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A Study on Effective Inclusion and Its  
Academic and Social Impacts on  
the Mildly Learning Disabled

by  
Maria Naugle

A THESIS

Submitted in partial fulfillment of the requirements of the Master of Arts  
Degree in the Graduate Division of Rowan University

Approved by: \_\_\_\_\_

Date approved: May 4, 1998

## **ABSTRACT**

Maria R. Naugle

A STUDY ON EFFECTIVE INCLUSION AND ITS  
ACADEMIC AND SOCIAL IMPACTS ON  
THE MILDLY LEARNING DISABLED

1998

Thesis Advisor: Dr. Stanley Urban

Master of Arts in Learning Disabilities

The purpose of this thesis project was to determine the effectiveness of placing mildly learning disabled (LD) public elementary school students (grades three, four, and five) in a fully inclusive general education setting with necessary support services, specifically collaborative teaching. Students involved in the study were classified perceptually impaired in accordance with N.J.A.C. 6:28, and placed in an in-class support (ICS) classroom, instructed by both a general education and special education teacher. Academic achievement data, as formally measured on the *California Achievement Test* (CAT 5) and functionally measured through teacher assigned report card grades, was analyzed. Social functioning (self-concept and peer acceptance) was measured by the *Piers-Harris Children's Self-Concept Scale* and through peer nominations. A questionnaire was completed by eight inclusionists to determine their attitudes toward and perceptions of ICS.

The results of the functional measure indicate that all ICS students were satisfactorily meeting district curriculum objectives. Formal measure results show that the majority of the classified students perform in the average range of functioning in reading and mathematics when compared to their same age peers. Socially, the LD students possess self-concepts described as average to very much above average, and these students are no more likely to be socially rejected than their nondisabled classmates. Furthermore, teachers view this program as essential and successful for mildly LD students.

## **MINI-ABSTRACT**

Maria R. Naugle

### **A STUDY ON EFFECTIVE INCLUSION AND ITS ACADEMIC AND SOCIAL IMPACTS ON THE MILDLY LEARNING DISABLED**

1998

Thesis Advisor: Dr. Stanley Urban

Master of Arts in Learning Disabilities

The purpose of this thesis project was to determine the academic achievement and social functioning of included mildly learning disabled (LD) public elementary school students. Teachers views of the program were also analyzed. A functional measure, teacher assigned report card grades, and a formal measure, *California Achievement Test-5* (CAT-5) indicated that most of the LD students included in the general education setting make satisfactory academic progress and are socially well-adjusted. Teacher viewpoints support these findings.

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## **Chapter 1: Introduction**

### **Background**

In past years, the “pull-out” mode for delivery of service, such as resource rooms and self-contained classes, has been the primary method used for providing academic support to students with mild learning disabilities (LD). These types of programs have often been criticized for isolating disabled students and removing them from their peers, thus causing scheduling conflicts, organizational difficulties, and questionable social impacts on these students. The fact that mildly LD students need academic support has not been a point of contention in special education. Yet, in the past, the primary method of delivering this support has been by moving the students to a special education setting. In doing so, we have not only physically but also socially isolated these students.

In recent years, the idea of keeping these students with the general education population has resulted from philosophical stands, federal policy development, and extensive research in special education (Shinn, Powell-Smith, Good III, & Baker, 1997). Educating these students with their nondisabled peers not only meets the requirements of least restrictive environment (LRE), but also can have positive academic and social effects, provided the program is carefully geared toward meeting the individual needs of classified students. Such an educational placement is

known as inclusion.

Inclusion is part of a restructuring trend in education that is based on the theory that students with disabilities can receive an appropriate education in the general education setting with necessary support services (Rivera & Smith, 1997). Since the inclusion movement, more students identified as having a disability are being educated in the mainstream setting. As a result, the special education teachers' role has expanded to include collaborative consultation and team teaching within this classroom. This partnership is also known as in-class support (ICS), and is becoming the preferred program for many mildly LD students.

#### Purpose of the Study

The purpose of this study is to examine the academic achievement of mildly LD students who are fully included in the general education setting and receiving ICS instruction. Data will also be provided on the social functioning (self-concept and peer acceptance) of these students. Furthermore, this study will examine the attitudes and perceptions held by ICS teachers involved in the program, as well as highlight important factors that can contribute to a successful inclusive program. This study is important because the value of placing the special education teacher in the general education classrooms to assist classified students needs to be examined if the trend is to continue.



### Need of the Study

There are several compelling reasons for evaluating inclusion settings for students with mild LD. Most special education organizations acknowledge the importance of including students with disabilities in mainstream settings as much as possible to meet the guidelines for LRE. However, many are uncertain if a program such as ICS yields more success than a pull-out program, which can contribute to a students's lack of membership in a classroom, and overall low social status (Vaughn, Elbaum, & Schumm, 1996). Parent and professional organizations have been carefully examining inclusion for the LD population, since LD is the most invisible of all disabilities, and these students, tend to be overlooked in the general education settings. Also, it is believed that the key to a successful ICS program is a dedicated team, which includes both a general education and special education teacher, committed to the program, yet some general educators do not feel that they have adequately geared their classrooms to meet the educational needs of classified students who are fully included (Vaughn et al., 1996). Students with disabilities who remain in or are placed in such a program require a wide range of services to meet their needs, and the professionals involved need to restructure a typical program to meet the best interests of each student.

### Value of the Study

Information gathered in this study can be utilized by Gloucester Township Public Schools, since these findings can provide pertinent information regarding any successes of ICS programs within the district. Results can be used to: a) provide ICS teachers with those strategies and

modifications found to be successful when educating these students; b) provide school administrators with the opinions and concerns of ICS teachers regarding the successes and pitfalls of the program; c) justify the funding of such programs within the district; d) provide parents with vital information when attempting to choose possible placements; e) understand the LD students' perception of themselves and their social acceptance.

### Research Questions

To accomplish the purpose of this study, the data obtained is used to answer the following research questions:

Question 1: What are the attitudes and perceptions of ICS teachers (general and special education) on inclusion and collaborative teaching as measured by a questionnaire and follow-up interviews?

Question 2: What factors are present in cases where gains were made with included mildly LD students receiving ICS?

Question 3: What academic gains are made by the mildly LD students currently receiving ICS instruction as indicated on pupil records and standardized testing results?

Question 4: What is the social functioning (self-concept and peer acceptance) of included mildly LD students as measured by the *Piers-Harris Children's Self-Concept Scale* and peer nominations?

### Limitations of the Study

Inclusion efforts for students with mild disabilities have been the subject of various research studies yielding results that are, at times, difficult to interpret (Shinn et al., 1997). In many districts, ICS and other types of inclusive programs have not existed long enough to yield meaningful longitudinal data regarding success or failure rates. Should a program show evidence of success or failure, the important underlying cause or causes may be difficult to determine. Extent of teacher involvement, modifications implemented, flexibility of grading, sample group size, program funding, class size and make up, as well as the severity of the disabilities of the ICS students are factors which could limit research attempting to prove that inclusion really works. Furthermore, social functioning of students is difficult to measure, and it cannot conclusively be determined that any low self-perceptions and low peer acceptance of students with LD is solely the result of the disability itself.

### Overview

In Chapter 2, current research that pertains to inclusion of the mildly LD will be reviewed. Literature containing the components of appropriate inclusion, the academic and social effects of inclusion on these classified students, and the attitudes and attributes of successful inclusionists will be compared and analyzed. In Chapter 3, the design of the study, including the sample used and operational measures will be presented. In Chapter 4, an analysis of the results from the data gathered from the study will be reviewed. It is predicted that the results of the study completed for this thesis will be somewhat similar to the information found in the review of current literature

on inclusion of the mildly LD. Chapter 5 will contain any major findings and results of the study.

## **Chapter 2: Review of Literature**

### **Planning for Inclusion**

The term inclusion is used widely in educational circles when speaking of students with disabilities. In truth, there is no one definition for this word, since inclusionary practices vary from school to school, district to district, and state to state.

“Full” inclusion refers to those students with disabilities who receive their entire education within the general education setting. In contrast, “partial” inclusion refers to educating these students for a portion of the day in the general education classroom. The remaining instruction is received in a special education classroom or resource center (NICHCY *News Digest*, 1995).

The public law, Individuals with Disabilities Education Act (IDEA), that requires a free and appropriate education for all students with disabilities does not use the term inclusion, but rather LRE. However, in a November 23, 1994, memorandum to the Chief State School Officers, the U.S. Department of Education offered clarification regarding IDEA’s LRE provisions, which states “IDEA’s strong preference for educating students with disabilities in regular classes with appropriate aids and supports” (Heumann & Hehir, 1994).

Concern arises when students are placed in general education classrooms without needed supports, without training teachers, and with only the “hope” that inclusion will work. This

controversial practice is becoming known as “dump and hope”, and in reality is inclusion gone bad. In contrast to “dump and hope”, the National Education Association (NEA) policy supports and encourages “appropriate inclusion characterized by practices and policies which provides on a sustained basis” for:

- \* a full continuum of placement options and services within each option;
- \* appropriate professional development;
- \* adequate time for teachers to plan and collaborate on behalf of all students;
- \* class sizes responsive to student needs;
- \* and staff and technical assistance appropriate to teacher and student needs (Chase, 1995).

In many locations, the debate is no longer, “Should we include or shouldn’t we?” As the inclusion movement gains momentum, and as more successes with these programs are achieved, many are now wondering, “How exactly do we include?” There are several factors emerging as critical to establishing an inclusive program successfully:

- 1.) *Establish a philosophy that supports appropriate inclusionary practices:* the best philosophy should recognize a diverse student population and affirm that learning for all students can be successful when individual supports are provided.
- 2.) *Plan extensively for inclusion:* planning needs to include all those who will be involved in and affected by the inclusion plan. Providing ample time, collaborative planning, ensuring that staff receive ongoing training, and district monitoring of the overall inclusion effort are all vital components for successful inclusion.
- 3.) *Involve a principal as a change agent:* through a principal’s leadership, a model of accepting

disabled students, encouraging collaborative teaming, and providing ample planning time and resources can be established at the site.

4. )*Involve parents*: since parents have expert knowledge of their child's personality, strengths, attitudes, and needs, involving them- even beyond the requirements of the law- makes good sense.

5. )*Develop the disability awareness of staff and students*: having a full knowledge of the special needs that a disability can create will help staff establish an atmosphere of acceptance. Help students understand that students with disabilities are people first.

6.) *Ensure that there is adequate support in the classroom*: general education must not become a "dumping ground" with inadequate support. Paraprofessionals, technology, and curriculum modifications are all supports which should be explicitly listed in a student's IEP if determined necessary.

7.) *Make adaptations*: as the definition states, "adjustments or modifications made in the environment, instruction, or materials used for learning that enhances the person's performance or allows at least partial participation in an activity" are necessary.

8.) *Establish policies or methods for evaluating student progress*: one of the most frequently asked questions among special educators and inclusionists is how to fairly evaluate performance, especially within the framework of state reporting systems. There may be as many variations to student evaluations as there are for inclusion itself. Developing guidelines within the school or district may eliminate possible future disparities.

9.) *Establish policies for evaluating the program*: there is a lack of empirical data on the effectiveness of inclusion. Schools should ask themselves periodically: Are students achieving predicted outcomes? Are teachers getting the support and training they need? How effectively

are collaborative teams planning? How do parents feel about the program? What adjustments need to be made to improve the program? (NICHCY *News Digest*, 1995).

### Attitudes and Attributes of Effective Inclusionists

While some educators feel that “unwise inclusion is creating unbearable classrooms across the country”, there are others who “believe in it so strongly that no argument against it can ever sway (them)” (NICHCY *News Digest*, 1995). One study found that general education teachers’ attitudes and beliefs toward students with disabilities are among the most important issues influencing collaborative efforts between special and general educators. These teachers exhibit tolerance of diverse student skill levels and report a good collaborative relationship between themselves and special educators. Research also reports that elementary teachers have more positive views of special education than their secondary counterparts. This may be due to the fact that elementary education is geared toward instruction and students, while secondary education is more subject-matter oriented (Olson, Chalmers, & Hoover, 1997).

The study by Olson et. al., examined the attitudes and attributes of 10 inclusionists identified as successful by administrators and special education staff. These teachers represented elementary and secondary placements in the Grand Forks metropolitan area and surrounding rural districts. Nine of the 10 were female, and averaged 12.6 years in their current positions. The participants were interviewed and asked to comment on a set of 12 questions. Following the interviews, seven themes emerged. These teachers:

1.) *Described their own personalities as tolerant, reflective, and flexible.*



- 2.) *Accepted responsibility for all students:* all teachers expressed to varying degrees that they were responsible for the education of students with and without identified disabilities.
- 3.) *Described a positive relationship with special educators:* however, seven of the 10 nominees desired more support from special education staff than they were currently receiving, but felt as though time constraints prohibited this.
- 4.) *Indicated that their primary inclusionary attitude was showing interpersonal warmth and acceptance in their interactions with students:* while elementary teachers believed that they needed to provide environment fostering for student development, secondary teachers described their behavior toward included students as “approachable”.
- 5.) *Reported adjusting expectations for integrated students:* expectations were lowered for elementary and secondary learners diagnosed as mildly LD, yet there was a tendency among the secondary participants to rely on reducing academic outcomes more substantially. Both groups emphasized the need to adjust expectations on an individual basis for the students.
- 6.) *Felt that there was insufficient time available for collaboration:* all nominees felt that insufficient time was available for collaboration. Secondary teachers voiced concern over not producing students who make great accomplishments and always teaching classes geared toward slower learners because they were viewed as “good” with that type of student population. Many teachers felt they were “under acknowledged” for their efforts.
- 7.) *Expressed reservations about fully including all students:* nine of the 10 believed that inclusion is not always appropriate for those with severe or multiple handicaps or emotional disturbances. Such low incidence students can be too disruptive for the rest of the class and consume too much teacher time (Olson et. al., 1997).

### Social Effects of Inclusion

Deficits in social skills occur throughout all groups of students with learning and behavior problems. The development of social competence is of utmost concern to educators because of the inclusion trend. As students with disabilities return to the general education classrooms, their differences in social skills are more obvious (Rivera & Smith, 1997).

Children with disabilities exhibit a lack of judgement, difficulty in perceiving how others feel, problems socializing and making friends, and problems with adaptive behavior. When asked to assign behavior characteristics to students with LD, teachers use such terms as “disruptive”, “hyperactive”, “aggressive”, and “disinterested”. Some students possess an array of these characteristics, others only one or two, and still others present no social or behavioral deficits (Bender, 1993).

Many times, students demonstrating these behaviors experience peer rejection. When coupled with the inadequate feelings resulting from academic challenges, LD students develop a low self-concept. Other potential causes of a low self-concept are negative feedback at home and school, negative effects of labeling, and the social stigma resulting from the interruption of classroom activities inherent in pull-out programs (Bender, 1993).

Most studies addressing the peer status of students with LD utilize sociograms measuring peer status within a group. The two types of sociometric procedure used the most are nomination procedures and rating scales. One study of third grade students by Weiner (1987), found that girls with LD have more serious peer status problems than their male counterparts. Furthermore, he found that more children with LD are negatively rated by their peers. This study neglected to mention the special education placement of these students (Bender, 1993).

While there is a lack of data on the positive social effects of inclusion, many advocates argue that such a concept is beneficial as an article of faith. An article authored by Kay Marcel, University of New Orleans, described the responses of three mothers whose children are experiencing various stages of inclusion. They range in ages from eight to 15, exhibit moderate cognitive disabilities, and are partially included. Each of these parents chose inclusion after experiencing a more segregated program, even though they acknowledged that needed educational supports in the inclusion classrooms was sometimes lacking. They felt the social benefits of inclusion outweighed the negative outcomes. They recognize that such a program must be individualized, and may not work for everyone.

The parents report positive outcomes in terms of friendships and acceptance in the community and school. They also noted positive changes in school administrators and teachers with whom they have contact. The parents also feel that classmates without disabilities show growth in understanding and social relationships (NPR Inc., *Inclusion Times*, 1996).

A study by Vaughn, Elbaum, & Schumm (1996), examined the effects of inclusion on the social functioning of students with LD. The social functioning of 64 second, third and fourth graders from an urban district in the southeastern United States who participated in an inclusive classroom for a year was studied. The students had previously received instruction in a resource center. These students were fully included the following year, and a part-time teaching assistant (four hours daily) and an LD specialist (90-120 minutes daily) worked in the general education classroom. Social functioning was examined through their peer acceptance and social status, self-concept and self-worth, and self-perceptions of social alienation and loneliness. The examiners believed that social functioning of included students is an important aspect of evaluating the

overall success of the model because the rationale used for placing these students in general education classrooms is often that it will improve their overall social functioning and acceptance by peers. The authors concluded that students in inclusive settings fare at least as well, socially, as students from previous studies in resource center settings. There is even some evidence that they fare better, in that they do not demonstrate high levels of loneliness and increase reciprocal friendships during the school year (Vaughn et al., 1996).

Nominations and peer ratings of liking provide an index of peer acceptance and social status from classmates. Children in a class were asked to rate how much they liked each of their classmates on a 4-point scale (1-not at all , 4-very much). The researchers then asked students to name three students they liked best and three students they liked least to obtain peer nominations. A self-concept scale, representing looks, friends, global self-worth, and academics was also completed by the students. Other scales used in the study measured loneliness, social alienation and social dissatisfaction. The students were identified as LD (n=16), low achieving (LA; n=27), and average/high average (AHA; n=21). The study found that overall, both LA and LD students experience somewhat less positive social adjustment than AHA students. Although students' overall self-worth did not differ by achievement group, the LD students demonstrated significantly lower academic self-concept scores. The students with LD did not differ on feelings of loneliness, and they demonstrated an increase in the number of friendships within the class from fall to spring (Vaughn et al., 1996).

Evidence from this study, when compared with that of other studies that have evaluated similar outcomes for students with LD in resource center settings, reveals that youngsters in inclusive settings fare at least as well socially, as students from previous studies in resource

centers. There is even some evidence that they fare better, in that they do not demonstrate high levels of loneliness and increase their friendships throughout the year. While these findings appear to positively promote the inclusion concept, such results need to be interpreted with caution, since social outcomes for students in inclusion programs are multifaceted and complex (Vaughn et al., 1996).

### Academic Effects of Inclusion

The academic results of reintegration outcomes studies are difficult to interpret because much of the research covered a broad range of disabilities, definitions of reintegration, experimental designs, and dependent measures. Furthermore, the most recent reintegration studies are tied to specific instructional strategies rather than investigating inclusionary practices in a more naturalistic manner, independent of instructional approach (Shinn, Powell-Smith, Good III, & Baker, 1997).

In a study by Shinn et al. (1997), students receiving special education services were reintegrated into general education classrooms for their reading instruction for a trial period. The participants were nominated by their teachers. Their reading progress and reading skills were compared to those of general education low reading peers, who received reading instruction at the same time. The success of the reintegration was evaluated with curriculum-based measures (CBM) of reading progress, measures of reading skills, and parent and teacher surveys. Their reading progress was charted at week 4, week 8, and again at week 12 (Shinn et al., 1997).

The special education students were drawn from nine schools from three school districts in the Pacific northwest. The communities were socioeconomically diverse, with a median of the 57th percentile. Most of the 23 students received special education services under the category of LD. Students were in grades 2 to 6, with the bulk of students in 3rd (n=7) or 6th (n=6). Subjects were almost equally divided with respect to gender (Shinn et al., 1997).

General education teacher subjects (n=20) had instructional responsibility for the reintegrated students for at least half the day for approximately six months when the study began. Only two of the teachers reported having teaching experience in special education (Shinn et. al., 1997).

It was hypothesized that if the reintegration were successful, the reading performance of the included students relative to that of their low-reading peers would maintain or improve. Alternatively, if the reintegration were unsuccessful, the performance of the included students would be increasingly discrepant from their peers over time.

Results indicated that both the reintegrated students and their low-reading peers followed equivalent patterns of progress over the trial reintegration period. Thus, included students as a group were progressing in reading at a rate equivalent to that of their low-reading peers. Parents, special educators, and general education teachers were asked to evaluate trial reintegration. There was no evidence that they differed systematically in their judgements of the success of the general education reading program in meeting the needs of the reintegrated students. Parents, special educators, and general education teachers all reported that that general education was the preferred placement for 90% of the reintegrated student, but that 10% of the group would benefit best from an alternative special education placement. In part, these findings replicate those of Fuchs, Fuchs, Hamlett, Walz, & Germann (1993), who reported equal gains for reintegrated and

low-achieving students using CBM math measures (Shinn et al., 1997).

In this study, it is notable that it was the general education teachers who were the most confident from the beginning of the study in their ability to teach reintegrated students. Furthermore, these teachers, more so than special educators, reported at the end of this study that general education classrooms alone were the most appropriate placement for reintegrated students' reading instruction (Shinn et al., 1997).

This study lasted approximately 12 weeks, and took place near the end of a school year. The long-term outcomes for achievement and other social-emotional behaviors were not examined (Shinn et al., 1997).

In contrast, the practice of inclusion was examined at a typical large urban middle school, struggling with special education reform. The research project, by Deno, Foegen, Robinson, & Espin (1996) began as an investigation of the use of a group-based educational technology for interactive communication. It was their hope to determine the types of assessment data that were most use to teacher and how to study the provision of assessment data could influence instructional decisions made by the teacher. What they discovered instead was a school that has attempted to develop a collaborative integrated program without additional resources (Deno et al., 1996).

Consistent with school district policy, Central Middle School had moved to an integrated collaborative model for providing services to students with disabilities. Like many middle schools, Central organized its students into teams of 125 to 130 students led by an average of five teachers. Although direct service in pull-out settings remained an option, most teams chose to emphasize the general education classroom as the ideal placement for students with disabilities.

Each team includes a special educator who functions primarily in a collaborative role by providing assistance to their general education counterparts and monitoring 15 to 17 students with mild LD on their team. The examiners hoped that Central would be an ideal place to examine ways to use technology to adapt instruction to the needs of individual students (Deno et al., 1996)

At the beginning of the nine weeks, the students were pretested on a full range of content in order to determine those skills they had already mastered. Following the pretest, the general education teacher, Ms. Franklin, was provided with the data on individual student performance. It was assumed that Ms. Franklin would use that information to adapt instruction to the student's current skill level. It was imagined that she would form subgroups within each class and help each group work toward mastery of a common skill. The hope was that the technology would provide a manageable way to assess student skills and monitor progress. Instead this data was used to make individual homework assignments, and Ms. Franklin, like other classroom teachers, made little attempt to adjust instruction to the needs of the students who were having difficulty. Ms. Franklin instructed students for nine weeks in a marking period, emphasizing one new skill each week. By the last week of the academic quarter, only three of 94 students had mastered all nine skills (Deno et al., 1996).

Ms. Franklin explained that the students remain on the same team during their three years at Central. This meant to her that student mastery of a skill was not essential because the content would be addressed in subsequent years. Although Ms. Franklin assumed responsibility for general and special education students, her team's decisions regarding the use of the special education teachers time provided her with only limited assistance in accomplishing the task of educating these students to their fullest potential (Deno et al., 1996).



This study did not intend to question the value base of collaborative and inclusive school programs. What began as an examination of the use of technology in assisting with more individualized instruction resulted in raising the question as to how beneficial inclusionary practices can and should be attained. The examiners fear that the role of special educators has been revised from one of direct instructor to general education assistant in many schools and districts. Concern arises as to whether supporting the ideals of inclusion will encourage schools to rapidly create drastic reforms that will result in eliminating potentially helpful services.

### Summary

In order for inclusion to be fully successful, critical factors, such as extensive planning, adequate classroom support, and evaluation measures need to be carefully implemented. Teachers in inclusive classrooms, while dedicated to the program and the students they teach, express concern over such factors and indicate insufficient collaborative planning time as a major flaw in the program.

Studies show that while LD students exhibit problems socializing, their overall social functioning is similar to that of their nondisabled low achieving peers. Furthermore, reading rates of included students were found to be progressing at a rate equivalent to low readers in the same classroom. While these results tend to support the concept of inclusion of the mildly LD, further studies need to be conducted in this area.

## **Chapter 3: Design of the Study**

### Conceptual Format

This study will focus on elementary school children who are mildly LD and receiving full instruction in an ICS classroom. The social functioning (self-esteem and peer acceptance) of these students as compared to that of their nondisabled peers in the same classroom will be examined. This study will also compare the academic achievement of the LD students prior to and during their placement in the ICS classroom. Attitudes and attributes of the general education and special education teachers involved in ICS coteaching will also be examined.

### Sample

The subjects of the social study, specifically measuring self-esteem, are 47 students in grades four and five. Participants are grouped according to the following guidelines for the purpose of analysis: a.) students identified as having a learning disability (LD) in accordance with New Jersey Administrative Code (N.J.A.C.) 6:28 (n=14); b.) students identified as low achieving (LA) by their classroom teachers for exhibiting inconsistent work and study habits, and maintaining primarily “C” averages in mathematics and reading (n=12); and c.) students identified as average/high average (AHA) by their classroom teachers for exhibiting fairly consistent work and study habits, and maintaining primarily “A/B” averages in mathematics and reading (n=21).

Teacher assigned grades, though subjective in nature, are a fairly reliable indication of the students' academic functioning due to specific district guidelines for assigning grades. Of these 47 students, the 23 fifth grade students completed positive and negative peer nominations as a measure of peer acceptance and reciprocal friendships within the classroom. Table 3.1 contains a summary of the students within each group.

**Table 3.1**  
**Social Functioning Student Sample (N=47)**

	<u>Fall 1997</u>		
	<u><b>LD</b></u> (n=14)	<u><b>LA</b></u> (n=12)	<u><b>AHA</b></u> (n=21)
<b>Grade 4</b>	8	6	10
<b>Grade 5</b>	6	6	11

The sample used in the academic study consists of 20 mildly LD, elementary age students, representing third (n=6), fourth (n=8), and fifth (n=6) grades, who are fully included in the ICS classroom involving coteaching. The mathematics and reading progress as indicated by the

*California Achievement Tests* (CAT 5) is being examined each year from 1995 to 1997.

The students identified as having a learning disability are classified perceptually impaired (PI) in accordance with N.J.A.C. 6:28. They have been identified by the local school district's child study team (CST) on the basis of guidelines that specified the following criteria: impairment in the ability to process information due to physiological, organizational, or integrational dysfunctioning which is not the result of an other educationally disabling condition or environmental, cultural, or economic disadvantage and is characterized by a specifically learning disability manifested by a severe discrepancy between the pupil's current achievement and intellectual ability in one or more of the following areas: basic reading skills, reading comprehension, oral expression, listening comprehension, mathematics computation, mathematics reasoning, and written expression (N.J.A.C. 6:28, 1996).

The sample group involved in the examination of inclusive teachers' attitudes and attributes is comprised of eight teachers (general education n=5, special education n=3) who are currently or have been previously directly involved in the education of mildly LD students receiving ICS instruction. All subjects are female.

Subjects involved in the study are from one of the ten schools of the Gloucester Township Public School district. Gloucester Township is a large suburban district in Camden County, New Jersey. The student body population at this K-5 elementary school is 942 (504 boys, 438 girls). Forty-five classified students attend this school. A small number of these students are bussed from other elementary schools within the district, and attend self-contained classes. Approximately 4.9% of the school's students are classified as eligible for special education. Basic skills instruction (BSIP) is provided for 45 students (4.8%). Eighteen students (1.9%) currently

receive ESL instruction . Of the 942 students, 18.7% receive free or reduced lunch.

Approximately 92% of the student population is Caucasian. Racial distribution is not representative of the normal population. The district initiated the ICS programs in 1994 as the result of the current trend in special education to keep disabled students in the mainstream.

### Group Selection

Students are placed in the ICS classrooms upon the recommendation of CST, special educator, general educator and school administrator in accordance with the guidelines for least restrictive environment. In view of heterogenous grouping, the balance of the classroom must be considered when placing classified students. Student selection guidelines are as follows:

- \* consistent academic achievement and social behavior
- \* academic skills sufficient enough to function effectively in the ICS classroom
- \* willingness to manage self and materials without a great deal of direction
- \* asks for and accepts help
- \* adheres to classroom and school procedures
- \* ability to function in a large group

Continual review of students in this program is warranted, as well as evaluation of success overall. Each year, ICS teams, academic areas, and students must be reassessed (GTPS ICS Handbook, 1995).

### Procedures

The 47 students involved in the self-concept study are to complete the *Piers-Harris Children's*

*Self-Concept Scale*. This is an 80 item self-report questionnaire used to evaluate how children and adolescents feel about themselves. Peer acceptance and reciprocal friendships were examined using the method of positive and negative peer nominations with the fifth grade ICS students (n=23).

Every spring, the students in the district were administered the *California Achievement Test* (CAT 5). The CAT 5 is a battery of tests that evaluates academic achievement in the areas of reading, mathematics, and language. The results of this battery of tests were collected and examined for the purpose of this study. A review of pupil records is also being conducted.

A ten question survey was given to eight ICS teachers at the beginning of the 97/98 school year for the purpose of examining the attitudes and attributes of teachers involved in the full inclusion of mildly LD students.

### Measures

The *Piers-Harris Self-Concept Scale*, subtitled “The Way I Feel About Myself”, is to be completed by all students placed in the fourth and fifth grade ICS classrooms (n=47). This is a brief self-report measure designed to aid in the assessment of self-concept in children and adolescents, ages 8-18. The children are shown a number of statements that tell how some people feel about themselves, and are asked to indicate whether each statement applies to themselves using dichotomous yes/no responses. The overall self-concept is reported in a raw score, percentile, and overall stanine. The *Piers-Harris* provides six “cluster scales” in the areas of Behavior, Intellectual and School Status, Physical Appearance and Attributes, Anxiety,

Popularity, and Happiness and Satisfaction. It appears to be a highly reliable instrument.

Test/retest reliability coefficients range from .42 to .96, and internal consistency estimates for the total score range from .88 to .93. Criterion-related and construct validity has been shown to be adequate. The scale is not recommended as a routine screen, or for use with children who are hostile, uncooperative, moderately-severely mentally retarded, bilingual or prone to distortions (*Piers-Harris Revised Manual*, 1984).

Peer nominations will be obtained by asking the students in fifth grade ICS to name the three students in the class they like the best, and the three they like the least. Positive nominations reflect popularity, while negative nominations are indicative of social rejection. Nominations provide an index of peer acceptance and social status from the perspective of classmates. Reciprocal friendships will also be examined. A reciprocal friendship is one in which two students have nominated each other as one of their three most liked classmates. The number of possible reciprocal nominations ranges from zero to three. Test-retest reliability as well as criterion-related validity have been found to be adequate (Vaughn, Elbaum, & Schumm, 1996).

Academic achievement for the students is evaluated each spring using a formal measure, the CAT 5. The CAT 5 is a norm-referenced, group administered standardized achievement battery comprised of tests in reading, mathematics and language. It was standardized on 300,000 students in grades K-12. The national standardization sample included public, Catholic, and private non-Catholic students. Schools in the national sample were stratified based on geographic region, district enrollment, and socio-economic status. The most recent publication of the tests was in 1986 by CTB/McGraw Hill. Scores are reported as raw scores, standard scores, national percentile ranks, and national normal curve equivalents. Reliability was examined using test/retest

and alternate form methods. Reliability levels range from .6 to .7 for level 10 and 11, and .8 to .9 for level 12-20. Content and construct validity was found to be good (CAT 5, 1986).

Since the CAT 5 is administered during the spring of each year, mathematics and reading percentiles for the current school year are not yet available.

Another way in which the student's academic achievement will be measured is with a functional method, teacher assigned report card grades. Final report card grades will be utilized as academic indicators. Teacher assigned grades are a fairly good indication of pupil progress due to specific guidelines for grading set by the district. Grades are determined based on criterion-referenced test results, curriculum-based assessments, work samples, assignment completion, and classroom effort and performance.

A teacher questionnaire was developed to ascertain the teachers' attitude towards inclusion, to discover personality traits of these inclusionists, and to identify strategies and modifications made within the classrooms. Personal interviews were conducted with a sample of the teachers (n=4) to help further understand teacher perspective on inclusion of the mildly LD. Teachers were encouraged to be open and honest on their thoughts and views of inclusion.

The ten question survey (see Appendix A) requiring short responses, was given to eight inclusionists. All surveys were returned. The questionnaires possessed face validity since questions measured teachers beliefs on the subject of inclusion and ICS instruction.

### Summary

This is a study in which data will be used in order to determine if mildly LD elementary students placed in ICS classrooms are socially well-adjusted and making adequate academic gains.



Teacher attitudes toward this type of placement option were also examined.

The students in the social study are 47 fourth and fifth graders designated learning disabled (LD), low-achieving (LA), or average/high average (AHA). The *Piers-Harris Children's Self-Concept Scale* and peer nominations are being utilized in examining self-concept and peer relationships. Academic achievement of the LD students in the third, fourth and fifth grade ICS classes is being examined using CAT 5 mathematics and reading percentiles as well as a review of pupil records.

## **Chapter 4: Analysis of the Results**

### **Introduction**

The purpose of this study was to document collaborative teachers' attitudes toward and perceptions of in-class support for mildly LD elementary school students. Factors that can contribute to successful inclusion were identified. Overall effectiveness of ICS was also examined by comparing the social functioning (self-concept and peer acceptance) and academic achievement of classified ICS students to that of their nondisabled peers.

In previous years, the mildly LD students received special education services in resource centers and various other types of pull-out programs. These programs have been criticized for contributing to a student's lack of membership in a classroom and overall low social status. Inclusion is the result of a restructuring trend in education based on the theory that students with disabilities can receive an appropriate education in the general education setting with necessary support services. Effectiveness of ICS programs is being examined nation wide. The hypothesis is that mildly LD students can function appropriately both academically and socially in the general education setting with support services.

## Results

Research Question 1: What are the attitudes and perceptions of ICS teachers (general and special education) on inclusion and collaborative teaching as measured by a questionnaire and follow-up interviews?

The responses of the teacher questionnaires were analyzed. Eight questionnaires were handed out and completed. Five were completed by general education teachers, and three were completed by special education teachers. All teachers were involved in ICS instruction for at least one year. Of the eight female teachers, six found ICS to be “very successful”, while two reported it to be “successful”. Both teachers who rated ICS as “successful” shared that there are too many “needy non-classified” students placed in the ICS classes, and that more positive role models are needed for true program success. In addition to the overall success rating of ICS support, upon analyzing the questionnaires, the following themes emerged:

1. Teachers involved in ICS instruction described themselves as “flexible”, “organized”, “positive”, “determined”, and “willing to try new things”.
2. Teachers believed that successful ICS involves different partner perspectives and continued adjustments.
3. Teachers expressed concern over adequate collaborative planning time and the placing of too many special needs students in one ICS classroom.
4. All teachers questioned believed that ICS is not appropriate for students with behavior problems and/or moderate-severe learning deficits.
5. Teachers believed that the building administrator contributed to the program’s success through student and teacher support, open-mindedness to teacher suggestions, and careful pairing of

collaborative teachers.

6. Teachers felt that classified students benefit more from ICS (rather than a pull-out program) both academically and socially.

Research Question 2: What factors are present in cases where gains were made with included mildly LD students receiving ICS?

Four teachers were interviewed and asked to share their thoughts on Research Question 2. Teacher A strongly believes that her program is successful because both teachers chose to be involved in ICS. Forcing teachers to engage in ICS collaboration can be detrimental to the students. Teachers A and B feel that ICS teachers must be willing to accommodate special needs students by modifying testing procedures, trying new methods and strategies, and incorporating flexible grouping within the ICS classroom. Teachers were asked to elaborate on the idea of “modifying tests”. Teachers involved in the interview shared that they have varied the modality (written vs. oral testing), expanded time limits, decreased the number of questions or problems, abbreviated or reworded directions, and carefully monitored the level of difficulty for test items. Teacher B shared that frequent informal evaluations are necessary to ensure that the students are mastering new skills as well as maintaining prior skills and concepts. Teacher C emphasized study skills instruction as an integral part of ICS success. She believes that teaching note-taking and using auditory tutorial cassettes are beneficial. Teacher D commented that using a multi-sensory approach to instruction, particularly hands-on learning, greatly benefits all students, but most specifically special needs students, because auditory and /or visual modalities are often weak.

Research Question 3: What academic gains are made by the mildly LD students currently receiving ICS instruction as indicated on pupil records and standardized testing.

It is important to discuss the term “academic gains” before reviewing any report card or standardized results. It is the goal of educators involved in ICS that students be able to maintain sufficient academic growth, without broadening any gaps in learning that currently exist. Should a classified ICS student begin to exhibit severe academic struggles in the general education classroom, in spite of current support services and modifications, it is the practice of this elementary school to consider, as a team, alternative placement special education options currently existing within the school.

Final report card grades in reading and mathematics are listed in Tables 4.1, 4.2, and 4.3. It is the policy of Gloucester Township Schools to report grades in the form of a letter. Letter grades were converted to numerical values 1.0-4.0 (D=1.0, C=2.0, B=3.0, A=4.0) for the purpose of calculating a mean score for each subject area.

Table 4.1 shows the final grades in reading and mathematics for classified ICS grade three students for the last two consecutive school years. These students are currently ICS grade four students. Final grades for the current school year are not yet available. An analysis of final grades shows that 50% of the students maintained the final grade given for the close of the 95/96 school year in both subject areas. Any increase or decrease in a final grade was limited to a difference of only one letter grade and was not considered significant. The mean reading final grade of 2.75 for 95/96 dropped to 2.25 in 96/97, and the mean mathematics final grade of 2.75 in 95/96 dropped to 2.38 in 96/97.

Table 4.2 shows the final grades in reading and mathematics for classified ICS grade four

students for the last three consecutive school years. These students are currently in grade five ICS. It is important to mention that ICS was not implemented in second grade until the current (97/98) year. In 94/95, LD 1 received BSIP, while LD 2 was not yet classified. All other students were classified and receiving resource center instruction as second grade students. The mean final reading grade of 2.0 in 94/95 steadily increased over the course of the following two years, while the mean mathematics score of 2.4 in 94/95 steadily decreased. It is important to mention that no student received a final grade lower than a "C" in either academic area.

Table 4.3 shows the final grades in reading and mathematics for classified ICS grade five students. These students are currently in grade six in various placements within the district. The mean final reading grade of 2.25 significantly increased to 2.67, while the mean mathematics score of 2.5 decreased to 2.33. Scores were not available for LD 1 and LD 5, as these students were new to the district last year. Furthermore, only one of the remaining four students was placed in ICS for the previous year. Therefore, only scores for the previous two school years are contained in table 4.3. It can be concluded that the impact of ICS on the classroom academic achievement of these students is not clearly known.

**Table 4.1**  
**Previous Reading and Mathematics Final Grades**  
**for Grade Three Students**

	<b>95/96 MATH</b>	<b>96/97 MATH</b>	<b>95/96 RDG</b>	<b>96/97 RDG</b>
<b>LD 1</b>	2.0	3.0	3.0	2.0
<b>LD 2</b>	3.0	2.0	3.0	3.0
<b>LD 3</b>	3.0	3.0	2.0	3.0
<b>LD 4</b>	3.0	2.0	3.0	2.0
<b>LD 5</b>	3.0	3.0	3.0	3.0
<b>LD 6</b>	2.0	2.0	2.0	2.0
<b>LD 7</b>	3.0	3.0	2.0	2.0
<b>LD 8</b>	3.0	2.0	2.0	2.0
	<b>M=2.75</b>	<b>M=2.38</b>	<b>M=2.75</b>	<b>M=2.25</b>

**M=mean**

**Table 4.2**

**Previous Reading and Mathematics Final Grades**  
**for Grade Four Students**

	<b>94/95 MA</b>	<b>95/96 MA</b>	<b>96/97 MA</b>	<b>94/95 RD</b>	<b>95/96 RD</b>	<b>96/97 RD</b>
<b>LD 1</b>	3.0	3.0	2.0	3.0	2.0	2.0
<b>LD 2</b>	1.0	2.0	2.0	1.0	2.0	3.0
<b>LD 3</b>	3.0	2.0	2.0	2.0	2.0	3.0
<b>LD 4</b>	2.0	1.0	2.0	2.0	1.0	2.0
<b>LD 5</b>	N/A	N/A	2.0	2.0	3.0	2.0
<b>LD 6</b>	3.0	3.0	2.0	2.0	2.0	3.0
	<b>M=2.4</b>	<b>M=2.17</b>	<b>M=2.0</b>	<b>M=2.0</b>	<b>M=2.17</b>	<b>M=2.5</b>

**Table 4.3**

**Previous Mathematics and Reading Final Grades**  
**for Grade Five Students**

	<b>95/96 MATH</b>	<b>96/97 MATH</b>	<b>95/96 RDG</b>	<b>96/97 RDG</b>
<b>LD 1</b>	N/A	2.0	N/A	3.0
<b>LD 2</b>	2.0	2.0	2.0	2.0
<b>LD 3</b>	2.0	2.0	2.0	3.0
<b>LD 4</b>	3.0	3.0	3.0	3.0
<b>LD 5</b>	N/A	2.0	N/A	3.0
<b>LD 6</b>	3.0	3.0	2.0	2.0
	<b>M=2.5</b>	<b>M=2.33</b>	<b>M=2.25</b>	<b>M=2.67</b>



Academic achievement for the students is evaluated each spring using a formal measure, the *California Achievement Test* (CAT 5). Mathematics and reading percentiles for the classified students were examined. Results for the 97/98 school year have not yet been received, and therefore are not included in this analysis.

Achievement test scores for the eight grade three LD students for the 95/96 and 96/97 school years were compared. Scores are listed in table 4.4. A review of the scores showed that in the area of mathematics, six of the eight students experienced a decrease in their total mathematics percentile, two of the eight experienced an overall increase, while one student maintained his current percentile ranking. A measurable increase or decrease was five or more percentile points. It is important to mention that in spite of the high incidence of declining scores, only one of the LD students fell below the 50th percentile.

In the area of reading, as measured by the CAT 5, among the eight classified third grade students, four of the eight experienced an overall decrease in their total reading percentile, three of the eight maintained their current percentile ranking, while one student experienced a significant increase from the 14th to the 83rd percentile. Three of the eight students ranked below the 50th percentile.

When comparing the CAT 5 mathematics and reading percentiles for the six classified grade four students from the previous two school years, remarkable overall improvement was noticed. Scores are listed in table 4.5. The total mathematics percentile for all six students improved by five or more percentile points. Three students' scores rose by thirty or more points. The collaborative team of this group for the 96/97 school year attribute rising scores to continued skill

review and maintenance and problem solving discussion.

Three of the six LD students experienced an increase in the total reading battery percentile scores. Again, two of the three students' scores rose by 30 or more percentile points. Two of the six students maintained current percentile scores, while one student experienced a decrease in total reading percentile rank.

Data gathered on the six classified Fifth grade ICS students shows that one student's percentile ranking in reading and mathematics significantly increased, two students' percentiles decreased in both areas, and one student maintained his previous percentiles. Scores were not available for comparison for LD 1 and LD 5. As previously mentioned, this data in relation to academic achievement of mildly LD ICS students is inconclusive.

While some of these scores either decreased or fell below the 50th percentile, it is important to observe the improvement of many of these classified students from one year to the next. Furthermore, when examining the CAT 5 96/97 results, 65% of the 20 classified students ranked above the fourth stanine in mathematics, while 55% ranked above the fourth stanine in reading. As previously stated, it is the goal of this elementary school to at least maintain, if not improve, the current academic achievement of the ICS students. Thus, it can be concluded that ICS has been successful for many of these students who have managed to remain academically competitive with their same age peers.

Research Question 4: What is the social functioning (self-concept and peer acceptance) of mildly included LD students as measured by the *Piers-Harris Children's Self-Concept Scale* and peer nominations?

The subjects in the self-concept study were 47 students currently in grades four and five. Students were ability grouped for this study as learning disabled (LD), low achieving (LA), and average/high average (A/HA). All subjects completed the *Piers-Harris Children's Self-Concept Scale*, subtitled "The Way I Feel About Myself". The following areas were examined: behavior (BEH), intellectual and school status (INT), physical appearance and attributes (PHY), anxiety (ANX), popularity (POP), and happiness and satisfaction (HAP). Average cluster raw scores for grades four and five are contained in tables 4.7 and 4.8.

Of these 47 students, the 24 fifth graders completed positive and negative peer nominations as a measure of peer acceptance and reciprocal friendships. Students were simply asked to list the three students they liked the most and three students they liked the least.

***Table 4.4***

**Grade 4 CAT 5 National Percentile**

**Total Mathematics and Reading Scores**

	<b>95/96 MATH</b>	<b>96/97 MATH</b>	<b>95/96 RDG</b>	<b>96/97 RDG</b>
<b>LD 1</b>	63	87	14	83
<b>LD 2</b>	40	52	61	61
<b>LD 3</b>	86	77	59	39
<b>LD 4</b>	93	84	84	83
<b>LD 5</b>	76	75	70	70
<b>LD 6</b>	76	42	49	30
<b>LD 7</b>	86	77	53	45
<b>LD 8</b>	90	69	63	56

***Table 4.5***

**Grade 5 CAT 5 National Percentile Rank**

**Total Mathematics and Reading Scores**

	<b>95/96 MATH</b>	<b>96/97 MATH</b>	<b>95/96 RDG</b>	<b>96/97 RDG</b>
<b>LD 1</b>	36	76	4	34
<b>LD 2</b>	71	79	61	70
<b>LD 3</b>	14	35	54	30
<b>LD 4</b>	46	58	22	25
<b>LD 5</b>	12	43	23	26
<b>LD 6</b>	52	70	24	60

Inspection of the mean scores for the six cluster areas for students in grades four and five are contained in tables 4.6 and 4.7, and are not meaningfully different. It should be noted that current fourth grade LD students demonstrated a more favorable self-concept than their non-disabled peers in the areas of physical appearance and attributes, popularity, and intellectual and school status. Percentile conversions for cluster and total scores for grade four students place all students, with the exception of LD 6 (below average) in the average and above average ranges. Furthermore, all of the grade five LD students can be described as average and above average with regards to overall self-concept.

An analysis of the positive and negative peer nominations shows that 50% of the grade five LD students share in at least one reciprocal friendship, as compared to 66% (LA) and 100% (A/HA). However, an analysis of negative peer nominations shows that the LD students were no more likely to be negatively viewed by their peers than students in the LA and A/HA groups. It should be noted that A/HA students tended to feel more positively toward students in their own group (A/HA), whereas LD and LA students tended to show no preference.

In general, the social functioning of the classified LD students appears to be intact. These students appear to be well-adjusted, accepted members of their general education classrooms.

**Table 4.7**

**Average Cluster Raw Scores for Grade 4**

	<b>BEH</b> (x=16)	<b>INT</b> (x=17)	<b>PHY</b> (x=13)	<b>ANX</b> (x=14)	<b>POP</b> (x=12)	<b>HAP</b> (x=10)
<b>LD</b>	12.8	12.3	8.1	9.8	8.1	8.1
<b>LA</b>	10.5	9.8	6.2	8.3	5.2	6.2
<b>A/HA</b>	12.4	11.4	5.8	10.4	7.2	8.8

\* x= maximum score possible in each cluster area

**Table 4.8**

**Average Cluster Raw Scores for Grade 5**

	<b>BEH</b> (x=16)	<b>INT</b> (x=17)	<b>PHY</b> (x=13)	<b>ANX</b> (x=14)	<b>POP</b> (x=12)	<b>HAP</b> (x=10)
<b>LD</b>	14.8	14.7	10.5	10.2	8.5	9.0
<b>LA</b>	13.2	14.2	9.3	10.7	8.7	8.2
<b>A/HA</b>	14.3	18.2	11.7	11.7	9.3	9.5

## **Chapter 5: Summary/Conclusions**

### Introduction

The purpose of this study was to examine the academic achievement and social functioning (self-concept and peer acceptance) of ICS students. This study also examined the attitudes and perceptions held by ICS teachers, as well as important factors that can contribute to a successful inclusive program.

The subjects for the academic portion of the study were 20 mildly LD elementary school students, representing grades three (n=6), four (n=8), and five (n=6), who are fully included in the ICS classroom. Achievement was measured using a functional measure, previous final report card grades, and a formal measure, standardized test percentiles (CAT 5) for mathematics and reading.

The subjects used for the self-concept study were 47 fourth and fifth grade students. For the purpose of analysis, students were ability grouped, learning disabled (LD), low achieving (LA), and average/high average (A/HA). The 23 grade five students also completed positive and negative peer nominations to examine peer acceptance and reciprocal friendships.

Eight general and special educators completed a questionnaire in order to determine their attitudes toward and perceptions of ICS. Of the eight, four inclusionists were interviewed and

encouraged to share their thoughts on successful inclusion.

All subjects involved in this study were from the same K-5 elementary school in Gloucester Township, New Jersey. The LD students have been found eligible for special education services in accordance with New Jersey Administrative Code 6:28, under the classification perceptually impaired. They have been placed in the general education classroom with necessary support services, as decided by the child study team, teacher(s), and parent(s).

### Findings

The results of this study indicate that when using a formal measure (CAT 5), most of the students identified as LD and fully included in the general education setting can demonstrate academic achievement that at least equals, if not surpasses, their nondisabled peers, as indicated by reading and mathematics percentiles. Those grade three and grade four students who did not achieve percentile rankings within the average range still tended to show gradual improvement over the previous year's scores. Grade five CAT5 results were inconclusive. Report card grades support this theory, as ICS students tended to be "B/C" students, thus indicating that curricular objectives are being met with the implementation of modifications and support services.

Socially, the LD students show no signs of negative self-concept or peer rejection, as indicated by the *Piers-Harris Children's Self-Concept Scale* and positive/negative peer nominations, in spite of their disability. Of the 14 LD students who completed the scale, only one student places in the "below average" overall descriptor category, while the remaining 13 LD students possess self-concepts through the "average" to "very much above average" ranges.

Furthermore, the teachers involved in ICS instruction view the program as "successful" or



“very successful” overall, as indicated by the teacher questionnaires. These teachers view themselves as “flexible”, willingly engaged in ICS, and demonstrated the ability to meet individual needs within the general education classroom to ensure student success. The inclusive practices in the K-5 elementary school involved in this study closely resemble those mentioned in the 1995 NICHCY *News Digest* article, which were characterized as “essential for success”.

### Hypothesis and Implications

The data generated by this study seems to substantiate the hypothesis that *most* mildly LD students can meet with success both academically and socially when fully included in the general education setting with appropriate services. Teachers who positively view, and are dedicated to, such ICS programs can contribute to overall program success. However, due to the limited sample involved in the study, further research would be needed to substantiate these findings.

### Recommendations for Further Research

The results of this study seem to support previous research findings that mildly LD students fully included in the general education setting with necessary support services tend to show satisfactory academic progress and social functioning. Furthermore, careful planning for and frequent monitoring of inclusive programs contribute overall success. Based on this study, further research can be conducted to substantiate results.

1. Compare the academic and social functioning of mildly LD ICS students to that of students receiving special education services in pull-out or self-contained programs.

2. Assess the long-term academic and social functioning of ICS students:

What type of transition planning is developed for these students?

What changes in placement (ICS to resource center) have been made for any ICS elementary students?

3. Examine the long term attitudes and perceptions of ICS teachers.

How do ICS teachers view the success rate of the program after x number of years?

What factors contribute the success/failure of the program?

In conclusion, it appears that continued research is necessary in order to determine the overall effectiveness of inclusion of the mildly LD population in the general education setting with necessary support services.

## **Teacher Survey on In-class Support**

**Name:** \_\_\_\_\_

**Current Position:** \_\_\_\_\_

**Years Teaching:** \_\_\_\_\_ **Degree Certification:** \_\_\_\_\_

Describe yourself as a person.

Describe yourself as a teacher.

How successful do you rate the in-class support program? 1-unsuccessful 2-mildly successful  
3 successful 4-very successful

To what do you attribute its success/failure?

What modifications do you make to meet the needs of a classified student?

Approximately how many minutes per week are spent collaboratively planning? \_\_\_\_\_

What pitfalls do you see with the program?

What type(s) of students do not belong in the ICS program?

To what extent does your building administrator facilitate this program?

Do you feel students benefit more from ICS than a pull-out program?

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