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## The practice of inclusion at the Upper Deerfield Township School District

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THE PRACTICE OF INCLUSION AT THE  
UPPER DEERFIELD TOWNSHIP SCHOOL DISTRICT

by  
Russell Clark Jr.

A Masters Thesis  
Submitted in partial fulfillment of the requirements of The  
Master of Science Degree in the Graduate School of  
Rowan University  
May, 1998

Approved by

Professor

Date Approved

May, 1998

## ABSTRACT

Russell Clark Jr.

The Practice of Inclusion at the  
Upper Deerfield Township School District  
1998  
Dr. Ronald Capasso  
School Administration

The purpose of this study was to observe the effects of inclusion upon classified and special needs students in regards to social and academic accomplishment. Eight eighth grade special education pupils were placed in a regular education science classroom along with fifteen non-classified. All pupils in the inclusive group received instruction for forty-five minutes each day. Lessons, tailored to each pupils needs, were cooperatively planned and implemented by both a regular and special education teacher.

Before and after the study, the special education pupils and their parents completed surveys which recorded their feelings regarding the concept of inclusion . Students also completed a norm referenced, self esteem test, utilized to measure any changes in personal perception that may have resulted from the inclusive experience. Further assessment consisted of classroom grades, as well as observations made by teachers, members of the Child Study Team, and the building principal.

Information regarding the academic and social achievement of the special education pupils was positive in nature and verifies that inclusion can benefit these students. Data obtained from the Self Esteem Index suggests that pupils' perception of their academic ability was raised substantially as a result of the inclusive placement.

## MINI-ABSTRACT

Russell Clark Jr.

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Dr. Ronald Capasso  
School Administration

This study assesses the effects of inclusion upon classified and special needs students in regards to social and academic accomplishment. Information pertaining to such areas of achievement was positive and verifies that inclusion can benefit these students.

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## Chapter One Introduction and Focus of the Study

The Upper Deerfield School District strives to provide the best education possible for each child of the community. To help facilitate this task, the district employs a Child Study Team that oversees the responsibility of identifying those pupils in need of special attention. Often a teacher will identify a pupil suspected of experiencing a learning problem. The student is then referred to the Child Study Team which will provide an evaluator to observe the pupil in the classroom, under instruction. If the evaluator feels that a problem may exist, the student's parents are notified and arrangements are made to further assess the situation. Most often pupils suspected of a learning disorder are tested by state certified personnel. A variety of standardized achievement tests are employed. These measure not only intelligence but perceptual performance. Once they make a diagnosis, the Child Study Team is compelled to make necessary recommendations regarding placement of the child. Often, recommendations are made regarding instructional and behavioral strategies to fit the pupil in the regular classroom. If these approaches fail, the Child Study Team, with parental consent, classifies the pupil according to his impairment. Currently, the district places many of its classified and special needs students in a Resource Center with a Special Education instructor. To administrators, this seems to be the most efficient and economical way to deliver the services required of its special needs population. In this self-contained setting students are isolated from any regular, mainstreamed pupils. Studies show that this type of exclusive environment is often detrimental to a child's sense of confidence, self-esteem, and well-

being. Because of scheduling problems, many of these students have lunch with pupils of other grade levels, thus furthering the segregation.

#### Purpose of the Study

The purpose of this study is to observe the effects of inclusion upon classified and special needs students in regards to social and academic accomplishment. A basic assumption that supports inclusion is that educational establishments are to be restructured in such a manner as to become supportive, nurturing communities equipped to meet the individual needs of all children. From a legal standpoint, the Education for All Handicapped Children Act mandates that, whenever possible, children with disabilities be educated in settings with non-disabled children. Schools that have carried out inclusive programs report the effects to be positive and worthwhile in terms of academic success and social adjustment.

It is hypothesized that special needs pupils, within a regular classroom setting, will exhibit improved confidence and self esteem and display a better attitude toward school. Success of this study will provide supporting evidence that the inclusive process is the most beneficial way to educate today's special needs population.

#### Product Outcome Statement

All classified students in grade eight will be mainstreamed into the regular education science classroom and receive a passing grade of C or better.

As a result of the program's implementation, the district will employ the most advantageous strategies obtainable to meet the individual needs of its pupils, especially those in its classified population. By practice, inclusion will become a district-wide philosophy which will permeate to all levels and areas of instruction.

This investigation itself will provide the intern with an opportunity to recognize, encourage, and monitor the use of effective teaching methods and strategies necessary to facilitate the education of a special needs population. With assistance from the special education department and a team teacher, this study allows for the intern to evaluate



instructional techniques tailored to meet the requirements of each special education student who is mainstreamed into the regular classroom environment.

### Definitions of Terms

For this study the following terms are defined to provide clarification and understanding of ideas and issues relative to the investigation:

*Cooperative Learning* - A learning activity in which students work together in small groups to accomplish a common task.

*Curriculum Adaptations* - Changes made in the general classroom curriculum that allow each child to actively participate at his or her own level and meet his or her individual goals.

*Curriculum Modifications* - Those changes and adaptations made to the regular grade level curriculum in order to facilitate the achievement of a disabled child's individual educational goals and objectives.

*Emotionally Disturbed* - Category of exceptionality characterized by problems with learning, interpersonal relationships, and control of feelings and behavior.

*Hands-On Activities* - Classroom activities in which a student uses manipulative materials and supplies to explore concepts and create learning projects.

*Inclusion* - The placement of all students, especially those with learning disabilities and physical afflictions in the

regular classroom with children their own age and at their appropriate grade level.

*Individualized Educational Plan* - School program tailored to meet the individualized needs of an exceptional child.

*Learning Disabled* - A classification for an individual who suffers from a disorder that impedes academic progress.

*Least Restrictive Environment* - The educational setting in which a child with disabilities can receive an appropriate education and which is most like the regular classroom.

*Main streaming* - The return to the regular classroom.

*Perceptually Impaired* - A classification for an individual who suffers from a disorder in which the brain misinterprets external stimuli.

*Resource Center* - A facility where special needs students receive individualized instruction.

*Self Esteem Index* - A test which uses percentile scores to rate a person's self esteem.

## Limitations of the Study

This study was conducted at the Woodruff School, Upper Deerfield Township, and included one class consisting of eight students mainstreamed for grade eight science. In addition to those classified students, the remaining non-classified students were homogeneously grouped and considered mid level in academic ability and accomplishment. Because of the small size of the classified population, the diversity of disabling conditions and learning disabilities is limited.

## Setting of the Study

Upper Deerfield is a small rural community located in Cumberland County and consists roughly of 6500 citizens. In keeping with a rural heritage of more than 250 years, Upper Deerfield is an area primarily agriculture in character with scattered communities of developments dotting its 31.8 square miles of forests, swamps, ponds, and open fields (F. Palmer, 1985). Geographically, the community is located midway between Vineland and Bridgeton, New Jersey. Though somewhat remote, the township enjoys the metropolitan advantages of Philadelphia, Pennsylvania and Wilmington, Delaware, which are no more than an hour away in travel time (F. Palmer, 1985). The township itself was established as late as 1922 when area citizens, discontented with an unequal distribution of local property taxes, voted to secede from governing Deerfield Township. Because of the division, Deerfield was forced to relinquish 65 percent of its former citizens along with their net assets.

Today Upper Deerfield is inhabited by individuals who typify most American communities. The citizenry is endowed by the cultural contributions made by each of the varied ethnic groups who call Upper Deerfield home. These include inhabitants from Estonia, Latvia, Poland, Germany, Russia, Holland, and Japan. Some residents are people whose ancestors cleared the land to create the farms on which they raised their families.

Other occupants consist of citizens whose grandparents arrived in the United States to seek refuge during the periods of economic or political distress which swept Europe in the 19th century (F. Palmer, 1985). The Japanese portion of the population arrived as captives when they were interned in Upper Deerfield by the United States government during World War II. Upon their release, many elected to stay and make a new life for themselves in the township.

Because of its open rural setting, farmland is the most precious natural resource of Upper Deerfield Township and from the time it was first settled remains a major source of revenue for the area. Helping to improve the township's large-scale vegetable production, Rutgers University employs a research station in the township to test and market new farm products. To aid with the processing of the area's food crops, many local canning facilities have been established. The largest of these is Seabrook Farms, Inc., a major grower and processor of vegetables in the area. Citizens from many surrounding areas often call Upper Deerfield "Seabrook," because of the company's location. Established in 1922, Seabrook is a major employer of the area, hiring more than 400 people annually. The plant contracts many area farms to raise green vegetables, which are processed and frozen at the facility. Each year more than 50 million pounds of local vegetables are shipped by the company to supermarkets around the country. Many of the homes in the vicinity of the plant are residences for Seabrook employees and their families.

For years the township has enjoyed an enviable reputation for its provision of exceptionally fine educational facilities and for maintaining an unusually competent staff of dedicated teachers for the instruction of the children of the municipality. Total enrollment to date consists of 952 students in grades kindergarten through eight (Upper Deerfield B.O.E. records, 1997). The Woodruff School, where this study takes place, was built in 1976 and accommodates grades six, seven, and eight with 288 pupils, 86 of whom are in the eighth grade. Because of the availability of state subsidized housing in the township, there is a larger than average number of low income families living in the district.

Therefore, it is not surprising that more than one third of Upper Deerfield's student population receives either free or reduced lunch.

The district offers a wide variety of student services, many tailored to meet the numerous needs and of the student population. To begin with, pupils first entering the district now attend a full day of kindergarten. This program is supported by state aid. The district offers accelerated programs in such subject areas as physical education, music, and art. Exceptional students are challenged as they participate in the gifted and talented program. The district's afternoon latchkey program provides creative activities to pupils while their parents work.

Twice a month, students of the Woodruff School partake in a teacher-sponsored activity period where they can create crafts, perform extra curricular science experiments or even go bowling - all during school time. Woodruff also sponsors a variety of extracurricular sports activities.

Of the students in grade eight, nine percent are classified as requiring special needs. Included in this category are learning disabled, perceptually impaired, emotionally disturbed, and physically handicapped. Children found to require services not offered by the district (i.e., those suffering from severe mental retardation) are sent to other nearby facilities where their needs can be accommodated. The education of each classified student is governed by an IEP - Individualized Educational Plan. Each IEP is prepared by the student's Special Education instructor along with qualified members of the district's Child Study Team. Individual student assessments are attained using standardized achievement tests and personal observations by qualified instructors and personnel. A major function of the IEP is to outline educational goals and objectives for each pupil, with suggested strategies and methods for attaining these goals.

The science laboratory in which the students of grade eight receive instruction is a well illuminated, spacious room with large tables on which experiments can be performed. There are sinks, counters, and glass cabinets which encase various scientific apparatus and

lab paraphernalia. For the inclusive students, this will be their first time in such an instructional environment. Besides the regular science classroom teacher, another instructor from the resource center is present who assists with the planning and implementation of the lessons. Another task of the resource instructor is to provide individual help to the inclusive pupils. Because this person works more closely with the special needs students and for longer periods of time (i.e., time periods beyond those which encompass science instruction), she is more inclined to ensure that each student receives instruction attuned to his / her IEP. Furthermore, it is the special education teacher who can make the necessary recommendations for each pupil regarding special accommodations that may facilitate the learning process and thus guarantee academic success. The period during which each pupil receives science instruction lasts forty- two minutes.

The curriculum itself encompasses the areas of life science, earth science, physical science, and health. The goal is to provide each student with a basic understanding of scientific facts and knowledge. Critical thinking skills are developed allowing pupils to analyze, judge, and even predict the outcomes of problems and situations relating to science and the world. The Child Study Team will help to identify those instructional strategies and methods within the curriculum necessary to fit each pupil's IEP. This approach allows the curriculum to be tailored to accommodate the needs of the classified population within the classroom.

#### Importance of the Study

The legal mandate driving inclusive education in the United States is Public Law 94-142, also referred to as the Individuals with Disabilities Education Act. Although the terms "inclusion" or "inclusive education" cannot be located in this law, the definition of least restrictive environment is contained in the legislation and has thus provided the initial impetus for creating inclusive education. The application of least restrictive thus allows for the integration of disabled students with those who are without afflictions. In most

instances today, inclusion allows for the placement of special needs students in the regular classroom, a practice often referred to as mainstreaming.

Most research in the area of inclusion indicates that students who are involved in the regular classroom perform better than those who are placed in self-contained programs (Dyke, Stallings and Colley, 1995). Children benefit from being in an inclusive environment by learning to interact with all members of society regardless of their differences. Consequently, regular students receive early exposure to attitudes and behaviors contrary to many of the harmful prejudices adults have.

One of the most important benefits to inclusive pupils is an overall gain in their self-esteem. We must realize that many of the social problems our society faces are the result of poor self-esteem in individuals who never had the opportunity to develop a healthy appreciation of themselves. Good self-esteem allows children to believe that they can do things well. It gives them the assurance that if they dare to create new things they have a chance to succeed. With inclusion, we are placing children with special needs in the regular classroom, giving them the opportunities they deserve and allowing peer modeling of appropriate behaviors. The message to inclusive students should be that they are in fact equal to any other human being and capable of meeting the same expectations as any other student in the district.

Teachers learn from the challenges of dealing with special needs pupils. Not only do they experience the fulfillment of aiding those with special needs, they are given an opportunity to teach values such as kindness, generosity, sharing, friendship, loyalty, leadership, and most importantly, responsibility.

Another argument toward inclusion contends that general education teachers have more in-depth knowledge about specific curriculums or subject areas being taught than those involved in areas of special education. Most regular classroom instructors are specialists in their subject areas and can better explain intricate ideas and concepts pertaining to the areas they teach than someone of a general education background.

Despite the evidence that inclusion can work when properly implemented, concerns abound in the educational community. Many experts argue that it is difficult to classify children accurately and that classification systems for placing students in special programs are seriously flawed. Some parents and educators argue that special needs pupils require additional time and attention which may be detrimental to the education of regular classroom students. Because of concerns and disbelief in the use of inclusion, some people have made attempts to slow, stop, and even reverse this practice. Attempts to impede inclusion policies are evident even today as some states, despite mandates for the placement of pupils in a least restrictive environment, have exhibited no progress in this area (Villa and Thousand, 1995). Furthermore, it is evident that some states have actually increased restrictive, segregated placements by hardening their categorical teachers' certification and have even gone so far as to re-institute segregation itself by establishing separate institutions for those pupils with disabilities (Stainback and Stainback 1992, as cited by Thousand).

The number of students who are being referred to specialized educational programs is rising annually. The task at hand is to establish programs that are best suited to benefit these pupils. Ultimately, the practices of special education need to be reconceptualized as a support to the regular education classroom, rather than an alternative placement for those of special needs. This can only be accomplished through the use comprehensive studies and experimentation in the area of inclusion. This study seeks to provide evidence that the practice of inclusion does work and is essential for the personal well being of every special needs child.

#### Organization of the Study

The following addresses the subsequent chapters of the study and their contents:

Chapter Two encompasses a review of literature relating to inclusion and inclusive studies. Discussed are the rationales behind the utilization of inclusion programs, the



benefits and the drawbacks that such practices can have on the students themselves, as well as the educational system as a whole.

Chapter Three of the study delineates the design of the investigation. Included are descriptions relating to the research design and methodology. Examined are the instruments utilized in the study and how, in fact, these tools were formulated. Also discussed in this section are the sampling techniques utilized in the investigation.

Chapter Four focuses on the actual research findings. These include all data gathered during the study and the significance to the theories mentioned in the study.

Chapter Five discusses the conclusions of the study and relates their implications to practices of inclusive education. This section further discloses the implications that the research project has had on the interns leadership development. In addition, conclusions are presented as to how the organization has changed as a result of this study. Finally, the necessity for further study is addressed in regards to inclusive education.

## Chapter Two Review of Literature

The rationales for inclusive education center around a common belief that all children, both disabled and non-disabled, be educated together in the same environmental setting. A review of literature finds that the philosophy of inclusive practices to be based on three fundamental arguments.

Foremost is the legal justification for inclusion. By law, each child has a fundamental right to be educated in an environment that is “least restrictive.” For many advocates, inclusion has become a civil issue in that segregated programs are viewed as inherently unequal, and thus, a violation of the rights of students with disabilities. A second argument for inclusion rests on educational studies which deem inclusion to be the most appropriate practice for special needs students. Current research indicates that students who are situated in inclusive programs do better than those who are placed in self-contained classrooms. Analysis of segregated special education programs indicates that they have simply not worked. Finally, there exists among inclusive supporters a strong moral and ethical argument for the “rightness” of inclusion. Segregating pupils according to a classification, labels them as different from other students, thus creating bias.

Attempts to include all students in the mainstream of education have persisted throughout history. In the United States, a majority of students considered disabled learners were not deemed worthy of education until the early 1800s. “Institutionalized, segregated education was the norm during the nineteenth century and much of the

twentieth century” (Villa and Thousand, p16). Recent years, however, have witnessed a steady movement toward mainstream education for many previously segregated learners.

The formation of special classes for educating disabled pupils came about not for humanitarian reasons but because such children were unwanted in the regular classroom (Chaves 1977, p.30). Although students were, in fact, attending a regular school, in many ways they were not an accepted part of it. As special education classes increased in number, attitudes among educators ensured that such classes paralleled, rather than converged, with regular education classes.

While the 1950's and 1960's saw increased support for mainstreamed education for the disabled, it wasn't until the 1970's that U.S. schools implemented policies for students with disabilities. Various court decisions in Pennsylvania, in 1971, and in the District of Columbia in 1972, established the right to all children, labeled as mentally retarded, to a “free and appropriate education.” Such rulings made it difficult for pupils with disabilities to be excluded from public schools and denied an education.

In 1975, due to pressure from parents and legislatures concerned with special education, Congress enacted Public Law 94-142, the Education for All Handicapped Children Act (later ratified as the Individuals With Disabilities Education Act). This statute entitled all children with disabilities to a free, appropriate, education situated in the “least restrictive environment” (LRE). The LRE addendum mandates that school districts, whenever possible, educate children having disabilities with pupils who are non-disabled.

By mid-1980, all fifty states had passed legislation subsidizing public school programs for students with disabilities. Still unsatisfied with dual education systems, many prominent educators began to speak out publicly beyond the borders of special education circles. Two major proponents of inclusive education, Susan and William Stainback, began to write papers and articles condemning dual educational practices. They demanded the merger of special and regular education into one system in order to meet all students' needs (Stainback and Stainback 1984).

One problem with segregation, special educators confess, is providing proper placement for special needs students. Difficulty stems from the fact that many exceptional pupils are difficult to classify. Studies show that some classification systems employed by Child Study Teams for evaluating students are inaccurate and seriously flawed. Even when students are properly classified and placed together in self-contained classrooms, little evidence exists to prove that such arrangements are beneficial. Inclusion remedies the proper placement dilemma by grouping special needs pupils heterogeneously. The issue of where to place special needs pupils, however, has now become the center of a fervent debate.

To date, there are no standard, written procedures regarding the inclusion of disabled students in the regular classroom. Therefore, the responsibilities of interpreting inclusive legislation and complying with its directives lie with local school boards and policy makers. This plurality has led to inconsistency between districts and states in regards to pupil placement. Thus, the practice of inclusion varies from area to area depending on the philosophy of local policy makers and school administrators. Because many districts still employ a dual system of regular and special education classes, many proponents of inclusive education are coming forth to argue the benefits of this practice.

Empirical studies performed in the area of inclusion are broad in scope as researchers try to address the many issues associated with this practice. A review of literature finds more inclusive studies that are qualitative in nature than quantitative. Much inclusion data exists as documentation from schools that have successfully implemented and evaluated inclusive programs. None the less, a review of the literature indicates that appropriate inclusion does not harm, and can in fact benefit both classified and non-classified students.

The concerns related to inclusive practices focus mainly on learning outcomes and social alliances. Early studies relating to inclusion were prompted by a report released by the National Academy of Sciences in Washington, D.C. entitled "Placing Children in

Special Education: A Strategy for Equity.” The panel found the classification and placement of children in special education classes in the United States to be “ineffective and discriminatory” (Baker, Wang, and Walberg, 1995). The study recommended that children in special education arrangements receive noninclusive instruction only if they can be accurately classified, or when non-inclusion demonstrates superior results.

Parents have mixed views concerning the benefits of integration programs. On one hand, parents may see integration as a positive step (Hanline and Halvorsen, 1989). Many have watched their sons and daughters in self-contained special education classrooms suffer ridicule by other students. By having their child placed in a regular classroom setting, parents surmise two benefits; first, that any mockery will stop, and secondly, that their child will benefit from participating in a general education curriculum (Hanline and Halvorsen, 1989).

Conversely, parents are often apprehensive about integration programs, especially when their recommendations for adapting the curriculum, reducing class size, consulting with staff and accessing support personnel are not considered (Myles & Simpson, 1990). Further, parents of disabled pupils know that general education students may not accept their child. Many are even aware that their child may precipitate problems in the general education classroom. Issues arise due to the pupil’s immaturity, lack of social skills, and the nature of his / her disability. (Gresham, 1982).

Three sets of empirical studies in educational literature address the effects of inclusion on both academic and social accomplishment. The first was conducted by Carlberg and Kavale in 1980. Their methodology utilized a measurements technique referred to as “meta-analysis” which provides a statistical number called an Effect Size (ES). Carlberg and Kavale applied this measurement scale to an experimental group. The researchers used fifty studies representing 27,000 special and regular classroom students, who averaged eleven years of age with an IQ of approximately seventy-four. They were able to measure the effects of inclusive placement by establishing academic outcomes

(learning measures from standardized tests), and social outcomes observed by self, peer, teacher, and observer ratings of social success in the classroom. The study yielded data in the form of 322 Effect Sizes. By using their calculations, a negative ES would favor the special class placement, conversely, a positive ES would favor regular education placement. A record of published data indicates that special class placement is an inferior alternative to regular class placement. Further analysis points to a slight reduction (in grade equivalents) of one to two months on most elementary grade tests for segregated students (Carlberg and Kavale, 1980).

In 1985, clinical psychologist Edward J. Baker repeated the work of Carlberg and Kavale using 11 different study groups. He too obtained positive ESs for academic and social progress.

Later, in 1994, E.T. Baker, performed yet more studies along with education professors M.C. Wang and H. J. Walberg. Utilizing standardized achievement tests as well as written observations, the researchers also estimated that inclusion had small to moderate benefits on the academic and social outcomes of special needs students (Baker, Wang and Walberg, 1994-1995).

In all three studies, the common measure of Effect Size ranged from 0.08 to 0.44, (all positive) with an average of 0.195 (see figure A). It was found that Effects vary with individual studies, but the numbers themselves have rarely been negative. The researchers' conclusions unanimously find the consequences of inclusion on academic and social achievement to be positive and worthwhile. Disabled pupils, they theorize, can benefit from mainstreaming practices when adequate opportunities for academic and social advancement are given.

Concerns for the progress of regular classroom students in an inclusive environment have also been investigated. Research conducted by Odom, Deklyen and Jenkins in 1984, compared the progress of non-disabled children in both inclusive and noninclusive classrooms. As with other studies, standardized tests were utilized to

measure cognitive, language, and social development. Odom, Deklyen and Jenkins failed to identify any significant differences in developmental outcomes of regular education pupils in an inclusive environment. Further research was conducted by Hunt, Staub, Alwell, and Goetzin in 1986. They assessed the academic achievement of non-classified students in cooperative learning groups, six which included a classmate with severe learning disabilities. One group, consisting solely of regular education pupils, served as a standard for comparison. Using pre- and post-math achievement test scores as indicators of pupil progress, their examination found no significant differences among the groups on math achievement pre- and post-test scores.

Similar studies, conducted at the preschool level, tracked the developmental progress of non-disabled children enrolled in inclusive programs over one or more years. A review of written observations indicates that inclusion failed to cause developmental harm to the regular education pupils (Peck & Hayden, 1989).

Another major concern relating to non-disabled pupils in an inclusive setting stems from a misconception that the special education pupils will consume large amounts instructional time. The consequence would be that regular education students would be deprived of their share of instruction. For educators working in such integrated contexts, it is important that all children benefit from the learning experience and that the presence of students with disabilities does not become a hindrance for those deemed non-disabled. Education research reveals that time-related instructional variables (e.g., time allocated for instruction and learner engagement) are predictive of academic achievement. (Good and Brophy, 1986). These variables have recently been applied to inclusive arrangements as a measure of time as utilized by pupils. Studies conducted by Tia Hollowood and Christine Salisbury in 1994, compared allocated to actual instructional time for six randomly selected non-disabled students in classrooms that included at least one pupil with severe learning disabilities. The two experimental groups (groups one and two) were arranged, each consisting of six randomly selected students with severe disabilities enrolled in four

regular education classrooms appropriate to their age. In addition to a regular teacher, each classroom had the support of a special education instructor. The control group consisted of pupils that possessed no disabilities what so ever. Hollowood and Salisbury observed classes in which the students were placed for a total of 150 hours. Data was recorded in measurements of “used time” (actual instructional time received) and “engaged time,” (time on task exhibited by pupil, see figure B). Observations found that time lost to interruptions during instruction was not significantly different in inclusive than noninclusive classrooms. The researchers concluded that the presence of students with severe disabilities had no effect on levels of allocated or engaged time.

The findings of Hollowood and Salisbury are further supported by survey responses from teachers, parents, and students who have direct experience with inclusive classrooms. For example, in Washington State, 166 high school students who had been involved in inclusive classrooms were interviewed. A significant number of pupils did not believe that their participation in inclusive classrooms had caused them to miss out on other valuable educational experiences (Helmstetter, Peck and Giangreco, 1993).

Further misgivings focus on non-disabled students learning inappropriate behavior from students with disabilities. Observations of young children in inclusive classrooms suggest that this seldom occurs. (Peck, Carolson, and Helmstetter, 1992) One follow-up study sought to prove the above. Several non-disabled students in an inclusive setting were observed for two successive school years. Interviews with pupils’ parents, and from teachers involved with the program, as well as direct observations from Child Study Team members, indicates that regular education students do not acquire undesirable or maladaptive behavior from peers with disabilities (Staub, Schwartz, and Gallucci, 1994).

Investigations are helping to reduce the anxiety felt by parents, students, teachers and administrators in regards to inclusion. Through trial and error, educators are finding that by developing new cooperative learning techniques, and instructional strategies, inclusion can exceed expectations for success. Because of the rising popularity of



inclusion, more and more educators are starting to implement such programs. Assessment of these programs constitutes the qualitative portion of research on inclusion.

For many districts where special education programs are failing to achieve beneficial results, full mainstreaming is the only answer. In 1991, with twenty-one percent of the student population enrolled in self-contained classes, the Dowling Urban Environmental Learning Center in Minneapolis Minnesota became a magnet school for learning disabled children. From 1991 to 1993, research was conducted at this facility by the United States Department of Education to determine the effectiveness of such all-inclusive programs. Age appropriate achievement scores were used for assessment of annual academic accomplishment. The California Achievement Test-Reading was administered to all students at Dowling. It was found that both disabled and non-disabled pupils scored in the 80th percentile (the national norm). Scores leading up to 1993 exhibited further improvement. CAT Math Concept scores showed even greater improvement. Further measurements of children's achievement, in the form of classroom grades, show that mainstreaming had not deleterious effects. (Raison & Hanson, 1995). Why is the Dowling School different from others attempting inclusion? Teachers of the Dowling District say full devotion is the answer. In many districts trying inclusion, a majority of the work is placed solely on the special education instructors. At Dowling, both special and regular education teachers function collaboratively as a team. They are committed to thoughtful planning and hard work, toward the continuous improvement of their programs. A survey at the school indicated that 100 percent of the staff enjoys working at the school. Educators there acknowledge that team problem solving and shared responsibility for leadership are vital to the success of any school.

The Christina School District of Newark, Delaware is also obtaining positive results with inclusion. Christina has been building and evaluating inclusive classrooms for almost twenty years (Johnston, Proctor, and Corey, 1994-1995). In this district, as with Dowling, team teaching utilizes a special education instructor and a regular classroom

teacher. Jointly, these educators plan, implement, and finally evaluate their inclusion programs to promote success.

In Christina's classrooms, disabled students are educated alongside non-disabled peers (usually at a 1:2 Ratio) for the entire school day. Their program called "Team Approach to Mastery" (TAM) now has the support of parents of both disabled and non-disabled students (Johnson, Proctor and Corey, p 46, 1995). Educational strategies of TAM include cooperative learning, peer tutoring, direct instruction and point cards. Christina teachers are finding these practices to be instrumental in helping pupils to achieve their highest potential.

The inclusive program at the Christina School in Newark, Delaware is a notable example for schools to follow. Evidence of Christina's success exists in the form of classroom grades and opinion surveys from teachers, parents, and administrators. Some quantitative studies have been conducted, however, as evaluators of the TAM model were concerned with its effects on the achievement of nondisabled students. This assessment which utilized the Comprehensive Test of Basic Skills, found that third grade non-disabled students of Christina scored significantly better than students their age in other general education settings (Bear and Proctor, 1990). Studies show positive results from districts that are committed to making inclusive placement work. Proper implementation along with the utilization of essential strategies, are vital if success is to be achieved. Schools employing full inclusion commonly exercise five important practices:

The first device involves a shared philosophical commitment to the practice of inclusion by all staff members. It is important for inclusive teachers to follow the belief that students with disabilities can learn successfully and deserve the opportunity to participate in an age appropriate classroom (Dyke, Stallings and Colley, 1995). Often, general educators' attitudes on accepting students with disabilities in their classrooms are related to their ability to participate in the overall process. Thus, when general education

teachers have a direct voice in selecting mainstreaming modifications, they are more apt to support integration (Myles and Simpson, 1998).

Secondly, inclusive programs should not be implemented without proper staff development. A large portion of teachers confess that neither their professional preparation nor their teaching experiences have adequately prepared them for inclusive environments (Lyon, Vaasseen and Toomey 1989.) They lack the ability to teach the academic, social, and adaptive behaviors that students with disabilities require. The inservice that educators receive can affect their predispositions toward students with disabilities (McDaniel, 1982). When designing inservice programs, consultants should work closely with teachers, administrators, parents, and even students to ensure that the inclusive program meets their immediate needs. Today, most districts now employ training sessions to prepare their inclusive teachers for the challenges they will face in the classroom.

Also essential to inclusion are the utilization of collaborative planning times for teachers to coordinate classroom strategies and activities. In successful classrooms, the general educator, the special educator, and any instructional assistants must collaborate to meet the needs of all students.

The fourth important practice is the utilization of collaborative or team teaching. Many educators insist that children benefit from the kinds of skills offered by both regular and special education teachers. Special education teachers generally know more about modifying and breaking down curriculum and adapting teaching methodologies to meet the needs of individual children (Stanback and Stanback, 1996). Also of major importance is actuality that co-teachers can provide one another with evaluation and feedback.

Lastly is the development and implementation of policies that nurture inclusion practices. Administrators provide the impetus and support to make inclusive education happen. With staff and parents, educational leaders need to be supportive of inclusive philosophies. They can facilitate non-segregational collaboration by removing the barriers

to change. After integration has taken place, the principal should visit the classrooms to make assessments, recommendations, and most importantly, to reinforce inclusive efforts (Heron and Harris, 1993).

In order for the special education student to benefit from being in the regular classroom, all portions of the his/her IEP must be followed. The student's basic instructional program is not changed, but is adjusted to meet IEP requirements. Thus, as specialists contend, inclusion functions to redesign the delivery of special services in the general classroom setting (Bruker, 1994).

All children benefit from being in an inclusive environment by learning to interact with all members of society regardless of their differences. In the primary school setting, pupils are exposed to attitudes and behaviors contrary to the harmful prejudices that some adults have. Probably the most important benefit of inclusion is self-esteem. We must realize that many of the social problems our society faces today are the result of poor self-esteem in individuals who never had the environment or the opportunity to develop a healthy appreciation of themselves. Good self-esteem at school age allows children to believe they can do things well. If we group children with disabilities together, they will see themselves only through the eyes of their peers.

Special education teachers who have recently entered inclusive programs find that their students have become active participants, not only in class, but in such social activities as scouting, sports teams, and birthday parties.

Although researchers continue to assess inclusive education programs, data in this area is limited. Empirical studies, none the less, show positive outcomes in the areas of academic and social achievement for pupils in such programs. Testimony from people currently involved with inclusion substantiates the claims of researchers as to its effectiveness. However, to further success in inclusive programs, additional research must be conducted to fully evaluate and measure the definitive effects of inclusion.

Parents and legal experts are increasing their demands for schools to address the scientific and legal basis for noninclusive practices. As schools are challenged to effectively serve an increasingly diverse student population, the concern is not whether to provide inclusive education, but how to best implement this practice. Society, as a whole, is gradually moving away from the segregationist practices and toward providing all students an equal opportunity to have their educational needs met within the mainstream of general education. The problem currently facing researchers is how to implement inclusive practices that are not only feasible, but effective in ensuring success for all children, especially those with special needs.

FIGURE A  
**EFFECTS OF INCLUSION ON ACADEMIC AND SOCIAL ACCOMPLISHMENT**

Author	Carlberg and Kavale	Wang and Baker	Baker
Year Published	1980	1985	1994
Number of Studies	50	11	13
Academic Size Effect	0.15	0.44	0.08
Social Effect Size	0.11	0.11	0.28

FIGURE B

**PERCENTAGE OF USED (U) AND ENGAGED (E) TIME  
FOR STUDENTS AND GROUPS**

	STUDENT 1		STUDENT 2		STUDENT 3		STUDENT 4	
<b>GROUP</b>	<b>U</b>	<b>E</b>	<b>U</b>	<b>E</b>	<b>U</b>	<b>E</b>	<b>U</b>	<b>E</b>
GROUP 1	96	80	96	75	96	75	97	46
GROUP 2	96	80	96	85	96	80	97	81
GROUP 3	96	80	96	85	95	79	95	75
	STUDENT 5		STUDENT 6		MEAN		SD	
<b>GROUP</b>	<b>U</b>	<b>E</b>	<b>U</b>	<b>E</b>	<b>U</b>	<b>E</b>	<b>U</b>	<b>E</b>
GROUP 1	96	61	97	80	96	70	<1	2
GROUP 2	96	81	97	82	96	82	<1	2
GROUP 3	96	78	96	83	96	80	<1	4

*Note: Used time* -- calculated as amount of time teachers allocated to instruction and actually used for that purpose minus the time lost to classroom disruptions. *Engaged time* -- calculated as sum of used time spent by student in off-task, on-task passive, and on-task active behavior.

## Chapter Three Design of the Study

### The Research Design

To begin the investigation, eighth grade special education pupils were placed in a regular education science classroom along with non-classified students to receive instruction. Prior to the investigation, these pupils were taught by a special education teacher in a seventh grade self-contained setting. At the end of their seventh grade school year, the students completed two questionnaires. The first survey, Student Attitude Survey I, recorded the students' views of participating in a regular education classroom. A second questionnaire, the Self Esteem Index, was utilized to measure their self-esteem. In addition, previous academic achievements in the area of science for the past year were assessed using classroom grades and standardized test scores. These surveys served as a base line for comparison.

All pupils in the inclusive group received instruction for a period of forty-five minutes each day. Because of a rotating schedule, the time of day at which the inclusive students received science instruction differed each week by one classroom period. The curriculum included areas of life, earth, and physical science. The level of instruction was adapted to meet the individual needs and abilities of all pupils in the class. Measures were also taken to follow the Individual Educational Plan of each special education pupil. Instruction was provided by both the regular and special education teachers who

cooperatively planned and implemented the lessons. As a team, the regular and special education teacher assisted those students requiring individual attention during the class period. Educational strategies utilized in the classroom included the following: direct instruction, lecture, cooperative learning, and peer tutoring.

At the end of the investigation, all of the pupils, classified and non-classified, completed a second survey entitled Student Attitude Survey II. The special education pupils again completed the Self Esteem Index to determine if any changes in self esteem occurred. Academic and social achievement were assessed by comparing current science grades and behavioral reports to those of the previous year. Finally, parental attitudes toward inclusion were obtained using questionnaires.

#### Instrumentation

Instruments utilized in the study included: student surveys, Self Esteem Index, pupil report card grades in science from both the current and previous school year, teacher designed tests and quizzes, class participation, class work, homework, science projects, parental input, progress reports from the regular classroom and special education instructors, individual classroom observation reports from the Child Study Team, Principal's observation reports, and finally the Intern's reflective journal.

The Student Attitude Survey I was designed by the researcher and special education instructor. This was given to classified pupils prior to the experiment and assessed pupils' attitudes about participating in a regular classroom for the first time. The survey itself consisted of four open-ended questions. It allowed for pupils to express any concerns they had toward inclusion and aided in identifying those pupils who may have had difficulty in the transition.

Student Attitude Survey II was also designed by the researcher and special education instructor, but was administered to pupils at the end of the study. It consisted of ten Likert questions followed by two open ended inquiries. This survey assessed the concerns of the classified pupils after participating the inclusive setting.

The Self Esteem Index is an eighty-item, norm referenced, self-report instrument designed to elicit children's perceptions of their personal traits and characteristics. This assessment tool was developed by psychologists for the PRO -ED Corporation. This test is appropriate for ages eight to eighteen and requires approximately one-half an hour to administer. Using a Likert scale, the test consists of four, twenty item scales. The first scale, Perception of Familial Acceptance, measures one's self-esteem at home and within the family unit. The second scale, Perception of Academic Competence, appraises self-esteem in academic and intellectual pursuits. A third inquiry, Perception of Peer Popularity, places a value on one's self-esteem in social situations and on interpersonal relationships with peers. The fourth measurement, Perception of Personal Security, rates self-esteem as reflected in a person's feelings about his or her physical and psychological well-being. A raw score for each category was obtained and then converted to a percentile rank.

The pupil report cards utilized an interval scale, and pupils were assigned a letter grade, depending on his or her grade point average. Special comments in regards to pupil behavior, work habits, etc., are given by selecting a corresponding letter, taken from a list at the bottom to the document. These letters are placed in a special column next to the letter grade.

The Parent Attitude Survey was designed by the researcher and special education instructor. The questionnaire was utilized to address the attitudes of special education parents concerning the benefits and disadvantages of the inclusive process. It, too, employed ten Likert scale questions followed by two open-ended questions. This parental input provided assessment from a view outside the school setting.

#### The Sample

The experimental group comprised an intact assembly of special education pupils consisting of six boys and two girls. Their ages ranged from thirteen to fourteen years and all had either been promoted or placed into the eighth grade. The classification given to



each special education pupil was based on evaluations conducted by members of the Child Study Team. The regular classroom students, also in the eighth grade, consisted of four boys and five girls whose ages ranged from thirteen to fourteen years. These pupils were grouped homogeneously according to academic ability as determined by the previous year's classroom grades and prior CTBS (California Test of Basic Skills) scores. Together, the inclusive group was assigned to instructional level four (one being the highest functioning, five being the lowest), based on each pupil's academic potential.

#### Data Collection

Data obtained prior to the investigation consisted of Student Attitude Survey I and the Self Esteem Index Test, both completed by the special education pupils. Throughout the experiment, daily assessment of pupil progress was conducted by either classroom instructor, and / or members of the Child Study Team. These two groups were responsible for recording classroom grades and writing observations of pupil performance. Formal appraisal was conducted and logged weekly, in the form of a letter grade. At the end of the investigation, the special education pupils completed Student Attitude Survey II, which recorded their views of the inclusive experience. Most importantly, the classified students completed the Self Esteem Index a second time to measure any change in their self esteem. Finally, the Parent Attitude Survey, was distributed and collected by the researcher to record the viewpoints of special education parents concerning the inclusive process.

#### Data Analysis

All surveys were analyzed by the researcher. The percentage and mean of each Likert response was recorded. Open-ended questions were qualitatively analyzed to identify commonalities and themes.

A directional t-test for non-independent means was applied to the differences in Self Esteem Index scores to decide any statistical significance.

Lastly, the past and present science grades and behavioral reports of pupils in the experimental group were both qualitatively and quantitatively analyzed and compared.

## Chapter Four Research Findings

A major goal of the assessment strategy was to identify any changes in pupils' self-esteem that may have resulted from the inclusive placement. The researcher utilized the Self Esteem Index Test to accomplish this task. Both the regular and special education instructors conducted daily assessment regarding pupil progress. Formal observations were conducted by members of the Child Study Team and the building principal. Input was also provided by the special education pupils and their parents with regard to their feelings about inclusion.

### Self Esteem Index Test

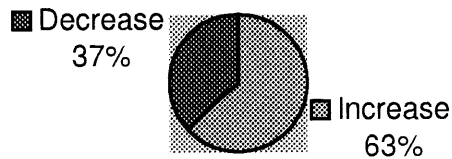
A total raw score for the Self Esteem Index was calculated by adding the raw scores obtained for each area of assessment. These included: Perception of Familial Acceptance, Perception of Academic Competence, Perception of Peer Popularity, and Perception of Personal Security.

Although the total mean scores for the group increased by only three points, 63 percent of pupils taking the test displayed some type of elevation. These individuals exhibited a substantial increase that ranged from five to twenty-three points per pupil. Such gains confirm that removing a child from a self-contained learning environment and placing him in a regular education classroom, even for one class, causes some facet of his self-esteem to rise.

Thirty-seven percent of the pupils, however, exhibited a decrease in their total raw score. These scores ranged from minus seven to minus twenty three (refer to chart number one). Such a drop in self-esteem is an obvious indication that somewhere the

pupil's personal needs are not being met. Whether it be in the home or at the school, these students had personal issues to deal with. Perhaps greater assessments and evaluations of pupil demands are necessary to adequately prepare each pupil for such transitions.

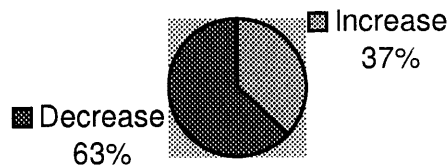
**Chart 1**  
**Total Raw Scores**



The perception of familial acceptance portion of the test measured self-esteem at home and within the family unit. The mean score for familial acceptance within the experimental group remained constant. At the individual level, nonetheless, one finds that 37 percent of the pupils exhibited an increase in family acceptance. Growth in this area varied from four to six points. Such strides show strong parental support and positive interaction within the home environment.

Consequently, 63 percent showed a decline in family acceptance. Reductions in this area ranged from minus three to minus six points (refer to chart number two). Often enough, low scores in this area indicate lack of support and encouragement in the home. Whether or not this was a result of the inclusive placement is unknown.

**Chart 2**  
**Perception of**  
**Familial Acceptance**

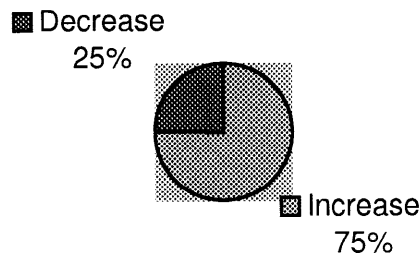


Perception of academic competence is an appraisal of one's self-esteem in academic and intellectual pursuits. From an educational standpoint, it is an assessment of how a student views himself or herself in a classroom situation.

Seventy-five percent of the pupils displayed an increase in this area of investigation. As with the total raw score, the increase in the mean raw score for academic competence within the group increased by three points. However, individually, one finds a growth range of one to seven points. Progress in this area indicates that special needs pupils feel better about their intelligence and their ability to learn when placed in a regular education setting.

In contrast, 25 percent of the pupils displayed a decrease in this area which varied from minus two to minus eight points (refer to chart number three). Such reductions are usually due to frustration or anxiety over the mastery of the material presented in class. As a result, instructors need to be aware of students who are experiencing performance stress in the classroom and assist them whenever possible.

**Chart 3**  
**Perception of**  
**Academic Competence**

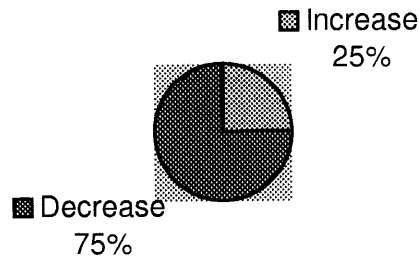


Perception of peer popularity is an assessment of one's self-esteem as perceived in social situations and interpersonal relationships with peers. It essentially measures one's sense of popularity within a group.

Twenty-five percent of students within the experimental group experienced growth in this domain. Although the mean raw score for peer popularity only increased by one point, a more substantial increase can be observed at the individual level. In this domain some scores increased as much as twenty-six points. Such dramatic increases may suggest that pupils feel unaccepted by their fellow peers when placed in a self-contained environment. Placement of these students in a regular education classroom, consequently, raises their self esteem in this realm.

Seventy-five percent of pupils, however, exhibited a reduction in their perception of peer popularity. This decline, ranged from minus three to minus six points (refer to chart number four). Since the special education pupils were only in one regular education class per day, one could argue that being separated from fellow pupils while in the self-contained classroom may have had detrimental effects upon their peer perceptions. Perhaps total inclusion would have made a difference in this area or measurement.

**Chart 4**  
**Perception of**  
**Peer Popularity**

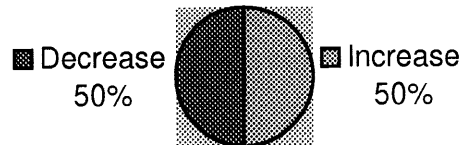


Perception of personal security measures self-esteem as revealed in a person's feelings about his or her physical and psychological well being. Such issues as confidence, vulnerability, anxiety, conduct and temperament are analyzed and established.

The average mean score regarding personal security for the special education pupils remained constant. However, when viewed at the individual level, evidence shows that 50 percent of the pupils exhibited an increase from scores obtained prior to the study. Improvement in personal security ranged from three points to eleven points. These students obviously felt a greater sense of self-worth and personal strength by being placed in a regular classroom.

Consequently, 50 percent of the population exhibited a decrease in personal security. These numbers fluctuated from minus two to minus eighteen (refer to chart number five). Such low scores may indicate a sense of insecurity among some pupils placed into the inclusive setting. Teachers, should therefore be aware of special need students who are exhibiting an uneasiness about themselves in the regular education classroom, offering help and counseling when needed.

**Chart 5**  
**Perception of**  
**Personal Security**



#### Student Attitude Survey I

Before the investigation, several special education pupils expressed misgivings about being in a regular education classroom. Having studied in a small, self-contained environment since the start of their schooling, many were unsure of what the new placement would be like.

A major concern among pupils was that the classwork might be too difficult for them. Several pupils remarked that new material presented in the regular education classroom would be hard for them to understand. A second concern centered around the possibility of being separated from their friends in the self-contained setting. These students have studied together for several years and the thought of being with a larger group, with many new faces concerned them.

#### Student Attitude Survey II

Having experienced inclusion for two full marking periods, all of the pupils had overcome their anxieties regarding the transition to a regular education science classroom.



In addition, these pupils felt they had benefited from being placed in a regular education classroom for science instruction. Most of the students felt comfortable taking science along with the regular education pupils of their grade level. Consequently, the group expressed no interest in returning to a self-contained setting for science instruction. All but one pupil expressed a desire to be placed in a regular education classroom for all of their academic subjects, and receive additional help when necessary. Academically, all of the classified students felt they were doing the same or better than last year while in the self-contained environment. Furthermore, almost half the inclusive pupils admitted experiencing some type of problem adjusting to the routine of a regular education classroom. All of the pupils, however, remarked that their science teachers kept them informed as to their progress in the class.

When questioned as to the types of problems they experienced this year in the regular education science classroom, pupil responses related specifically to academic concerns. Some pupils explained that the material, at times, was difficult to understand. One pupil, limited in the use of the English language, explained that he had trouble reading the material and understanding some scientific ideas presented in class. "Taking an exam was extremely difficult for me," he explained. Other students confessed that they had trouble understanding and completing the laboratory exercises.

The students' comments regarding the concept of inclusion were all positive in nature. Many expressed an interest in having more inclusive classes in the school. Additionally, several students remarked that they enjoyed the science laboratory experiments. On a more personal basis, some pupils openly confessed that they felt better about themselves because they were in a regular education classroom. One pupil

explained that for the first time, he felt like part of the class. Another student explained that the process gives one an opportunity to meet students and teachers he otherwise would not encounter in a self-contained classroom.

#### Parent Survey

All of the parents who completed the survey felt that their child had profited in some way from the inclusion process. Furthermore, all acknowledged that their child seemed comfortable with the transition, and all preferred that their child remain in the regular education science classroom for the remainder of the year. Having observed their child's progress for two marking periods, most expressed an interest in placing him or her in a regular education environment for his or her other academic subjects. Only one parent held reservations regarding further placement. Regardless, all of the inclusive parents agreed unanimously that their children were more enthusiastic this year about science and, academically, were doing as well as last year.

The survey's open-ended questions provided an opportunity for parents to address any problems or concerns experienced by their children this year as a result of the inclusion program. Several confessed that their child had experienced some anxiety prior to the transition. Two parents remarked that their child was having difficulty keeping up with the additional homework required of the class.

All of the parents surveyed expressed positive remarks toward their child's participation in the inclusion program and the overall concept of inclusion. Several parents explained that though their children did well in the self-contained classroom, it was time for them to make a change toward a regular education setting. Others were simply

proud of the progress their children had made in the transition and were happy to see them doing as well as their peers.

#### Teacher Assessment of Pupil Progress

From a social standpoint, both the regular and special education instructor observed that the classified pupils exhibited little trouble with the transition to the regular education classroom. Even those pupils who reported feeling anxious on the student survey seemed more at-ease after placement had occurred. The regular education pupils were equally content being assembled with the new pupils in the inclusive arrangement. Social interaction between members of both groups was friendly and congenial. In the classroom, cooperative learning exercises were used where each student works with a peer. During these endeavors, the instructors noted that over half the special education pupils chose to work with a regular education student. In these instances, the outcome was always positive. This type of interaction illustrates an acceptance and assimilation of both peer clusters within the classroom.

Pupil behavior within the inclusive class was good and any disturbances that did occur were not confined to any one group.

Academically, all of the pupils in the classroom performed to the instructors' expectations. A breakdown of academic achievement finds that 75 percent of the special education pupils maintained the same grade point average as the previous year while in the inclusive classroom. Furthermore, an additional 25 percent of the pupils actually saw their grade point average increase the equivalent of an entire grade. The grades of the regular education students also reflected little change from the previous year. Thus, pupil progress was not hindered by the inclusive placement.

Verbally, the special education pupils were not inhibited by the inclusive setting and class participation among this group was equal to that of the regular education pupils. The instructors also failed to notice any difference in time-on-task exhibited between the special and regular education students. Also important was the fact that all of the pupils drew equal attention in the classroom. The regular education pupils were not deprived of any instructional time as some studies contend. Most often, the special education pupils received additional help while in the Resource Center. When these pupils were late with an assignment, both classroom instructors took the responsibility of speaking to the pupil and seeing that the work was completed. Furthermore, both instructors attended parent conferences for the classified pupils and provided assessment and input toward pupil progress.

#### Child Study Team Assessment

Reports from the district's Child Study Team were all supportive of the inclusive program. Through personal interviews and classroom observations, they concluded that the special education pupils adjusted well through the transition and benefited greatly from the new placement.

From a social standpoint, the entire class interacted and functioned in a positive fashion conducive to learning. Furthermore, the regular education pupils exhibited an acceptance of those less proficient in reading and comprehending the scientific facts presented in class. More than often, the regular education pupils provided assistance to those in need.

Academically, most of the special education pupils showed little trouble grasping the material presented in class. All were working to their potential and earned a passing grade of C or better.

#### Administrative Assessment

Classroom observation reports from the building principal were optimistic and supportive of the inclusive classroom. It was noted that throughout the lessons, transitions moved quickly from one exercise to the next. All of the pupils were familiar with the routine of the class. Both special and regular education teachers were actively involved in the lesson and they circulated around the room addressing questions or problems as they arose. The special education instructor, however, closely monitored the classified pupils in the classroom. All pupils were involved in the laboratory activities which they seemed to enjoy. Because of such motivating activities, the pupils remained on task throughout the period. During the lessons there was opportunity for student discussion which was facilitated with the help of the teachers.

From a physical standpoint, the principal remarked that the classroom provided a safe and attractive learning environment. Student work, related to the current unit of study was displayed on the walls surrounding the room.

The principal's final comments noted that the inclusive program was functioning very well. Because of this class's accomplishments, the district now plans to expand its inclusive program to include other academic subjects as well.

## Chapter Five Conclusion

Information gathered during the study was positive in nature and verifies that inclusion can benefit the special needs student. When successfully implemented with the appropriate classroom strategies, both academic and social outcomes are impressive.

Data obtained from the Self-Esteem Index suggests that the use of inclusion to educate special needs children does, in fact, elevate their self-esteem to a measurable extent. Although a t-test calculated for mean scores in all areas, showed no statistical significance at the one or five percent levels, one does find a substantial increase in per-pupil scores obtained at the individual level. Such increases within the four domains of self-esteem suggest that each student benefits from inclusion in different ways. The one area of self esteem most positively affected by the inclusion process was that related to students' academic perception. This evidence stands to prove that the placement of special needs pupils in a regular education classroom gives them the confidence and willingness to succeed academically. Because of the inclusive experience, these pupils now feel they can accomplish the same goals as other children their age.

Information gathered from pupils' report cards, along with the surveys indicates that all pupils in the inclusive classroom, whether special or regular education, performed

to everyone's satisfaction. Thus, no negative consequences were observed academically or socially upon either group in the classroom.

The process of inclusion is far from full proof and various issues became apparent as the investigation progressed. Evidence gathered prior to the study found that pupils were apprehensive about leaving the self-contained setting they had grown accustomed to. Furthermore, special needs pupils often have concerns regarding the transition to a regular education classroom and how they will function academically once placement has occurred. Parents also have similar concerns and many are naturally apprehensive toward any change involving their child's education. An awareness of such issues is consequential to the success of this type of program. Once in the regular education classroom, pupils must be carefully monitored for adjustment problems. Also, it is the responsibility of both classroom instructors to monitor the progress of each pupil, and assist those in need as promptly and effectively as possible.

Everyone involved in the program from administrators to the children themselves expressed positive comments regarding the inclusive program. With the number of special education pupils increasing annually, along with subsequent failures with many self-contained programs, inclusion seems to be the most feasible solution. Inclusive programs allow everyone to participate in the educational process and through such involvement, special needs pupils can and do feel better about themselves.

### Implications

For many schools, inclusion simply means enrolling students with disabilities in regular education classrooms. Few districts, however, take the steps necessary to successfully implement and maintain such a program. Due to lack of preparation on the

part of teachers and administrators, problems are encountered which, to the inexperienced person, may seem difficult and even unsurmountable. In these situations the outcome often results in pupils who have been negatively affected by the program. For these reasons staff members acquire a negative image of inclusion.

When enrolling pupils with special needs into regular education classes significant changes must occur regarding the use of educational strategies and methods within that classroom. This is best accomplished through in-service training.

Most importantly, the educational establishment must consider each pupil entering the program on an individual basis. Many questions need to be asked to ensure success. For instance: What are the pupil's strengths and weaknesses? What is stated in the IEP? How will the child cope psychologically with the new placement? What are the students' own concerns regarding inclusion? What needs to be done to ensure that the child can function academically in the inclusive environment? Is behavior a problem? What strategies need to be implemented to prevent disturbances in the classroom. What type of grading system should be utilized? And most importantly how will assessment be carried out? Studies show that each pupil is affected differently by the inclusive experience. These areas need to be identified and confronted for the child's own well being.

Naturally, the inclusive child is not alone in the program. Parents, teachers, and even administrators will have issues and concerns that need to be addressed and dealt with. Since the parents know their child more than anyone, their input is vital to the child's success. Parents will naturally have questions and concerns regarding inclusion which need to be addressed. Both the regular and special education teachers must cooperate to meet the individual needs of each pupil. Strategies must be designed to



accommodate all pupils in the classroom. Administrators need to be open-minded in regards to inclusion. They must allow teachers the freedom to try new methods and procedures that may ultimately enhance pupil achievement and productivity within the classroom.

The ultimate goal is for the inclusive pupil to achieve academic levels at least equal to or higher than those obtained prior to placement. A program that meets the criteria for responsible inclusion would result in the following outcomes:

- 1) The inclusive students are considered integral members of the learning community.
- 2) The inclusive students' achievements commensurate with those of regular education classmates.
- 3) The inclusive students function independently and do not depend on others for their success.
- 4) The inclusive students do not affect classroom instruction in a negative fashion.
- 5) All students, parents and teachers involved with the inclusive program are satisfied with the learning environment.

By placing special education pupils in the regular classroom educators are giving them the opportunity to be a part of the norm. Inside the regular classroom, inclusive students realize their potential to perform academically as well as other children their age. This, in turn has tremendous effects on their self-esteem and mental well-being. The overall message to everyone involved with inclusion is that all human beings need to be accepted, despite their weaknesses. Each pupil has something special to contribute to the educational system and to society as a whole.

By participating in the study the intern acquired the skills needed to implement and maintain an educational program at the middle school level. Prior to the investigation, the intern researched and identified those educational strategies deemed successful in the inclusive classroom. The intern also visited other inclusive schools in the area, and spoke to their classroom teachers to discuss the design and arrangement of their programs. A needs assessment was conducted for each classified student by reviewing his Individualized Instructional Plan. The intern and special education instructor incorporated the educational strategies into their daily lesson plans. Throughout the study, the intern conducted formative evaluations of both individual and group progress using a variety of assessment devices. Communication in regard to pupil progress was maintained with pupils, parents, and related educational staff. Feedback and encouragement were provided to the pupils on a daily basis. Furthermore, the intern used a variety of problem solving strategies and techniques to facilitate the program's augmentation.

As a result of the inclusion program, the special education pupils of the district were allowed to participate in a regular education classroom (many for the first time). In the inclusive setting, pupils were not identified as special education because their teachers were able to design a general education program to meet their individual needs. Therefore, the eighth grade science classroom became a place where all students achieved success, regardless of their academic ability. Teachers involved with the program were able to develop progressive educational techniques such as cooperative learning and peer tutoring. Most importantly, the program stood as proof to other staff members that the concept of inclusion is a feasible and successful alternative for special needs pupils.

## Further Study

Although the practice of inclusion is gaining popularity among educators, only a handful of school districts have succeeded in implementing fully inclusive programs. Often administrators are less than enthusiastic in regard to starting such practices. When inclusion is proposed to regular education instructors, many shrug off the concept. The philosophy being such that special education pupils are not their concern. This negativity stems from the fact that most educators are either misinformed or unenlightened about the benefits of inclusion. Research in this area is growing, but slowly. More information is needed in the areas of academic achievement, and pupil performance. Data gathered in these areas will help to identify which instructional techniques are best suited to the inclusive classroom.

Another area requiring further study involves self concept. Does the placement in regular education classroom affect a pupil's self-esteem? Which areas of self perception are most affected, and can they in any way be related to academic performance? Inclusive students face a lot of pressure to function both academically and socially in an environment that is strangely new. Only with additional research can we better understand the emotional effects that inclusion has on special education pupils.

Not until significant, meaningful evidence in favor of inclusion surfaces, will educators realize the benefits of inclusion and the necessity for inclusive classes within our educational systems.

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Appendix A  
Student Attitude Survey I



Name

Date

### Student Attitude Survey I

The information on this paper is confidential. Only your classroom teachers will be able to read it.

- 1) Please explain your views on studying science next year as part of a larger class where everyone studies together. (How do you feel about this arrangement?)
  
- 2) What do you think will be some advantages to this classroom arrangement?
  
- 3) What do you think will be some disadvantages to this classroom arrangement?

Appendix B  
Student Attitude Survey II

Name \_\_\_\_\_

Date \_\_\_\_\_

### Student Attitude Survey II

- 1) My child, thus far, I have benefitted from being in a regular education classroom for science.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 2) I am comfortable taking science along with all the other pupils in my grade level.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 3) I would prefer to return to a self-contained classroom for science instruction as I did last year.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 4) I would like to be placed in a regular education classroom for all my academic subjects and receive additional help when necessary.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 5) Grade-wise, I am performing equal to or better this year in science compared to past years.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 6) I am more enthusiastic about science this year as compared to past years.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 7) I am exhibiting better attendance this year compared to past years.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 8) I have had concerns (anxiety) in regards to being placed in a regular education classroom for science instruction this year.

(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)

- 9) I have experienced problems adjusting to the routine of a regular education classroom.

(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)

- 10) My teachers keep me informed as to my progress in science.

(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)

- 11) Please describe any problems that you have experienced because of participating in a regular education classroom for science instruction.

- 12) As a student, what are your feelings about inclusion? (placing all pupils of the same grade level together in the same classes for instruction)

Appendix C  
Parent Questionnaire

Name \_\_\_\_\_

Date \_\_\_\_\_

Child's Name \_\_\_\_\_

### Parent Questionnaire

This school year your child is receiving science instruction in a regular education classroom as part of a new process called inclusion. By completing the following survey you will be helping our teaching staff to provide the best educational services possible to your son / daughter.

Thank you for your cooperation!

R. Clark / A. Nardelli  
(Eighth Grade Science)

- 1) My child, thus far, has benefitted from being in a regular education classroom for science.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 2) My child is comfortable taking science along with regular education pupils.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 3) I would prefer that my child return to a self-contained classroom for science instruction.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 4) I would like my child to be placed in a regular education classroom for all his / her academic subjects and receive supplemental instruction when necessary.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 5) My child is performing equal to or better this year in science compared to past years.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 6) My child is more enthusiastic about science this year as compared to past years.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)

- 7) My child is exhibiting better attendance this year compared to past years.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 8) My child has expressed concerns (anxiety) in regards to being placed in a regular education classroom for science instruction.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 9) My child has experienced problems adjusting to the routine of a regular education classroom.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 10) My child's teachers keep me informed as to his / her progress in science.  
(strongly agree) 5.....4.....3.....2.....1 (strongly disagree)
- 11) Please describe any problems that you or your child have experienced as a result of his / her placement in a regular education classroom for science instruction.
- 12) As a parent, what are your feelings in regards to inclusion? (placing special needs and regular education pupils together in the same classes for instruction)

## Biographical Data

Name:	Russell Clark, Jr.
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