5-2-1995

A comparative study of pull-out resource room instruction to in-class resource room instruction

Robin Comerford

Rowan College of New Jersey

"A COMPARATIVE STUDY OF PULL-OUT RESOURCE ROOM INSTRUCTION TO IN-CLASS RESOURCE ROOM INSTRUCTION"

by
Robin Comerford

A THESIS

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree in the Graduate Division
of Rowan College
May 2, 1995

Approved by

Professor

Date Approved 5/2/95

ABSTRACT

Robin L. Comerford

"A Comparative Study Of Pull-out Resource

Room Instruction To In-class

Resource Room Instruction"

May 2, 1995

Dr. John Klanderman

Master of Arts Degree

According to The Regular Education Initiative, students with disabilities will be fully integrated into the regular education classroom. Hardman et al. (1993) found that segregating learning disabled students limits their opportunities to learn appropriate social skills. Weiner (1979) hypothesized that attributions a child makes about himself/herself will affect his/her level of motivation. He also said that children who attribute failure to lack of ability and success to external factors, will develop a learned helplessness. Placing students with disabilities into regular education programs with their non-disabled peers is a movement designed to increase a learning disabled studentself esteem improving their ability to learn.

This study attempted to identify if learning disabled students improved in the areas of academic achievement and social skills when placed in a classroom with their non-disabled peers. The participants in this study were 44 classified resource center students from two middle class, suburban school districts. 22 students received in-class

resource room instruction whereas the other 22 received pull-out instruction. Both groups were compared by an independent measures *t* test to determine if the in-class group achieved higher scores on achievement tests and social skills inventories. Results did not support the hypothesis that there would be a significant difference between the in-class and the pull-out groups.

MINI ABSTRACT

Robin L. Comerford

"A Comparative Study Of Pull-out Resource

Room Instruction to In-class

Resource Room Instruction"

May 2, 1995

Dr. John Klanderman

Master of Arts Degree

Weiner hypothesized that attributions a child makes about himself/herself will effect his/her level of motivation. The Regular Education Initiative is designed to improve a learning disabled studentself concept and achievement by placing them with their non-disabled peers.

This study attempts to compare learning disabled students in an inclusive setting and a non-inclusive setting. Results did not support the hypothesis that learning disabled students placed in an inclusive setting will have higher achievement test score as well as social skills scores.

Acknowledgements

I gratefully acknowledge one very special person in the preparation of this thesis. A special thanks goes to my husband. Without his sacrifice and support throughout this project I would have been lost.

I would also like to thank Dr. John Klanderman and Dr. Dihoff for their guidance and support throughout my research.

TABLE OF CONTENTS

CHAPTER ONE

THE NEED

Inclusive education is a challenge in the classroom that many educators are facing today because of The Regular Education Initiative. If students with disabilities are going to be fully integrated into the regular classroom, understanding of how inclusive education arose and its' benefits are vital to completing this large task in public schools.

In the past, students with disabilities were educated in self contained settings without the model of age appropriate peers. Studies have shown that students in these traditional programs have not progressed to the level of that of their age appropriate peers both academically and socially.

The issue of integration both socially and academically is vital to successful lives of all people with disabilities. Research in this area would give educators a better understanding of the academic and social benefits of including students with disabilities into the regular classroom.

PURPOSE

The purpose of this study is to examine potential gains in reading and language that a classified student may experience as a result of placement in an included educational setting. This study will also examine possible gains in social skills of

resource room students as the result of being placed with appropriate role models. Because the concept of inclusion is now occurring in districts across New Jersey, roles of the traditional classroom educator and special educator are changing. My role as a special educator has changed because earlier in my career, I was to pull students with disabilities out of the mainstream and adapt the curriculum to meet the students individual needs. At that time, mainstreaming into the regular classroom was only used if the students were able to adapt to the regular subject curriculum. At present, this self contained setting is not being used to meet the student with disabilities needs. Instead, the classified student is placed in the regular classroom where the teacher, along with the special educator, adapts the curriculum to meet the student with disabilities needs.

This research could be used to foster understanding of the need to integrate classified students into the school community, for social benefits as well as academic. Students with disabilities need to be integrated into a regular classroom with appropriate support services and planning. As the Regular Education Initiative (REI) is now beginning to be implemented, there is little evidence to support that classified student who are included in a regular classroom, improve in reading and language. There is also little evidence to support that social skills change as a result of placement with age appropriate peers in a regular classroom setting. As special education is changing at a rapid pace, this research may be helpful in providing any additional information that can be used in this task. This study may be helpful in determining if any changes occur in achievement testing or social skills as the result of inclusive education.

HYPOTHESIS

Resource center students who are included in reading and language will attain higher scores on achievement tests as compared with resource center students educated in a pull-out program.

Resource center students who are included in regular class instruction will have better social skills than resource center students educated in a pull-out program.

HISTORY

The concept of inclusion was disguised in the Civil rights movement of the 1950 and 1960. It was during this time that all citizens had the right to a quality education. The outcome of the United States Supreme Court case, "Brown v. State Board of Education", paved the way for students with disabilities to obtain equal educational services.

In the early 1970, parents of children with disabilities started to fight for integrated education of their children. These parents were able to get a law passed entitled Education for All Handicapped Children Act (P. L. 94-142). This law enabled children with disabilities to receive a free and appropriate education in the least restrictive environment. Section 504 of the Rehabilitation Act stated that disabled people can not be excluded from participating in activities that are federally funded. Services in public education varied from state to state, district to district. The term,least restrictive environment, was interpreted in many different ways.

With the passage of P.L. 94-142, more deinstitutionalization of students with

disabilities occurred. As these students became members of an integrated society, communities had to instruct students in basic skills that were needed for living in a community. Because school is a member of the community, curriculum had to be provided for students with disabilities. Physical integration of students was the first initiative of including students in the public school domain.

Mainstreaming for lunch, homeroom and specials such as art, music, and physical education, became areas where students with disabilities were mainstreamed. This type of partial integration was primarily for social reasons. Some believe this is not full integration of students with disabilities. Academic subjects were taught in a pull-out program where students were taught by a special education teacher in a self contained setting where they were isolated from their peers. These segregated settings were unable to prepare these individuals with the opportunity to develop attitudes, values, and skills needed to get along with their age appropriate peers.

In 1990, The American with Disabilities Act was passed stating that students with disabilities can not be segregated or denied benefits of public school services. P.L. 94-142 was re-authorized in 1990 and was titled Individuals with Disabilities Education Act (IDEA P.L. 101-476). This law stated that students with disabilities are to be educated with students who do not have a disability. It became illegal to deny students' with a disability any services, programs or activities in public schools.

As a result of this legislation, students with disabilities are now being placed across New Jersey in regular classes with age-appropriate peers in their local school district. These students are entitled to supports in the regular classroom that involve

team teaching strategies. There is a significant use of cooperative learning, peer supports and peer tutoring in classroom settings. Students with disabilities are to be considered part of the regular classroom and the public school at large. Peers without disabilities will learn to develop skills in dealing with others who are different from themselves. This experience leads to growth in their own self esteem as well as those with disabilities. Supports for student with disabilities in the regular classroom include team teaching with both the resource center instructor and the regular education teacher in the academic subject area. This is a major change because prior to the IDEA legislation, resource center students were educated in self contained classrooms for certain academic periods during the day.

ASSUMPTIONS

1. It is assumed that the populations being compared are from similar suburban school districts.
2. It is assumed that the teaching method in one sample differs from that of the other sample.
3. It is assumed that there is no systematic bias in the use of achievement tests.
4. It is assumed that the achievement tests and the Social Skills Rating System are administered by trained personnel.

LIMITATIONS

1. It is understood that the samples are from two small suburban school districts, which limits the sample size, making the study not as adequate as it could be.
2. It is understood that the samples used are limited in gender with majority of

subjects being males.

DEFINITIONS

included- students with disabilities who are placed into non-special education classrooms

inclusion- students with disabilities who are valued an identified as members of a non-special education classroom with age appropriate peers

resource center- a classroom for classified students labeled as Learning Disabled separate from the regular classroom

pull-out program- a special educator designs a program taught apart from the regular classroom, to meet the student with disabilities educational needs.

in-class program- a special education teacher and a resource room teacher use a team teaching approach to educate both classified students and non-classified students in the same classroom.

traditional classroom educator- teaches students in a regular classroom

special educator- teacher who has been trained in educating students with disabilities

mainstreaming- integrating students with disabilities into the regular classroom

self-contained- classroom where students with disabilities were educated separately from their peers

integrate- the act of bringing together students with disabilities and students who are not disabled both socially and academically

Regular Education Initiative- concept that students with disabilities are best served in a regular classroom where the regular education teacher and special education teacher work together to educare the student with disabilities in the regular classroom

Least Restrictive Environment-after PL94-142 students with disabilities were educated with students without disabilities to the maximum extent possible unless the severity of the student handicap would prevent them from being placed in regular education.

learning disabled- children who may display difficulty in the academic subject areas; displaying various perceptual problems

OVERVIEW

Chapter Two consists of pertinent literature relevant to this experiment. Specific and related research will be reviewed in this chapter.

Chapter Three delineates how this experiment was executed.

Chapter Four reviews the statistical relevance of this study and of the data obtained.

CHAPTER TWO

REVIEW OF LITERATURE

The literature contained in this chapter provide a review of studies that examine social interaction, social competence, and social acceptance of learning disabled students placed in self contained, partially integrated and fully integrated classrooms. Also examined are motivation and cognition of learning disabled students as compared to their non-disabled peers. Finally, this chapter will discuss self esteem, self concept, and self perceptions of learning disabled students and the effects those issues have on academic achievement.

SOCIAL INTERACTION SKILLS

The current trend for students with learning disabilities is to be placed in classrooms with non-disabled peers. Hardman, Drew, Egan, and Wolf (1993) found that segregation limits opportunities for students to learn skills necessary for social participation in a regular classroom environment (Haas, 1993).

SOCIAL SKILLS DEFICIENCIES

A study conducted by McKinney, McClure, and Feagano (1982) found that social interaction skills and social acceptance of learning disabled students are deficient when compared to their non-disabled peers (Coleman, McHam, and Minnett, 1992). Another study by LaGreca and Stone (1990) found that students with learning

disabilities were less well liked and less accepted when compared with average and low achieving peers (Coleman, McHam, and Minnert, 1992).

On the contrary, a study by Bursuck (1983) found that learning disabled students were no different than other low achieving students on ratings of peer acceptance (Coleman, McHam, and Minnett, 1992). To further study these results, Coleman et al., (1992) conducted a study to determine if learning disabled and low achieving elementary school children had similar competencies. They used a sample of 170 third through sixth grade low achievers and classified learning disabled students. The Harter Perceived Competence Scale, Self Description Questionnaire, and social ratings by peers and teachers were used to retrieve data. Results yielded that the differences between low achievers and learning disabled students were minimal. Peer ratings indicated that learning disabled students were better liked than their low achieving peers (Coleman, McHam, and Minnett, 1992).

BEHAVIOR PROBLEMS

Other studies suggest that learning disabled students display less social competence and have more behavior problems than their non-disabled peers (Torro, Weissberg, Guara, and Lieberstein, 1990). Pearl, Bryan and Donohue (1983) found that learning disabled students showed more negative and inappropriate types of social behavior. Pearl and Cosden (1982) found that learning disabled students misread social interactions (Toro, Weissberg, Guara, and Lieberstein, 1990). Spivak et al., (1976) found that learning disabled students were deficient in generating solutions to problems in social situations; unable to offer relevant means to accomplish appropriate social

outcomes (Toro, Weissberg, Guara, and Lieberstein, 1990).

Toro et al., (1990) conducted a study comparing social-problem solving skills and school behavior of non-learning disabled and learning disabled students. The sample consisted of 86 non-learning disabled and 86 learning disabled ranging from 7 to 11 years of age. Instruments of measurement included The Child Behavior Rating Scale and Open Middle Interview. Results indicated that learning disabled students displayed deficiencies in areas of alternative solutions, frustration tolerance, adaptive assertiveness, global adjustment and competence (Toro, Weissberg, Guara, and Liebenstein, 1990).

MOTIVATION

Weiner (1979) hypothesized that attributions a child makes about self will effect his/her level of motivation; and that children who attribute failure to lack of ability and success to external factors will develop "learned helplessness" (Ayres, Cooley, and Dunn, 1990). Learned helplessness occurs when a student attributes failure to internal causes (ability), which is detrimental to future behavior.

MOTIVATION AND COGNITION

Torgeson and Dunn (1983) describe learning disabled students as inactive learners who inefficiently use their cognitive resources, attributing failure to insufficient ability (Ayres, Cooley, and Dunn, 1990). As a result, learning disabled students can become debilitated by failure, causing lower concentration, lower expectations for success and deterioration of problem solving strategies (Ayres, Cooley, and Dunn, 1990).

SELF CONCEPT AND FAILURE

Aponik and Dembo (1983) found that learning disabled students attributed academic failures to lack of ability which is contrary to that of their non-learning disabled peers. Palmer, Drummond, Tollison, and Zinkgraff (1982) found that learning disabled students reported lack of ability as important in failure situations. The learning disabled students as compared to non-learning disabled students were less persistent on academic tasks and were rated by teachers as exhibiting more learned helplessness behaviors (Ayres, Cooley, and Dunn, 1990).

A study by Ayres and Cooley (1990) investigated self-concept, attribution, and persistence in learning disabled students. The Piers-Harris Self-concept Scale was used to determine differences in self-concepts of learning disabled students and non-learning disabled students. They compared 49 learning disabled students to 56 norm achieving students from fifth to seventh grade. The learning disabled students were receiving 1 hour of pull out resource room per day. Results indicated that learning disabled students attributed failure to factors beyond personal control. Their self-concept was negatively related to failure. Teachers indicated that learning disabled students were less persistent on academic tasks than non-learning disabled peers (Ayres, Cooley, and Dunn, 1990).

Pintrich and Schrauben (1992) found that students with higher levels of self efficacy would persist longer, be more likely to uses cognitive strategies than other students.

INTRINSIC MOTIVATION

Ellis (1986) found that learning disabled students were not as intrinsically motivated as their non-disabled peers, especially if they experienced failure and were receiving special education services (Pintrich, Anderman, and Klobucar, 1994).

Paris and Oka (1986) found that students who have more strategic and conditional knowledge about memory, reasoning or learning tend to do better in different academic performance tasks. Therefore, learning disabled students may not have acquired as much metacognitive knowledge as their peers.

ATTRIBUTIONS OF FAILURE

Pintrich, Anderman and Klobucar (1994) studied differences in cognition and motivation on non-learning disabled ans learning disabled students. 39 fifth grade subjects were assessed using two self-report questionnaires and various reading tasks. Results indicated that students without learning disabilities displayed greater awareness of metacognitive strategies. They found no significant differences between learning disabled and non-learning disabled students on intrinsic orientation, self efficacy, or anxiety. Learning disabled students tended to attribute reading failure to bad luck. Non-learning disabled students were more external for both success and failure situations. Students with more metacognitive knowledge about reading performed better on comprehension tasks and were more aware of different reading strategies (Pintrich, Anderman, and Klobucar, 1994).

SELF-CONCEPT AND ACADEMIC ACHIEVEMENT

On questionnaires, students with learning disabilities report lower self concepts on items related to academic achievement. As earlier studies indicated, teachers rated learning disabled students as less persistent than their peers. The whole concept of academic achievement is closely related and entwined in the psyche of the learning disabled student.

Evidence of poor academic achievement is frequently associated with poor self esteem. Perceived competence reflects and affects classroom achievement (Butler, and Marinov-Glassman, 1994).

Coleman et al. (1983) found that learning disabled students placed in self-contained classrooms had higher self esteem than those placed in regular classes. It was noted that self perceptions among learning disabled students depend mainly on targets with whom they compare themselves. However, Strang, Smith and Rogers (1978) found that students who were mainstreamed for part of the day evidenced gains in self esteem when compared with learning disabled students in self-contained classrooms (Butler, Marinov-Glassman, 1994).

SELF-CONCEPT AND INCLUSIVE CLASSES

Hyman and Singer (1976) proposed that people who have access to multiple reference groups will use these selectively in ways designed to bolster their self esteem. Accordingly, mainstreamed learning disabled students can have a general self esteem that comes from belonging to a normal social group; but academic self esteem can be measured by comparing themselves with other learning disabled students.

However, other studies have indicated that students with learning disabilities do compare themselves to non-learning disabled peers. Butler and Marinov-Glassman (1994) investigated the effects of age and placement of learning disabled students related to self esteem. Results indicated that self perceptions of students attending special education classes were similar to that of low achievers. They found that learning disabled students compared themselves with their non-learning disabled peers (Butler, and Marinov-Glassman, 1994).

Gottman, Gonso and Rasmussen (1975) found that academic deficits that learning disabled students have are linked with their own social status in the eyes of their peers (Coleman, McHam, and Minnett, 1992). These academic difficulties, not the actual learning disability may be the common thread of social difficulties.

COOPERATIVE LEARNING

Integration of learning disabled students in regular education classrooms that emphasize individual and cooperative learning, not competitive environments, will help the learning disabled child to succeed and improve self concept. According to an integrated classroom model, designed by Madge, Affeck, and Lowenbraun (1990), students should be evaluated on individual progress and outcomes; not normative outcomes. According to this classroom model, learning disabled students have yielded positive results in both academic and social status when educated along with their non-disabled peers (Butler and Marinov-Glassman, 1994).

COLLABORATIVE TEACHING

Walsh (1991) found that learning disabled students felt better about themselves in

classes that were co-taught by regular education and special education teachers. It was also reported that the learning disabled students had more friends. Rosenfield (1991) found that a collaborative, rather than an expert model of consultation between teachers worked better. Villa and Thousand (1989) found that collaborative methods used in the classroom increased the potential for individualized instruction which enabled all students to be educated with their age appropriate peers.

SUMMARY

In conclusion, the literature reviewed supports the current trend to allow learning disabled students to be educated with their non-disabled peers.

Various studies indicated that learning disabled students have weaker social skills than their non-disabled peers. Providing appropriate role models for these students seems to aid in their ability to improve social competence skills.

Research on self concept of learning disabled students, however, indicate different results. Further studies in this area need to be conducted as learning disabled students continue to be included in regular education.

Research supports the need for cooperative learning and collaborative teaching which increases the likelihood of successfully integrating learning disabled in inclusive classrooms.

CHAPTER THREE

SAMPLE

The subjects for inclusion in this study consist of forty-four students that were classified as Perceptually Impaired by their local school district. All forty-four students were entitled to resource center instruction. Twenty-two students received resource center instruction in a regular education classroom in a small, middle class, suburban school district. They received reading and language instruction by a regular education teacher with the support of a resource center teacher in the classroom. The remaining twenty-two students were from a similar small, middle class, suburban school district who were not included in the regular classroom. Instead, they received reading and language instruction in a pull-out program from a resource center teacher. The subjects are of mixed age and gender. The in-class group consisted of nine girls and thirteen boys. Ages ranged from 10.3-14. The pull-out group consisted of six girls and sixteen boys. Ages ranged from 9.9-13.3. The ethnicity of the participants was Caucasian. The academic functioning level of the subjects varied from six months to one year below grade level.

MEASUREMENT

As inclusion of students with learning disabilities becomes more commonplace in our school systems, it is imperative to measure any effects it has on students both

academically and socially. By comparing two different resource center class settings on the basis of achievement test scores and social skills inventories, measurement of any significant differences may be apparent.

Data was collected from student records of scores obtained on the California Achievement Tests in areas of Reading and Language. A total score was obtained from combining the Reading and Language scores. The Social Skills Questionnaire designed by Frank M. Gresham and Stephen N. Elliot was given to classroom teachers to assess social skills. Standard scores from this inventory were collected and combined from the social skills and the problem behaviors section of the inventory.

Classroom setting was determined by placement of students into a resource center program by classification of the student as Perceptually Impaired by the local district Child Study Team. The in-class resource center setting consisted of students educated together in the same classroom, following the same curriculum as their peers. In this situation, the resource center teacher assists the classroom teacher with daily reading and language instruction. In this situation, classified students are responsible for the same classwork as their peers.

The pull-out group consisted of resource center students who were instructed in reading and language by only the resource center teacher. They received instruction in a small classroom setting with three to five other peers. Instruction occurred at the students own academic level and students were graded according to their own ability.

Data from the California Achievement tests and Social Skills Questionnaire was collected. The scores from the in-class group and the pull-out group were compared.

DESIGN

The data was taken from two school districts similar in population and socio-economic level. The difference between the districts was in the way services for classified students was administered. The in-class group followed the Regular Education Initiative where students with disabilities were served in a regular education classroom with a special education teacher and regular classroom teacher who worked together. This in-class group included 22 resource center students who were in the regular education classroom for reading and language instruction. In this classroom setting, the regular classroom teacher and the special education teacher used a team teaching approach in educating all students together. During reading and language periods, one teacher was in charge of leading the lesson and the other teacher monitored the progress of the students with learning disabilities in the class. The teacher who lead the lesson varied from day to day. Both teachers coordinated lesson plans together. The lesson plans utilized strategies beneficial for the learning of reading and language for all students in the classroom.

The pull-out group did not include resource center students into the regular education classroom. Instead, these twenty-two students were educated in a pull-out program for reading and language. This program involved instruction in a small class setting made up of three to five students. The resource center teacher was in charge of instruction in reading and language. Students used materials that were at their own instructional level and moved at their own pace throughout the lessons. Their instructional level was five months to one year below that of their age appropriate peers.

Both groups took California Achievement Tests near the end of the school year. Data was gathered from the records of the twenty-two resource center students in each school district. Reading and language scores were combined together to get a total score for each student. The scores from the in-class setting and the pull-out setting were compared.

Age appropriate peers for role models is another concept important for inclusion of learning disabled students into regular classrooms. Another aspect of this study involved looking at the same groups in the area of social skills. Teachers of twenty-two in-class resource center students were asked to rate their students using the Social Skills Questionnaire designed by Frank M. Gresham and Stephen N. Elliot. Teachers of the pull-out group used the same rating scale to measure social skills and problem behaviors of their resource center students. The Social Skills Questionnaire consisted of items relating to individual students' classroom behaviors such as: 1) controls temper in conflict situation 2) uses free time in acceptable ways 3) uses time appropriately while waiting for help 4) produces correct schoolwork 5) makes friends easily (Gresham and Elliott, 1990). All fifty-seven questions were rated according to how often these social skills, as well as behavior problems, occured. The scale for this is: Never, Sometimes, Very Often. The raw scores from the social skills and behavior problems section were converted into Standard Scores which were taken from a list specifically designed for handicapped boys or girls of different ages. Social skills were also rated by the classroom teacher who indicated how important the behavior is for success in his or her own classroom.

Scores from the Social Skills Questionnaire for the twenty-two in class resource center and the twenty-two pull out resource center were then compared. Standard scores from the social skills and the problem behaviors section were combined and analyzed.

TESTABLE HYPOTHESIS

The literature reviewed supports the hypothesis that learning disabled students have better social skills and increased self esteem when placed with their age appropriate peers. However, there is little research on the effects of academic achievement of resource center students placed with age appropriate peers due to the fact that this is a new placement for learning disabled students.

Null Hypothesis: There will be no significant difference on achievement test scores in reading and language of resource center students educated in-class as compared with resource center students in a pull-out program.

There will be no significant difference in social skills of resource center students educated in-class as compared with resource center students in a pull-out program.

Alternative Hypothesis: Resource center students who are included in reading and language will attain higher scores on achievement tests as compared with resource center students educated in a pul-out program.

Resource center students who are included in a regular classroom setting will have better social skills than resource center students educated in a pull-out program.

ANALYSIS

Data collected from both the California Achievement Test and Social Skills Questionnaire was analyzed by an independent measures *t* test because of the two separate samples.

The chart containing combined scores of the reading and language section of the California Achievement Test for the pull-out and the in-class groups were designed. Another chart containing the combined scores from the Social Skills Inventory in the areas of social skills and behavior problems was made.

Two simple bar graphs were used to depict the mean score of the in-class group compared to the pull-out group in both the California Achievement Test scores as well as the scores from the Social Skills Inventory.

I computed an independent measures *t* statistic by obtaining a sample means and sum of squares. The sample mean for the in-class group in the California Achievement Test was 113.818. The sample mean for the pull-out group in the California Achievement Test was 99.545. The sample mean for the in-class group in the Social Skills Inventory was 198.455. The sample mean for the pull-out group for the Social Skills Inventory was 195.227. A pooled variance was obtained for both the in-class and pull-out groups. Next, the estimated standard error for mean differences was calculated. Finally, the *t* statistic was calculated for both groups. The *t* statistic for the in-class and pull-out groups for the California Achievement Test result was 1.505. This was not a significant difference as the critical t values were -+ 2.074. The *t* statistic results from the Social Skills inventory from the in-class and pull-out group was 1.038. This also

was not a significant difference. I was unable to reject the null hypothesis that resource center students who are included in reading and language will attain higher scores on achievement tests and social skills inventory as compared with resource center students educated in a pull-out program.

SUMMARY

This study used data from two rural school districts similar in population and socio-economic status. The subjects included in this study involved forty-four classified students entitled to resource center services. The two groups differed in the way they received resource center instruction.

Both groups were compared to see if there were differences in achievement test scores and social skills. Achievement test scores and scores from a social skills questionnaire were gathered and compared. A simple graph was used to discern the differences between the scores and classroom setting.

California Achievement Test

In-Class				Pull-Out			
Sex	Reading	Language	Combined	Sex	Reading	Language	Combined
F	65	94	159	F	23	41	64
F	76	49	125	M	59	86	145
M	44	63	107	F	63	75	138
F	77	79	156	M	29	48	77
M	41	44	85	F	44	27	71
F	66	59	125	M	54	73	127
M	48	54	102	M	55	80	135
M	54	64	118	F	1	27	28
F	96	36	132	F	41	34	75
F	43	55	98	M	59	87	146
F	76	87	163	M	66	43	109
M	56	39	95	M	49	71	120
M	38	20	58	M	44	71	115
M	62	27	89	M	39	26	65
M	59	63	122	M	63	31	94
M	67	58	125	M	79	63	142
F	72	30	102	M	50	47	97
M	46	31	77	F	71	65	136
F	70	71	141	M	39	52	91
M	30	91	121	M	61	46	107
M	54	40	94	M	12	19	31
M	67	43	110	M	30	47	77

Table 1.1

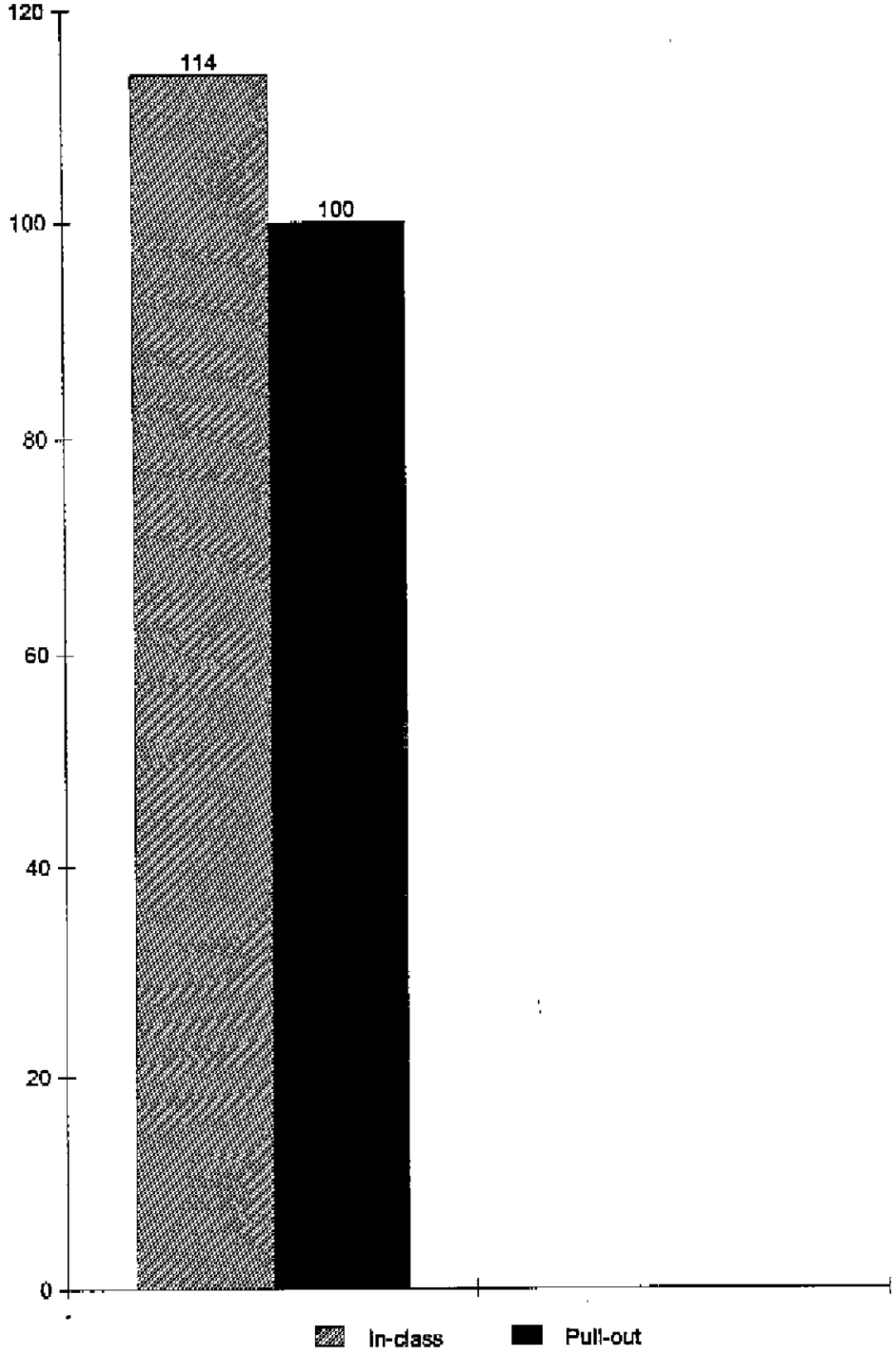
Social Skills Inventory
Combined Social Skills and
Behavior Problems Scores

IN-CLASS		PULL-OUT	
Sex	Combined	Sex	Combined
F	184	F	196
F	239	M	193
M	198	F	196
F	192	M	194
M	170	F	199
F	194	M	195
M	196	M	205
M	208	F	190
F	202	F	186
F	213	M	190
F	195	M	190
M	207	M	197
M	193	M	193
M	206	M	195
M	201	M	189
M	211	M	206
F	195	M	195
M	195	F	207
F	187	M	189
M	197	M	192
M	193	M	190
M	190	F	208

Table 1.2

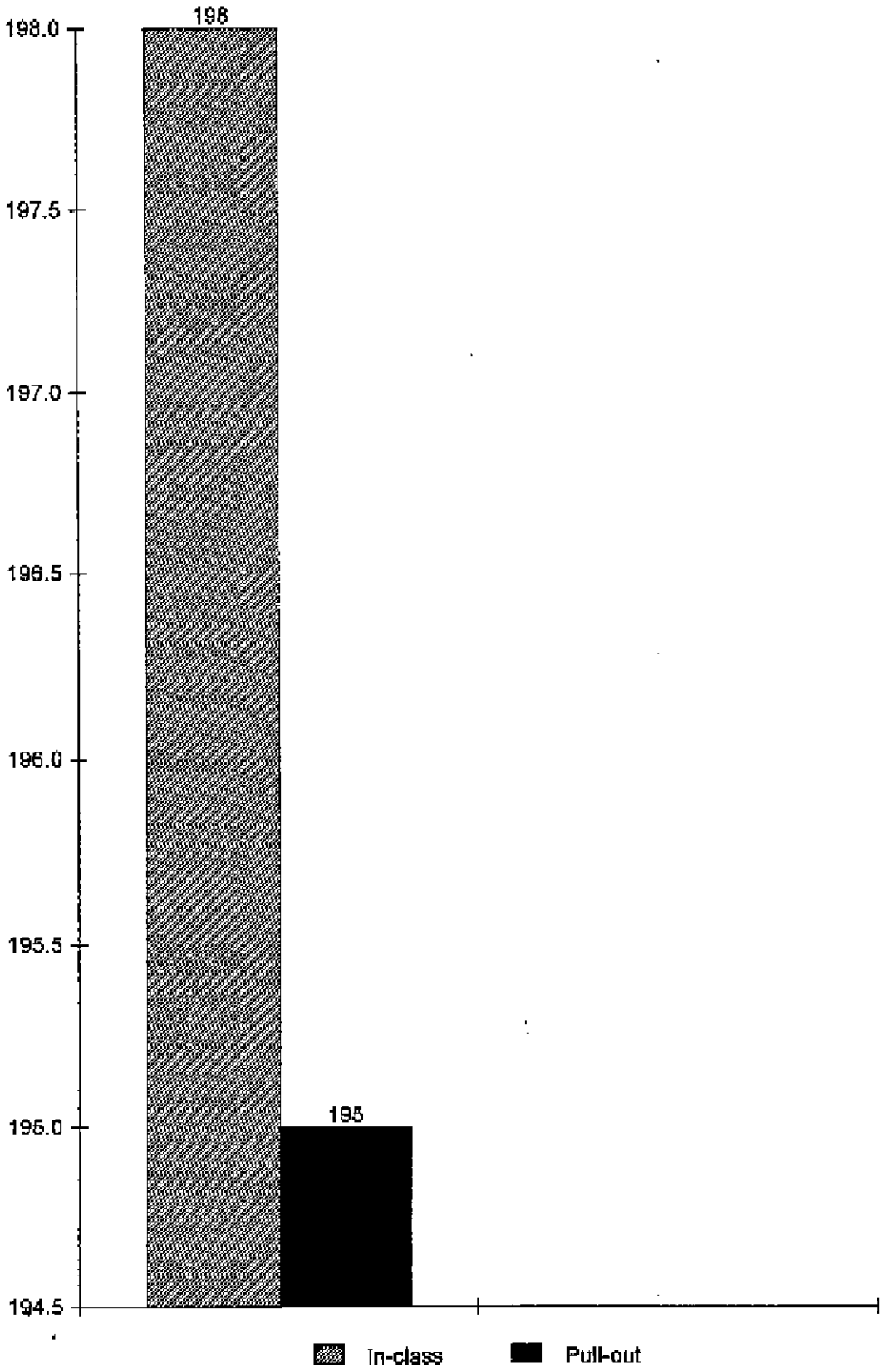
California Mean Achievement Test Scores

Chart 2.1



Mean Social Skills Inventory Scores

Chart 2.2



CHAPTER FOUR

ANALYSIS OF RESULTS

As new legislation requires students with learning disabilities to be educated with their age appropriate peers; we need to evaluate both the traditional resource room pull-out program and the in-class program. Many studies have shown that educating a student with age appropriate peers in a regular classroom in a public school increases their sense of self worth.

Evidence of poor academic achievement is frequently associated with poor self esteem. In order to increase self esteem in these youngsters, we need to look at all areas of their education, particularly the type of program that is available to them. Two types of classrooms, pull-out and in-class, are being compared in the areas of academic achievement in reading and language as well as in self esteem.

As stated in the hypothesis, the intent was to study in-class resource room students to see if they would score higher on achievement tests in reading, language and social skills inventories as the result of placement in a regular education classroom with their age appropriate peers.

The results are organized to answer four questions. First, did including children who are classified into the regular education curriculum have better achievement test scores than classified students in a pull-out program? Or, will there be no significant

difference between the in-class and the pull-out classified students? Third, will the classified children included in the in-class setting score higher on social skills inventories as the result of being placed in that class? Or, will there be no significant difference in social skills between the in-class and the pull-out group?

Upon completion of the collection baseline data, it was apparent that there was a difference in reading and language achievement test scores but the difference was not significant at the alpha .05 level. The in-class group scored an average of 198.455 on the Social Skills Inventory and the pull-out group scored an average of 195.227.

DISCUSSION

Relating these differences to similar literature that has been researched (Hardman, Drew, Egan and Wolf, 1993) indicates that segregation of students may limit their opportunities to learn appropriate skills necessary for social participation.

Relating the actual data results to some of the research may indicate in the future that social interaction skills of learning disabled students may be deficient when compared to their non-disabled peers (McKinney, McClure and Feagano, 1982). Other data indicates that learning disabled students display less social competence (Torro, Weissberg, Guara and Lieberstein, 1990). Future studies with a larger sample may be necessary to see if, in fact, social skills of learning disabled students may be improved by placement of them with their non-disabled peers. A learning disabled student may misread social interactions displaying more types of inappropriate social behavior than their non-disabled peers. Future studies could research the area of learning disabled students and their misreading of social behaviors of peers.

Students in a pull-out program may or may not have appropriate models for social competence. There are many more models to choose from in the regular education program as opposed to the pull-out program. Future research may justify the need for appropriate role models in the classroom.

Attributions a child makes about himself or herself will effect his/her level of motivation (Weiner, 1979). If a child attributes failure to lack of ability and perceives that is why he/she is in a pull-out special education classroom, he/she may not perform as well academically or socially. If these learners attribute failure to insufficient ability according to (Ayres, Ceroley and Dunn, 1990) they will not perform as well on academic achievement tests. Although results of this study did not indicate a significant difference between pull-out and in-class students, longitudinal studies could be done that follow the same group of students to see if any differences do exist.

Evidence of poor academic achievement is frequently associated with poor self esteem. Perceived competence affects classroom achievement (Butler and Marinov-Glassman, 1994). If a student in a pull-out setting perceives himself or herself as a poor learner, he/she may not score well on an academic achievement test. Pull-out students have self perceptions similar to that of low achievers according to Butler and Marinov-Glassman (1994). Future research needs to be done in this area, as positive self esteem is vital for success. As more and more learning disabled students are placed with their non-disabled peers, self esteem needs to be closely monitored.

Learning disabled students have a higher self perception in classes that are co-taught, like the in-class programs mandated today (Walsh, 1991). As higher numbers

of resource center students are placed in an in-class setting, studies need to be conducted to see if students perform higher on achievement tests as a result of this placement.

CHAPTER FIVE

SUMMARY

As more learning disabled students of all ages are educated along with their non-disabled peers because of inclusive education legislation, it becomes important to evaluate their programs. Many studies have indicated that educating students with age appropriate peers increases their self worth. On the contrary, Coleman et al. (1983) found that learning disabled students placed in self contained classes had higher self esteem than those placed in regular classes. Because self esteem is closely related to academic achievement, it becomes necessary to evaluate programs for students with specific needs.

As an educator of learning disabled students in regular education classrooms, cooperative learning seems to be an area that I have observed to be beneficial for both learning disabled and non-learning disabled students. Madge et al. (1990) designed an integrated classroom model that evaluates students according to their own progress using cooperative learning techniques. Academic and social status of learning disabled students improved as a result of this classroom model. As a special educator, I am interested in further studies to demonstrate improved self esteem and achievement of learning disabled students as the result of placement in this type of program.

Collaborative teaching is another growing area in the education of learning

disabled students in an in-class setting. Walsh (1991) found that learning disabled students felt better about themselves in classes that were co-taught by regular and special education teachers. Other studies have found that collaborative models increased the potential for individualizing instruction, enabling learning disabled students to be educated with their non-disabled peers. Regular education teachers in my district report to me that this method is beneficial for the learning disabled as well as the non-learning disabled in their classes. As teachers, they also report being less anxious of having learning disabled students in their classes if they engage in collaborative instruction with a resource room teacher. They report co-teaching to be an invaluable experience for the students as well as themselves because they can learn teaching techniques from their colleagues.

CONCLUSION

1. Evidence of poor academic achievement is frequently associated with poor self-esteem. It is not conclusive as to what type of program, in-class or pull-out, increases self esteem of a learning disabled student.
2. Peers serve as role models for appropriate and inappropriate behaviors. Social skills of learning disabled people seem to be weaker than their non-disabled peers.
3. Cooperative learning may improve academic and social status of learning disabled students.
4. Collaborative teaching may enable learning disabled students to be educated with their non-disabled peers.

This study just scratched the surface of the effects of educating learning disabled students with their non-disabled peers. As more learning disabled students begin to be educated with their non-disabled peers, future studies need to be conducted as to the possible effects of this placement. This study was inconclusive as to whether learning disabled students improved academically or socially as the result of placement in an in-class setting. As an educator in an inclusive resource center, I have first-hand knowledge that it is beneficial for some learning disabled students to be integrated academically as well as socially with their non-disabled peers. I have observed an increase in self esteem of learning disabled students in my care. It is also apparent that learning disabled students in our program are passing the general curriculum required of all students in the district. At this time, however, I am unsure as to whether inclusive education benefits all learning disabled students.

If this study was to be replicated in the future, it should follow a group of in-class resource room students over a long period of time. Future studies could compare in-class programs that have been developed over a period of time with pull-out programs from other areas. Other academic areas could be examined instead of just the reading and language achievement grades. Perhaps report card grades could be analyzed also over a period of time.

In final conclusion, this study indicates the need for future studies because it is inconclusive as to whether in-class learning disabled students do better than pull-out students. The new legislation indicates the need for inclusive education but further studies need to be done to determine its' effectiveness. As the education of learning

disabled students is ever changing, we need to look at all avenues to make learning a successful experience for them.

REFERENCES

Axelrod, S. (1992). Applied behavior Analysis and the Mainstreaming Movement. Journal of Behavioral Education, 2, 219-224.

Ayres,R., Cooley,E., and Dunn,C. (1990). Self-Cocept, Attribution, and Persistence in Learning-Disabled Students. The Journal of School Psychology, 28, 153-163.

Butler, R.,and Marinov-Glassman, D. (1994). The Effects of Educational Placement and Grade Level on the Self-Perceptions of Low Achievers and Students with Learning Disabilities. Journal of Learning Disabilities, 27, 325-334.

Coleman, J., McHam, L., and Minnett, A. (1992). Similarities in the Social Competencies of Learning Disabled and Low Achieving Elementary School Children. Journal of Learning Disabilities, 25, 671-677.

Gresham, F.,and Elliot. (1990). Social Skills Rating System Manual. Circle Pines: American Guidance Service.

Haas, D. (1993). Inclusion Is Happening in the Classroom. Children Today, 22, 34-36.

Houk, C., and Rogers, C. (1994). The Specific/General Education Integration Initiative for Students with Specific Disabilities: A "Snapshot" of Program Change. Journal of Learning Disablities, 27, 435-453.

Nevin, A., Thousand, J., Whitcomb, P., and Villa, R. (1990). Collaborative Consultation: Empowering Public School Personnel to Provide Heterogeneous Schooling for All-or, Who Rang That Bell? Journal of Educational and Psychological Consultation, 1, 41-67.

Pintrich, P., Anderman,E., and Klobucar, C. (1994). Intraindividual Differences in Motivation and Cognition in Students With and Without Learning Disabilities. Journal of Learning Disabilities, 27, 360-370.

Toro, P., Weissberg, R., Guare, J., and Liebenstein, L. (1990). A Comparison of Children With and Without Learning Disabilities on Social Problem-Solving Skill, School Behavior, and Family Background. Journal of Learning Disabilities, 23, 115-119.