materials:

Teachers had much to say about materials. On the survey 53% said that standard textbooks were the primary materials used. Teachers explained many ways to individualize to meet students' needs. Some teachers were making modifications in worksheet format and tests (38%), had individual expectations for students, including shorter assignments, and were using a variety of classroom activities and hands-on materials. Teachers described the use of word banks on worksheets and tests from which students could choose for fill-in-the-blanks (61%), allowing them to write basic answers for complex questions, dictation of answers to teachers instead of writing them, the use of study guides which were provided for students (59%), and alternate assignments (32%). Other materials and teachers' responses to the extent of use of these materials included: hands-on materials (59%), reading textbooks aloud (58%), computer software (37%), life-skills materials (22%), lower level reading materials (20%), and some highlighted or underlined texts (18%). Teachers indicated with a 61% positive response on the survey that students with and without disabilities were allowed modifications in materials.

All teachers interviewed in teams described a lack of enough appropriate materials on low enough levels, in content and in reading levels, to meet students' needs, although the materials they were using they deemed appropriate on the survey, with a 71% positive response. They expressed the wish that publishing companies would provide more of these, as with enrichment activities. When asked if they needed more use of alternative materials, teachers on the survey gave a 54% positive response. Other teachers were individualizing reading by assigning 30 minutes of outside reading each night, and by reading texts aloud. Some teachers were reading textbooks aloud and recording them on tapes for students with reading problems, but this was a tedious and time-consuming task, and teachers expressed the wish that more audio-taped books were more readily available. Some of the teachers interviewed expressed the desire to have more textbooks which were

available to underline and highlight to increase meaningfulness for students, but this was not a reality yet beyond the use of one or two. They also described the need to have these lower level materials, if available, to look the same on the outside as general texts, so students would not be embarrassed by carrying them. They were individualizing writing assignments and using portfolio assessment, so students were competing against themselves. Teachers at several schools expressed a strong feeling that they were hampered in efforts to increase writing fluency by a lack of computers that their students could use. On the survey, teachers gave a 58% positive response when asked if more use of the computer lab was a needed change. Other teachers expressed the desire to have electronic dictionaries and more hands-on materials in all content classes. One math teacher described the use of hands-on materials and manipulatives to supplement her teaching. She also used the overhead projector a lot in her class, writing on it to demonstrate problems, with students taking notes from this, and said the textbook level was not a problem because she seldom used it. Table 2 is a visual representation of results concerning materials, and Table 3 is a representation of information concerning instructional groupings. Table 4 gives responses to the survey questions of changes needed in the instructional program.

Table 2

Percentages of Responses Concerning Materials Used in Cooperative Programs

	not at all	somewhat	to a good extent	definitely yes	number responding
Standard textbooks primary materials used	15	32	33	20	122
All students allowed modifications in materials and expectations	3	36	42	19	122
Materials appropriate to meet all students' needs	4	25	54	16	123

Table 3

Percentages of Responses Concerning Instructional Groupings and Materials

	not at all	somewhat	to a good extent	definitely yes	number responding
cooperative groups	7	44	37	12	123
student peer partners	11	48	28	13	123
highlighted or underlined texts	61	21	10	8	120
worksheet format or wording changes	23	39	24	14	121
lower level reading materials	34	47	16	3	122
alternative assignments	13	55	24	8	119
read texts aloud	6	36	31	28	120
word banks & multiple choice worksheets	6	33	37	24	120
study guides	15	26	35	25	121
life-skills materials	29	48	18	4	120
hands-on materials	7	33	40	20	121
computer software	21	42	28	9	121

Table 4

Percentages of Responses Concerning Changes Needed In Instructional Program

	not at all	somewhat	to a good extent	definitely yes	number responding
more multisensory instruction	8	44	32	16	121
more co-planning	6	23	31	40	122
more team teaching	8	26	26	39	121
flexibility in instruction	5	41	33	21	121
improved working together	10	38	26	27	120
focus on lead-support	14	40	29	17	118
flexibility-using what both want	14	36	27	23	120
more parallel teaching	16	43	23	17	122
more use of computer lab	4	38	38	20	122
more use of alternative materials	4	42	39	16	122

IEP Goals and the Curriculum:

Special teachers in initial interviews described IEPs as being written to coordinate with the curriculum, rather than the curriculum coordinating with IEP goals. On the survey, when asked to what extent the IEP goals had been geared to the curriculum, teachers gave a 56% positive response. Teachers at one school explained that modifications were made in the curriculum to suit individual needs, and with modifications, these students needs could be met within the curriculum. At one school, IEPs were written in the spring for the following fall, based upon students' recognized needs and experiences teachers had with that student that year, and the curriculum they would be expected to learn the following year. The special teacher, parents, and at least one member of the team of general teachers collaborated to write the IEP.

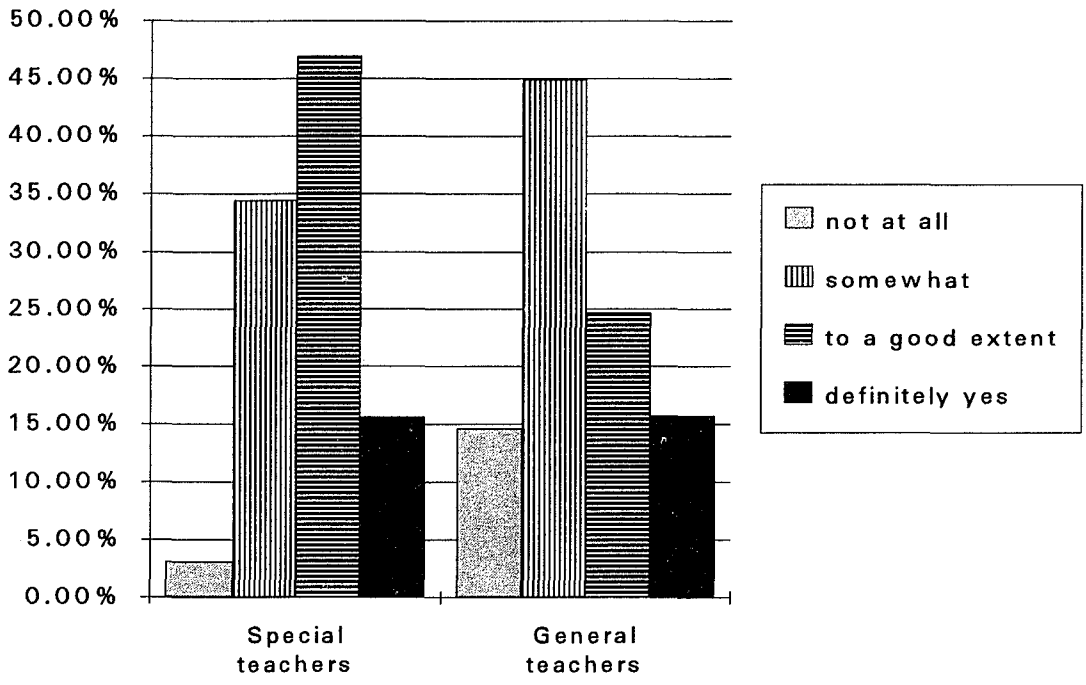
Roles and Responsibilities:

Programs at most schools were in a continual state of change since they began, as teachers and administrators searched for the best implementation method for their particular school, and relationships between the special and general teachers grew. On the survey, 42% of those responding gave positive responses when asked if they had gained skills in how to work with others cooperatively, and 52% gave positive responses when asked if they felt like a partner with teachers in the cooperative program. Teachers gave an 82% positive response when asked on the survey to what extent this ability to interject an opinion or comment when the other teacher was teaching without intimidating or alienating was needed to strengthen instruction.

Others also spoke of the dynamics of working together changing for the better, whereas at first they were a little uneasy with each other and with making suggestions. The survey responses indicated that 59% of the teachers responding felt willingness of teachers to collaborate had gone well, and a 52% positive response when asked to what

extent expectations of the special/general teachers had gone well. Teachers on the survey gave a 92% positive response when asked about flexibility as a needed skill to strengthen instruction, and a 91% positive response to willingness to change. Survey results indicated that 51% of those responding felt that interactions with other teachers had gone well, and 46% felt that the cooperative teaching program had been a successful arrangement interpersonally for teachers. Special teachers gave a higher positive response to the question of interpersonal success, with a 63% positive response to general teachers' 40% positive response. Figure 12 represents special and general teachers' perceptions of whether or not the program was successful interpersonally for them.

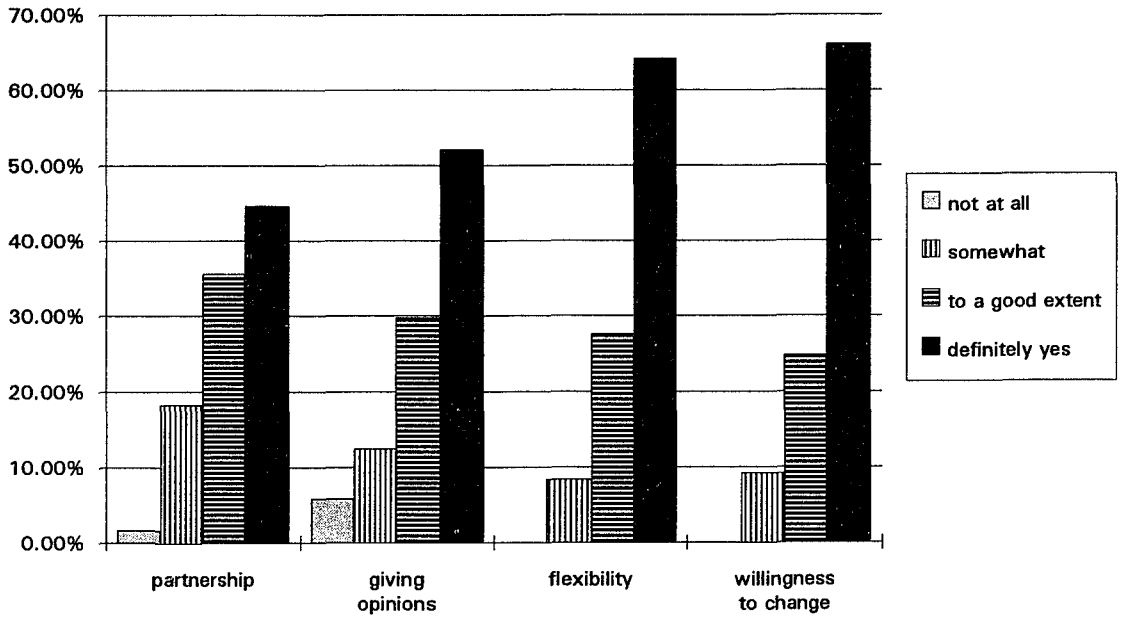
Figure 12



Teachers' Perceptions of Interpersonal Success

The sharing of responsibilities between teachers developed slowly at most schools. Special and general teachers responded with a 67% negative response that they were not jointly responsible for teaching, and the sharing of responsibilities received only a 42% positive response from teachers surveyed. Teachers (78%) were not having differences of opinion concerning roles and responsibilities, but interviews with teams found that these roles and responsibilities were not always discussed. Teachers responses indicated that 50% of them believe flexibility in using whatever suited both teachers was a needed change, and 80% believe that the ability to form better partnerships with other teachers is needed. Interpersonal skills needed to improve instruction can be seen graphically represented in Figure 13.

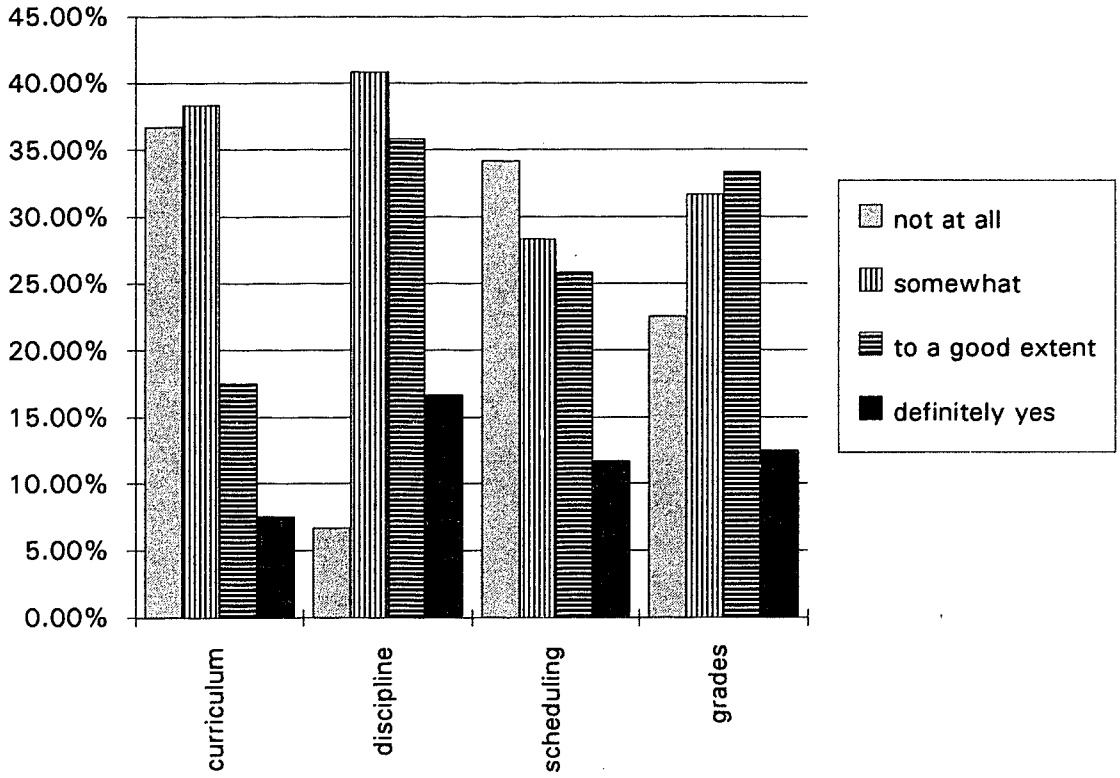
Figure 13



Interpersonal Skills Needed To Strengthen Instruction

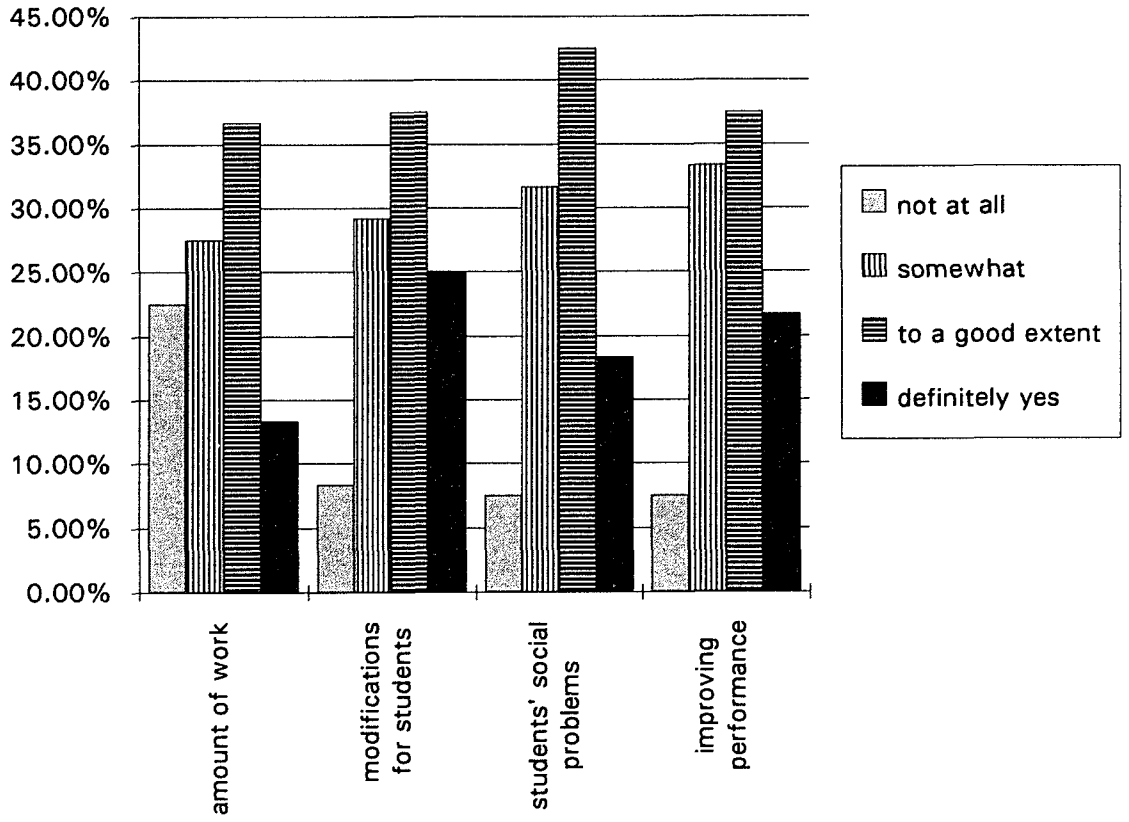
Certain areas of decision-making were shared responsibilities. Input on modifications to be made for students with disabilities had the highest positive response for being a shared decision, with a 63% positive response. The other areas were shared decisions on students' social problems (61%), ways of improving performance (59%), testing and evaluation (54%), discipline (53%), amount of work (50%), grades (46%), teaching methods (46%), seating arrangements (45%), teaching responsibilities (44%), scheduling (38%), and curriculum (25%). Figures 14, 15, and 16 show survey results on shared decision-making.

Figure 14



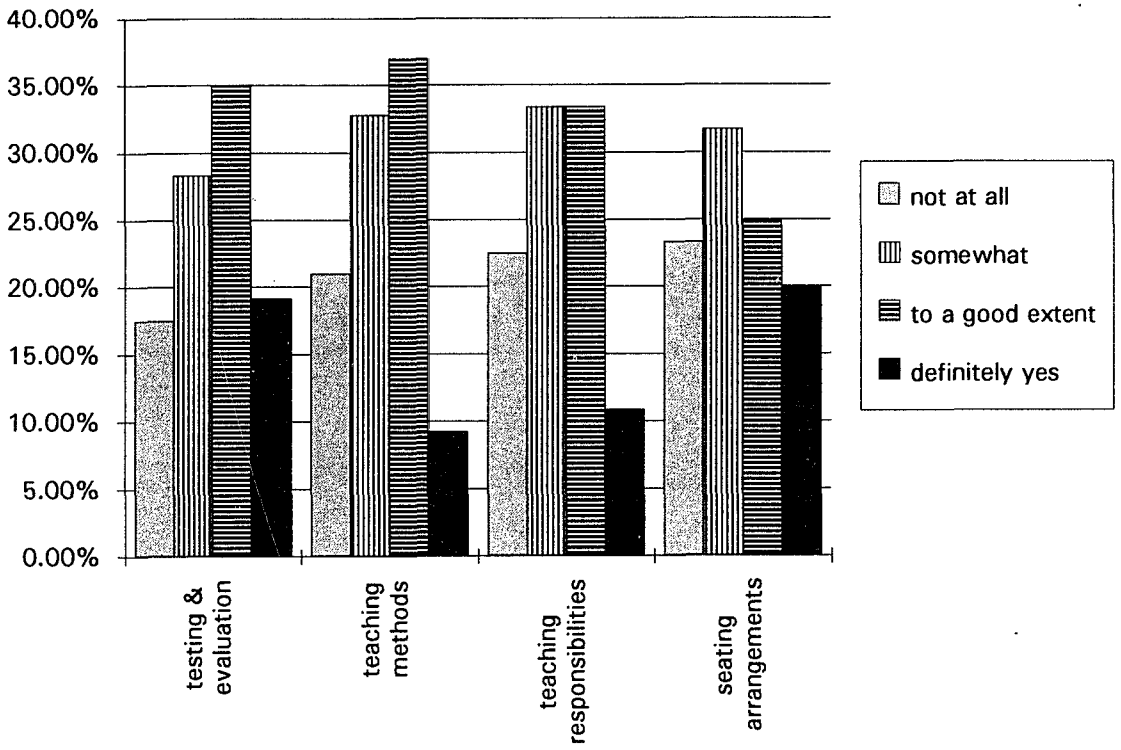
Shared Decision-Making I

Figure 15



Shared Decision-Making II

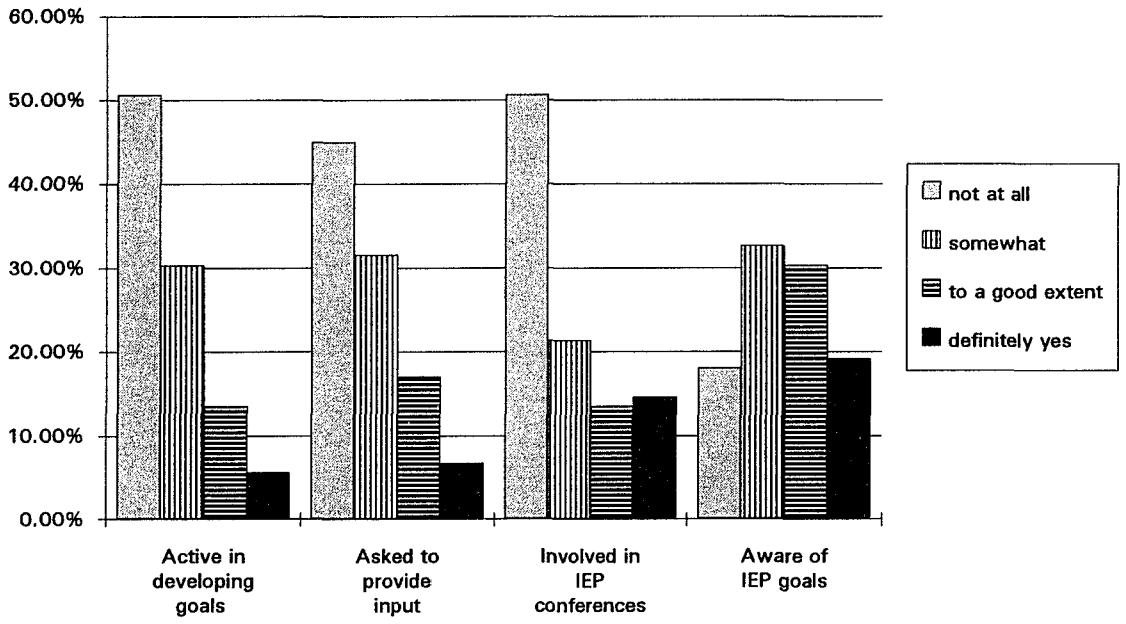
Figure 16



Shared Decision-Making III

At most schools, the special teacher was considered responsible for Individual Education Programs for students with disabilities. The IEP was perceived by 68% of the teachers to be the sole responsibility of the special teacher. Special teachers tended to write the IEP, and if general teachers wanted to add to it later, they would do it. Some teams had very carefully delineated roles for special and general teachers, which had not changed very much from the roles they had before inclusion. At one school interviewed, the special teacher described her role as writing a "working IEP," or framework first, and then meeting with at least one of the general teachers on the team and the parents for their input. Together they produced a final copy. General teachers' main involvement in IEPs was that they (1) were aware of goals, (2) they sometimes attended IEP conferences, and (3) they occasionally gave input for modifications they felt were needed, based upon their experiences with the student that year. Results were not positive concerning general teachers' perceptions of their involvement in IEPs, with only 19% who said they were active in developing goals for the students' IEPs. Only 24% of general teachers perceived that they were asked to provide input into IEPs. When these teachers were asked to what extent they were involved in IEP conferences, 28% affirmed participation in IEP conferences. Awareness of IEP goals, was affirmed by 49% of respondents. Only one team interviewed did IEPs as a team, as they did everything else. These responses can be seen graphically illustrated in Figure 17.

Figure 17

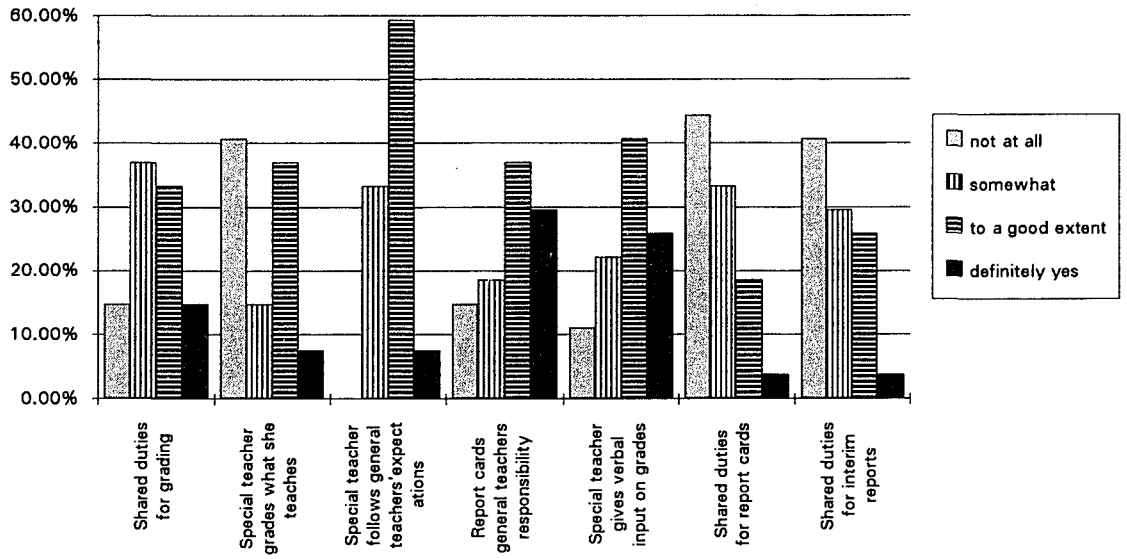


General Teachers' Involvement In IEPs

Evaluation

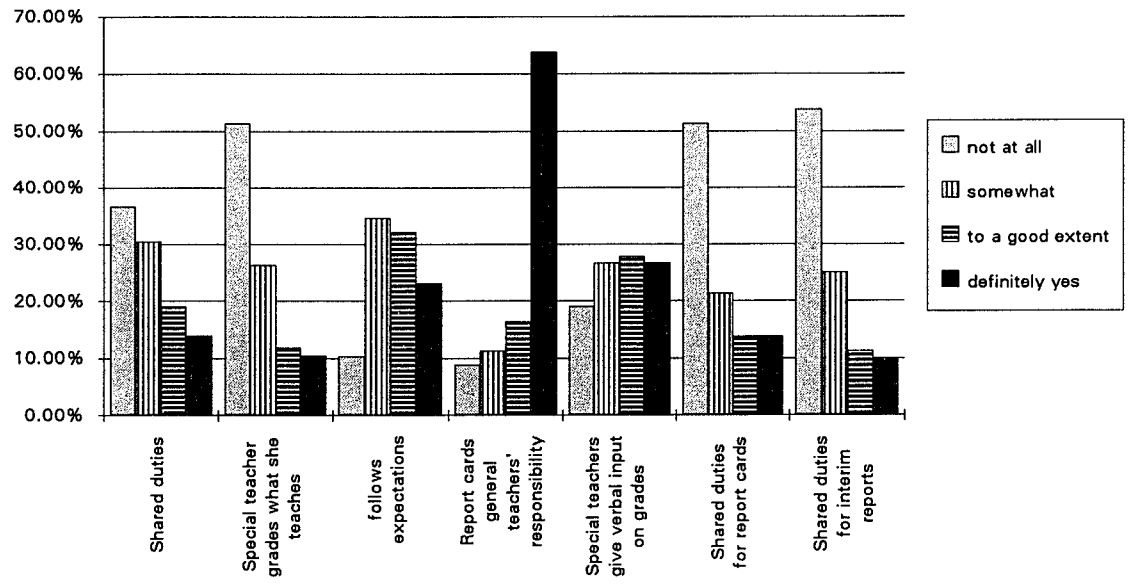
Grading and evaluation of students in cooperative programs was an area of shared responsibility to different degrees in different schools. Shared grading by special and general teachers received a 37% positive response from the total group. Special teachers' responses on this question were 48% positive. Special teachers at some schools reported in interviews that they helped grade papers, especially if they had taught the lesson, or they sometimes took notebooks to grade as their regular responsibility. When teachers were asked on the survey to what extent special teachers graded what they taught, responses as a whole were 28% positive, with special teachers' responses as 44% positive. Many said that they regularly volunteered to help grade papers. Survey results showed that 31% of special teachers did not grade papers at all, and 58% of special teachers followed expectations set by the general teacher in grading. During team interviews, the special teacher for one team commented that she sometimes helped grade tests, but that the general teacher gave the grade. He also tallied the grades according to his own system. The special teacher reported that she was satisfied with this arrangement. The science teacher at that school responded that the special teacher had made up the last test for the students with disabilities, and then asked him if it was sufficient to meet objectives. He commented that, "It was perfect." Special teachers' perceptions of roles and responsibilities for grading are represented in Figure 18, and general teachers' perceptions in Figure 19.

Figure 18



Special Teachers' Perceptions of Roles and Responsibilities For Grading

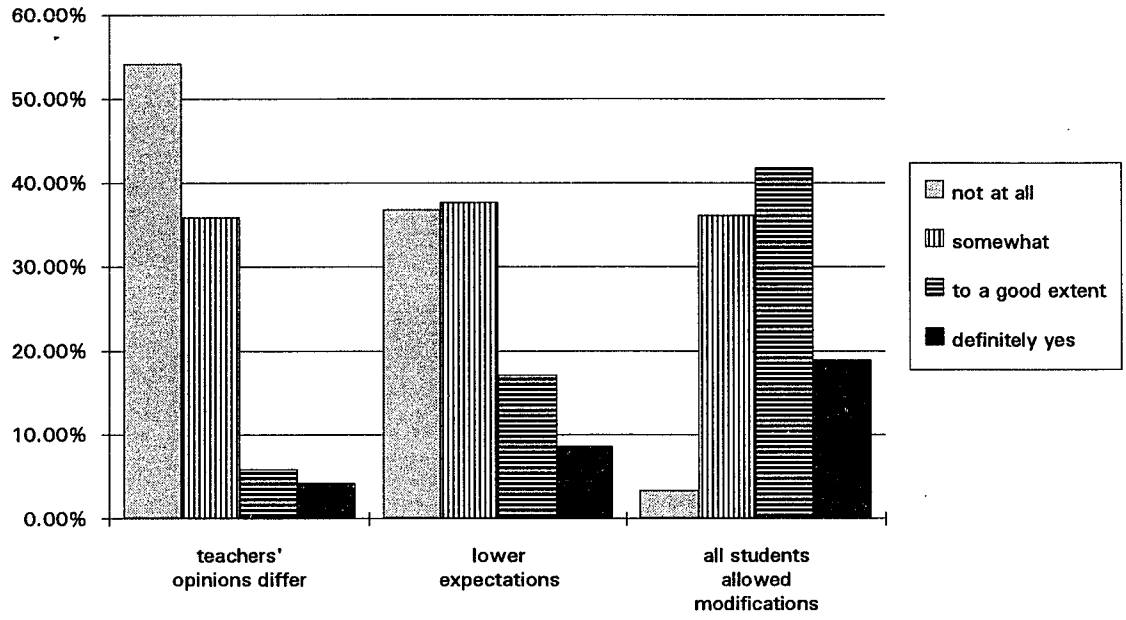
Figure 19



General Teachers' Perceptions of Roles and Responsibilities For Grading

On the survey, a majority of teachers responded that they considered effort for all students in grading. General teachers commented in interviews that they depended upon the input of special teachers, to help them know if a student was really putting all of their ability into their work. Survey results only showed a 26% response to expectations for students being lower, but a 61% response to students being allowed modifications in materials and expectations. Grading expectations are represented in Figure 20.

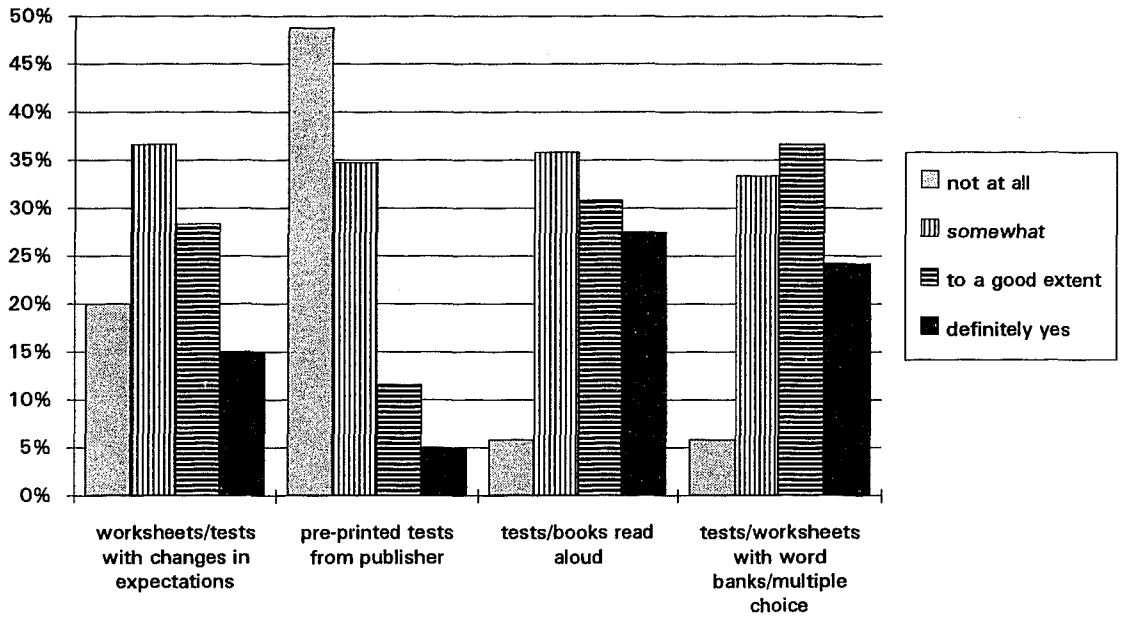
Figure 20



Grading Expectations

The use of tests with changes in expectations was affirmed with a 43% response, and 58% responded that tests could be read aloud. Teachers affirmed the use of tests with word banks and/or multiple choice answers with a 61% response, and 58% of teachers allowed students to re-do tests. Tests from the publisher received only a 16% positive response. Results from the survey questions concerning materials used in evaluation can be seen in Figure 21.

Figure 21



Materials Used In Evaluation

General teachers did most of the grading of papers, although 37% of respondents said grading was shared, and 58% of respondents said special teachers gave verbal input concerning grades. Some special teachers regularly graded papers, and picked up a stack to grade as a normal part of the day's work. Special teachers sometimes graded papers for lessons they taught (28%). Teachers generally agreed on grading, with a 90% affirmative response to this. Some teachers reported in the interviews that all students were allowed flexibility in grading, including the option to re-do tests, and 61% of survey respondents indicated that all students were allowed to have modifications in materials and expectations.

General teachers did the actual work of the report cards, with an affirmative response of 77%, but special teachers sometimes recorded grades in the grade book or helped do interim reports. Only 26% responded that both teachers shared duties for report cards. For interim reports, only 23% responded with positive responses when asked if teachers shared this duty. Special teachers commented that they were more likely to give input on report cards.

Research Question 3- Phase III- Major Differences in Programs

Research question 3, What are the major differences in programs described in most positive and least positive terms by participants?, was examined in Phase III. A general index of satisfaction from the teachers responding was drawn from a list of questions asking whether or not they felt certain areas of the program had gone well or been successful. These were questions 19, 20, 21, 22, 23, 24, 25, 30, 29.1, 29.2, 29.3, 29.4, 29.5, 29.6, 29.7, 29.8, 29.9, 45, and 54. Total responses from these questions were summed to find total percentages that were positive. Other questions were compared to examine differences in the programs that were rated in most or least positive terms. The

four schools chosen had at least 50% response rate, and were all rural schools, two in one district and two in another, geographically near each other. One school had a high rate of positive responses and one had a low rate of positive responses to the 19 selected questions. The two other schools had middle levels of positive responses.

Interviews were held in January with teams of special and general teachers at the four selected schools. Interviews were held either during the team planning period or after school, at times selected by the teams. Refreshments were furnished by the researcher as an incentive and to thank the teachers for participating. Teachers were very responsive and open, giving thorough answers to basic questions, requiring very little probing. Interviews were approximately 45 minutes long, and at two of the schools the researcher was able to stay an extended time to talk with either general or special teachers separately from the team. Interviews were audio-taped and teachers signed Consent to Act as a Human Subject forms. There were 22 questions relating to main topics of interest in the study which needed clarification or verification from previous phases of the research. Audio-taped interviews were reproduced into typed transcripts for examination, and notes taken during the interviews were used as a back-up in the event of inaudible tapes. Transcripts were examined for categories of answers by the researcher and a colleague for interrater agreement on final answers to topics that were questioned.

In general, issues of biggest concern to teachers were limited personnel to allow for better balanced classes and more time for co-planning and team teaching. Classes in teams interviewed were overpopulated with not only students with mild disabilities, but those for whom a resource or even self-contained setting may have been the more optimal setting, in the teachers' opinions. Special teachers in some instances were spread either between teams or grade levels, or between teaming and providing services for students with more disabling learning problems, in resource or self-contained settings part of the day, not allowing them the needed time to co-plan and thus co-teach.

Teachers indicated that programs were changing to accommodate needs of the students and the teams, sometimes with the acquisition of additional personnel, and sometimes with changing schedules or assignments. Areas of disapproval for general teachers seemed to be the multitude of problems students with more severe disabilities had in keeping up with general curriculum, and in the disruptions they caused in the classroom. At one school, the general teachers also expressed dissatisfaction with the lack of help from one of the special teachers, who was said to go into their classes and "just sit", although other teachers in that school who were teaming with different special teachers, and in other schools expressed great satisfaction in their team relationships.

A majority of special and general teachers surveyed believed that the cooperative teaching program had been successful for students with disabilities. The overall positive response to that question on the survey was 54%. Special teachers were more positive than general teachers that it had been a successful experience, with a positive response rate of 73% to the general teachers' 48%. When asked on the survey if the program had been successful for students without disabilities, results were not so positive, with 42% of those responding who said somewhat, and 22% who said not at all. Total positive responses were 36%. Special teachers had a different response, and were 61% positive that it had been successful for students without disabilities. General teachers were only 27% positive.

School # 1: (65% positive on index of satisfaction)

As stated earlier, the researcher met with the special teacher and the math and language arts teachers on one of the teams with whom she teamed. At this school, students from each grade level were divided into two teams. One group of students with mild disabilities were considered fully included, and received all their instruction in general classes with cooperative teaching. Students with more serious problems were on the other

team and had the benefit of the special teacher in a resource room for language arts and math. Students who were only seen on a consultation basis were also on the other team. The special teachers were split this year between the two teams at each grade level. The team interviewed was the one doing cooperative teaching for one of the grade levels. Survey responses came from all three grade levels. In the math class, teachers found that a lead-support model worked best, due to the content of the curriculum. In the language arts class, teachers shared everything. Teachers thought the students with disabilities were doing well, and the program was definitely helping. They liked to have these students in class because it was easy to see their progress and improvements as the year passed. In this school, students in the language arts class were individually graded, and their abilities taken into consideration. The special teacher commented, "Because they're individually graded, a student who's on a low level can be earning As, whereas in another class that same work may be graded as an F." She commented that she never would have believed that the students with disabilities could have made such progress this year. She was amazed at their individual growth.

This school had the most positive responses of the four chosen to examine more closely. Teachers were 83% positive that the program was successful for students with disabilities. Teachers on the team commented that it was really helping all students to have two teachers in the room. When asked if the program was holding back some students, the language arts teacher on that team said, "Oh, it's moving them forward!" He said that all of his students were learning, "in leaps and bounds." They were 67% positive that the program was successful for students without disabilities. They gave 84% positive responses to indicate that they were not frustrated in trying to make their program work. When asked in the team interview about the mixture of students with and without disabilities, and the success of the program for all students, teachers commented that academically gifted students were in other classes. On this team there were a lot of

students who were formerly in Chapter I Reading programs, and they benefitted from the extra help. On the survey, teachers gave a 67% positive response when asked if class size had gone well, and a 50% positive response when asked if the mixture of students with and without disabilities had gone well.

Their program had changed from last year, when teachers were able to cooperatively team for all subject areas. They lost a teacher because of headcount, and they had to provide a resource room, which they had not done last year, so the schedule of the special teacher changed. Teachers stated that they would like another teacher, to enable the special teacher to be with their team all day. On the survey, teachers gave a 50% positive response when asked if they were satisfied with the EC teachers' schedules. They were only 33% positive when asked if they had enough EC teachers.

Teachers in the interview talked about the dynamics of the team changing for the better as the year progressed. At first they had not worked together before, and were a "little tight" talking to each other, making suggestions and recommendations. But once they got to know each other, they became freer in talking to each other, and realized the flexibility of their partners. On the survey, teachers gave a 100% positive response when asked the importance of flexibility to their program, and a 100% positive response when asked the importance of a willingness to change. The importance of the ability to form better partnerships received an 83% positive response, and the importance to their program of the ability to give an opinion when another was teaching without alienating or intimidating was given an 83% positive response.

Teachers commented that it was great having two people working together in the same room. They were very satisfied with the lead-support roles they played in math class, and described their relationships in language arts where they team-taught as, "just natural," as teachers felt free to interject whenever they had something to say. They gave a 50% positive response when asked if their program needed more of a focus on lead-support

teaching, and a 50% positive response when asked if their program needed more focus on parallel teaching to groups of varied abilities. In the interview, teachers told how the special teacher took groups of students to the back of the room and checked their notebooks or gave them extra help on specific areas. They gave a 50% positive response when asked on the survey if teachers were jointly responsible for teaching.

Sharing responsibilities was an area that teachers in the team interview called, "it was what worked best." On the survey, teachers gave a 67% positive response when asked if sharing of responsibilities had gone well. On the survey, teachers gave an 83% positive response when asked if the program was successful interpersonally for teachers. Willingness to collaborate received an 83% positive response, and when asked if expectations of special/general teachers had gone well, teachers gave it an 83% positive response. For some reason, when they were asked if they felt like a partner with the other teachers, the response was only 33% positive. Results in the team interview were very positive. When asked on the survey if interactions with other teachers had gone well, teachers gave it an 83% positive response.

Teachers in the team interview told how sharing responsibilities had gone well. In the math class, the general teacher instructed as the special teacher monitored students to make sure they were on task. As the general teachers described it, "She filled in where there were gaps." On the survey, teachers gave an 83% positive response when asked about differences of opinion on roles and responsibilities, indicating they did not have differences. When asked if changes were needed in improved ways of working together, teachers gave a 33% response that indicated that they did not need this.

Teachers on this team reported in the team interview that they planned together for one hour each day. They discussed parent contacts, conferences, who was doing well in the classes, and where they were headed for that day and week. The special teacher planned with the other team daily, but did not have an individual planning time for ECS

paperwork. The special teacher commented in the interview that she did her ECS paperwork whenever she could, on her own time. She did not have an individual planning time to do this. On the survey, special teachers gave a 25% positive response when asked if they had a set planning time for ECS paperwork.Teachers on the survey gave a 67% positive response when asked if time to plan with teachers had gone well. Special teachers gave a 25% positive response when asked if their planning time was productive, and general teachers gave a 67% positive response to this question. Asked on the survey if planning time was a set time, special teachers gave it a 25% positive response, and general teachers gave it a 33% positive response. They only responded with a 33% positive response when asked if more co-planning was needed.

In the language arts class, teaching responsibilities were shared. They planned the concept of what they wanted to accomplish, but remained flexible in class because of changing needs of the kids. Teachers on the survey gave a 100% positive response when asked the importance of letting the students experience success. They only gave a 33% positive response when asked if more flexibility was needed in trying various instructional models. Teachers only gave a 17% positive response when asked if more team teaching was needed. In the team interview, they indicated their satisfaction with the amount of team-teaching being done. They gave a 100% positive response when asked about differences of opinion on instructional methods, indicating that they did not have any differences in this area. They gave an 83% positive response when asked the importance to their program of a knowledge of learning strategies, and the same response when asked the importance to their program of a knowledge of content subjects.

On the survey, teachers gave an 83% positive response when asked if implementation of modifications had gone well. They were 60% positive that the curriculum was meeting the needs of all students, and 67% positive that the materials were appropriate to meet all needs. Teachers gave a 50% positive response when asked if all students were allowed

modifications in materials and expectations. During the team interview, teachers expressed pride in their three-part, thematic curriculum which integrated adolescent developmental theory with concerns from the outside world and the state-mandated curriculum. They expressed in the team interview that they were satisfied that the curriculum was totally appropriate for all students at their own levels. They gave a 100% positive response to indicate that they did not have differences of opinion on instructional methods. They gave a 67% positive response when asked if amount of work was a joint decision. Modifications as a joint decision was given a 67% positive response, and how to improve performance as a joint decision was given an 83% positive response.
They gave a 50% positive response when asked if curriculum was a decision handled with input from both special and general teachers. In the interview they describe the curriculum as totally student generated and student centered.

When asked about staff development in the interview, the language arts teacher said that it was a constant need because teachers needed to stay updated on the newest research and techniques. On the survey, they gave a 67% positive response when asked if staff development was needed on modifications to meet individual needs. When asked if staff development was needed in communication skills, they gave it a 50% positive response. When asked if staff development was needed in sharing a classroom, they only gave it a 33% positive response.

In the interview, teachers told of sharing grading in the team. On the survey, teachers gave a 67% positive response when asked if grading was shared. The question of whether or not the special teacher graded what she taught received a 33% positive response. In the interview, the special teacher told how they divided the papers up at the end of the day and each took a stack. Teachers gave a 50% positive response when asked if the special teachers followed the expectations of the general teacher. In the interview, the special teacher told that the general teacher sometimes took a particular paper that he wanted to

check for attainment of a part of the curriculum. On the survey, teachers gave a 100% positive response to indicate that they did not have differences of opinion on grading. They told in the team interview of their portfolio system of grading where students competed only against themselves. On the survey, when asked if effort was considered for all students, responses were 67% positive.

In the interview, the teachers told how they discussed grades, and the special teacher gave input, but the general teacher was responsible for the report cards, and the special teacher's name was not on them. On the survey, teachers indicated with a 17% positive response that the general teachers were not solely responsible for report cards. They gave an 83% positive response when asked if the special teacher gave input on grades. When asked if both teachers shared duties for report cards, teachers gave a 17% positive response, and a 33% positive response when asked if they shared duties for interim reports. They gave an 83% positive response when asked if decisions about grades were made with input from both teachers.

School # 2: (56% positive on index of satisfaction)

The researcher met with a special teacher and one of the teams with whom she works, one general teacher for each content area. This school had an assistant principal whose main responsibility was monitoring and supervising the cooperative programs throughout the school. He also met with us, and gave much input.

A major problem reported by teachers in the team interview was large numbers of students with problems in classes and not enough help to deal with those problems. Teachers on this team did not feel that they had enough of the time of the special teacher to make their program run smoothly. The teachers in that school were only 45% positive on the survey when asked about their satisfaction with the special teacher's schedule, and

only gave a 36% positive response when asked if they had enough special teachers. This team had a special teacher for only part of the day, as she was split between two teams. Teachers had no resource class available, and therefore had no options other than a self-contained class for students who needed more help than they could get in the inclusive setting. Therefore, general teachers were having to teach larger numbers of students with special needs, even though the students with disabilities were split between two teams per grade level, and were struggling with having students with many disabilities in general classes.

The special teacher was not always able to be in every class due to her schedule, and she reported in the team interview that the students with disabilities really missed her help when she was not there. Teachers and administrators reported that they would very much like to have another ECS teacher to teach a resource class, and to have the current teacher be able to team only with one team, so that students would have her help every period. The teachers felt that several of these students needed to have the option of a resource room for at least one or two classes per day. There were approximately 8 students with disabilities per class of 28 students. Teachers gave only a 36% positive response when asked if the mixture of students with and without disabilities had gone well.

On the survey, teachers gave a 54% positive response when asked if the program was successful for students with disabilities, but only a 36% positive response when asked if it was successful for students without disabilities. In team interviews teachers told of Academically Gifted (AG) students being held back somewhat by the slower pace necessary in some classes. They told of trying to do extra enrichment activities for the more capable students, but that it was difficult because many other just needed very basic information. They felt that the program could work much better if they could have another teacher who could take students who really needed a resource setting. They commented also that their students were beginning to notice the difference in expectations for students

with disabilities, although it had not become a problem. Students were beginning to ask, "Why can't I have a copy of the notes?" Other comments reflected their frustration with adjusting the pace for slower students, as well as in trying to meet individual needs when the special teacher was not even in their classes every period, having to divide her time between two teams. One teacher had tried cooperative groupings with some success, and said that students with disabilities had naturally paired up, on their own, with AG students. Some of these cooperative groups were working well, with each student taking a page or a group of problems, and pooling the resources. One teacher commented that the AG kids were "getting tired of being sponged off by lower kids," and that the students with disabilities took the easy route and just copied everything down. Another teacher mentioned that this was not just an AG-LD situation, but happened in all classes between nondisabled students.

The entire school had been trained in cooperative teaching, but the administration decided, due to conflicts last year, that it would be more successful to use teachers who were willing. Teachers gave a 73% response indicating that they were not frustrated in trying to make their program work. Teachers stated in the team interview that they enjoyed having two teachers in the room to help students. One teacher commented on the positive aspects of having the special contributions of students with disabilities to her class. The teacher said that this program allowed students who may have sat at the back of the room and felt isolated, to contribute and really feel a part of the group. These teachers commented that inclusion worked better for the students and that the students themselves did not like to be pulled out. These students had complained to their parents that they felt like they were "being baby-sat" when in the resource room. On this team, the majority of students with mild disabilities were doing fine, and adjusting well in the program, but teachers felt strongly that two or three students with more severe disabilities needed to be pulled out, and that had not been an option.

General teachers commented that they had not had any conflict, and appreciated the help from the special teacher. The special teacher stated that she felt free to bring needed modifications or changes to the attention of the general teachers. The teachers were 54% positive when asked if they felt like a partner with the other teacher. Teachers gave a 91% positive response when asked if implementation of modifications had gone well.

Teaching was mainly lead-support. The special teacher went into classes with the benefit of cooperative planning, to help students with disabilities keep up with their work. The general teacher was in charge of instruction, and the special teacher was there to support and add modifications. The survey responses indicated that teachers were only 36% positive when asked if teachers were jointly responsible for teaching, and 46% positive when asked if the sharing of responsibilities had gone well. They commented, in the team interview, though, that this arrangement was comfortable. The special teacher stated that she would not feel comfortable teaching the content classes for which she had not trained. General teachers expressed in the team interview their relief that the special teacher was in their rooms to help students with problems. One general teacher commented that it would be very frustrating without the help of the special teacher to make suggestions for another way to approach the learning situation. On the survey, teachers gave a 73% positive response when asked the importance to their program of a knowledge of learning strategies. They gave a 64% positive response when asked the importance to their program of a background in content subjects.

Curriculum in this school was state-mandated. Teachers gave only an 18% positive response when asked if the curriculum was a decision handled with input from both special and general teachers. They gave a 55% positive response when asked if amount of work was a joint decision, and an 82% positive response when asked if how to implement modifications was a joint decision. They gave a 55% positive response when asked if ways to improve performance were joint decisions.

The survey results indicated that teachers were 76% positive that the program had been successful interpersonally for teachers. They were 64% positive when asked if willingness to collaborate had gone well, and 64% positive when asked if expectations of special/general teachers had gone well. They gave a 55% positive response when asked the importance to their program of the ability to form better partnerships, and a 55% positive response when asked the importance to their program of the ability to give an opinion during teaching by another, without alienating or intimidating. They were 73% positive when asked to what extent interactions with other teachers had gone well. They gave a 82% positive response when asked the importance to the program of a willingness to change. They gave an 82% response to show that they did not have differences of opinion on roles and responsibilities, but 46% said that they need changes in improved ways of working together.

When asked about staff development in the team interview, teachers said that they would like to visit a school where the model is successful, and would like staff development on modifications to meet individual needs, but on the survey only gave a 27% positive response when asked if staff development in this area was needed. They thought all teachers in the school needed more staff development in order to better understand the program. The need for staff development on communication skills received a 46% positive response, and staff development on sharing a classroom received a 36% positive response on the survey.

As stated before, these teachers felt that they needed to have a resource room for students who were having a difficult time in the cooperative program, and who, in the teachers' words, "were dragging down" some other students. Several teachers on this team felt that the program would work better if a few students could be taken aside for the special teacher to work with them only. They gave a 73% positive response when asked the importance of letting students experience success. When asked on the survey if the

curriculum was meeting the needs of all students, responses were only 50% positive, although they were 82% positive that materials were appropriate to meet all needs. They were 46% positive when asked if all students were allowed modifications in materials and expectations. When asked about the students without disabilities in their classes, teachers described a heterogenously mixed group which included gifted students.

Teachers commented that they would like to do more team teaching and more co-planning. The split schedule of the special teacher did not permit that presently. On the survey, they gave a 73% positive response when asked if more team-teaching was needed. They gave a 46% positive response when asked to what extent they needed more flexibility in trying various instructional models. When asked to what extent changes needed included more lead-support teaching, responses were 64% positive. They were also 64% positive when asked to what extent changes needed to include more parallel teaching to groups of varied abilities.

Since the special teacher was split between two teams, the general teachers did not have the benefit of her help in every content class, and would have liked at least one other special teacher to be hired, and preferably two more. They did have a common planning time daily. On the survey, teachers gave a 73% positive response when asked if time to plan with teachers had gone well. The general teachers gave only a 38% positive response when asked if they had enough time to plan with special teachers, but the special teachers gave a 67% positive response when asked if they have enough time to plan with general teachers. Special teachers gave a 33% positive response when asked if they planned weekly with general teachers, and general teachers gave a 38% positive response when asked if they planned weekly with special teachers. Special teachers gave a 67% positive response when asked if planning time was productive, and general teachers gave a 38% positive response when asked if planning time with special teachers was productive. When

asked if planning was a set time, special teachers gave a 33% positive response, and general teachers gave a 50% positive response.

The special teacher alone was responsible for exceptional services paperwork, and said at the team interview that she did it whenever she could work it in. When special teachers in the school were asked if they had a set planning time to do ECS paperwork, responses were 0% positive. To the general teachers, this was not a problem. On the survey, teachers gave only a 27% positive response when asked if time to complete special education paperwork had gone well.

In the team interview, the special teachers said that she helped grade tests, but that the general teacher gave the grade. When asked if she was satisfied with this arrangement, she responded that she was. On the survey, when asked to what extent special and general teachers shared grading, the positive response was only 18%. The special teacher told in the interview of grading a science test that she developed. On the survey, teachers gave a 27% positive response when asked to what extent the special teacher graded what she taught. The special teacher operated on a supportive level, and did very little whole class teaching. When asked to what extent the special teacher followed the expectations of the general teacher, teachers gave it a 64% positive response on the survey. When asked if there were differences of opinion on grading, teachers were 100% positive that they did not have any differences.

In grading, effort was considered for all students in grading. On the survey, teachers gave that question a 55% positive response. Report cards were the responsibility of the general teacher, although the special teacher gave input. When asked to what extent the general teacher was responsible for report cards, teachers on the survey gave it a 100% positive response, and when asked to what extent teachers shared duties for report cards, teachers gave it a 0% positive response. When asked to what extent teachers shared duties for interim reports, teachers only gave it a 9% positive response. When asked if the special

teacher gave verbal input on grades, teachers gave it a 55% positive response, and when asked to what extent decisions about grades were made with input from both teachers, teachers gave it a 46% positive response.

School # 3: (52% positive on index of satisfaction)

Three teams of general and special teachers, all on 6th grade teams, took part in the team interview, and responses varied from these three teams as to the success of the program, in all areas. The schedules and teaching arrangements for each team were different, depending upon personal preference and schedules. The comments from teachers reflected their overall views of the program. For purposes of clarity, teams will be referred to a Team A, Team B, and Team C.

About half of the 15 teachers responding to the survey felt that the program was successful for students with disabilities, and less than 50 % felt that it had been successful for students without disabilities. Since the AG students were taught in special enrichment classes, this was not an issue. In the team interview, one teacher on Team A commented that the program had not really had any negatives for anyone, but then commented that having two or three students in her class who need a lot of help had really "thrown" her, and upset the balance of the class. She went on to remark that the program was " definitely not the best thing for the rest of the class."

Of teachers responding to the survey, 46%, responded that they were frustrated in trying to make their program work. Team B had some success with the program, and teachers commented that the students with disabilities who, "were not the shining star pupils," and who were not usually motivated to succeed, were "hanging in there," and doing well and making As and Bs. The general teachers in that team commented that they were able to do much more for all of their students because the special teacher was in the room. Team A had teachers who had not really bought into the program yet. One general

teacher commented that some students with disabilities in her class really needed to be in a more restrictive setting. She felt that their needs were not being met in an inclusive setting due to their attentional problems combined with their learning problems. She commented that they, "really needed a smaller, more structured setting to help them focus on their work."

Team C at that same school felt their students were doing well. A general teacher commented that she and her partner teacher were able to meet all of the needs of students because a lot of their work was individualized reading and writing. She also commented that there was "no way" that she "could do without" the special teacher in the room to help her. Teachers told how students in their classes who were not identified as exceptional, but who still had problems, were being helped by having two teachers in the room. Students could be pulled aside for extra help or to have their tests read to them, when the general teacher alone would not be able to do this. In one class with hearing impaired students, the general teacher told of her average students becoming more tolerant and understanding, and of wanting to know more about deafness. They also had been learning sign language on their own so that they could better communicate with their classmates.

Others teachers on Teams A and B commented about the ratio of students with many types of social, behavioral, and learning problems in their classes, and that the students with identified leaning problems were not the problem. The teachers commented that computer scheduling of students gave no consideration to the types of social, academic, and behavioral problems, and that it was not fair to average students to have classes so weighted unevenly with students with multiple problems. A teacher on team A was not pleased with the mixture of students in her room, and felt that there was an overabundance of students with problems. She would like students hand-scheduled, and consideration given to students' problems when scheduling.

During the team interview, teachers in Team B commented that the program had helped a lot of their students who were high-risk and/or deficient in reading skills, but not identified as exceptional. The general teacher commented that the special teacher was able to pull aside slower students and give them extra help or read tests to them when needed, when she alone would not have been able to do this.

Teachers on Team C shared all planning and instructional duties, and felt very positive about every aspect of the program. They commented that it took over half the year last year for them to feel comfortable with each other and to get to know each other, but now they couldn't imagine teaching without the other. Teachers on the survey gave a 70% positive response when asked if they felt like a partner with the other teacher, and a 67% positive response when asked if the program was successful interpersonally for teachers. Willingness to collaborate had a 60% positive response on the survey, and when asked if interactions with other teachers had gone well, teachers gave it a 67% positive response.

Team B was unable to share planning due to the schedule of the special teacher and her duties in other areas. This team operated on a lead-support basis, but divided part of the language arts lesson up regularly, and each took responsibility for certain parts of the instruction. The general teacher was ultimately responsible for grades and planning instruction. For this team, duties were divided as each felt comfortable and competent to teach. Teachers on the survey gave a 32% positive response when asked if teachers were jointly responsible for teaching, and gave an 80% positive response when asked if expectations of special/general teachers had gone well. They gave an 86% response denying that they had differences of opinion on roles and responsibilities, and 33% of these teachers affirmed that changes were needed in improved ways of working together.

An outspoken general teacher on Team A was not happy with the cooperative teaching program, and did not want to share any planning or instruction, since she described herself as "responsible for those kids." She seemed satisfied to have the special

teacher come into her room to help, but she did not want to relinquish any of her authority. When asked if sharing of responsibilities had gone well, teachers on the survey only gave it a 40% positive response.

Teachers on the survey were 93% satisfied with the EC teachers' schedules, but only gave a 28% positive response when asked if there were enough EC teachers. Teachers at this school indicated on the survey that they are not happy with the mixture of students with and without disabilities, with only a 13% positive response, or with class size, with a 7% positive response. Teachers in the team interview described a general population of high-risk students in their grade and teams, and told of the many problems these students have. They said that the identified exceptional students were not the problems.

Teachers at this school reported in the interview that they felt like their curriculum and instruction was meeting the needs of the students, but curriculum, being state-mandated, was not a question of discussion. Teachers on the survey gave a 0% positive response when asked to what extent curriculum was a joint decision handled with input from both teachers, but the amount of work as a joint decision received a 53% positive response, and modifications as a joint decision received an 87% positive response. How to improve performance as a joint decision received a 73% positive response. When asked if implementation of modifications had gone well, teachers on the survey gave it an 87% positive response. When asked on the survey if the curriculum was meeting the needs of all the students, they gave a 57% positive response. When asked if the materials were appropriate to meet all the needs, they responded with 87% positive responses. They affirmed with an 87% positive response that all students were allowed modifications in materials and expectations. They also indicated a desire to have staff development in modifications to meet individual needs, with a 60% positive response on the survey. They gave a 93% positive response when asked the importance to their program of a knowledge

of learning strategies, and an 87% positive response to the question of the importance of a knowledge of content subjects.

Only one of the three teams, Team C, planned together regularly. Two other teams planned together infrequently. When asked if time to plan with teachers had gone well, teachers on the survey only gave a 27% positive response. When asked if time to complete paperwork had gone well, they gave it also a 27% positive response. When asked if more co-planning was needed, they gave it a 67% positive response.

Teachers at this school saw the importance of cooperation. Teachers from two of the teams, Team B and C, divided teaching responsibilities regularly, and Team A did some shared instruction, although in Team A and B the general teacher was still in charge. In the team interview when discussing staff development, teachers explained that they would like training in how to organize cooperative relationships, including shared planning and teaching. On the survey, teachers gave a 53% positive response when asked to what extent staff development was needed in communication skills, and a 53% positive response when asked to what extent staff development was needed in sharing a classroom. They gave an 80% positive response when asked the importance to their program of the ability to form better partnerships. They gave an 87% positive rate when asked the importance to their program of the ability to give an opinion during teaching by another teacher, without intimidating or alienating. They gave a 93% positive response when asked the importance to their program of flexibility, and a 93% positive response when asked the importance to their program of a willingness to change.

According to the survey, 60% of teachers surveyed thought more team teaching was needed, and only 20% thought more of a focus on lead-support teaching was needed. This was affirmed in the team interviews when many of the teachers discussed the fact that they liked sharing teaching. One team, Team B, preferred a lead-support model. They also favored parallel teaching when needed, to present the same material to two separate

groups when abilities of students vary widely. Teachers on the survey gave it a 60% positive response.

Only 11% of those general teachers responding to the survey thought they had enough time to plan with special teachers, and 33% of the special teachers responding believed they had enough time to plan with general teachers. Only 17% of special teachers responded positively when asked if they planned daily with general teachers, and 11% of general teachers said they planned daily with special teachers. Weekly planning got a 33% positive response from special teachers and a 56% positive response from general teachers. When asked if planning time was productive, 33% of special teachers responded positively, and 67% of general teachers responded positively. Only 17% of special teachers said planning time with general teachers was a set, scheduled time, and 33% of the general teachers said it was a set time.

Teachers affirmed on the survey that they had no differences of opinion on grading, with a 100% response, but only gave a 40% positive response when asked if decisions on grades were made with input from both teachers. In the team interview, teachers in Team C shared grading as they shared instruction, dividing it evenly. Students with and without disabilities were allowed testing modifications. The special teacher on that team wrote her grades on a grade sheet and the general teacher transferred them to her grade book. Team A operated on a lead-support basis, with grading and planning done by the general teacher who felt these were her responsibility. The special teacher agreed with her when asked about grading. The general teacher used her own grading system for weighting assignments and thought this might be confusing for another teacher. Teachers on the Team B were comfortable in sharing grading, and did it regularly. The general teacher stated, "Her name may not be on the report card, but as far as I'm concerned, the grades and the work come from both of us."

School # 4: (27% positive on index of satisfaction)

The team interviewed at this school included one special teacher and four general teachers who worked together at the 7th grade level. This program was in a state of change due to the fact that they had just gotten an additional special teacher to work with the 8th grade. This meant that their special teacher would not have to be split between the two grade levels, as she was first semester.

One big problem at this school that the teachers talked about in the team interview was the addition to their classes of three students who previously had been in a self-contained class, but because there is no resource class at this school, were in general classes. The special needs of these three students necessitated that the special teacher take a lot of time to help just these three. Teachers in the team interview spoke of their frustration in trying to teach class when there were several students in the class who needed extensive help. When asked to what extent class size had gone well, teachers on the survey gave 0% positive responses. When asked to what extent the mixture of students with and without disabilities had gone well, they gave 0% positive responses. When asked on the survey if the program was successful for students with disabilities, teachers gave only a 20% positive response. They gave the same response when asked if it had been successful for students without disabilities. When they were asked to what extent they were frustrated in trying to make their program work, teachers gave a 60% response indicating that they were frustrated in trying to make it work.

When asked if the curriculum was meeting the needs of all the students, teachers on the survey gave it a 0% positive response. When asked about this in the team interview, a general teacher commented that the curriculum, as they were teaching it, was meeting the students' needs as well as could be expected. She said they were adapting it so it would meet those needs. The special teacher commented that the general teachers were, "doing a wonderful job of modifying." On the survey, teachers were 50% positive that materials

were appropriate to meet all needs. Responses were only 25% in the affirmative when asked if all students were allowed modifications in materials and expectations. Teachers were 100% positive when asked the importance to their program of a background in content subjects.

Teachers reported in the team interview that they still needed one more special teacher to have a resource room, enabling the present special teacher to concentrate on the cooperative program. When asked on the survey to what extent they were satisfied with the special teacher's schedule, teachers answers were 40% positive. When asked if there were enough special teachers, teachers answers were only 20% positive.

Having three students in general classes with such involved needs took away the time the special teacher could do cooperative planning and teaching with her team members. Teachers were 75% positive on the survey that more co-planning was needed, and 75% positive that more team-teaching was needed. When asked on the survey if time to plan with teachers had gone well, all teachers gave a 20% positive response. Special teachers gave a 0% positive response when asked if they had enough time to plan with general teachers, and general teachers gave a 0% positive response when asked the same question. Special and general teachers gave a 0% positive response when asked if they planned daily with the other teachers, and special teachers gave a 0% positive response when asked if they planned weekly with general teachers. General teachers gave a 67% positive response when asked if they planned weekly with special teachers. When asked if planning time with general teachers was productive, special teachers gave it a 0% positive response, and general teachers also gave a 0% positive response when asked if their planning time with special teachers was productive. When asked if planning time was a set, scheduled time, special teachers gave it a 0% positive response, and general teachers gave it a 33% positive response. the special teachers gave a 0% positive response when asked if there was a set time to complete ECS paperwork.

Teachers on this team were not sharing many decisions. When asked in the team interview what decisions were shared, teachers were silent. One teacher later said that she thought decisions on discipline were shared. Teachers on the survey were 0% positive when asked if curriculum was a decision handled with input from both special and general teachers. They gave a 25% positive response when asked to what extent amount of work was a joint decision, a 25% positive response when asked if modifications were a joint decision, and a 50% positive response when asked if how to improve performance was a joint decision.

When asked on the survey if they felt like a partner with the other teacher, results were 0% positive. They were 80% positive that they did not have differences of opinion on instructional methods, and 60% positive that they did not have differences of opinion on curriculum. Since they did not have cooperative planning, there was no discussion on these issues. When asked if teachers were jointly responsible for teaching, results were 0% positive. When asked if the program was successful interpersonally for teachers, results were 40% positive.

Teachers were willing to collaborate. They spoke in the interview of their program last year when they had a teacher in their content classes every period, and the success of the program then. This has not been the case this year, due to the fact that that teacher left. On the survey when asked if willingness to collaborate had gone well, teachers gave it a 60% positive response. When asked if expectations of special/general teachers had gone well, teachers gave it a 60% positive response. They answered with a 50% positive response when asked to what extent staff development was needed in communication skills. When asked in the team interview if they would like staff development, they said that it would be helpful to have staff development in how to share a classroom. On the survey, they gave a 50% positive response to this question of staff development in sharing a classroom. They gave a 100% positive response on the survey when asked about the

importance to their program of the ability to form better partnerships. They also gave a 100% positive response when asked the importance to their program of the ability to give an opinion during teaching by another without intimidating or alienating. Flexibility and willingness to change also each received 100% positive responses when teachers were asked about importance to their program on the survey.

Teachers liked having a special teacher in the room to help with students who have special learning needs, and wished that she could be there every class period. They commented in the interview that her presence had helped students with disabilities participate more fully in the general classes, and not be isolated in a separate room. Teaching was mainly lead-support, where the general teacher led the instruction and the special teacher was there to support her and help students with note-taking and organization of their work, or giving tests aloud. When asked if implementation of modifications had gone well, teachers gave a 60% positive response.

When asked if they were satisfied with the sharing of responsibilities, teachers commented in the interview that presently each teacher was doing the best that she could to make the team function as well as possible. They commented that it would be wonderful to have more shared teaching and planning. When asked on the survey if the sharing of responsibilities had gone well, answers were 40% positive, and 80% said they did have differences of opinion on roles and responsibilities. They were 40% positive when asked if interactions with other teachers had gone well, and 75% positive when asked if changes were needed in improved ways of working together, saying that these changes were needed.

Changes needed were explored on the survey, and teachers gave a 50% positive response when asked to what extent changes were needed in more flexibility in trying various instructional models. They gave a 50% positive response also, when asked about changes needed that would include more of a focus on lead-support teaching, and the

same response (50%) when asked about changes in more parallel teaching to students of varied abilities. In the team interview, teachers commented that for the present, a focus on lead-support was working well, but they enjoyed their team-teaching of last year. They commented that they would like to have a resource room and a common planning time with the special teacher, and staff development in sharing a classroom. They would also like staff development on how to include all levels of ability when teaching students of diverse needs. On the survey, when asked if staff development was needed in modifications to meet individual needs, responses were 75% positive. They gave a 100% positive response to the question of the importance of letting students experience success.

Teachers did not share grading. When asked in the team interview about this, the special teacher said that she gave input on grades when necessary. On the survey, teachers gave a 25% positive response when asked if the special teachers gave input on grades. When asked if decisions on grades were made with input from both teachers, teachers gave it a 0% positive response. The general teachers commented in the interview that the special teacher made suggestions about the amount of work. On the survey, the question of whether or not teachers shared grading got a 0% positive response. The question of whether or not the special teacher graded what she taught got a 25% positive response. When asked if the special teacher followed the expectations of general teachers, responses on the survey were 75% positive. The general teachers were responsible for doing report cards, and on the survey this question got a 100% positive response. When asked if both teachers shared duties for report cards, teachers gave it a 0% positive response, and a 0% positive response when asked if teachers shared duties for interim reports. Table 5 shows a summary of comparisons among the 4 schools interviewed in Phase III.

Table 5

Summary of Four Teams Interviewed In Phase III

	School # 1	School # 2	School # 3	School # 4
% Positive special teachers' schedule	**67% ECS tchr. with 2 teams: 1 co-op 1 resource**	**56% ECS tchr. with 2 teams; no resource available ECS tchr. not in each class each day**	**52% ECS tchrs. in all 3 teams split between resource and co-op**	**27% 1st semester ECS tchr. with 2 teams. Now 1 team plus 3 self-contained students**
instructional procedures	**math:lead-support LA: team**	**all 4 content subjects: lead-support**	**team A: lead-support team B: lead-support with EC tchr. taking 1 part of lesson team C: all teaming**	**all lead-support EC tchr. helps EC students**
student population	**many high-risk, former Chap.I students with EC students. No AG on team**	**no resource, so many ECS students, 8 out of 28, per class. Many others with problems**	**Many high-risk students with problems**	**3 former self-contained cause EC tchr. to have to devote all her time to them**

	School # 1	School # 2	School # 3	School # 4
curriculum modifications	like EC students; can see much progress	tchrs. frustrated w/ student ratio. Like co-op tching.	<u>Team A:</u> doesn't like having to team <u>Team B:</u> hopeful, positive, but frustrated w/ ratio of kids <u>Team C:</u> doesn't want to ever split up team	gen. tchrs. like idea - it went well last yr. with diff. tchr. This yr. gen. tchrs. frustrated with having 3 very low students. Very little team-work happening
program implemented by:	individual; developm.; thematic	modifications made, but differing levels diffic.	<u>Team A:</u> EC students upset balance <u>Team B:</u> EC students OK <u>Team C:</u> all students benefit	difficult with very low students, to meet all needs - teachers 60% frustrated

	School # 1	School # 2	School # 3	School # 4
Needs	**admin. idea, but teachers planned program**	**ECS Admin. gave initiative, Task force investigated; all trained, participation rotated at first; now use those willing**	**ECS teacher; began small; evolved to whole school. Team A & B new this year. Team C began last year (young tchrs.)**	**admin. told them they would do it; no training or preparation**
	More EC tchrs., 1 per team	**More EC tchrs., 1 per team**	**Another EC tchr. Smaller classes**	**EC tchr. to do res/self-cont., com. plan.**
working relationships	**awk. at first, now flexible; partners in everything**	**Team volunteered; tchrs. like working together**	**<u>Team A:</u> dislike sharing at all <u>Team B:</u> works well <u>Team C:</u> true partners**	**very little teamwork; they occupy same room**

	School #1	School #2	School # 3	School # 4
time to plan	**1 hour daily with each team; EC no individ. time**	**team plans daily; each has indiv. planning**	**<u>Team A:</u> no team planning <u>Team B:</u> monthly <u>Team C:</u> daily, ongoing**	**no planning with EC tchr. due to respons. with 3 very low students**
IEPs	**written together**	**EC tchr. writes, at least 1 or 2 gen. tchrs. attends conf.; input is ongoing**	**<u>Team A/B:</u> EC tchr. responsibility <u>Team C:</u> tchrs. write together**	**EC tchr. writes; shares them with gen. tchrs.**
grading	**EC tchr. helps grade; gen. tchr.does report cards with EC tchr. input**	**Tchrs. beginning to share grading**	**<u>Team A:</u> all gen. tchr. <u>Team B:</u> EC grades papers, puts on grade shts <u>Team C:</u> divided evenly**	**Gen. tchrs. do all grading**

Summary

Special and general teachers at 16 middle and junior high schools in three school systems were interviewed and surveyed to discover how implementation of their cooperative teaching programs had been accomplished, how they addressed the areas of time, roles and responsibilities, instruction, and evaluation, and what the major differences were in programs at different schools described from most positive to least positive terms. Data was collected from initial interviews of a key teacher in each school, from surveys of special and general teachers participating in the cooperative programs, and from team interviews at four schools. Validity of the interview instrument was supported by the literature and by having it checked, and suggestions for clarification, deletions or modifications made, by a jury of educators who were familiar with or who were participating in cooperative teaching programs. The validity of the survey was supported in that it was drawn from responses from teachers involved in programs with which it was to be tested. The team interview instrument was a re-statement of some earlier questions that needed clarification or elaboration. The reliability of the survey was supported by comparison to team interviews.

Research question one, concerning how programs are being implemented, was addressed in the initial interviews, the surveys, and in team interviews. Research question two, concerning the 4 critical issues of time, instruction, roles and responsibilities, and evaluation was also addressed in each phase of the data gathering. Research question three, concerning differences in programs from most positive to least positive, was addressed in survey data and in team interview data.

Summary data provides a picture of how cooperative teaching programs are being implemented in three school systems. Comparison of findings from all three sources of data gives a clearer picture of the prevalent issues. Topics of concern from initial interviews focused on:

1. implementation and selection of participants
2. lack of sufficient training to feel comfortable
3. team and teacher cooperation and cohesion
4. delineation of roles and responsibilities
5. dealing with content subjects by special teachers and modifications by general teachers
6. time to plan
7. choices of curriculum and instructional methods and materials, and
8. evaluation and paperwork.

These topics were used to develop the survey which went to all general and special teachers in the 16 schools participating in cooperative teaching programs. Overall response rate was 47% after several attempts by letter and phone to elicit response. Findings from the survey, and later team interviews of teachers in four schools to clarify survey responses, indicate that:

1. A majority of programs were initiated by principals.
2. Pre-implementation training or preparation of teachers was limited.
3. Scheduling of special students into general classes had to be done by hand many times, and balance of special and general students and total class size is not perceived by teachers as positive.
4. There are not enough special teachers at some schools to sufficiently staff resource classes and still cooperatively team in all content classes with teachers who teach students with disabilities.
5. Teachers would like more training in organizing cooperative programs and in modifications to meet individual needs.
6. Teachers have gained empathy for each other from working in cooperative programs.
7. Special teachers have gained skills in content subjects.
8. Teachers, especially special teachers, have gained in their knowledge of students while

participating in the program.

9. Time to cooperatively plan is not necessarily scheduled for general and special teachers, and is more likely to occur weekly or in informal, unscheduled times.
10. Time for special teachers to complete paperwork is limited.
11. Some special teachers are working with more than one team, limiting their time with content classes and limiting time to plan cooperatively.
12. Roles and responsibilities for many teachers cooperatively teaching have not been delineated.
13. Lead-support teaching is more prevalent than team teaching, but teachers would like to do more team teaching is they had more time to plan.
14. Curriculum is state-mandated and has not been changed in content, but pacing may be slower and modifications are widely used.
15. Teachers would like more alternative materials, varying levels of materials, and teaching aids such as computers.
16. Special teachers do the majority of the IEPs, with general teachers' main involvement being awareness of goals, sometimes attending IEP conferences, and giving some input into goal development.
17. Teachers have become more comfortable in working with each other with time, and most seek better working relationships.
18. General teachers do most of the grading and report cards, although special teachers in some schools share this responsibility.
19. Special students are allowed flexibility for effort in grading, and testing modifications are made in a majority of teams.

Findings from team interviews concerning the index of satisfaction show similarities in problems teachers are encountering in the ratio of students with disabilities to students without disabilities within classes, and the special teachers' schedules that

pulled them in several directions, sometimes between teams. The many responsibilities of special teachers did not always allow them to team fully with all content teachers, including time to plan or to provide instructional help. Teacher attitudes differ between programs and within schools concerning the success of the program and the efficacy of it. The school with a high positive response has similar problems with class ratios and special teacher schedules as the schools with medium or low positive responses, although these teachers gave positive responses on the success of the program. The teachers at the school with the highest level of positive response were interested in participating in the program and took part in planning their program and its delineation of roles and responsibilities before implementation.

CHAPTER FIVE
CONCLUSIONS

Introduction

Since the National Joint Committee on Learning Disabilities in 1991 developed a list of suggestions for educating students with mild disabilities within general classes, many programs have begun to be restructured as collaborative, cooperative teaching programs (Nowacek, 1992). Special and general teachers many times began these programs not sure of how to accomplish this goal, without guidelines, training, or preparation. It has become important to identify key factors to guide such implementation, and to provide data to support these key factors.

The study examined how special and general education teachers in 16 middle schools in North Carolina were implementing cooperative teaching programs, and investigated factors contributing to the implementation of such programs. Of particular concern were the issues of time, instruction, roles and responsibilities, and evaluation. The study sought to discover how teachers had negotiated these issues, and how implementation had been accomplished at these schools. Three sources of data were examined to research these questions. One key informant, either special or general, was interviewed initially at each school, to obtain descriptive information concerning implementation. From these results, important differences in programs were noted, and a survey was written to include all of these differences.

The second phase was to survey all special and general teachers who were teaming at selected schools to determine their perceptions of the extent of implementation of factors originally described by key informants at each school. The third phase was to question

team members as a whole at four schools with at least 50% participation in the survey, chosen because they were close geographically, and had differing levels of satisfaction with the program. Team interviews sought to clarify implementation factors, to question why they were implemented as they were, and to ask what teachers would see as factors to improve existing problem areas. From the whole of this information, important differences in programs emerged that impact the success of these and future programs.

Interpretations of Findings

Preparation of participants:

The preparation of teachers to participate in a cooperative teaching program is perhaps the strongest factor leading to successful programs. In all aspects of the research, teachers expressed a need to be more involved in the planning for their programs, including developing a shared vision, or perspective, of what the program goals should be, and what cooperative teaching meant for them. A lack of a shared perspective or vision caused teachers to be unsure of how roles should be carried out when there were two teachers in the room. Most never had the chance before implementation to discuss roles and responsibilities for each teacher, and to examine different program formats or instructional procedures to find what would best suit them, and this caused some problems later. Initially, the teachers interviewed seemed to express dissatisfaction that programs were initiated by administrators, with no input from teachers. But, whether they were initiated by an administrator, at the request of an interested special education teacher, or because faculty in general thought children could be better served in cooperative teaching programs, it became clear that the key issue was teacher preparation and involvement.

Preparation for teachers to be a part of cooperative programs can take several forms. Initial and team interviews found that most teams of special and general teachers did not formally work out roles and responsibilities for teachers or important considerations

involved in developing these new programs before beginning the relationship, although a few did. One team that sat down and worked this out was very upbeat and positive about their program. Teachers on this team explained in the team interview that they had worked out at the beginning of the year how classes would be managed and roles delegated, and that they are satisfied that they have the best arrangement possible. Even though teachers recognize their differences, they take advantage of these differences. For example, one general teacher explained that he was not a detailed person, and so the special teacher's organizational skills were valued in their relationship. The special teacher in that team explained that as the general teacher taught, she reminded him to give a visual cue on the overhead projector or board as he lectured.

Another school that initiated discussions and interest in teachers before implementation also provided teachers with ongoing support from an assistant principal, whose sole responsibility was the support and administration of cooperative programs in that school. Teachers in several schools, in interviews, expressed the need for ongoing support throughout the year, to help work out problems, answer questions, or to discuss ways to better work together.

Another means of preparing teachers was to provide yearly training in cooperative teaching during summer institutes for special and general teachers in one district studied. Another school in another district initially interviewed had a pilot program to experiment on a small scale with changing teacher roles and instructional methods and materials with one or two classes for a year in advance. Teachers in another school in interviews told of visits by teachers and administrators to existing programs, to observe how others began implementing cooperative programs in their schools. Interviews showed that in schools where some teacher preparation took place, programs were better received and more positively viewed by teachers involved, than programs that did not have the benefit of such preparation. Individuals with no preparation or voice in planning for innovations or new

positions, may either directly resist or reject, or passively resist by not following through or not utilizing the innovation to the fullest or in proper ways, to the detriment of the organization (Zaltman, Duncan, & Holbek, 1973).

Teachers said that they would have liked to have had more training before they began cooperative programs. Results of the study indicated that fewer than one-fourth of participants received training before they began cooperative teaching. It would have better prepared them to be partners with one another in every way. In fact, some of the teachers who received training together spoke of this feeling of partnership as a benefit of that training. The fact that three-fourths of the teachers had little or no training before implementation, and that fewer than half were familiar with what cooperative teaching meant was a detriment. They did not know before attempting to implement it, how cooperative teaching would affect their autonomy, their roles and responsibilities in teaming with another teacher, their instructional and evaluation procedures, or their students' performance. This lack of knowledge many times caused mistrust and indecision or inhibitions in the teachers involved. They were not sure what the program would mean for their roles and responsibilities in the school.

Further information and training may affect an individual's attitudes towards adoption of a new idea. Teachers have reported that training has alleviated some of the fears and uncertainties they felt at the idea of working with another person in the room and sharing roles and responsibilities. Others who received training with a team member said that training helped them to approach the program with similar ideas and information, and consistent expectations for what it would entail, and therefore work together better as a team. Those without preparation had no basis for acceptance of the idea, and no knowledge of what acceptable practices of sharing roles and responsibilities would entail. They had no idea of how cooperative teaching would affect their own autonomy, and felt uncomfortable sharing duties, leadership, and control.

Willingness to participate:

Another important finding is that teachers who were willing to participate, or were volunteers for cooperative teaching programs, and who believed in the philosophy of cooperation and collaboration, were more likely to be successful than teachers who had no choice. Teachers in the study who shared this belief in the idea of cooperative teaching were more willing to compromise, to empathize with the other teacher, and were more flexible. A significant potential obstacle in developing cooperative relationships is resistance by teachers to such a radical shift in the format of their teaching roles (Bauwens, et al.,1989) . General and special teachers traditionally have been segregated in their training, in their roles and responsibilities as teachers, and even in location in the school buildings, and have not had opportunities to work so closely together. In Bauwens', et al. (1989) study, teachers completing their first year of cooperative programs reported that training, experience in the programs, and the development of individualized guidelines for program implementation served to alleviate resistance and help teachers feel comfortable with and enthusiastic about their cooperative programs.

This study found that originally, although at some schools teachers were asked if they would like to participate, others were not, but were informed that this program would begin. Their schedules were changed to include students with disabilities, who had previously been served in resource rooms, into their classes. On the survey, over half said that they were willing to work with another teacher, now that the programs have been in existence at least a year, but at two-thirds of the schools, willingness of teachers was not a consideration or only somewhat a consideration. Teachers reported that the subject in which the student qualified was the most important consideration, and sometimes teachers were chosen simply because they happened to teach that subject. Any program is only as

good as its participants, and those setting up programs must choose teachers who have demonstrated an interest and willingness to participate (Reynaud, et al., 1987).

Some teachers in interviews reported that, in the beginning, some teachers had to be talked into being a part of the program. They were leery of this new program, and had not been trained to feel prepared. At one school interviewed in Phase III, administrators made the decision when the program began, to rotate every teacher in the school through training and participation in the program, a year at a time. They found that this did not work because of differing, preconceived perceptions of what the program should be. Teachers in the team interview told of one instance in which parents of a student with disabilities had built up a trust relationship with the special teacher, and turned to her when they had concerns. This offended the general teachers, two of whom did not believe in the model in the first place. That school has since decided that the program will work better with teachers who are willing and who believe in the program. Participation is now on a voluntary basis.

An innovation may not be as unique after the persons involved adjust to the idea over time. The teachers interviewed all reiterated that it just took time for cooperative relationships to develop. Some said that the first year was a growing period, when teachers teaming had to get to know each others' styles of teaching, organization, or managing behavior. Others said it took even longer to feel like a true partner with another person, to adopt a new program as their own, or to work out all of the problems inherent in starting something new. One special/general teacher team told in their team interview that it had taken about two-thirds of the first year for their relationship to evolve to where they did more shared planning and shared teaching. They stated that they felt like their relationship was easier to bond because they were both fairly new to teaching, having taught only two or three years apiece. They did not have to change twenty years of habits to adopt this new program. Some teachers suggested group awareness activities before

programs begin, that would enable teachers to begin to bond together as partners before they began teaching together.

Other teams learned to work out relationships as time passed and willingness to share ideas grew. In the Phase III team interviews, teachers at one school commented that they did not work out roles and responsibilities ahead of time, but did this as they went. In their team planning they discussed upcoming lessons and instruction and the special teacher decided how to make modifications. Teachers were satisfied with this relationship, and reported that they were not territorial, had no conflict, and respected each others' strengths and needs. On the survey, answers to the question of whether teachers felt like a partner were 70% positive at this school.

Teachers who do not believe in the concept of inclusion may react negatively to all aspects of the cooperative program. Another team of special and general teachers in the same school mentioned above, had trouble, and did not relate together as a team. Responsibilities for grading and discipline were not shared. The general teacher was not willing to share teaching responsibilities, and said in the interview that she was ultimately responsible. This teacher's lack of willingness to participate affected her beliefs in the efficacy of the cooperative program. She really did not think students with disabilities should be included in general classes, and commented that they needed to be in a small group setting because, with their attention spans, they just could not function in a whole class setting. She commented, when asked about adequate materials, that they did not have materials that were low enough, and felt untrained to adapt materials and lessons for students who needed it. This school did have a resource class and a self-contained class for students who cannot make it in general classes. These comments were a reflection of her lack of willingness to participate.

For grading she also preferred to do it herself, rather than explain her system to the

special teacher. She commented in the team interview that she got frustrated sometimes because she felt shewas responsible for getting grades into the computer. She felt that she had to make sure she was aware of exactly what students had done, and how it had been done, and have it recorded in a manner that she considered correct. When asked if staff development was needed in sharing a classroom or in communications skills, the general teacher responded that it was not needed. Another general teacher at that school commented at the end of the interview:

> "Inclusion only works if there's a good relationship between the two teachers from Day One....If you take two different philosophies and put them together, no matter how hard you work, it's not going to work, and you're hurting the kids instead of helping them. I don't think that anyone should be forced to do inclusion unless they're both willing, and I don't think that has happened, definitely, with some teachers. They don't want to be doing it, but they're stuck doing it. "

Some special teachers commented that general teachers sometimes had unrealistic expectations for students with disabilities, and were unwilling to compromise. General teachers commented that the slower students were holding back the other students, when they really just did not believe in the program or its possibilities for success. They did not want to change their way of doing things to accommodate students with special needs. This was evident in one team interview, at the school with only a 27% positive overall response rate. When the researcher asked general teachers in a team interview if they felt that they needed staff development in modifications to meet individual needs, the response was minimal, despite the fact that they had just been complaining of diverse needs of students.

Other teams of teachers emphasized that teachers were chosen who believed in the

program. Some became interested when they saw others being successful with it as the first year progressed. The success of the program convinced them that it was something in which they wanted to participate. Some were convinced because they saw it as a way to have help with the diverse needs of students in their classrooms. Some teachers in this study were willing to try, and volunteered for the program because they had always had students in their classes who needed extra help, and they were convinced that this program was the way to best help them.

Reynaud, et al., (1987) suggested that administrators use motivating techniques to stimulate interest and concern in teachers at their schools. They suggested involvement of general teachers to survey why students were not being successful in content classes. They went on to suggest that administrators provide leadership, but allow the ideas/ solutions to come from the teachers, thus establishing ownership of the program.

Some teachers interviewed in this study suggested that teachers be chosen based upon similarities of teaching style or personality, and that the successful development of a partnership depends upon teaming the "right" teachers with one another. At one school, two teachers commented in the team interview that their strengths matched well. The general teacher, more familiar with the content of the curriculum, is in charge of the direction of the curriculum. The special teacher, with skills in organization and learning strategies, is in charge of pacing the instruction, and instruction and assessment are evenly split between the two. Theirs is truly a partnership. Reynaud, et al., (1987) in describing the Park Hill Learning Disability Project, stated that teacher compatibility is the most important ingredient for success of a cooperative program.

The majority of teachers surveyed commented that flexibility is an important characteristic for those seeking to cooperatively teach. Willingness to change was also given a very high positive response when asked the importance of that skill to the program. The Park Hill Project teacher selection list included similar suggestions to this

study's findings. They suggested similarity in organizational, teaching, and discipline style, willingness to adapt and be flexible, willingness to have another professional in the room, interest in participation, understanding and acceptance of disabled learners, and willingness to change teaching practices and adopt new strategies (Reynaud, et al., 1987). Many teachers in cooperative programs have worked to change preconceived ideas and see the other teachers' perspective, and now feel a true partnership with each other.

A continuum of services and adequate staff to maintain them:

A third important finding is that schools need to retain a continuum of services, and be committed to having enough personnel to staff each level of this continuum. Cooperative programs and inclusion are not appropriate for every student. Some schools have tried to incorporate cooperative programs without retaining resource rooms for students who still need that level of help. This may have been because they thought all students could succeed in general classes, perhaps because they tried to implement a new program without considering what it meant in terms of personnel, or because they do not have the funds at this time to hire another teacher. Some schools are experiencing serious problems in implementing cooperative programs because of a lack of resource rooms, causing students with serious learning and/or behavioral needs to be included in general classes. This has left some general teachers feeling very frustrated with trying to meet the wide variance in skill level in their classes.

This need to provide a full continuum of services replicates results from Colorado's efforts to implement secondary cooperative teaching programs (Adams & Cessna, 1991). They found that no one service delivery model will meet the needs of all students. Their full array of services are available within a school, and allows for students to take advantage of any of the services to meet his/her needs, and does not limit him/her to being in any one service delivery model. For example, a student may need direct services in a

resource room for English, but be very well served in cooperative classes for other subjects.

Some schools in the study realized this sole reliance on cooperative classrooms as a mistake, and rescheduled students into a resource room, but without hiring another special teacher to staff it. This left the one special teacher per grade to divide his/her time between the resource room and cooperative classes. The majority of teachers responding to the survey said that they did not have enough special teachers to make the program run smoothly. At all four of the schools interviewed in Phase III, teachers commented that one of the things that would improve their programs the most would be an extra teacher.

The lack of a resource room at some schools caused larger classes and a larger ratio or students with special needs per class. The majority of teachers surveyed felt class size and the mixture of students with and without disabilities were problems in their schools. At some schools, class size was 28-30 students, with almost half of these having special needs. This was too many students with special needs, and too many students per class. Having 20-25 would better enhance the possibilities that teachers would have the time to do more individualizing. At some schools, all students with disabilities were scheduled into one team per grade level, giving that team a large proportion of students with special needs. Many other students not identified as exceptional, but who experienced other academic, social, or behavioral needs were in the same classes, causing teachers frustration at having so many students with special needs in one class. Even with a special teacher it was difficult, because those with more serious needs took up most of the special teacher's time, limiting her usefulness to other students and to the teacher. At other schools, the students with disabilities were distributed between two teams per grade level. This helped the ratio of students with and without disabilities, but unless there was another special teacher, the special teacher for that grade level was then split between these two

teams for services, limiting the common planning time available and many times meaning services were only provided in math and language arts content classes. When they were in science and social studies classes, students and teachers were left without the help of the special teacher.

Even when students with disabilities were distributed between two teams per grade level, and the ratio of students with and without disabilities was better, there still were some problems unless the school had hired another special teacher. One special teacher had to divide her time between the two teams, limiting her usefulness again in all subject areas or for common planning. She could not cooperatively plan and teach with two teams of teachers in all subject areas. It meant that cooperative programs were limited to language arts and math. Sometimes teachers had to skip classes with one team once a week in order to plan with another team. Sometimes they chose to cooperatively teach with social studies one day a week for one team, or science on the alternating week. Some teachers only worked with science and social studies teachers when students were having a test that needed to be modified or read orally. Even then, they had to sacrifice either planning or teaching time in their regular schedules to accomplish this.

Time to plan:

A fourth and very important finding, replicating earlier findings, is that time to plan was not always provided in teachers' schedules, despite the fact that part of the middle school philosophy is that team planning is a vital part of the schedule (Bauwens et al., 1989; Evans, 1980; Friend, 1984; Glomb and Morgan, 1991). The issue of time to plan with others and to complete paperwork was examined in all phases of the study. Although some teachers found some time within their schedules, most responded that it was

not enough, and was often interrupted by many other things. In initial interviews, only about half of those interviewed said that they met daily with their cooperating teachers. A few teachers interviewed met daily with their team and some had an additional individual planning also, when they tried to do paperwork. Some teachers interviewed initially used individual planning sessions to meet individually with one or two teachers with whom they cooperatively taught, in order to do real planning for particular lessons.

Cooperative planning between teachers working together is very important. Without it, general teachers must rely on their own perceptions of students' needs and abilities or of what students are capable of doing in their classes. They have no opportunity to question special teachers about certain behaviors, or to discuss alternative methods of instruction or evaluation. Special teachers have no time to hear general teachers' concerns, ask questions about or give their input concerning appropriate curriculum sequence, pacing, or depth, or to suggest particular modifications in methods, materials, evaluation, or curriculum (Johnson, et al., 1988). As stated earlier, teachers need a chance to share successes and failures, reflect on activities that occurred, and discuss alternatives (Cole, 1992). But the study showed that time to meet and plan is not necessarily a part of cooperative teaching programs. Due to the large numbers of students to be served in some schools, and not enough personnel available to serve them, time to plan takes second place in prioritizing teachers' schedules.

Having a regular time to plan allowed teachers to develop their feelings of being partners, to share ideas, and to plan together for curriculum, materials, and assessment. It gave them a chance to develop their communication skills and practice ways to collaborate. Having time to develop collegiality broke the isolation of being teachers alone in their classrooms. Studies have shown that working closely together on instructional and assessment issues helps teachers to be better equipped for dealing with

students' needs in the classroom (Little, 1987). Teachers have commented that it was nice to have ideas from two people, and to realize that there was more than one way to do something. Working together enabled teachers to develop pride in their professional relationships that withstood occasional differences of opinion or minor conflict. When asked in interviews if they ever had differences of opinion, teachers responded that they did, but that they usually talked it out right then or later in team meetings. Teachers who had good relationships and planned daily shared that they had almost gotten to the point that they thought alike, and considered themselves lucky to teach together. Teachers also shared the fact that during shared planning times they even helped each other with paperwork, the general teacher helping with drafting IEPs or the special teacher helping grade papers. These types of sharing lead to a more collegial feeling between teachers, and a relationship that was rewarding for both teachers. The survey showed that 61% of the teachers responding have felt that they had gained empathy from working with the special /general teachers. Along with empathy, they described gaining a better understanding of what special or general teachers' jobs were like.

Without time to plan together, in some cases this resulted in general teachers treating special teachers like assistants. This attitude was still prevalent in some places, although not in a majority of cases. At one school interviewed during Phase III team interviews, a general teacher spoke of the benefits of having a special teacher in the room, saying, "She's very helpful. I'm the teacher, but she jumps right in there to help. She takes the initiative, yet there's no doubt as to who the teacher is. So, to have an aide, or a resource teacher in the classroom at all times would be wonderful." Although these two teachers had adopted the lead-support model for their relationship, and both seemed satisfied with it for that class, this teacher was referring to the special teacher repeatedly as a helper or an aide, and to herself as the teacher. During initial interviews, teachers told of feeling like an aide in the classroom, especially if there was no opportunity to plan with general

teachers. They had no choice but to go to the class unprepared to be a partner in teaching, unless they had seen each other after school, had planned together for a few minutes after class, or a few minutes before class, and knew what the lessons were going to be and had a planned role in those lessons. Some special teachers felt like their skills were wasted, and some felt insulted when they were asked to go run copies, to check papers, or were otherwise treated as an assistant. Others said that they felt that they were able to better use their skills now, as the program and the relationships between teachers had progressed, but it took a "growing period" in the program for that to happen.

General teacher participation in Individual Education Programs (IEPs):

A fifth important finding is that many special and general teachers were not working cooperatively to plan Individual Education Programs, despite the fact that state and federal regulations stipulated that IEPs be written by a team. For most respondents, the IEPs were considered the responsibility of the special education teacher. This replicated findings by Ammer (1984), who found that 48.6% of general education respondents indicated they had no role in IEP development. Interviews with teachers found that special teachers, perhaps because it is easier to write IEPs themselves than to elicit input from general teachers, tended to write the IEP before the IEP conferences. Many special teachers interviewed wrote what they called a "draft" IEP before the conference, and then asked general teachers who attended if they had anything to add. But general teachers were not always treated like team members, and invited to give input before the conferences, or even informed about when the IEP conferences were to be held. An example of this lack of collaboration was at another school, where the special teacher did the IEPs, and showed them to general teachers. She commented that she, "Lets them know what modifications need to be made." She did not make any attempt to instigate any

input from the general teachers before writing them, and did not invite them to IEP conferences.

Part of her reticence may have been due to the general teachers' attitudes. During team interviews when asked about paperwork, general teachers at that school expressed frustration at having to do any of what they called administrative paperwork, although they were only responsible for gathering information on new referrals, as is the role, state-wide, of general education before a child reaches the stage of actually being referred for further testing. This lack of willingness of the general teacher to be a part of what she may have perceived as special education paperwork, may have been the reason that the special teacher did not seek to make writing the IEPs a team process.

At another school, during the team interview general teachers described themselves as very involved in IEPs, because they felt that they knew the students and had information that might help the next year's teacher deal with students' needs. The special teacher did a draft ahead of time, and parents and at least two members of the team were there at the IEP conference to give input about changes or modifications in what was drafted. This level of involvement that the general teacher called, "very involved," seemed to be the rule at other schools also, except that general teachers tried to get at least one general teacher to attend the meeting.

When asked to specifically identify their level of involvement by rating suggestions made in the interview, teachers commented that their number one involvement was awareness of the goals, their number two involvement was to sometimes attend IEP conferences, and their third level was to occasionally give input for modifications they felt were needed. This was not what the authors of federal and state regulations meant when they stipulated that IEPs were to be written by a team of professionals. Ammer (1984) found a direct involvement between the degree to which responsibility for developing and maintaining the academics of the student was shared, and the extent to

which classroom accommodations were made once the IEP was written. Morrison, et al., (1986) pointed out in their study that although the law has mandated shared responsibility for developing programs for students, general teachers are not seen by others nor do they see themselves as full partners in the education of students with disabilities. They pointed out that it is not surprising that general teachers give evidence of resentment and antagonism about special education procedures, because they have not had the opportunity to understand these procedures. Perhaps if general teachers had more of a direct involvement in IEPs, they would feel more like partners in every respect for educating students with special needs.

A good example of this type of shared involvement was a team with very positive responses to the program. They wrote IEPs as they did everything, together as a team. At this school, the whole team sat in on the IEP conferences with the parents and gave input or made suggestions. Teachers described their input as continual and ongoing, at daily team meetings. The special teacher did not write the IEP ahead of time, but wrote them with the general teachers and parents, at the conference. The result was a team that took joint responsibility for assessing students' needs, developing goals and objective to meet those needs, and carrying out those objectives in shared instructional methods each day. If a teachers are to work as a cooperative team, they must have the attitude that all aspects of the program are to be a shared responsibility, especially the IEP, which was originally designed as a team responsibility.

Instructional methods:

Another important finding was that while many teachers were doing lead-support teaching, with one teacher teaching the lesson and the other providing support by helping students as they participated and responded to the lesson requirements, most would like to do more team teaching. Team teaching only received a 23% positive response when

teachers were asked on the survey if they used it. Teachers in initial interviews described the instructional procedures used in their teams as mostly lead-support, with one teacher leading the lesson, and the other providing support by helping students as they participated and responded to the lesson requirements. Some of these teams said that they sometimes reversed the roles, with the general teacher working to support the lead of the special teacher, but most of the time it was the other way around. It did not mean that general teachers always took the lead, and special teachers provided the support. Teachers commented that they usually talked about lessons in planning sessions, and divided up the teaching responsibilities according to what they felt comfortable in teaching.

Lead-support teaching has become the prevalent instructional procedure mostly because special education teachers have not been trained, nor are they familiar with the content subjects. In initial interviews teachers commented that they did not feel comfortable in teaching math, or science, or perhaps social studies. Each teacher seemed to have one particular subject that they did not at all feel comfortable in teaching, and were glad to take a supporting role in that class.

Teachers in initial interviews commented that they had become more confident in their abilities to "handle" the curriculum as their experience with the cooperative program grew, and they learned more and more of the content curriculum. They also described working very hard to learn the curriculum, taking textbooks home at night to familiarize themselves with the content, taping television specials on the Discovery Channel about foreign countries, investigating workshops on content subjects that they might be able to attend, writing Chambers of Commerce in foreign countries to request brochures and information, and even taking courses to sharpen their skills and broaden their knowledge about content subject matter. Some special teachers were very motivated to make cooperative programs work.

Although some teachers described their uncertainties in teaching content

subjects, others with some experience in content areas felt fine sharing teaching. Special teachers were more likely to team teach in language arts classes because of an easier familiarity with it. Many special teachers commented in initial interviews that they felt they had learned a great deal about content subjects and about ways to teach from teaming with a general teacher. On the survey, 70% gave positive responses when asked if they had gained skills in content subjects. This replicated findings by Meyers et al., (1991), who found that the majority of teachers in their study felt that their skills in teaching had improved, as a result of both cooperative planning and cooperative teaching. Teachers in cooperative programs reported that this improvement was a result of opportunities to observe instructional techniques, classroom management, and teaching styles.

General teachers in the Meyers, et al., (1991) study reported that they had gained skills in developing classroom procedures that individualized instruction, ideas on cooperative learning, special fun techniques to teach material, how to be more understanding, and "confidence to leave the basal." Overall they found that cooperative relationships had resulted in positive growth for teachers involved. Similarly, 61% of teachers in this study reported that they had gained empathy for the special/general teachers by participating in the cooperative program. Along with empathy, teachers in initial interviews described gaining a better understanding of what general teachers were having to face with a large class and trying to modify curriculum to meet all of the students' needs.

The area of "gained skills" with the second highest positive response on the survey was knowledge of the student with/without disabilities. Of those responding, 52% gave positive responses. In initial interviews also, special teachers expressed difficulty in getting used to teaching in general classes, with larger groups and students with higher levels of abilities. But once they adjusted, they felt that they had become better at handling classroom management for large groups, and were more confident in their ability to help

all students. Another benefit was that special teachers now better understood how students with disabilities fared in general classes, and the challenges they faced. Some special and general teachers commented in the initial interviews that another benefit was that they understood learning differences better.

Despite use occasionally of other instructional procedures of alternative teaching, parallel teaching, or learning station teaching, the two most prevalent styles were lead-support and team teaching, with the latter being the most prevalent. Teachers would like to do more team teaching, and this would benefit the programs by increasing collegiality and sharing of other responsibilities. Meyers, et al., (1991) reported that teachers who team-taught increased the frequency of their collaborative meetings, and when they met, focused more on how to teach these students. Nolet and Tindal (1993) found that the new relationship between collaborating teachers must be based on communication that has a content focus. They explained that content teachers must clearly define specific concepts and principles they view as critical, and special teachers can then support this process by helping to give ideas for formatting that information in instructional and assessment applications for use in the content class (Nolet & Tindal, 1993). .

As the relationships and collaboration between special and general teachers develop, and special teachers learn more about content subjects, teachers will do more shared, or co-teaching. As Gately and Gately (1993) suggested, teachers are still more separate at the beginning level of their cooperative teaching relationship. As the relationship moves into the collaborative level, shared responsibility for lesson presentation occurs. Students perceive both teachers as competent and in charge, and open communication during lesson presentation is the rule (Gately & Gately, 1993). A few teams in this study developed this collaborative relationship. Teams told how special teachers had gotten more involved in instruction and had become more of a partner. One team described that they understood how each other thought, and were not afraid to

interrupt each other and add or interject when needed. In the team interviews one general teacher described her relationship with the special teacher as natural, and said, "It's her class as much as mine! It's almost gotten to the point where I can start something, and she can finish the sentence."

To help facilitate the development of a collaborative relationship where team teaching occurs more, Gately and Gately (1993) suggested that special teachers focus their efforts on developing outlines of lessons, study guides, and other materials that may be useful to students, to illustrate their abilities in these areas. They also suggested that offering to review lessons after the initial presentation is a good way to begin to share instructional duties. Many of the teachers in the study have already begun to do these types of activities as they have gained confidence and competence from their experiences, and as they have sought to become more helpful to students and colleagues.

Innovative and shared evaluation:

A final important finding from the study was that evaluation can be a shared responsibility, and one that is carried out in creative and innovative ways by teachers who are considering individual efforts and growth by students. As stated previously, grading and evaluation of students in cooperative programs was an area of shared responsibilities to different degrees at different schools. Although total response to the question of shared grading was only 37% positive, special teachers' responses were 48% positive. Special teachers described their involvement as grading what they teach, including everyday journals, grading notebooks on a regular basis, grading homework papers or checking that homework had been done (for which students got points which added to their grades), sometimes grading a stack of papers "to help out," or completely sharing grading on a daily basis. Many said that they regularly volunteered to grade papers.

Some special teachers, at schools with lower levels of collegiality, did not grade

papers at all. In the team interview at one school, when asked about grading papers, the special teacher said that she was "getting ready to do a little bit of encouraging" the general teachers to give students extra points for improvement. She commented that the general teachers were, "doing a wonderful job of grading and modifying." When the general teachers at this school were asked if they were satisfied with this arrangement, they said that they were, after a pause. They commented that the special teacher gave them input. On the survey, a few general teachers wrote comments in on their surveys that it was not fair that they did all the work, and the special teacher was also getting paid to be a teacher. There was some resentment about grading that was not shared.

Some teams worked out responsibilities for grading that seemed to suit them in their situations. In some schools, special teachers deferred to general teachers' judgment for giving grades or making decisions on testing. Responses on the survey when asked to what extent the special teacher followed the expectations of the general teacher were 58% positive. Teams described the special teacher grading the papers, but the general teacher using his/her own system of tallying and giving points for grades. Special teachers, when asked in team interviews, expressed satisfaction with this arrangement.

It was a regular occurrence for special teachers to give input on grades, especially for final, report card grades, whether they had been actively involved in grading papers or not. During initial interviews, teachers said that they openly discussed grades, sometimes giving special consideration to students with disabilities for effort. General teachers commented in team interviews that this input was valuable. They valued the input because sometimes it enabled them to correctly judge whether or not students were putting all they were capable of into their work. It helped them to have another perspective, and to have someone else suggest another way to approach a learning situation.

Some general teachers did not want to give up the control they had in grading students. They preferred to treat the special teacher as an assisitant, and wanted help with

the grading, but preferred to make their own decisions concerning the results. In one team interviewed, where many responses had been negative concerning the cooperative program and shared responsibilities, a general teacher commented that she preferrd to be the one to put grades in the grade book. She felt that shared grading was too confusing and a waste of time. She commented that it was too much trouble to show the special teachers her system of grading, and did not ask for help.

Gately and Gately (1993) pointed out in their study that the grading /evaluation component of cooperative teaching is a most difficult one to develop, and it is a developmental process, just as the cooperative relationship is developmental. Each general teacher has their own system for grading. They may not want to share the responsibilities for setting the standards for performance. Those authors pointed out that, as teachers begin to develop experiences in working together as they build a relationship, some modifications are considered and some discussion takes place. More and more ways to evaluate students become acceptable practices, and general teachers begin to realize that modifications in grading are necessary. At the final, collaborative level, modifications in assessment are implemented effectively and many objective and subjective measures are used (Gately & Gately, 1993). In order to develop this area of cooperation, Gately and Gately (1993) suggested that special teachers stress accountability of assignments, keep a record of homework handed in on time, completion of classwork, and any other measures that seem appropriate. For some teams interviewed, this process was taking place. The special teachers graded notebooks and homework as well as tests. At one school interviewed, special teachers put grades on a grade sheet, and the general teacher assigned the grade according to her/his own standards, and wrote it in the grade book.

Grading for one team where teachers had a very positive relationship was a process of collaboration on all grading decisions, for all students. The special and general teacher at the end of class each day divided up the papers to grade, just as they divided the teaching

responsibilities. The system used is a portfolio system that is totally individualized for each student. Students competed against themselves to reach a higher level. The general teacher was in charge of the sequence of the curriculum, and may have chosen to grade a particular set of papers to see if he was satisfied that students had reached what he called a certain benchmark, or level of achievement, but decisions on grading are shared.

The results of Nolet and Tindal's (1993) study suggested that the types of assessment procedures for students in content classes may directly affect the validity of inferences made about students' ability to use content information. Although many students with disabilities have trouble reading and writing, affecting their output on tests, it would be a mistake to assume they have not learned the content just because they have trouble communicating it. Nolet and Tindal (1993) suggested a range of assessment options, including oral presentations or interviews. Others that could be used are oral testing, projects, posters, or skits.

Some special and general teams in the study were already doing this kind of assessment. Most students with disabilities were allowed flexibility in assessment, including reading the tests orally to them, allowing them to re-do tests or take them in segments on different days, or having fewer choices or a word bank on vocabulary tests. One team spoke of daily assessing student growth by their participation in class discussions and with class projects. Clearly, there was evidence that changes in assessment were taking place, if slowly in some places, and that as teachers become more collaborative they will do more shared grading as well as sharing other aspects of the duties.

In conclusion, cooperative teaching programs in these selected schools have been implemented in a variety of ways. As suspected, the issues of time to meet and plan, instruction, roles and responsibilities, and evaluation have remained critical issues in implementation. While some programs were running smoothly, despite the problems,

others were struggling with a definition of what the program should be, and what roles and responsibilities of teachers should be. Key factors that emerged were the importance of preparation of teachers to implement the program, their willingness and philosophical agreement with the idea of the program, a continuum of services available to meet student population needs and adequate staff to maintain these services, and providing time in teachers' schedules to plan together without sacrificing that time to multiple roles for teachers. Of lesser importance but still key in cooperative programs was that the lack of a team perspective for developing Individual Education Programs was indicative of the lack of a team perspective for all roles in the program. Another important finding was that of the emergence of team teaching over a lead-support approach as the approach teachers preferred and began to adopt as their relationships grew and as they learned more about each other's roles. And finally, innovative, individualized, and shared evaluation of students was possible and preferable, and further supported a team approach to the cooperative program as well as better meeting students' needs. There were very positive things happening in cooperative teaching programs, and those programs can be seen as models to others wishing to improve existing programs or better yet, begin implementation of new programs, with some positive steps.

Implications For Practice and Further Study

The results of this study suggest several considerations for middle grades educators wishing to implement cooperative teaching programs in their schools. One important implication is that they should provide careful preparation of teachers who will participate in the program at least several months, or preferably a year prior to implementation. This preparation should include time for teachers to investigate other cooperative programs and talk to other teachers who were involved and had gotten past the initial bumps and trouble

spots of implementation of a new program. Much can be learned from those who have had similar experiences, and teachers could dicsover very useful information concerning this type of program by visiting other schools with successful programs.

In addition to visits and discussions, workshops should be provided with information concerning the implementation of such a program. Topics of concern would be the sharing of roles and responsibilities, and the kinds of instructional and assessment modifications that could be used. The instructional procedures of team-teaching, lead-support teaching, parallel, alternative, and learning station teaching should also be introduced in staff development sessions, and the pros and cons of these discussed, so that teachers could decide upon the merits of each for different times and uses in their schedules. Additional staff development on content courses for special teachers, and on learning differences for general teachers would be very useful. In addition to initial staff development, monthly discussions or follow-up staff development should be provided for the first year or two, to give helpful suggestions and to allow a framework for working out differences and conflict. Teachers need to be fully involved in planning such a program to establish ownership, and roles and responsibilities need to be delineated carefully. In addition, they need to be prepared to expect difficulties as natural occurrences in setting up a new program, and to be encouraged to talk about problems as they occur. Concrete, well-defined programs are more likely to be accepted and successful. Programs should be well-planned, with clear objectives.

A second important consideration is the need to involve teachers who are willing and interested in being a part of this venture. Administrators should survey the staff to discover teachers with some knowledge of learning differences or experience in working with students with disabilities. If teachers are not willing and interested participants, they may be inflexible and unwilling to adapt to new roles and new responsibilities, and resent an intrusion into their classroom. The end result may be that they try to retain control of

the new class rather than sharing roles and responsibilities, and the relationship will be a difficult one.

Principals should motivate teachers to participate by providing material and emotional support at all times. Team-building retreats previous to implementation would help teachers begin to bond relationships. In Cobb County School District in Georgia, where collaborative teaching programs are in place, bonding activities and simulations have been used to successfully train teachers in communication skills (White & White, 1992). Personality testing would be useful also in determining which teachers should team together. If this is not available or too time-consuming, some consideration should be made of teachers' differing personalities, teaching, organizational, and discipline styles, to find compatible teams.

A third important consideration is that it is very important for administrators and teachers to realize that a full array of services for each level of need must be provided in each school, and that to fully and successfully implement these services, enough teachers must be hired to staff each type of class/service in that continuum. If administrators fail to provide the needed staff, and hope to stretch the limits of available teachers' time and skills, they may sacrifice the quality and success of the programs they have, and cause frustration among teachers.

Another important consideration is that time to plan is not always provided for teachers in cooperative programs. Time for teachers to plan together and individually must be provided in their schedules. While it is recognized that this time may be interrupted, and an array of responsibilities may infringe on this time, it must be allotted as a normal procedure. Teachers cannot be expected to "find" the time to meet between classes, before school, or after school on their own time, and expect that to be adequate to enable them to become partners in reaching the needs of students.

Important also from the study, was the consideration that teachers do not often share a team perspective for developing Individual Education Programs. Often the special teacher views this as her responsibility, and solicits little and receives little input from general teachers. Many general teachers normally see their involvement as (1) awareness of the goals, (2) to sometimes attend IEP meetings, and (3) to occasionally give input for modifications they feel are needed. This lack of a team perspective for some teachers is indicative of the same perspective they have for all roles in their program. Other teachers share completely in developing and implementing the goals of the IEP, and view themselves as partners to the full sense of the word. It would be advisable in planning for a cooperative teaching program to emphasize this team approach to developing the IEP. Not only will it reflect a team approach to implementing the goals, but reflect a new perspective among teachers that students are not "your" students or "my" students, but a shared responsibility between partners.

Another important consideration that could affect future practice is the emergence of team teaching over a lead-support approach, as the approach teachers prefer and begin to adopt as their relationships develop. It was found that teachers who are not accustomed to working together sometimes begin programs with the general teacher retaining the lead in presenting instruction, and the special teacher providing support to students as they attempt to complete assignments. Program initiators, recognizing this trend, should provide staff development to teachers before implementation, to enable them to sharpen their skills in various area, discuss various instructional models, and decide which model(s) they would feel comfortable in using. They may find that different approaches are appropriate at different times, or that roles can be reversed for teaching different skills. Whatever approach they use, teachers need to have a chance to prepare for using it before programs begin.

The final consideration that could have impact on implementation of future cooperative programs, is that evaluation of students' skills and abilities can be shared between teachers in various ways, and need not be seen as the sole responsibility of general teachers any more so than the IEP be seen as the special teacher's. Although this is a difficult component of cooperative teaching to develop due to the element of control inherent in giving grades, if implemented from the beginning of the program, it will support a team approach to instruction and decision-making, and contribute to the idea of having two *teachers* in the room, and not one teacher and her/his helper. In addition, teachers have found many innovative and individualized methods for evaluation, and these should be encouraged and researched by program administrators in order to open new possibilities for measuring true gains in students' knowledge and skills.

Further descriptive or case studies are needed to investigate ways to prepare teachers for cooperative programs, looking at the kinds of pre-implementation and training activities that are most helpful in developing a shared vision or understanding and communication skills among special and general teachers. Cooperation, communication, and the sharing of roles in teaching, planning, and assessing students, as has been demonstrated in this study, do not necessarily occur simply by placing two teachers in the same room. Teachers who have participated in training programs should be compared to teachers who have not had the benefit of any training, to give evidence of the benefits, or lack of benefits, in that training. Or, types of training could be compared to each other by measuring teacher interactions before and after different types of training. Researchers should look for ways to facilitate partnerships between teachers.

Perhaps cooperative teaching programs that are deemed successful by participants could be examined or compared more explicitly, with carefully documented observations over a period of time. Types of statements and behaviors between teachers working cooperatively could be measured and compared to evaluate differences in relationships and

reasons behind these differences. Further investigation to measure the factors relevant in the success of such programs is needed. Investigators could catalogue activities, behaviors, schedules, and communication styles. These observations could be compared to survey or interview results.

Successful programs do not come easily. Research is needed to further delineate steps in preparation and factors inherent in successful programs. But careful investigation can lead to more successful programs in the future, and better services for students with special needs.

BIBLIOGRAPHY

Adams , L. , & Cessna , K. , (1991) . Designing systems to facilitate collaboration: Collective wisdom from Colorado . Preventing School Failure , 35, (4) 37-42 .

Adamson , D. R. , Cox , C. , & Schuller, J. (1989) . Collaboration/consultation : Bridging the gap from resource room to regular classroom . Teacher Education and Special Education, 12 (1-2) , 52-55 .

Ammer, J . J . (1984) . The mechanics of mainstreaming : Considering the regular educator's perspective . Remedial and Special Education , 5 (6) , 15-20 .

Bauwens , J . , & Hourcade , J . J . (1991) . Making co-teaching a mainstreaming strategy. Preventing School Failure, 35 (4) , 19-24 .

Bauwens , J . , Hourcade , J . J . , & Friend , M . (1989) . Cooperative teaching : A model for general and special education integration . Remedial and Special Education,10 (2) , 17-22 .

Bauwens , J . , & Korinek , L . (1993) . IEPs for cooperative teaching : Developing legal and useful documents . Intervention In School and Clinic , 28 (5) , 303-306 .

Bean , R . M . , & Eichelberger , R . T . (1985) . Changing the role of reading specialists : From pull-out to in-class programs . The Reading Teacher , 38 (7) , 648-653 .

Bender , W . N . , & Ukeje , I . C . (1989) . Instructional strategies in mainstream classrooms : Prediction of the strategies teachers select . Remedial and Special Education , 10 (2) , 23-30 .

Braaten , B . , Mennes , D . , Brown , M . , & Samuels , H . (1992) . A model of collaborative service for middle school students . Preventing School Failure , 36 (3) , 10-15 .

Brady , M . P . , & Taylor , R . D . (1989) . Instructional consequences in mainstreamed middle school classes : Reinforcement and corrections . Remedial and Special Education , 10 (2) , 31-36 .

Christenson , S . L . , Ysseldyke , J . E . , & Thurlow , M . L . (1989) . Critical instructional factors for students with mild handicaps : An integrative review . Remedial and Special Education , 10 (5) , 21-30 .

Cole, C . M . (1992) . Collaboration : Research and practice . CASE information dissemination packet (Report No . CIS - 5) . Bloomington , IN : Council of Administrators of Special Education , Inc . : Indiana Univ . (ERIC Document Reproduction Service No . ED 358 653) .

Evans , S . (1980) . The consultant role of the resource teacher . Exceptional Children, 46 (5) , 402-403 .

Friend , M . (1984) . Consultation skills for resource teachers . Learning Disability Quarterly , 7 , 246-250 .

Friend , M . (1985) . Training special educators to be consultants : considerations for developing programs . Teacher Education Special Education , 8 (3) , 115- 120 .

Friend , M . , & Bauwens , J . (1988) . Managing resistance : An essential consulting skill for learning disability teachers . Journal of Learning Disabilities , 21 (9) , 556-561 .

Friend , M . , & Cook , L . (1990) . Collaboration as a predictor for success in school reform . Journal of Educational and Psychological Consultation , 1 (1) , 69-86 .

Fuchs , L . S . , Fuchs , D . , & Bishop , N . (1992) . Teacher planning for students with learning disabilities : Differences between general and special educators . Learning Disabilities Research and Practice , 7 , 120-128 .

Fuchs, L . S . , Fuchs , D . , Hamlett , C . , Phillips , N . B . , & Bentz , J . (1994) . Classwide curriculum-based measurement : Helping general educators meet the challenge of student diversity . Exceptional Children , 60 (6) , 518- 537 .

Gans , K . D . (1985) . Regular and special educators : Handicap integration attitudes and implications for consultants . Teacher Education Special Education , 8 (4) , 188-197 .

Gable, R . A . , Arllen , N . L . & Cook , L . (1993) . But- let's not overlook the ethics of collaboration . Preventing School Failure , 37 (4) , 32-36 .

Gately , F . J . , & Gately , S . E . (1993 , April) . Developing positive co-teaching environments: Meeting the needs of an increasingly diverse student population . Paper presented at the Annual Meeting of the Council for Exceptional Children , San Antonio , TX . (ERIC Document Reproduction Service No . ED 358 604 .

Gerber , S . (1991) . Supporting the collaborative process . Preventing School Failure , 35 (4) , 48-54 .

Gersten , R . , & Woodward , J . (1990) . Rethinking the regular education initiative: Focus on the classroom teacher . Remedial and Special Education , 11 (3) , 7-15 .

Glatthorn , A . A . (1990) . Cooperative professional development : Facilitating the growth of the special education teacher and the classroom teacher . Remedial and Special Education , 11 (3) , 29-34 .

Glomb , N . K . , & Morgan , D . P . (1991) . Resource room teachers' use of strategies that promote the success of handicapped students in regular classrooms . The journal of Special Education , 25 (2) , 221- 235 .

Gulledge , J . , & Slobe , P . (1990 , September) . Collaboration : A key to successful mainstreaming . Middle School Journal , 34-36 .

Graden , J . L . , Casey , A . , & Christenson , S . L . (1985) . Implementing a prereferral intervention system : Part I . the model . Exceptional Children , 51 (5) , 377-384 .

Haynes , M . C . , & Jenkins , J . R . (1986) . Reading instruction in special education resource rooms . American Educational Research Journal , 23 , 161- 190 .

Heron , T . E . , & Kimball , W . H . (1988) . Gaining perspective with the educational consultation research base : Ecological considerations and further recommendations .
Remedial and Special Education , 9 (6) , 21-28 .

Howell , P . (1991) . Taking AIM to assist middle school students with special needs . Preventing School Failure , 35 (4) , 43-47 .

Heward , W . L . , & Orlansky , M . D . (1984) . Exceptional children : An introductory survey of special education (2nd ed .) . Columbus : Merrill .

Huefner , D . S . (1988) . The consulting teacher model : Risks and opportunities . Exceptional Children , 54 (5) , 403-414 .

Idol , L . (1989) . The resource / consulting teacher : An integrated model of service delivery . Remedial and Special Education , 10 (6) , 38-48 .

Idol - Maestas , L . (1983) . Special educator's consultation handbook . Rockville , MD : Aspen Systems .

Idol , L . , & West , J . F . (1987) . Consultation in special education (part II) : Training and practice . Journal of Learning Disabilities , 20 (8) , 474-494 .

Idol , L . , & West , J . F . (1991) . Educational collaboration : A catalyst for effective schooling . Intervention In School and Clinic , 27 (2) , 70-78 .

Idol , L . , West , J . F . , & Lloyd , S . R . (1988) . Organizing and implementing specialized reading programs : A collaborative approach involving classroom , remedial, and special education teachers . Remedial and special Education , 9 (2) , 54-61 .

Jackson , A . (1990 , January) . From knowledge to practice : Implementing the recommendations of Turning Points . Middle School Journal , 1-3 .

Jaeger , R . M . (1984) . Sampling in education and the social sciences . New York : Longman .

Jenkins , J . R . , & O'Connor , R . E . (1991) . Implications of the sameness analysis for curriculum developers and curriculum users . Journal of Learning Disabilities , 24 (6) , 361-363 .

Johnson , L . J . , Pugach , M . C . , & Hammitte , D . J . (1988) . Barriers to effective special education consultation . Remedial and Special Education , 9 (6) , 41-47 .

Katchman , P . , & Mills , H . (1989 , March) . A plan for meeting the needs of students with learning difficulties . Middle School Journal , 20-21 , 46-47 .

Lessa , W . , Bitner , S . , & Beily , J . (1990 , January) . Taking remediation into the classroom : A successful alternative to the "pull-out" remediation approach is presented . Middle School Journal , 24-26 .

Lieberman , A . (1986 , February) . Collaborative research : Working with , not working on . Education Leadership , 28-32 .

Little , J . W . (1987) . Teachers as colleagues . In Virginia Richardson-Koehler (Ed.) , Educator's handbook : A research perspective, (pp . 491-518) . New York , : Longman .

Lockledge , A . , & Wright , E . B . (1993 , Summer) . Collaborative teaching and the mainstreamed student . University of North Carolina at Wilmington , NC . (ERIC Document Reproduction Service No . ED 358 100) .

Lynch , E . C . , & Beare , P . L . (1990) . The quality of IEP objectives and their relevance to instruction for students with mental retardation and behavioral disorders . Remedial and Special Education , 11 (2) , 48-55 .

Margolis , H . , & McGettigan , J . (1988) . Managing resistance to instructional modifications in mainstreamed environments . Remedial and Special Education , 9 (4) , 15-21 .

Marshall , K . J . & Herrmann , B . A . (1990) . a collaborative metacognitive training model for special education and regular education teachers . Teacher Education and Special Education , 13 (2) , 96-104.

Meyers , J . , Gelzheiser , L . M . , & Yelich , G . (1991) . Do pull-in programs foster teacher collaboration? . Remedial and Special Education , 12 (2) , 7-15 .

Meyers , J . , Gelzheiser , L . M . , Yelich , G . , & Gallagher , M . (1990) . Classroom , remedial , and resource teachers' views of pullout programs . The Elementary School Journal , 90 (5) , 533-545 .

Miller, L . (1990) . The regular education initiative and school reform : Lessons from the mainstream . Remedial and Special Education , 11 (3) , 17-22 .

Nolet , V . , & Tindal , G . (1993) . Special education in content area classes : Development of a model and practical procedures . Remedial and Special Education , 14 (1) , 36-48 .

Nowacek , J . (1992) . Professionals talk about teaching together : Interviews with five collaborating teachers . Intervention In School and Clinic , 27 (5) , 262-276 .

Pugach , M . C . (1982) . Regular classroom teacher involvement in the development and utilization of IEP's . Exceptional Children, 48, (4) , 371-374 .

Reisberg , L . , & Wolf , R . (1986) . Developing a consulting program in special education : Implementation and intervention . Focus on Exceptional Children, 19 (3) , 1-14 .

Reisberg , L . , & Wolf , R . (1988) . Instructional strategies for special education consultants . Remedial and Special Education , 9 (6) , 29-41 .

Reynaud , G . , Pfannenstiel , T . , & Hudson , F . (1987 , April) . Park Hill secondary learning disabilities project : An alternative service delivery model implementation manual . Missouri State Dept . of Elementary and Secondary Education . (ERIC document Reproduction Service No. ED 289-321) .

Semmel , M . I . , Abernathy , T . V . , Butera , G . , & Lesar , S . (1991) . Teacher perceptions of the regular education initiative . Exceptional Children, 58 (1) , 9-23 .

Simmons , D . C . , Fuchs , D . , & Fuchs , L . S . (1991) . Instructional and curricular requisites of mainstreamed students with learning disabilities . Journal of Learning Disabilities , 24 (6) , 354-360 .

Simpson , R . L . , & Myles , B . S . (1990) . The general education collaboration model : A model for successful mainstreaming . Focus on Exceptional Children, 23 (4) , 1-10 .

Stainback, W . , & Stainback , S . (1984) . A rationale for the merger of special and regular education . Exceptional Children, 51 (2) , 102-111 .

Vergason , G . A . , & Anderegg , M . L . (1991) . Beyond the regular education initiative and the resource room controversy . Focus on Exceptional Children , 23 (7) , 1-10 .

West , J . F . , & Idol , L . (1990) . Collaborative consultation in the education of mildly handicapped and at-risk students . Remedial and Special Education , 11 (1) , 22-31 .

White , R . , & Calhoun , M . L . (1987) . From referral to placement : Teachers' perceptions of their responsibilities . Exceptional Children, 53 (5) , 460-468 .

White , A . E . , & White , L .L. (1992) . A collaborative model for students with mild disabilities in middle schools . Focus on Exceptional Children , 24 (9) , 1-10 .

Wiedmeyer, D . , & Lehman , J . (1991) . The house plan approach to collaborative teaching and consultation . Teaching Exceptional Children , 23 (3) , 6-10 .

Will , M . (1986) . Educating students with learning problems : A shared responsibility . U . S . Department of Education .

Woodward , J . , & Noell , J . (1991) . Science instruction at the secondary level : Implications for students with learning disabilities . Journal of Learning Disabilities , 24 (5) , 277-284 .

Zaltman, G . , Duncan , R . , & Holbek , J . (1973) . Innovations and organizations . New York : John Wiley & Sons .

Zigmond , N . , & Baker , J . (1990 , October / November) . Mainstream experiences for learning disabled students (Project MELD) : Preliminary report . Exceptional Children , 57 (2) , 176-185 .

Zigmond , N . , Levin, E . , & Laurie , T . E . (1985) . Managing the mainstream : An analysis of teacher attitudes and student performance in mainstream high school programs . Journal of Learning Disabilities , 18 (9) , 535-541 .

Zvolensky , C . , & Speake , C . (1988 , Feb.) . Mainstreaming the resource specialist. Proceedings of the annual ACRES (American Council on Rural Special Education) National Rural special Education Conference . (ERIC Document Reproduction Service No . 299 731) .

APPENDIX A

TEACHER INTERVIEW

Teacher Interview

This instrument has been designed with initial questions followed by probes to use if necessary to gain additional information not given in teachers' initial responses. All probes will be used if the focus of the probe was not sufficiently addressed by the respondent.

"Thank you for taking the time to meet with me. I am investigating a lot of middle school programs such as yours, in which general and special education teachers work together in the same room to jointly teach a heterogenously mixed group of non disabled and disabled students in a cooperative manner. I'll refer to this type of program as *cooperative teaching*. I am looking at middle school teams which are implementing this type of program, in three school systems, in order to find out what works and what doesn't work in implementing these programs. Would you please just describe your program to me as it concerns each of the following questions?"

Specific questions:

1. How did the idea of cooperative teaching get started at your school?
   Probe:
   a. Who initiated it?
   b. Why?
   c. Was there a purpose or a vision in mind?
   d. How was the decision made to co-teach?
2. What process or procedure was used to do the scheduling for your program?
   Probe:
   a.. Are there any changes you would make to the schedule procedure?
   b. What factors or considerations, if any, were used to guide the scheduling process?
3. What pre-implementation training did you and your co-teachers receive?
   Probe:
   a. Was the training you received (if any) useful?
   b. Are there any skills you feel you need to be more successful in this program? (in working with others, sharing responsibilities, etc.)
   c. Are there any skills you feel you need to acquire in order to better meet the needs of your students?
   d. Have you learned any particular skills or strategies from your direct experience teaching in this program?
4. Would you explain what it is like working with another teacher in the room?
   Probe:
   a. What specific skills are needed to be successful in working together?
   b. Has it turned out the way you expected it to?
   c. Has it been a successful arrangement?
   d. Is there anything else that needs to be done to make the relationship between the special and general teacher a true team partnership?

e. Are the unique skills of each teacher used ?
f. Are there any particular ways in which you've changed since you began working in a cooperative teaching program?
g. Before you began, how did you feel about working with another person in the room?
h. Do you have differences of opinion?
i. How do you resolve these?
j. What has gone well in working with another teacher?
k. What has not gone well?
l. What can be done to change this?

5. How do you and your companion teacher schedule planning time?
Probe:
a. How often?
b. Do you find this productive?
c. Have you had to make any changes in your schedule?
d. Do you have enough time to do all you need to do together?
e. What guidelines and/or considerations did you follow in developing your method for scheduling planning time (eg. having a time consistently scheduled, never relying on lunch time, doing as much as possible via "paper exchange")?

* (to the special teacher}

*6. Did you include time in your schedule to complete special education paperwork?
Probe:
a. When do you find the time to do this?
b. Are there any changes that you would like to make?

7.Would you tell me about your curriculum, as pertains to students with disabilities in your class?
Probe:
a. Did you make any changes from the general curriculum?
b. Is it different in scope, sequence, or pacing from the general curriculum?
c. Has the curriculum worked out as you planned?
d. Are there any changes that are needed for next year?
e. Has it proven effective for all students (ie. those with and without disabilities)?
f. Have I.E.P. goals been incorporated into the curriculum?
g. Would you describe how this has been done?
h. Does each teacher participate in developing and implementing these goals?

8. Would you tell me about your instructional materials as pertains to integrating students with disabilities?
Probe:
a. How did you decide which materials to use?
b. Have materials been appropriate?
c. Are you using any modified materials?
d. Would you describe some of these?
e. How are arrangements made to acquire or make modified materials?

f. Are there any changes you would make?

9. What kinds of grading or evaluation methods are used?

Probe:

a. Were any changes made in grading or evaluation methods when the cooperative teaching program began?
b. How are grading or evaluation decisions made?
c. Are responsibilities for evaluation shared?
d. Who is responsible for grading and report cards and parent conferences?
e. Is evaluation different for general and special students?
f. How have any modified evaluation methods affected other students?

10. Would you describe the types of instructional procedures your team uses?

Probes:

a. Are you and the special/general teacher:

* team-teaching:

Both teachers sharing presentation of the instructional lesson. Perhaps alternating presentation of parts of the lesson, or both presenting and supplementing each other. For example, they may take turns presenting material, leading a discussion, or demonstrating concepts or learning strategies.

* lead-support teaching:

Both teachers are in the room, but one teacher leads to present the lesson and the other supports by helping students as they participate and respond to the lesson requirements. Teachers are planning together. Sometimes this results in having the general teacher present the content with the special teacher acting as a facilitator to monitor progress or offer help during practice sessions.

* Alternative teaching:

In this arrangement, one teacher works with a small group of students to preteach, re-teach, supplement, or enrich while the other teacher instructs the rest of the group.

* Learning Station Teaching:

With this arrangement, teachers divide the content to be delivered, and each takes the responsibility for separate parts. Some students may also work independently.

* Parallel Teaching:

In this arrangement, teachers simultaneously teach the same material, which they have cooperatively planned, to two separate groups of students. This is sometimes used when abilities of students vary widely, requiring significant adaptation or alternate curriculum.

(Do you have a written lesson plan describing the role(s) of cooperative teaching in delivering the lesson content? If so, would you please share one with me?

b. Has the manner in which content is taught changed as a result of this program?

c. Do any changes need to be made in instructional procedures?
d. What would strengthen them?
e. Are there any specific skills needed to better deliver instruction in content subjects?
f. What skills have you found particularly helpful in working with general/special students?

11. Do you have a system for solving problems concerning procedural issues or student problems?
Probe:
a. How do you decide who does what, when?
b. Are any changes needed in the problem-solving process?
c. What kinds of decisions are made with input from both special and general teachers?
d. How do you resolve differences of opinion?
12. Would you describe a typical procedure for handling misbehavior?
Probe:
a. Were decisions made beforehand concerning responsibilities for this?
b. What changes would you make?

APPENDIX B

TEACHER QUESTIONNAIRE

TEACHER QUESTIONNAIRE

This instrument has been designed to investigate middle school programs such as yours in which special and general education teachers work together in the same room to jointly teach students with and without disabilities in a cooperative manner. **This program will be referred to as *cooperative teaching*.** The purpose of this survey is to find out what the best practices are in implementing and maintaining such programs.

Directions: Listed on the following pages are statements that reflect possible conditions of cooperative teaching programs. **Please read the statements and circle the number that best expresses your view of your program.**

	No	Yes
1. Did your cooperative teaching program begin because the Exceptional Child Services (ECS) teachers initiated it?	1	2
2. Did your cooperative teaching program begin because an administrator initiated it?	1	2
3. Did your cooperative teaching program begin because the faculty in general thought it was the best way to serve ECS students?	1	2

4. Other (Please explain)_____

_____

	Not at all	Somewhat	To a good extent	Definitely yes
5. To what extent were you familiar with what cooperative teaching meant before you began working in this program?	1	2	3	4
6. To what extent were you unsure about working with another teacher in the room before you began working in this cooperative teaching program?	1	2	3	4

	Not at all	Somewhat	To a good extent	Definitely yes
7. To what extent are you familiar with the procedure used to schedule students with disabilities into cooperative teaching programs in your school?	1	2	3	4
8. To what extent does your school have a set of considerations used to set up schedules for students with disabilities?	1	2	3	4
9. To what extent is the subject in which the student qualifies for special services considered in the scheduling of classes for the cooperative teaching program?	1	2	3	4
10. To what extent is the willingness of teachers to participate in the cooperative teaching program considered?	1	2	3	4
11. To what extent is the number of students with disabilities in each class considered?	1	2	3	4
12. To what extent is the scheduling procedure an organized plan of action?	1	2	3	4
13. To what extent are you satisfied with the way the students have been scheduled?	1	2	3	4
14. To what extent did you have inservice training concerning cooperative teaching or collaboration **before** you began working in this cooperative teaching program?	1	2	3	4
15. To what extent have you had inservice training in cooperative teaching **since you began** teaching in this cooperative teaching program?	1	2	3	4

(If you have NOT had any training in cooperative teaching, skip to question # 17)

	Not at all	Somewhat	To a good extent	Definitely yes
16. As a teacher trained in cooperative teaching, was the training sufficient to prepare you to teach in this program?	1	2	3	4

17. To what extent do you feel you <u>need more</u> skills in the areas of:	Not at all	Somewhat	To a good extent	Definitely yes
17.1 Content subjects	1	2	3	4
17.2 Cooperation and how to develop rapport with others	1	2	3	4
17.3 Communication	1	2	3	4
17.4 Planning with others	1	2	3	4
17.5 Organization	1	2	3	4
17.6 Discipline	1	2	3	4
17.7 Child advocacy	1	2	3	4
17.8 Modifications to meet individual needs	1	2	3	4

18. To what extent do you feel you <u>have gained</u> skills in these areas since you have been involved in this cooperative teaching program:	Not at all	Somewhat	To a good extent	Definitely yes
18.1 Empathy with the special/general teacher	1	2	3	4
18.2 Knowledge of the content subjects	1	2	3	4
18.3 Ideas on modifications to meet individual needs	1	2	3	4
18.4 How to work with others cooperatively	1	2	3	4

18.5 Knowledge of students with/without disabilities	1	2	3	4

	Not at all	Somewhat	To a good extent	Definitely yes
19. To what extent has the cooperative teaching program been a successful arrangement academically for students **with** disabilities?	1	2	3	4
20. To what extent has the cooperative teaching program been a successful arrangement academically for students **without** disabilities?	1	2	3	4
21. To what extent are you satisfied with the special education teachers' schedules?	1	2	3	4
22. To what extent does your school have enough ECS teachers to make the cooperative teaching program run smoothly?	1	2	3	4
23. To what extent do you feel like a partner with teachers in the cooperative teaching program with whom you teach?	1	2	3	4
24. To what extent are special and general teachers in your cooperative teaching program jointly responsible for teaching?	1	2	3	4
25. To what extent are you frustrated in trying to make your cooperative teaching program work?	1	2	3	4

26. To what extent do teachers in your cooperative teaching program have differences of opinion about:	Not at all	Somewhat	To a good extent	Definitely yes
26.1 Grading	1	2	3	4
26.2 Behavior management	1	2	3	4
26.3 Instructional methods	1	2	3	4

26.4 Curriculum	1	2	3	4
26.5 Roles and responsibilities of teachers	1	2	3	4

27.To what extent are differences resolved by:	Not at all	Somewhat	To a good extent	Definitely yes
27.1 Intervention by an administrator	1	2	3	4
27.2 Talking it out 1 on 1	1	2	3	4
27.3 Talking it out in the team	1	2	3	4
27.4 Ignoring the problem or keeping quiet	1	2	3	4
28. To what extent are differences resolved easily?	1	2	3	4

29. Within your cooperative teaching program, to what extent do you feel these areas have gone well:	Not at all	Somewhat	To a good extent	Definitely yes
29.1 Willingness of teachers to collaborate	1	2	3	4
29.2 Implementation of modifications	1	2	3	4
29.3 Time to plan with special/general teachers on your team	1	2	3	4
29.4 Expectations of special/general teachers	1	2	3	4
29.5 Sharing of responsibilities	1	2	3	4
29.6 Time to complete paperwork	1	2	3	4
29.7 Class size	1	2	3	4
29.8 Mixture of students with and without disabilities	1	2	3	4
29.9 Interactions with other teachers	1	2	3	4

30. To what extent has the cooperative teaching program been a successful arrangement interpersonally for teachers?	1	2	3	4

(Only the SPECIAL teachers will answer questions in this section:)

	Not at all	Somewhat	To a good extent	Definitely yes
31. To what extent do you have enough time to plan with general teachers?	1	2	3	4
32.To what extent do you plan daily with general teachers?	1	2	3	4
33. To what extent do you plan weekly with general teachers?	1	2	3	4
34. To what extent is your planning time with general teachers productive?	1	2	3	4
35. To what extent is your planning time with general teachers a scheduled, set time?	1	2	3	4
36. To what extent do you have a set time to complete ECS paperwork?	1	2	3	4

(Only the GENERAL teachers will answer questions in this section)

	Not at all	Somewhat	To a good extent	Definitely yes
37. To what extent do you have enough time to plan with special teachers?	1	2	3	4
38. To what extent do you plan daily with special teachers?	1	2	3	4
39. To what extent do you plan weekly with special teachers?	1	2	3	4
40. To what extent is your planning time with special teachers productive?	1	2	3	4

41. To what extent is your planning time with special teachers a set, scheduled time?	1	2	3	4

	Not at all	Somewhat	To a good extent	Definitely yes
42. To what extent is the curriculum in the cooperative teaching classes the same as it was before students with disabilities were included in general classes?	1	2	3	4
43. To what extent has the curriculum in classes where the cooperative teaching program has been implemented been modified to meet the needs of students with disabilities?	1	2	3	4
44. To what extent has the curriculum in cooperative teaching classes been modified in these ways:				
44.1 More hands-on activities	1	2	3	4
44.2 Slower pace in one or more classes	1	2	3	4
44.3 Material is read to the students who need it	1	2	3	4
44.4 Assignments are reduced	1	2	3	4
44.5 Expectations are lower	1	2	3	4
44.6 Material is taught in chunks	1	2	3	4
44.7 The sequence of the curriculum is changed	1	2	3	4
44.8 The curriculum is not explored in as much depth as it was before students with disabilities were included	1	2	3	4

	Not at all	Somewhat	To a good extent	Definitely yes
45. To what extent is the curriculum in cooperative teaching classes effectively meeting the needs of <u>all</u> students, those with and without disabilities?	1	2	3	4
46. To what extent have Individual Education Program (IEP) goals been geared to the curriculum?	1	2	3	4

(Only the GENERAL teacher answer the following questions:)

47. To what extent have you been <u>active in developing goals</u> for students' IEPs?	1	2	3	4
48. To what extent have you been <u>asked to provide input</u> into students' IEPs?	1	2	3	4
49. To what extent do you <u>participate in IEP conferences</u>?	1	2	3	4
50. To what extent are you <u>aware of IEP goals</u> for the students you teach?	1	2	3	4

(ALL teachers please answer the following questions:)

51. To what extent are the IEPs the sole responsibility of the special teachers?	1	2	3	4
52. To what extent are standard textbooks the primary materials used in classes in the cooperative teaching program?	1	2	3	4
53. Within cooperative teaching classes, to what extent are **all** students, those with and without disabilities, allowed to have modifications in materials and expectations?	1	2	3	4

	Not at all	Somewhat	To a good extent	Definitely yes
54. To what extent are materials used in cooperative teaching classes appropriate to meet all students' needs?	1	2	3	4
55. To what extent do students in cooperative teaching classes work in cooperative groups?	1	2	3	4
56. To what extent are student peer partners used in cooperative teaching classes?	1	2	3	4
57.To what extent are the following materials /methods used in cooperative teaching programs:				
57.1 Highlighted or underlined extra copies of texts	1	2	3	4
57.2 Worksheets with changes in format or wording	1	2	3	4
57.3 Worksheets or tests with changes in expectations	1	2	3	4
57.4 Pre-printed tests from the publisher	1	2	3	4
57.5 Lower level reading materials	1	2	3	4
57.6 Alternative assignments	1	2	3	4
57.7 Tests or books read aloud	1	2	3	4
57.8 Tests or worksheets with word banks and multiple choice answers	1	2	3	4
57.9 Study guides	1	2	3	4
57.10 Life-skills materials	1	2	3	4
57.11 Hands-on materials	1	2	3	4

57.12 Computer software	1	2	3	4

58. Within cooperative teaching classes, to what extent are the following grading/evaluation practices used:	Not at all	Somewhat	To a good extent	Definitely yes
58.1 Special and general teachers share grading	1	2	3	4
58.2 Special teacher grades what she teaches	1	2	3	4
58.3 Special teacher follows expectations set by general teacher	1	2	3	4
58.4 Effort is considered in grading for **All** students, those with and without disabilities	1	2	3	4
58.5 General teachers have the responsibility for report cards	1	2	3	4
58.6 Students may re-do tests	1	2	3	4
58.7 Special teachers give verbal input concerning grades	1	2	3	4
58.8 Both teachers share duties for report cards	1	2	3	4
58.9 Both teachers share duties for interim reports	1	2	3	4

59. To what extent is instruction a <u>team teaching</u> approach in cooperative teaching classes, with both teachers sharing presentation of one lesson, perhaps alternating presentation of certain parts or taking turns presenting or leading a discussion?				
59.1 With **both** taking part in the planning	1	2	3	4

59.2 With **no** co-planning	1	2	3	4
	Not at all	Somewhat	To a good extent	Definitely yes
60. To what extent is instruction an <u>alternative teaching</u> approach, with one teacher working with a small group to pre-teach, re-teach, or supplement as the other teacher teaches the rest of the class?	1	2	3	4
61. To what extent is instruction a <u>learning station</u> approach, with teachers dividing the content to be delivered, and each taking the responsibility for **separate** parts? (Students could rotate to stations)	1	2	3	4
62. To what extent is instruction a <u>parallel teaching</u> approach, with teachers simultaneously teaching the same material, which has been cooperatively planned, to two separate groups, used primarily when abilities of students vary widely?	1	2	3	4
63. To what extent are these changes needed in the instructional program:				
63.1 More multisensory instruction (e.g. visual / graphic aids to lectures)	1	2	3	4
63.2 More co-planning between special / general teachers	1	2	3	4
63.3 More team teaching (e.g. teachers present lessons together)	1	2	3	4
63.4 Flexibility in trying various instructional models	1	2	3	4
63.5 Improved ways of working together	1	2	3	4
63.6 A focus on lead-support teaching	1	2	3	4
63.7 Flexibility in using whatever suits both teachers	1	2	3	4

63.8 More parallel teaching to separate groups	1	2	3	4

63. (Continued) **To what extent are these changes needed in teaching?**	Not at all	Somewhat	To a good extent	Definitely yes
63.9 Use of the computer lab more	1	2	3	4
63.10 More use of alternative materials	1	2	3	4
63.11 More parallel teaching to separate groups	1	2	3	4
64. To what extent is staff development needed in communication skills?	1	2	3	4
65. To what extent is staff development needed on sharing a classroom?	1	2	3	4
66. To what extent is staff development needed on modifications to meet individual needs?	1	2	3	4

67. The following are **skills** mentioned by other teachers as being important **skills needed to strengthen instruction.** Would you please rate their importance in this program in your opinion:	Not at all important	Somewhat important	To a good extent import-ant	Definitely important
67.1 Ability to form better partnerships with fellow teachers	1	2	3	4
67.2 Classroom management	1	2	3	4
67.3 Ability to interject an opinion or comment during class discussion when the other teacher is teaching, without intimidating or alienating	1	2	3	4
67.4 Ability to let students experience success	1	2	3	4

67.5 Knowledge of learning strategies	1	2	3	4
67.6 Background in content subjects	1	2	3	4

	Not at all important	Somewhat important	To a good extent import-ant	Definitely important
67.7 Accommodation to individual needs	1	2	3	4
67.8 Flexibility	1	2	3	4
67.9 Ability to relate subjects to real life	1	2	3	4
67.10 Willingness to change	1	2	3	4

	Not at all	Somewhat	To a good extent	Definitely yes
68. To what extent does your cooperative teaching team have a system or procedure for solving problems?	1	2	3	4
69. To what extent does your cooperative teaching team use these possibilities for problem-solving:				
69.1 No formal system, individual teachers discuss problems as they occur	1	2	3	4
69.2 The team meets/decides, as needed	1	2	3	4
69.3 School-wide formal discipline flow chart is followed	1	2	3	4
69.4 Guidance counselors help problem-solve	1	2	3	4

69.5 The Mental Health Team helps problem-solve	1	2	3	4
69.6 Each class has rules and a plan for solving problems	1	2	3	4

	Not at all	Somewhat	To a good extent	Definitely yes
	1	2	3	4
69.7 Teachers go to a Case Manager or administrator				

70. Which of these areas of decision-making are handled with input from both special and general teachers:

70.1 Curriculum	1	2	3	4
70.2 Discipline	1	2	3	4
70.3 Scheduling	1	2	3	4
70.4 Grades	1	2	3	4
70.5 Amount of work	1	2	3	4
70.6 Modifications	1	2	3	4
70.7 Social problems of students	1	2	3	4
70.8 How to improve performance	1	2	3	4
70.9 Testing and evaluation methods	1	2	3	4
70.10 Teaching methods	1	2	3	4
70.11 Teaching responsibilities	1	2	3	4
70.12 Seating arrangements	1	2	3	4

How long has your school been involved in cooperative teaching? _____
Number of cooperative teams at your school:_____

Please check if you are a general teacher or a special education teacher:
general____ special____

number of years teaching general education classes_____
number of years teaching special education classes_____

I have taken approximately _____inservice workshops regarding the inclusion of students with disabilities into general classes, for a total of _____ hours of training

gender_____

Please indicate the name of your school and school system:
school_____ school system_____

*******Thank you very much for your help!!!*******

Mary B. Hamlin
6115 Muirfield Dr.
Greensboro, NC 27410
Please call me if you have any questions: (910) 668-4836

APPENDIX C

TEAM INTERVIEW QUESTIONS

Team Interview Questions

The purpose of today's interview is to get a clear picture of your program, based on the views of the group, and to get answers for any questions that might have arisen from analyzing your responses to the survey. I'd like you to feel comfortable to respond freely to my questions. The school will be referred to in my paper by a code name, and I will keep your responses confidential. If at any time you would like for me to cut off the tape recorder so you can respond "off the record", I will be happy to do so. I'd just really like an update on how things are going in trying to implement this program.

1. How did the Cooperative Teaching Program get started in your school?
    * How long has it been in operation?

2. Has it changed since it began?
    * If so, why?
    * Are there any other changes you'd like to see?

3. Do you still have a resource room where students who can't make it in a general classroom can receive instruction?
    * With or without, is that working out successfully?

4. How is it working out having two teachers in the room?

5. How have you delegated teaching responsibilities?
    * Is teaching a team approach, does one lead and one support, or do you use other models and methods?
    * How did you decide who teaches, and is it always the same, or do you switch around?
    * When one is teaching, what are the responsibilities of the other teacher?
    * Is the sharing of teaching working out to suit all of you, or is there any way you would like to change it?

6. How do you handle planning?
    * How often do you plan together, and is it a set time?
    * What is a typical planning session like?
    * Do you have enough time to plan together?
    * Do you feel that you need more co-planning?
    * Would it be possible to have more co-planning?

7. How do you handle grading and evaluation?
    * Do you have set roles and responsibilities?
    * Is the sharing of responsibilities for grading working, or would you like to change it?

8. How do you follow the exceptional students' IEPs?

9. Some of you commented that the program **has** been successful for the students *without* disabilities, and some of you responded that it **has not**. Would you comment on that?
   * Why or why not?

10. You also were divided on whether or not the program has been successful for the students *with* disabilities? Would you explain, please?

11. Many of you responded on the survey that you don't feel you have enough EC teachers. Would you comment on that?

12. Many teachers throughout the state responded that getting the ECS paperwork done was a problem. When do you get that done?

13. Tell me about the mixture of disabled and non disabled students in the classes, and the class size. Is that working out? Could it be improved?

14. Do you see staff development as a need?
   * If so, in what area?
     (communications, sharing a classroom, modifications, curriculum/content subjects)

15. You were divided on whether or not you felt the curriculum was meeting the needs of all the students. Would you explain that?

16. Are there ways you'd like to change the sharing of responsibilities?
   * for teaching ? * for report cards ?
   * for grading ?

17. Are the materials you have meeting the needs of your students?

18. Would you like special and general teachers to do more sharing of decisions?
   * On grades, discipline, the amount or kind of work assigned, how to improve performance, teaching methods, testing and evaluation?

19. Many of you responded that you were not happy with the ECS teachers' schedules. Would you explain that? Do you have enough ECS teachers?

20. What aspects of the program have been the most successful?

21. What have been your biggest challenges?

22. What do you feel would make the program better?