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Resource/team teacher: Service delivery option designed to help more effectively meet the needs of mildly handicapped students in the least restrictive environment

Abstract

The initiative and premise of this paper stems from an interpretation of the least restrictive environment aspect of PL 94-142, that an increase in appropriate effort should be made to meet the academic and affective needs of mildly handicapped students within the regular classroom. A review of literature foundational to this interpretation is presented, as well as some of the cautions regarding this movement. The option illustrated by the project described herein is that of a resource teacher team teaching with a regular classroom teacher within the regular classroom. Indications are that student academic and affective achievement improved under these conditions.

RESOURCE/TEAM TEACHER: SERVICE DELIVERY OPTION DESIGNED TO HELP

MORE EFFECTIVELY MEET THE NEEDS OF MILDLY HANDICAPPED STUDENTS

IN THE LEAST RESTRICTIVE ENVIRONMENT

A Research Paper

Submitted to

The Department of Educational Psychology

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

UNIVERSITY OF NORTHERN IOWA

By

Carol M. Straka

June 1988

This Research Paper by: Carol M. Straka

Entitled: RESOURCE/TEAM TEACHER: SERVICE DELIVERY OPTION
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has been approved as meeting the research paper requirement
for the Degree of Master of Arts in Education: Educational
Psychology: Teaching

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Co-Director of Research Paper
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July 19, 1988
Date Approved

This is to certify that

Carol M. Straka

___ Satisfactorily completed the comprehensive oral examination

___ Did not satisfactorily complete the comprehensive oral examination

For the Master of Arts in Education degree with a major in Educational

Psychology: Teaching at the University of Northern Iowa

at Cedar Falls on ___July 19, 1988___.

Examining Committee

Len Froyen

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This Research Paper by: Carol M. Straka
Entitled: Resource/Team Teacher: Service Delivery Option
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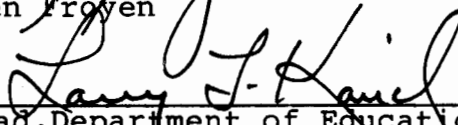the Degree of Master of Arts in Education.

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ABSTRACT

The initiative and premise of this paper stems from an interpretation of the least restrictive environment aspect of PL 94-142, that an increase in appropriate effort should be made to meet the academic and affective needs of mildly handicapped students within the regular classroom. A review of literature foundational to this interpretation is presented, as well as some of the cautions regarding this movement.

The option illustrated by the project described herein is that of a resource teacher team teaching with a regular classroom teacher within the regular classroom. Indications are that student academic and affective achievement improved under these conditions.

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INTRODUCTION TO THE PROBLEM

Since PL 94-142 was enacted in 1975, philosophy and efforts in special education have been directed toward assuring that all handicapped youth between the ages of 3-21 receive free and appropriate public education in the least restrictive environment.

Resource or pull-out programs have been the most common means of service delivery for mildly handicapped students. (ACLD, 1986) The resource room model is often not the most effective method of service delivery. Due to efforts aimed at more effective service delivery, which some have labeled the regular education initiative, special education services in the regular classroom have come to be the preferred mode of delivery unless extensive attempts to accommodate are not effective for a student.

In response to this movement, opportunities, via grants, have been made available to school districts to implement programs with this intent in mind. Team teaching is one service delivery option that appears to be compatible with this intent. A team teaching project in accord with this effort is the focus of this papaer. A description of the project and an evaluation

of effectiveness will be presented.

STATEMENT OF THE PROBLEM AND PURPOSE OF THE STUDY

Resource or pull-out programs have been the most prominent means of delivery and have resulted in overidentification of students as "handicapped." (Pugach & Lilly, 1984, p.49) The inverse, with several students still in classrooms who could benefit from services, but who don't qualify to receive services, is also said to be true. (Ysseldyke, Algozzine, Shinn, and McGue, 1982) 10% of all students are eligible for special education services and another 10%-20% have mild or moderate problems which disrupt their learning. (Will, 1986, Feb., p.413)

Learning disabled students are most frequently serviced in pull-out resource room programs. (ACLD, 1986) These programs are designed to meet the unique needs of the students while maintaining the structure of the regular classroom situation.

The resource room setting is often not the most effective if the goal is to support teachers and help students to succeed in the regular classroom. There is no solid evidence that separate programs benefit most students more than integrated programs. (Lipsky, Gartner, 1987, p.72) Some research suggests that some learning disabled students make more progress in an adapted regular classroom program than in a special education program. (State of IA, 1986, p.7)

There is often lack of sufficient coordination between special and regular educators, complement between resource and classroom programs, and transfer and generalization of learning on the part of the students. (Will, 1986, Nov.) Special education students in pull-out situations are often excluded from important educational and socialization opportunities. They are sometimes stigmatized by labeling and programming placements that are separate from the mainstream. (Will, 1986, Feb.) In fact, LRE is sometimes not addressed in placement decisions. (State of IA, 1986)

Because of these and other obstacles, special education services in the regular classroom have come to be the mode of delivery preferred by many researchers and practitioners, unless extensive attempts to accommodate are not effective for a student. (Wang and Baker, 1986)

State grants for projects to address alternative accommodation strategies for mildly handicapped students were made available through Keystone AEA, and such grants were applied for and received by Starmont Middle School to use in a team/cooperative teaching project. The goal of this team teaching program is to reduce the amount of time and number of students being pulled from regular classrooms, by meeting their needs within the regular classroom. The issues mentioned in the preceding paragraphs are pertinent to this project. In accordance with the purpose of the grant, the delivery of the language arts and math instruction to mildly handicapped students

was via a team taught regular classroom rather than in the resource or self-contained classroom with integration. often referred to as an S.C.I. room.

This study poses the question, "What is the effect of team taught instruction by a regular classroom teacher and a special education teacher in the regular classroom on the educational achievement and affective behavior of mildly handicapped students?"

It is anticipated that the educational achievement and adaptive behavior of these students will improve as a result of this instructional delivery model. Consequently, the need for pull-out servicing will diminish, and the number of referrals for special education services will decrease. In addition, assistance for those with learning problems who do not qualify for special education will be provided.

ASSUMPTIONS, LIMITATIONS, AND DEFINITIONS

Assumptions

1. That classrooms team taught by regular and special educators are one effective means of serving the educational and affective needs of mildly handicapped students.

Limitations

1.   Lack of comparison

Due to the size of the district and distribution of
mildly handicapped students a comparison to other
models, such as to regular class placement of
mildly handicapped students with no support or to
placement of mildly handicapped students in
pull-out resource situations, is unable to be made.

2.   Lack of generalization

Due to the low number of students involved it
cannot be assumed that they are representative of
the population. Primarily low achieving students
were serviced in this project; therefore, it may
not generalize to a more diverse population.
Further, the project focused only on two content
areas, math and language arts; therefore, the
result cannot be generalized to other content
areas.

Definitions

Accommodation strategies - effective pilot models which yield
cooperative endeavors between regular and special education in
the provision of services (support/instructional) for mildly
handicapped students, as well as non-handicapped students who

need individual assistance in the least restrictive environment. (McClure, 1987)

LD - Iowa Rules and Regulations (1981)

Learning disability is the inclusive term denoting the inability to learn efficiently in keeping with one's potential when presented with the instructional approaches of the regular curriculum. The inability to learn efficiently is manifested as a disorder in an individual's ability to receive, organize, or express information relevant to school functioning and is demonstrated as a severe discrepancy between an individual's general intellectual functioning and achievement in...(basic skills). LD is not the result of sensory or physical impairment, mental disabilities, emotional disabilities, cultural difference, environmental disadvantage, or a history of an inconsistent educational program.

LRE - any student needing special education services should be placed in an educational setting appropriate to his or her needs and removed only when necessary from the general education program. (State of IA, 1986, p.7)

  - To the maximum extent possible, children requiring special education shall attend regular classes and shall be educated with children who do not require special education. Whenever possible, hinderances to learning and to the normal functioning

of children requiring special education within the regular school environment shall be overcome by the provision of special aides and services rather than by separate programs for those in need of special education. Special classes, separate schooling or other removal of children requiring special education from the regular educational environment, shall occur only when, and to the extent that the nature or severity of the educational handicap is such that education in regular classes, even with the use of supplementary aids and services, cannot be accomplished satisfactorily. (Code of IA, Chapter 281.2<3>)

Mainstreaming/Merging/Integrating - Cooperative efforts (observation, planning, modification of curriculum and methods, teaching, evaluation) between regular and special education personnel in accommodating the individual differences of all students within the regular classroom as long as this placement is still within the best interest of, and in the LRE for, each child.

Resource Teaching Program - an educational program for children requiring special education who are enrolled in a general education curriculum for a majority of the school day, but who require special education in specific skill areas on a part-time basis. (Rules of Sp. Ed., State of IA, 1985, p.7)

SLD - from PL 94-142

Specific learning disabilities: means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or of environmental, cultural, or economic disadvantage."

CHAPTER II: REVIEW OF LITERATURE

INTRODUCTION TO THE LITERATURE REVIEW

The origin and rationale for the movement toward more special education services for mildly handicapped students in the regular classroom is reviewed. The literature review is organized into four sections: 1) Students require supportive assistance for regular class work, 2) Current system of program delivery, 3) The regular education delivery initiative, and 4) Concerns regarding delivery and policy change. The efficacy of restructuring and reallocating services for mildly handicapped students in the regular classroom is addressed in the summary of the literature review.

IDENTIFICATION OF STUDENTS REQUIRING ASSISTANCE IN THE MAINSTREAM

Concern has been expressed over a period of several years regarding the delivery of services to students with special needs. (ACLD, 1986) In fulfillment of PL 94-142, "Individuals with exceptional needs are to receive programs which promote mainstreaming. The legislature also intended that pupils would

be transferred out of special education programs when the special assistance is no longer needed." (Winston, 1985, p.44) Many students qualify for special education services. Students with specific learning disabilities have frequently been identified as requiring supportive assistance. An issue of consequence for students with learning disabilities has been the dilemma of classification caused by unclear definition of the term, learning disabilities. In Iowa the definition describes an inability to learn efficiently in accord with one's potential, a disorder in processing information related to school functioning, which is demonstrated by a severe discrepancy between an individual's general intellectual functioning and achievement in basic skills. Certain disabilities and impairments, such as physical and emotional, are not considered causes of learning disabilities. (Code of Iowa, 1987) Interpretation of any particular definition is subject to various misunderstandings and vagaries.

According to Ysseldyke, et al. (1982) many professionals in the area of learning disabilities are in conflict regarding the identification of students for special education services. Some believe that many learning disabled students are considered low-achievers and are denied services, while others believe that too many, who are actually low achievers, are identified as learning disabled. Hagerty and Abramson (1987) commented on a rapid increase in the identification of mildly handicapped children, particularly in the category of learning disabilities. Shepard (1987) observed that 90% of those served are very mildly

handicapped and that a minimum of half those identified as learning disabled would more appropriately be described as slow learners or have other problems interfering with their ability to learn. She also reported that the expense of the assessment and staffing of learning disabled students comprises nearly 1/2 the special education budget for the learning disabled. In addition, she was of the opinion that higher educational standards could dramatically increase the tendency to refer difficult children for special education services.

"As the mildly handicapped population expands in number and diversity, issues of cost evolving from the identification, placement, and specialized instruction process required for these students is gaining particular attention." (Hagerty & Abramson, 1987, p.318) Graden, Casey, and Christenson (1985) also have identified the issues of increasing numbers of academically and behaviorally different students and current funding as difficulties in the present special education practice which can potentially be more effectively dealt with by the restructuring and reallocating of services.

Lambert (1988) listed these steps as the procedure to be followed for assignment of students for special education services: identification, referral, determination of eligibility, and the actual decisions delineating the appropriate services available for the student within the educational setting, whether special education or other.

In summary, as the population of mildly handicapped students

increases, valid identification procedures must be developed to assure appropriate programming. Once identified, effective systems of program delivery can be structured.

CURRENT SYSTEMS OF PROGRAM DELIVERY

Laurie, Buchwach, Silverman, & Zigmond (1978) cited the following difficulties with the current delivery system: an increasing pull-out population which is complicated by a too lengthy referral procedure which delays support for both the classroom teacher and the student, that it is often the only support service available to regular education, and that there is a gulf of many differences between regular and special education. In her report to the Secretary of OSERS, Will (1986, Nov.) identified four obstacles existing in traditional pull-out programming for mildly handicapped students. These are: a fragmented educational approach for the students, a dual educational system, possible stigmatization of labeled students, and the potential for placement decisions being a battleground.

Some have believed that many of the learning problems of students have been due to regular education leaving things undone or doing them poorly, (Wang, Rubenstein, & Reynolds, 1985) or that the mainstream of education has failed to address the individual differences among students. (Laurie, et al., 1978)

Stainback, Stainback, Courtnage, and Jaben (1985) cited problems with a graded, lock-step traditional system for mildly

handicapped students. They observed that this structure assumes
that all students of the same age are ready to be taught and are
able to master the same objectives across the curriculum in the
same amount of time and at the same time. Lipsky and Gartner
(1987) have observed a disabling attitude on the part of teachers
who consider children more alike intellectually, physically and
psychologically than different. They listed the teaching skills
of: high expectations, an orderly atmosphere, positive school
climate, ongoing assessment, strong leadership, effective teacher
involvement, and basic skills instruction, as needed by both
special and regular education teachers. "The calls for special
education reform, for the reintegration and transfer of a large
portion of mildly handicapped students into the domain of regular
education, parallel public demands for improvement in teacher
performance, educational accountability, academic standards, and
school environments." (Hagerty & Abramson, 1987, p.319)

Cruikshank (1981, p.153) commented that, "If the concept of
least-restrictive placement is to prevail and not result in a new
generation of tragedy for learning disabled children, then school
leadership must attack its deficiencies with unrelenting
vigor....A variety of educational programs must be available for
children who have a variety of needs."

The concept of least restrictive environment also relates to
the rights of individual students. "In American society we must
see that each individual has a chance to participate and win,"
Mudra (1987, p.5) stated in reference to democratic values in

education. There should be equal educational opportunity for all. (Greer, 1988) Bastian (1988) reminded that a basic democratic promise of public education is that teachers are to have high expectations for every child. This means that each student has potential, can contribute to society, and can be empowered by knowledge. "Autonomy and choice-making are characteristics of persons whom society respects." (Lipsky & Gartner, 1987, p.70) These are opportunities that could be denied someone pulled-out of the mainstream. "Equality suffers when the education of some students is viewed as different, special, and charity-like while the education of other students is viewed as regular, normal, and expected." (Stainback & Stainback, 1987, p.67) Stainback and Stainback (1987) asserted that if every student is entitled to a free and appropriate public education, there should be no need for labeling to assure appropriate educational services, since those should be inherent in an educational system that addresses each student's needs, interests, and capabilities.

"A singular challenge facing education today is the challenge of providing the best, most effective education possible for children and youth with learning problems." (Will, 1986, Feb., p.411) Many believe that this will be best achieved by changing from the separation of special and regular education to more collaborative endeavors. (Wojelehowski & Burton, 1985; Reynolds, Wang, & Wallberg, 1987; Greer, 1988)

...the growing knowledge base about how

to organize schools and classrooms for the

benefit of student academic learning offers an

important challenge and opportunity for

regular and special educators interested in

children with special needs. We submit that

one use of this opportunity would be to change

the notion of 'special education' into 'powerful,

effective education.' The 'separateness' of

regular and special education programs would be

diminished in such circumstances. The delivery

of effective instructional support to schools,

teachers and students would be the essential goal,

and in the presence of a growing knowledge base,

we have reason to be optimistic that such goals

are achievable. (Bickle & Bickle, 1986, p.499)

Greer (1988) purported that special education, although focusing

on the exceptional children, enhances the education for all

children, by among other things, planned and delivered

individually designed programs and a continuum of educational

settings from the regular classroom to more intensive

instructional options in order to serve the needs of every child.

Will (1986, Feb.) stated that special and regular education

programs must be enabled to contribute together to facilitate

individualized education plans based on individualized education

needs. Several special education professionals have agreed that

change in education is needed for the whole population of

students, (Sapon-Shevin, 1987) and have cited a need to restructure regular education to more effectively meet the needs of all individual students. (Wang & Reynolds, 1986) Increasingly flexible and responsive educational efforts are encouraged. (Lipsky & Gartner, 1987) Current reform efforts, according to Wang and Baker (1986), are to mainstream those in special programs and to not move disabled students out of the regular classroom.

In review, pull-out or segregated programing has historically been the prominent service delivery model for students with mild handicaps. However, due to the lack of empirical evidence supporting this service delivery model, current efforts are focusing on providing assistance to the students in the regular education mainstream.

THE REGULAR EDUCATION DELIVERY INITIATIVE

Specific encouragement and support for the movement toward providing more programs for mildly handicapped within the context of regular education has come from the Bureau of Special Education in Iowa, OSERS, CEC, and the ACLD.

> For the past two years, the Bureau has been
> encouraging districts and AEAs to consider
> alternatives to the traditional "pull-out"
> model of the resource program. The purpose

of this focus has been to provide programs for

mildly handicapped students that emphasize a

closer alliance with general education and

provide the opportunity for general education

and special education personnel to cooperatively

address the educational needs of mildly handi-

capped students and nonhandicapped students who

have similar learning disabilities. (Reese, 1987, p.1)

"The heart of OSERS' commitment to increasing the educational

success of children with learning problems is the search for ways

to serve as many of these children as possible in the regular

classroom. This alternative does not mean that schools are being

asked to reduce the services or protections guaranteed to

children under P.L. 94-142." (OSERS, 1987, p.1) "Under suitable

conditions, our policies say, education in the regular class is

optimal for most exceptional children; education outside the

regular class ought to be the exception, not the rule." (Greer,

CEC, 1988, p.294) "ACLD has long maintained that educational

programs for students with learning disabilities would be more

effective and efficient if the various components of education

including special education, regular education, therapies,

supportive services, and parent involvement were integrated

rather than planned and administered separately. Integrated

education is desirable for all students whether eligible for

specialized services prescribed by Public Law 94-142 or not."

(ACLD, 1986, p.60)

Lilly and Givens-Ogle (1981) and Gartner (1986) concurred with the concept of the merging of the purposes of special and regular education, believing that that is how all children can be better taught. Greer (1988) commented that indiscriminant placing and educating of exceptional children apart from non-handicapped children has not been good educational practice, social policy, or fiscal management. "Perhaps the most effective instruction for the mainstreamed classroom is simply the most effective instruction for all students, and all students need to be treated as special in the sense that they have unique instructional as well as social needs." (Slavin, 1984, p.41)

Wang and Birch (1984) have indicated a need for changes in the financial support and management structures as well as the restructuring of the present educational system in order to effectively implement mainstreaming.

The challenge is to blend the strengths of special and regular education into a partnership. (Will, 1986, Nov.) "There must be an open, experimental period during which funding for general, special, and compensatory education can be combined to encourage innovative development aimed at improving educational services in the mainstream and to support a full continuum of services, including supplementary aids and pre-referral services in regular classes." (Wang, Rubenstein, & Reynolds, 1985, p.66)

This movement has been referred to as the Regular Education Initiative, particularly by those who are now taking an adversarial stance toward it. This faction will be referred to

more fully later in this review. The ACLD, however, used the term Regular Education/Special Education Initiative, and defined this as "...a system of integrated planning, delivery, and evaluation of the effects of services to all students." (ACLD, 1986, p.60) Some of their recommendations for implementation of this system involved the use of pilot programs, more individualization of instruction, sensitivity to the different needs of students on the part of teachers, and specialized personnel for team efforts. The ACLD (1986, p.61) listed the requirements it believes are necessary for the successful implementation of a Regular Education/Special Education Initiative: "...an integrated system of management, combining regular and special education under the cooperative efforts of regular and special educators, school administrators, teacher certification boards, planners and administrators of teacher preparation programs in the institutions of higher education, and the regular and special education professional and advocacy organizations."

It is essential that "...designs for change in the educational structure must be contemplated and implemented in a way that creates a 'receptive spirit' among those who are in the trenches on a daily basis." (Hagerty & Abramson, 1987, p.322)

There must also be a willingness to cooperate on the part of the teachers involved.

The extent to which regular classroom

teachers vary their task presentations

and adapt instructional materials is an

indication of commitment to accomodate the

mainstreamed student. There is a direct

relationship between a handicapped child's

daily performance and the extent to which a

classroom teacher personalizes a child's

program. However, if inadequate pupil

progress is observed, it would be counter-

productive to fault the child and/or the

classroom teacher. Rather, support personnel

must make a concerted effort to offer further

assistance and provide direction for needed

program changes. The responsibility for a

mainstreamed handicapped child's progress

must, of necessity, be a shared one.

(Anderson, Martinez, & Rich, 1980, p. 40)

Wojeiehowski and Burton (1985) commented, likewise, that regular

and special educators must learn to cooperatively share expertise

in order to fully achieve mainstream education. Direct lines of

communication are necessary between special and regular

educators. (Stainback, et al., 1985)

Successful implementation of mainstream or integration

programming is aided by features which are supported by effective

teaching literature such as: continuous assessment, alternative

routes and a variety of curriculum materials, individualized

progress plans, student self-management, peer assistance,

instructional teaming, and consulting teachers. (Wang & Baker, 1986) Common suggestions for facilitating the successful education of students in addition to these were: support, training, and resources for teachers; flexible and more adaptive grouping of students; and cooperative learning environments. (Gartner, 1986; Stainback, et al., 1985; Laurie, et al., 1978; Slavin, 1984; Slavin & Madden, 1986; Will, 1986, Nov.) Thompson, Graves, Brown, and Ray (1986) have published a brief compilation of some innovative cooperative practices appropriate for mainstreaming.

One study of the empirical results of full-time mainstreaming by Wang and Baker (1986) indicated a trend toward greater positive impact on student academic, attitudinal, and process outcomes. Since there were very few learning disabled students in this study, the strength of their findings is diminished.

"Learning-disabled children may be served in a variety of ways with some demonstrated success for all major service delivery modes....Any combination of service delivery systems should be considered acceptable if it is effective." (Gearheart, 1976, p.173) Gearheart affirmed that children other than those who are learning disabled can also be served via these alternatives. Some of the techniques involved variations in grouping students for learning, monitoring progress and needs,

and adapting materials and instruction for individual needs.
Specific changes in the roles of teaching staff are not obvious
in these accommodation strategies. Some schools have initiated
peer (teacher) assistance teams to provide consultation and
collaboration as needed. (Chalfant, Pysh, & Moultrie, 1979;
Pugach & Lilly, 1984) Two possibilities in which the traditional
roles of resource teachers show more pronounced change are the
resource teacher serving more deliberately than incidentally as a
consultant to classroom teachers, (Ludlow, 1982; Friend, 1984;
Laurie, et al., 1978; Kirk, 1986) and the resource teacher as a
team teacher with a regular classroom teacher in the regular
classroom. (Pugach & Lilly, 1984; Proctor, 1986: Will, 1986,
Nov.)

Proctor (1986) submitted that, in addition to modifying the
instructional program, the role of the resource teacher should
also be modified to include being a resource not only to
learners, but also to other teachers. In a language arts sharing
situation, which was a learner centered program and included the
resource and classroom teacher working together in the same room,
the teachers found that the adaptations and refinements to the
classroom made it possible for all students to learn.

Slavin (1984) observed that two principles on which pro and
antimainstreaming advocates agree is that academically
handicapped students need help to remedy deficits and that they
can also benefit from interaction with nonhandicapped peers. He
suggested that one logical step to enabling these to occur would

be to have special education or resource teachers team teaching
with regular class teachers in classes containing both mildly
handicapped and nonhandicapped students. Ferguson and Adams
(1985) cited a need to generalize remedial curriculum into the
ongoing work of the school and suggest that team teaching is one
vehicle for this. Rather than grouping students by handicaps or
deficits, Davidson and Morehead (1984?) recommended skill
grouping and teaming regular and special educators to provide
such a program. Shepard (1987) purported that if students
received remedial help and team teaching in the regular classroom
there would be fewer school psychologists and teachers of
learning disabled students needed. Pugach and Lilly (1984)
listed having a regular education based remedial services support
worker within the regular classroom as one of the options
designed to prevent the necessity of most special education
referral and placement.

     DeNault (1986) described some of the benefits of two
teachers of learning disabled children combining their classes
and teaming up to teach. They: divided research tasks and ended
up with a better program, prepared lesson plans together,
alternated teaching and monitoring responsibilities, needed to
spend less time on discipline, found that the students'
self-esteem was enhanced.

     In addition to adapting materials for students needing help,
Smith (1985) too, suggested team teaching as one means of support
for students. He listed this as one aspect of consulting, which

is also a facet of the collaborative consulting teacher concept.
(Robinson, 1987) Special educators need to have the skills,
time, and ability to communicate clearly and effectively,
(Ludlow, 1982; Robinson, 1986) particularly when in the roles of
team and/or consulting teachers.

The resource teacher as a consultant is an expansion of one
aspect of a resource teacher's role. (Idol & West, 1987)
Consulting teachers often work directly with the regular classrom
teacher by advising and assisting in organizing instruction for
the mildly handicapped in the class. The consulting teacher can
provide knowledge and encouragement to the classroom teacher in
dealing with special needs children in the regular classroom. The
classroom teacher is usually the one who works directly with the
children. (Kirk, 1986; Laurie, et al., 1978; Smith, 1985)
"...consulting programs share the common philosophy that with
appropriate adaptations educational programs can be provided to
mildly handicapped students largely in mainstreamed settings."
(Reisberg & Wolf, 1986, p.4) Salend and Salend (1984) reported
that consultation has been shown effective in modifying a variety
of classroom behaviors. Positive changes were noted in both
students and classroom teachers. Shared power and collaborative
decision-making are key factors in the consultation delivery
model. (Graden, et al., 1985) Wojelehowski and Burton (1985)
referred to situational leadership as operative in successful
consultative relationships.

A repeated recommendation by those advocating increased

servicing of the mildly handicapped within the mainstream was that, in addition to variations in programming, a resource program should continue to be available for those for whom it is still needed. Students may need this for only short-term pull-out. Skills taught there should be directly related to the classroom program to enable re-mainstreaming. (Evans, 1984; Pugach & Lilly, 1984; OSERS, 1987; Project Re-Entry, 1986)

Roosevelt Middle School in Mason City, Iowa has incorporated some of these methods in their Project Re-Entry (1986). Their goals are: to successfully mainstream more special education students and to prevent the need for pull-out services, to provide intervention procedures to enable more students to remain in the regular classroom, to lower the number of referrals and retentions, to foster more positive attitudes toward special education, and to produce evidence of more positive self-concepts among special education students. "Curriculum Adaptations, Team Teaching, Strategist Intervention Techniques, Special Education Teaming, Child Study Team, and Paraprofessional Use" (Project Re-Entry, 1986, p.12) are the six component strategies. Aspects of these which are used to meet their stated goals are: team building and total staff awareness of the project, daily academic team meeting and planning time, monthly meetings of the regular and special education teams, the availability of consultative services from special education teachers to regular classroom teachers not in teams, the availability of S.C.I. and resource classes for more severe cases and short-term pull-out as needed,

an all school study period at the end of each school day which facilitates additional contact time with students as needed, and a consistent homework completion policy across at least one grade level. They are completing their second year of the project and published results are not yet available; however, the attitude of the teachers involved was positive and they stated that the students are succeeding in the regular classroom. The participating teachers have emphasized the importance of adequate team planning time.

Mutual acceptance and parity between special and regular classroom teachers are essential in facilitating a team effort in the assessment of problems, formulation of goals, and implementation and management of programs. (West & Idol, 1987)

"It has been argued that the most likely way to assure mild to moderately handicapped students' maintenance and growth in regular classes is to address potential and existing problems within the setting in which they occur, i.e., the regular classroom." (Robinson, 1986, p. 2)

In summary, the regular education initiative exists as a response to the lack of strong empirical evidence that separate special education services are more effective for mildly handicapped students. It also aligns more effectively with the intent of least restrictive environment. By regular and special educators cooperation, collaboration, and sharing their expertise, all students who are the recipents of such joint endeavors should benefit academically and affectively. The needs

of more students will be more effectively and appropriately met.
Most proponents advocate the continued availability of pull-out
servicing for those who need it; the difference being that it
would not necessarily be the first option for delivery of
services as has often been the case. There are those who have
quite cautious stances concerning this movement and who have
issued warnings in the literature. Some have expressed issues
worth heeding.

CONCERNS REGARDING DELIVERY AND POLICY CHANGE

Recently there has been an increase of cautionary literature
regarding what the Journal of Learning Disabilities terms the
REI or Regular Education Initiative. (Hallahan, Kauffman, Lloyd,
& McKinney, 1988) The whole January, 1988, issue of the
Journal of Learning Disabilities was, in fact, devoted to
this topic. Other professionals have also recently mentioned
areas of concern. (Lerner, 1987; Huefner, 1988)

According to Kauffman, Gerber, and Semmel (1988, p.6):

Few educators would be able or willing

to mount arguments against any of the

following suggestions: (1) We need to work

toward better integration and coordination

of services for students who have difficulty

(for whatever reason) in school. (2) We

should seek the most effective and economical

methods of serving handicapped students.

(3) Students should be identified as needing

special services only when necessary and

should be placed with their nonhandicapped

peers to the greatest extent possible, and

at the same time the educational interest of

all students should be protected. (4) Research

on instruction and effective schools now

suggests guidelines for school reform.

(5) Special educators should focus their

efforts on the students who need the most

specialized and extensive services, not on

students who have problems but can be taught

by general educators. (6) Many or most of

the teaching practices that are appropriate

for one group of students are appropriate

for all students. (7) Some students fail

because of the inadequacies of teachers of

regular classes. (8) A continuum or cascade

of special services, ranging from full-time

placement of handicapped students in regular

classes to instruction in institutional

settings, should be maintained and should be

matched to the needs of individual students.

(9) Identification of handicapped students

and assessment of their individual needs are

difficult and controversial.

These authors argued against what they said supporters of

more special education services in the regular classroom assume.

They did not concur that: there is an overidentification of

students for special education, nor believe that students fail

only because of teacher failure, or that more competent teachers

are necessarily open to having handicapped learners in their

classes. They indicated a belief that student performance will

become more, rather than less, varied when effective instruction

is used, and that resources for low performing students need to

be protected.

Hagerty and Abramson (1987) referred to areas of concern

regarding the special education movement toward regular

education. They indicated that more data are needed for policy

making; that the current education funding structure needs to be

changed; that teacher preparation must change; and that the

current service delivery system has barriers within it regarding

change that need to be overcome. Keogh's (1988) concerns aligned

with these. Data are needed regarding whether or not this

integration is academically and socially beneficial to mildly

handicapped students and what programs and practices are most

effective for meeting their needs. (Slavin and Madden, 1986)

McKinney and Hocutt (1988) added to this the need for input

from regular educators and are concerned with feasability factors

and whether research analysis is consistent with the advocacy beliefs. They were also concerned that a change from categorical to block-grant funding may threaten the financial support for the handicapped. Martin (1987, p.14) stated that, "...because human beings are concerned, we professionals and public-policy makers must be extremely prudent, cautious, and evolutionary, in redefining populations, in changing the service delivery models that have grown up based on clinical, intuitive, and educational wisdom."

In response to those who consider that poor instruction is the cause of learning problems, Keogh (1988) said that this is not entirely supported by research. She observed that the individual differences of students is an important factor in their learning outcomes and that even with good instruction some will have difficulty learning. Comments by Kauffman, et al. (1988, p.8) aligned with those of Keogh, "...our concern is that an inappropriate student-deficit model may be simply replaced by an equally inappropriate teacher-deficit model that does not adequately account for the joint responsibility of teachers and students for learning. Both positions are too simplistic, and neither builds from an adequate theoretical foundation that appreciates the staggering complexity of instruction/learning transactions between teachers and students in the social context of classrooms."

Bryan, Bay, and Donahue (1988) identified a movement on the part of advocates of the REI, to diminish or eliminate the need

for special education services. They expressed belief that this rationale is based on the use of the learning disabilities definition rather than the definition itself. In spite of difficulties with the definition they pointed out that every definition of learning disabilities refers to a central nervous system dysfunction which includes processing deficits and intraindividual differences. The manifestation of these in the academic domain leads to measures of discrepancy:

> The definition of learning disabilities
>
> has been controversial since it was
>
> created in 1969. We believe it is of great
>
> importance to continue to expand our knowledge
>
> base regarding the nature of learning
>
> disabilities and to address the problems
>
> in the definition and delivery of services.
>
> (Bryan, et al. 1988, p.23)

Lerner (1987, p.6) similarly assessed that, "...learning problems must be clearly differentiated from learning disabilities."

In response to the expressed concern regarding the stigmatization of students by labling, Kauffman et al. (1988, p.7) stated that, "A much more concrete consideration is whether the social designation of 'handicapped' carries more benefits than detriments, not only for the individual but for the larger society. ...'handicapped' or another designation indicating the need for special education is, in fact, appropriate for most (though certainly not all) students now receiving special

education services."

The need for more empirical support to guide and undergird policy change has been expressed by several. (West and Idol, 1987; McKinney and Hocutt, 1988; Keogh, 1988; Hallahan, Keller, McKinney, Lloyd, & Bryan, 1988) Keogh (1988) recommended models of reorganization and implementation which are documented and evaluated. She declared that there must be an attitude of questioning regarding this movement rather than one of defense:

> Most of us would opt for systems that
> foster cooperation and *sharing rather than competition* alienation, and
> that provide appropriate and adaptive
> programs for all students. It is easy
> to reach consensus on such broadly stated
> goals. At issue is how to accomplish them.
> Given the limited evidence of efficacy
> from studies of both regular and special
> programs, decisions about how to provide
> services to whom and under what circumstances
> are too often made on the basis of beliefs. (p. 19)

Lerner (1987) cited the need for evidence of significant change in teacher training and in individual needs being met within the regular classroom before abandoning current special education systems and practices. She stated that, even in an excellent educational system, certain children need education services that go beyond what can be effectively provided in the regular classroom. Ritter (1978) also suggested maintaining

supplemental programming to be used for mainstreamed students when regular classroom instruction may prove insufficient for their needs. Likewise, Ferguson and Adams (1985) commented that team teaching was not meant to entirely replace the need for pull-out servicing.

In regard to consultative teacher roles, in particular, West and Idol (1987) stressed the importance of developing an empirical base and Huefner (1988) warned against casual or premature implementation. This could entail: a situation of ineffective caseload management, becoming a tutoring model, unrealistic expectations such as being regarded as a panacea, having inadequate support from regular educators, having an inadequate funding system, and incorrect assumptions regarding cost saving and program effectiveness.

The most critical area of concern is the call for empirical evidence to support beneficial accommodations for mildly handicapped students. Particularly in the field of special education, documentation and evaluation are recognized and important procedures and should generalize to these efforts. The lack of empirical support for the status quo, in fact, has lent impetus to the regular education initiative.

SUMMARY OF THE LITERATURE REVIEW

Due to the increasing concern regarding the effectiveness and cost of the delivery of special education services to the high numbers of mildly handicapped students and the interpretation of the intent of LRE, much has been written regarding the efficacy of restructuring and reallocating these services. Rather than assuming that special education service delivery of necessity be delivered separate and apart from the mainstream, a variety of accommodation strategies are being implemented which proponents consider fulfill the intent of LRE. Instructional accommodations such as cooperative learning, more individualization, learning strategies, and modifications of curriculum and classroom presentations are suggested means to accomplish this end.

It is purported by many supporters of increased mainstreaming that addressing students' needs with the combined expertise of regular and special educators when and where they occur (usually within the regular classroom) will facilitate the academic and affective success of more students, will minimize, but not entirely eliminate, the need for pull-out servicing, and will lower the incidence of referral for special education services. Many of these endeavors are more readily achieved by the cooperation and collaboration of regular and special educators. The team teaching of a regular and a special educator

in the regular classroom is one viable means for achieving this. The resource teacher as a consulting teacher is another means. If the necessary planning and conferencing time is allotted, the role of consulting can be combined with the role of resource/team teacher. Resource teachers are not available to team teach in all classes; therefore, the resource/team teacher's availability as a consultant to other content area teachers would provide additional cooperative efforts for students by special and regular educators.

Labeling and stigmatization are less problematic if mildly handicapped students receive assistance primarily within the regular classroom. 1A110 children benefit from such a situation and the rights of children are enhanced and upheld by it. Children are different in many ways. As much as possible, all educators need to address their individual needs, recognize their potential, and enable them to increase their understanding and abilities.

If mildly handicapped students are no longer specifically identified for special education servicing, a change in funding procedure is inevitable. It is understandable that there are those who are fearful of losing support for a population that worked so long and hard to get it. Care does need to be taken to ensure that continuation of funding occurs. Block grant funding is one option that has been proposed. Joint funding by special and general education has also been urged, thus sharing financial responsibility.

Some of the cautionary statements are similar to considerations previously expressed by the proponents of the delivery of more special education services in the regular classroom. It seems that false adversarial issues were sometimes raised, when in reality they are shared concerns. The rebuttal of Kauffman et al (1988) to the rising numbers of identified handicapped students was a reference to 1987 U.S. D. of E. data that there has been a decline in numbers. Neither explanation, nor statics in support of this were cited by Kauffman et al (1988). In practice, it may be a result of the movement to keep as many students in the regular classroom as possible by performing more exhaustive intervention efforts prior to referral.

Kauffman et al. (1988, p.7) identified an REI assumption "...that most of the students now identified as mildly handicapped - presumably many of those labled educable mentally retarded (EMR) and seriously emotionally disturbed (SED) for federal accounting purposes, as well as those categorized as LD - are neither handicapped nor appropriately served by special education." This observation is an exaggeration and serves to diminish more reasonable expressions of concern. McKinney and Hocutt (1988, p.17) also exaggerate by saying that the REI recommends..."wholesale mainstreaming of mildly handicapped students as well as those in compensatory programs." Many supporters of mainstreaming have expressed the need for the continued availability of some pull-out servicing as needed.

Kauffman, et al. (1988) pointed out the need for data regarding the attitude of regular education toward this movement, which is an area that has been slighted. Some referencing has been done, for example in the Collaborative Consultation Teacher Project (Robinson, 1986), but if regular educators are to be partners in this effort they need more representation and input into the literature regarding it.

Some things are difficult to document empirically, but the importance of more empirical research was illustrated by McKinney and Hocutt's (1988) comment, "The danger we foresee is that 'experimental trials' would, in fact, be demonstration programs in the local schools and not research efforts... This type of random innovation has failed to produce either sound generalizable evidence in the past and has confused rather than clarified issues in practice." It is responsible procedure to as objectively as possible examine and evaluate theories, policies and their implementation, and to utilize what is learned to guide future related endeavors.

Little has been written about the teaming of regular and special educators in the classroom. Several references to the concept are made and there are several such endeavors in practice. Much of the literature written about consultative relationships, however, can be related to team teaching. It is important for communication between cooperating teachers to be good and for them to be compatible. (Robinson, 1986) Skills in cooperative or collaborative problem solving, planning, and

negotiating are essential for both. Such team teaching appears to be a viable accommodation strategy for meeting the needs of mildly handicapped students as well as the needs of other students in the regular classroom.

The following chapter describes a project involving the teaming of regular and special educators in regular classrooms. Related data and explanation accompany this description.

CHAPTER III: REVIEW OF THE PROJECT, CONCLUSIONS,

IMPLICATIONS AND RECOMMENDATIONS

INTRODUCTION

In view of the lack of substantial empirical support for segregated special education services for mildly handicapped students as being more effective than services delivered in the regular education classroom, this direction seems justified. In an effort to better fulfill the implications of the LRE as delineated by PL 94-142, there has been an impetus toward increased cooperation and collaboration of special and regular education within the regular classroom. (Reese, 1987) Due to statewide encouragement along these lines and the availability of funding through grants, the Starmont Middle School applied for and received a grant to implement the accommodation strategy of team/cooperative teaching project in the area of math to begin in the fall of 1987. A later grant application was made and approval received to extend the team teaching accommodation strategy into the area of language arts.

In the first semester of the 1987-88 school year a 7th grade math class was taught cooperatively by the regular math teacher and a special education instructor, and an 8th grade math class was team taught by the same regular math teacher and a different

special education instructor.

In the second semester of that school year
departmentalization in and expansion of the team teaching project
occurred. The special education teacher who was team teaching in
the 7th grade math class also assumed the team teaching
responsibilities in the 8th grade math class. The first semester
8th grade math special education team teacher transferred from
the math class to team teaching in a 7th grade language arts
class with a regular classroom teacher.

Previous to this the Starmont Middle School resource program
had primarily served students in grades 7 and 8 via pull-out
during study periods. Only if a student was assessed as unable
to adequately perform in the regular classroom, or when
scheduling was problematic, was total programming in the resource
room done for one or two subject areas per student. An advantage
to this was that most students remained in regular classrooms for
course work. A disadvantage was that these students needed study
time in school, perhaps more than most, and were not able to
receive an adequate amount. The effort to provide special
education services for them in the regular classroom, in addition
to more effectively addressing their academic needs, also
facilitated the restoration of in school study time for these
students.

Fifth and sixth grade students were usually pulled-out of an
academic class. This procedure was effective in providing
students with academic assistance, but did not facilitate optimal

integration.

GRANT COMPONENTS

The grant components included two phases. The Phase I component involved a regular education teacher and two special education teachers team teaching in a seventh grade math class and an eighth grade math class. The accommodation project goal was to focus upon the adaptability of a cooperative learning strategy in reference to student growth in the least restrictive environment. It was intended to: illustrate examples of instructional provision in the least restrictive environment, begin an initial step in analyzing the feasibility of Project Re-Entry for the Starmont Middle School, and examine various teaching approaches in a collaborative effort between regular and special education staff.

Staff participants initially included the S.C.I./resource teacher and a regular math teacher who were to team in a 7th grade math class. With the realization that there were also three 8th grade LD resource program math students, the resource teacher was added to the project to team in an 8th grade classroom with the regular math teacher. The AEA consultant and Middle School principal, who was also the district Special Education Coordinator, were involved in monitoring and overseeing the project.

The student participants in the project were those who exhibited low achievement in math as determined by ITBS scores and math teacher recommendations and included those identified as mildly handicapped. During first semester these identified students also received resource room support. A description of the students participating in the project is provided in Table 1.

The implementation of the grant involved several steps. Initially, three days of planning time were allotted for the team teachers in August prior to the beginning of the school year. Goals were selected (see Appendix A); issues and concerns, including evaluation procedures were discussed; and preliminary lesson planning was done.

Daily team planning time was available for those team teaching the 7th grade math class. Due to scheduling difficulties, team planning for the 8th grade team was done on alternate days during a study hall that the regular classroom teacher supervised. A format was developed to facilitate daily team plans. (see Appendix B)

Teaching duties were shared. A majority of the lesson presentations, however, were done by the regular classroom teacher. The resource teacher provided input via various ideas for the grouping of students for practice, student recording and management tools (see Appendix C), and the monitoring of students at work. The S.C.I./resource teacher, in addition to monitoring, dealt primarily with affective behavior, for example, dealing with career related skills helpful for success.

The review and practice of basic math facts was identified by the total team as being important in order for the students to develop automaticity. During first semester both classes practiced with flash cards in pairs or small groups. Frequent testing provided the opportunity for students to progress through the facts in the following order: +, -, x, ÷, and mixed. Records indicating progress were kept by the teachers. All members of a small group had to pass a timing test before they could progress to the next type of facts. This provided additional practice and responsibility toward one another. This was discontinued second semester so that more time could be devoted to direct instruction.

The general math program followed a progression similar to other classes, but at a slower pace adapted to these students' achievement. Cue cards for decimals, for the conversion of percentages to decimals and vice versa, and reference sheets of factors and multiples were devised as aids to learning and made available to each student. Occasionally student teams of two or three worked together to check and explain practices on daily assignments. There was frequent modeling by the teachers and guided practice of assignments. Some time for individual practice in class was usually given. Students checked their own assignments, recorded their scores, and turned in assignments.

Due to the expanse of the Starmont School District and the numerous students who rely on busing for transportation home, an after school study session was usually impractical. Therefore, a

homework policy was established in this math class to encourage the satisfactory completion of daily assignments. Half the points possible for an assignment were earned by having the assignment done on time and according to directions. For most students this was helpful. When the whole class had completed an assignment on time they were allowed to listen to the radio during independent work time at the end of the period.

In the 8th grade class motivation regarding school in general was identified by the first semester team as an area needing improvement. After inquiry was made of the students regarding career interests (see Appendix D). Local school district residents between the ages of 20-30 were invited over a period of several weeks to present their career to the class indicating why they had chosen it, what education and skills had been necessary, and how math applied to it. There was opportunity for questions at the end of each visit. The follow-up questionnaire (see Appendix D) illustrated the students' response to this. Four of the students, including student B, didn't complete the bottom part of the questionnaire.

The second semester eighth grade math team extended this activity by discussing and practicing job applications and interviews in a series of class sessions. They also developed a "business" which offerred incentives for such things as good daily grades to those who chose to participate.

The presence of two teachers in the classroom made it easier for more student questions to be answered and more monitoring and

assistance to be given.

Measurement of progress toward the grant objectives involved pre-tests from the math textbooks administered to both math classes. Post-tests, related to material covered during the school year, were also administered. (see Table 2)

The Stanford Diagnostic Math Test was administered to all math students in the 7th and 8th grades in October. The post tests were administered in April. (see Table 3)

Semester math grades were reviewed from the previous and current school year. (see Table 4)

Responses to student and parent attitude surveys regarding the math accommodation classes were solicited in May. (see Appendix E)

As a follow-up activity, in October the total team, with the exception of the AEA Consultant, made a site visit to Project Re-Entry in Mason City, Iowa. Team taught classes were observed, and there was opportunity for discussion with some of the participating teachers and an administrator.

Phase II of the project involved taking advantage of an opportunity to continue the team teaching in math and to extend the team/cooperative teaching project into the area of language arts. A seventh grade language arts class would be team taught second semester with an eighth grade team taught language class anticipated to begin in the fall of the 1988-89 school year.

The accommodation project goal was to reduce the amount of time and number of students being pulled from regular classrooms

by meeting their needs within the regular classroom.

The staff participants alignment was altered from the first phase. In the area of math, the S.C.I./resource teacher would team teach a seventh grade and an eighth grade class with the regular math teacher. The resource teacher would team teach a seventh grade language arts class with a regular classroom teacher.

The student participants were the same as those identified in Phase I (see Table 1), although 7th grade student F was not in the accommodation language arts class. Seventh grade student A had been in S.C.I. pull-out for language arts during first semester. All the seventh grade students in the accommodation language arts class were also in the accommodation math class. The language arts class predominantly, although not entirely, consisted of low achieving, at risk, students, including identified special education students.

Two days were made available to each team prior to second semester to either continue evaluation and planning (math team) or to set up specific objectives and goals and initial plans (language arts team). (see Appendix F) Time was also to be provided during second semester to visit other projects or for inservice. One language arts site visit was made. In addition, three planning days for each team, including the eighth grade language arts team scheduled to being in 1988-89, were allotted for the summer of 1988 to plan for the next school year.

The math team continued to have a common planning time.

The language arts team also had a daily planning time during which daily class plans were formulated and finalized, teaching and monitoring responsibilities determined, concerns regarding program and/or students discussed, and collaboration regarding assignments and evaluation occurred.

Care was taken by both teachers in the language arts class to divide teaching responsibilities, including class presentations, as evenly as possible. Because of the usefulness of the math daily planning format, one was devised for use in the language arts class. (see Appendix G)

Initially effort was made to maintain relatively similar curriculum in the two seventh grade language arts classes taught by the regular classroom teacher. This would have included a writing workshop which focuses on the production of content, and addresses mechanics, when appropriate, by using the textbook or other material and coordinating this study with the students' writing. Following the evaluation of a writing sample taken from each language arts student in this class, it was determined by the resource teacher, with the support of the regular education teacher, to teach the simple sentence part of the Sentence Writing Strategy published by the University of Kansas. Due to the time this took, the writers' workshop aspect of the team taught class was minimal; however, there were still some common curricular activities between the two seventh grade classes, such as reading/writing projects. Spelling was another common aspect of the curriculum, although some lesson adaptations were made in

the team taught class.

Various cooperative groupings of students were used to provide supportive settings for the practice of spelling words, collaboration of efforts on exercises involving writing mechanics, and monitoring various levels or writing strategy practices. Students were at times responsible only for individual work and at other times group endeavors. This format facilitated motivation, social and academic interaction, and on task behavior for the students.

A homework completion policy was established at the onset of the language arts class to encourage and ensure that assignments were done. Since the class met 8th period, if a student did not have an assignment done, he/she was given until the beginning of first period of the following day to turn it in. If this procedure was not followed, he/she had to make arrangements to stay after school until 4:30 p.m. that day in order to complete the assignment.

Overviews were taken of the students' semester language grades from the previous year and the current year. (see Table 5)

Pre- and post- writing sample scores regarding sentence completion were evaluated, with primary attention given the percentage of complete sentences since complicated sentences were not yet addressed. (see Table 6)

The Brown and Hammill Student Rating Scales of the Behavior Rating Profile was administered in the language arts

accommodation class in February and May, 1988, by the regular classroom teacher. (see Table 7)

A behavior observation checklist (see Appendix H) was intended to be used in the language arts team taught class to facilitate the monitoring of the identified special education students. A few attempts by both teachers were made to utilize this; however, the resource teacher decided, with the agreement of the regular education teacher, to abandon its use. The modus operandi of the teacher doing the monitoring was compromised. It was determined that the teachers had adequate awareness of student behaviors without the use of the observation tool and were dealing appropriately with the behaviors of the students.

Student and parent attitude surveys regarding the language arts accommodation class were solicited in May. (see Appendix I)

In mid-November a presentation of the team/cooperative teaching project was made by the two participating special education teachers, the participating regular math teacher, and the Middle School prinicpal to the superintendent, elementary and high school principals, the other three district special education teachers, and the elementary Chapter I teacher and her aide. The philosophy and rationale of the project was presented and insights from the points of view of participating regular and special educators regarding the project were shared. A more brief and informal explanatory presentation was made by all team participants to the Middle School staff in February.

Communications regarding the project were also facilitated

via a brief article in a Keystone AEA monthly newsletter (see Appendix J), the videotaping of the math team in the classroom and the total team in discussion regarding the project for inclusion in a larger scale presentation regarding several accommodation strategy options in this AEA, and discussion with some representatives from the D. O. E.

A half day site visit by the 7th and 8th grade language arts teachers and the resource teacher was made to Hoover Intermediate School in Waterloo, Iowa. Team taught language arts classes in which some of the University of Kansas' Learning Strategies were being used were observed and opportunities to discuss with the AEA Consultant and a resource teacher were provided. Information regarding a holistically scored pre- and post- writing sample was also given. The remainder of that day was spent in a visit to Price Lab School, which provided an opportunity for discussion regarding whole language programming with some of the that school's language arts staff.

In April several educators from the Spencer area visited Starmont Middle School to observe the team taught accommodation classes. Some time was made available for questions and discussion, and according to a response received from them, their observations and impressions were favorable regarding the potential for such efforts in their schools.

Since the team teaching occurred in the seventh and eighth grades, informal interviews with four non-participant content area teachers in these grades were conducted in May to gain

insight into their perceptions regarding the project. (see
Appendix K)

The principal, two regular education classroom teachers, and
the S.C.I./resource techer were interviewed regarding their
observations and insights pertinent to the accommodation project.
(see Appendix L)

CONCLUSIONS

The accommodation strategy of teaming a regular education
classroom teacher and a special education teacher in the regular
classroom to address the academic and affective needs of mildly
handicapped students is in accord with the concept of the least
restrictive environment. Although teacher effort does not
decrease, and may even increase, it seems more effective in terms
of student academic and affective achievement. In assessing
various aspects of the project, the four participating teachers
agreed that it is first necessary that all participants be open
to the feasability of this accommodation strategy. The
development of rapport between the teaming teachers was also
observed to be essential, and something that grows as time and
effort are given to it. The need for common planning time was
identified as vital to this, as well as to successful curriculum
and daily planning pertinent to the needs of the students.

The objectives of Phase I of the accommodation project were

met. Students were able to remain in the regular classroom and achieve a greater degree of academic success than previously. More teacher assistance was available to a greater number of students who were in need of it. Participating students and their parents reacted positively to the project and want to see it continue. The language arts goals and objectives of Phase II were also met, although lack of time precluded being able to include the COPS Error Monitoring Strategy or to investigate curriculum based assessment. Time for the writing workshop format was less than desired, nevertheless, what was accomplished coincided with the goals set. Positive attitude and achievement results were also in evidence in the language class.

Student scores and grades showed overall improvement. The second semester language arts grades of 18 out of 20 students in the accommodation class improved from first semester. One exception had maintained a C. The other exception had previously received a B in a pull-out class and received a C- in the team taught class. After having been taught the simple sentence segment of The Writing Strategy, 17 out of 20 students increased the percentage of complete sentences in a writing sample. The average increase for the entire class was 16%, from 76% to 91%. The average increase for the special education students was 9%, from 79% to 88%. Math skills of students were observed to increase. The second semester grades of the special education students were in most cases lower than those of first semester; however, they were usually higher than those of the previous

school year. The mean increase of pre- and post- text related test scores of special education students was 44% for the 7th grade accommodation class and 22% for the 8th grade team taught class. The mean increase for these same groups of students on the pre- and post- Stanford Diagnostic Math tests was 13% for 7th grade and 11% for the eighth grade.

Several positive comments by participating language arts students and their parents indicated that two teachers in the classroom were an asset. 11 out of 20 parent attitude surveys sent out in May regarding the language arts class were returned. Names were usually not included, therefore it was not possible to assess all of the responses of the parents of the special education students. It was known, however, that parents of at least three of these five students responded and that their comments were positive. (see Appendix I for sample comments) With the exception of one response, all indicated a desire for this program to continue and for their son or daughter to be a participant in it.

Responses to parent and student attitude surveys from the math classes were similarly positive. The most frequent responses referred to the increased availability of help with two teachers present in the classroom, and many commented that they were doing better than last year.

Regarding the student rating scale which the language arts students did, most of the pre- and post- scores of the special education students were in the acceptable range. The exception

was student A's scaled peer score of 5 in the first rating, which increased positively to an 11 in the second. These were scores of a B.D. student who had had a pull-out language arts program during the first semester of the 1987-88 school year. One item of concern regarding the responses of the class of twenty students was item 45, "I'm dissatisfied with my progress in school." In the first rating 11 out of 20, and in the second rating, 10 out of 20 marked this true. Both times this included 4 of the 5 identified special education students. These students were later asked to provide written explanatory comments regarding this. One student said that she must have marked that item incorrectly, so did not write any comment. Some answers specified difficulties in a particular class or classes. Other comments related to occasional problems of a more general nature, for example, difficulty with tests and understanding assignments, and not having good enough grades. These concerns of the students warrant monitoring. All staff members need to be made aware of these student attitudes and together via curriculum and method changes, as well improving in sensitivity to the students, work to aleviate and change these negative attitudes to more positive ones.

In the seventh and eighth grades three special education referrals were made this school year. One involved 7th grade student E, who had been a resident of MHI, Independence, Iowa for 3/4 of his sixth grade year. He was involved in both accommodation classes. In April, he was staffed as a B.D.

student to receive pull-out programming one period per day for improving his social skills.

The second student had previously been an identified special education student. When he was in sixth grade his parents elected to remove him from the program. He was a student in the 8th grade math accommodation classroom. His parents recognized that he would need help in high school and hoped that he would qualify again for resource room assistance. He had evidently increased his math skills enough in the accommodation math class that he did not qualify. At this time there is no accommodation class planned for 9th grade math. His educational needs will need to be addressed by the regular education staff at the high school. Extended contact time, perhaps after school or during study periods will probably need to be established. Hopefully, effort and concern for this student's educational needs will be met.

The third student had not previously been referred for special education programming and was not in the accommodation classroom. She was staffed for assistance in math in ninth grade.

During the 1986-87 school year one new eighth grade student was staffed for resource room programming to improve his written expression. Four were already on the roster for math assistance, two of these also received help with written expression. One other eighth grader received reading and written expression programming.

It would seem that the project was somewhat successful in lowering referrals during the 1987-88 school year. Some students are remaining in the regular classroom, because of the accommodation classes which would not otherwise be possible. Others who are at risk are also being helped. Two younger students who are potential pull-out language arts students will be serviced in the 6th grade language arts/reading accommodation class with the hope that this will meet their needs and keep them in the regular classroom. The referrals for special education assistance in ninth grade may not have occurred had there been an accommodation class in which they could be served. A flaw in this project has been that carry over into the high school was not immediately done. If this accommodation strategy is as successful as it seems to be, it is not in the educational best interest of the students who benefit from it to discontinue it. One wonders why it is seen as appropriate at one level and not at another. Since both language arts and math will be affected in 1989, it appears that more effort will be undertaken to ensure transfer of this accommodation strategy in the 1989-90 school year.

Most of the non-participant teachers were generally supportive and thought the teaming of special and regular education teachers appropriate in the math and language arts classes. Ability tracking of students in social studies and science classes and somewhat in language arts classes was something to which those interviewed were averse. In regard to

continuity, one teacher expressed concern that once grant monies stopped, non-participant teachers might be required to have more duties and/or larger classes in order for the district to financially facilitate team teaching with smaller numbers of students.

Participating team teachers emphasized the importance of shared respect, trust, and cooperation in a team teaching relationship. Unique to the pairing of regular and special education teachers was the combining and sharing of the expertise from these two facets of education. The regular education teachers learned some useful monitoring and grouping techniques and activities to be used in these classes and the special education teachers learned more about particular content area instruction such as pacing that is more accelerated than that of a special education room. Flexibility was essential. There was much conferencing and collaborating regarding appropriate procedures for whole classes as well as for individual members of these classes. Another positive factor of the team teaching relationship was the encouragement and support team members gave one another. When dealing with low achieving students, daily progress is not always apparent. One special education teacher who had not previously been a regular classroom teacher appreciated being recognized as a "real" teacher by staff and students. It was felt that the view of special education teachers and programs by others had been enhanced by this accommodation strategy.

Much time and effort went into this project. Student
attitudes were positive and achievement improved. It was
gratifying to not only sense, but to see that progress had been
made with the students, and that some openness to the concept of
serving mildly handicapped students in the regular classroom on
the part of other staff exists.

IMPLICATIONS AND RECOMMENDATIONS

The results of this accommodation project indicated that
this effort was primarily positive. One caution exists regarding
the dilemma of tracking students. In a small school district it
is difficult to avoid this if even one or two subject areas are
tracked. Math seemed more compatible to achievement grouping.
Opinions varied in regard to this type of grouping in language
arts. Heterogenity seemed to be the more desired mode for
language arts, as indicated by the language arts teachers and the
principal. The language team sensed toward the end of the
semester that the three to four higher achieving students had not
been sufficiently challenged. This was verified by the students'
comments. If this had begun first semester, hopefully, that
dilemma would have been resolved during second semester by
implementing more varied writing activities. In addition, the
groundwork that had been laid via the learning of the simple
sentence writing strategy would be built on in the practice of

compound and eventually complex semtences.

It is best to implement such an endeavor at the beginning of a school year. Beginning the language arts effort second semester necessitated changing the schedules of some teachers and students, and during the transition compounded the planning responsibility and effort of the teaming teachers.

The teams observed that to begin planning the previous school year for such an endeavor would be a positive change. An observation site could also be visited prior to the implementation, as well as once a project had begun.

Earlier education and involvement of the total staff regarding the rationale of the teaming process would be beneficial. A trusting and knowledgable envircnment needs to be established at the building level as well as within a team.

The building administrator was very involved and supportive of this project and the people in it, and in fact initiated it. It would be very difficult to accomplish such an endeavor successfully without such support. Scheduling and planning time are facilitated by the adminstrator, and he or she also has much influence over whether or not a school's environment is receptive and supportive.

In 1988-89, this accomodation strategy was to further expanded to include having this special education teacher also team teach an 8th grade language arts class with another regular classroom teacher. A revision of these plans eliminated the 7th grade team taught language arts class for 1988-89, since there

would be only one identified special education resource student in that grade, and he would be receiving pull-out programming. Due to the numbers of identified special education students and their educational needs, and the willingness of regular classroom teachers, 5th, 6th, and 8th grades will each have a language arts/reading accommodation class team taught with the resource teacher. The 6th grade regular classroom team teacher previously team taught the 7th grade language arts class. The 5th and 8th grade regular classroom teachers will be involved in the project for the first time.

For similar reasons, the math accommodation classes will be in the 5th and 8th grades, rather than in 7th and 8th. The regular classroom teacher will continue to team in the 8th grade class. The 5th grade regular education classroom team teacher will be new to the project. There will be a new S.C.I./resource teacher working with both the 5th and 8th grade math classes.

There will be ongoing assessment of the project during the next school year, including all the revisions that will occur. There is concern that there be sufficient time, energy, and agreement regarding the philosophy of teaching, in general and the methods of teaching certain subject matter, in particular. Since two to three different pairings will be involved for each special education teacher, and at different grade levels, it is to be expected that much flexibility and adaptation will be required of team members. Respect and trust were evident between team members this first year. Concerns could be discussed

without these being threatened. Such an atmosphere is essential. Cooperation and teaming cannot be one-sided. It is hoped that these will exist next year as well.

Time is to be appropriated for the special education teachers to have sufficient opportunities for planning with their regular classroom team teachers. Time is also to be allotted for potential pull-out servicing of students.

The regular classroom seemed a much more sensible setting for appropriate attention and instruction to be given to mildly handicapped students than most pull-out situations. These students and their classmates, for the most part, experienced success. When brief one on one sessions were needed, the teaming situation often facilitated them. If the whole school were to have a common study period, this would provide for all students the time sometimes necessary to conference with teachers. Most students were able to be successfully serviced by the regular and special educators within the regular classroom. Occasionally that is not possible and pull-out programming should be available when needed.

As previously indicated, if this accommodation is successful, and it appears to be, it is self-defeating if it is not transferred to the high school setting. The attitudes of most of the students were favorable toward it, and more success was being experienced by them.

Continued funding of such projects is an issue of concern. Possibly that was involved in the lack of transfer of this

project to the high school setting, although that will hopefully be remedied next year. It may be prudent to combine general and special education funds to facilitate such joint endeavors.

When a school district is large enough it is possible for each special education teacher to team with regular classroom teachers within one grade level. such as was done at Roosevelt Middle School in Mason City. The benefit of this alignment is that at least one person is able to monitor students across content areas. In smaller districts, such as Starmont, it seems more feasible for the special education teachers to team within a particular content area. This has the potential for promoting insights and continuity from year to year regarding students within these classes.

The resource teacher as a team teacher is fulfilling the role of being a resource on the scene rather than in the wings. Enabling students to succeed in the place (the regular classroom) where it matters to them, can enhance their self-esteem and can help to generate other successes. The accommodation strategy of a regular education teacher and a special education teacher cooperatively team teaching in the regular classroom in order to better meet the needs of all children, including those who are mildly handicapped, is a viable option and is in keeping with the intent of the least restrictive environment concept in PL 94-142.

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Appendix A

Objectives for Phase I Accommodation Project

1. Establish or improve attitude toward school and math.

2. Improve socialization skills by remaining in classroom
    instead of pullout.

3. Decrease the chance of "falling through the cracks" with more
    monitoring.

4. Improve attitude toward special education teachers and
    programming to extend to other disciplines (they are resource
    people).

5. Increase awareness of application of math skills.

6. Reinforce feedback procedures with use of two teachres.

7. Create an awareness that Resource teachers aren't just for
    tutoring.

Appendix B

MATH   12:38 - 1:18   GRADE: 8   DATE: DAY

****
12:38-12:43 FLASH CARDS - FIVE MINUTES IN GROUPS - OR TIMING (EVEN DAYS ONLY)

****
12:44-12:49 OPENING - CAN CONTAIN COMMENTS BY TEACHERS - IS ALSO A TIME FOR
STUDENTS TO ASK MATH RELATED QUESTIONS FROM OTHER DISIPL.NES - ANNOUNCEMENT - (5
- 10 MINUTES)

****
REVIEW - CORRECT PREVIOUS DAYS ASSIGNMENT - ANSWERS ON OVERHEAD AND BOTH
TEACHERS GIVING INDIVIDUAL ASSISTANCE ON ERRORS. (5 - 10 MINUTES)

****
ACTIVITY - INTRODUCTION OF NEW MATERIAL (ONE TEACHER PRESENTING THE OTHER
MONITORING) - SMALL GROUP ACTIVITIES (BOTH TEACHERS LEADING ACTIVITIES) - (10 -
25 MINUTES)

****
PRACTICE - INDIVIDUALS WORKING ON DAILY ASSIGNMENTS (BOTH TEACHERS MONITORING -
(10 - 20 MINUTES)

****
COMMENTS AND EVALUATION

73

Appendix C

Name

Quarter

Tests

Quizzes

	Tests
100	
95	
90	
85	
80	
75	
70	
65	
60	
55	
50	
45	
40	
35	
30	
25	
20	
15	
10	
5	
0	

	Quizzes
100	
95	
90	
85	
80	
75	
70	
65	
60	
55	
50	
45	
40	
35	
30	
25	
20	
15	
10	
5	
0	

Score _ _ _ _ _

Date _ _ _ _ _

Score _ _ _ _ _

Date _ _ _ _ _

Appendix D

STUDENT CAREER INTEREST INQUIRY

Name _____

Date _____

1. What kind of job would you like to know more about?

_____

2. Who do you know who has that kind of job?

_____

3. What would be your first choice for a job after high school?

_____

Second choice? _____

4. Do you plan to go on to another school after high school?____

If so, where? _____

To study what? _____

If not, why not? _____

NAME _____

Please tell us what you have thought about each of the career visitors we've had in the class this semester.

CAREER VISITOR	INTERESTING EVEN IF I DON'T PLAN TO DO THIS KIND OF WORK	INTERESTING BECAUSE I'VE THOUGHT ABOUT DOING THIS KIND OF WORK	INTERESTING BECAUSE IT GAVE ME SOME NEW IDEAS ABOUT WORK	NOT INTERESTING TO ME BECAUSE
SCHOOL NURSE				
COSMETOLOGIST				
ARMY RESERVES COLLEGE				
CONSTRUCTION				
BODY WORK MECHANIC				

I (WOULD -- WOULD NOT) LIKE TO HAVE MORE CAREER VISITORS COME TO CLASS. (WHY)

I THINK LEARNING IN SCHOOL IN (IMPORTANT -- NOT IMPORTANT) TO ME.
(WHY)

I (LIKE -- DISLIKE) GOING TO SCHOOL.
(WHY)

IS SEMESTER MY IDEAS ABOUT WHAT I NEED TO LEARN IN SCHOOL HAVE (STAYED THE SAME -- GOTTEN WORSE -- IMPROVED).
(WHY)

Notes. Explanatory comments regarding follow-up
questionnaire:

All of the identified mildly handicapped students who
answered indicated that learning was important to them, that they
liked going to school, and that their ideas during first semester
about what they needed to learn in school had either stayed the
same (1 student) or improved. Generally when the "not
interesting" column was checked, it was accompanied by a negative
comment regarding the type of work, not the quality of the
presentation (which varied considerably). Only one student
indicated disinterest in having more career visitors.

Appendix E

Total Seventh Grade Math Accommodation Class	More than in other classes	Just like other classes	Less than in other classes
My participation is	8	10	0
My attention in class is	4	13	1
Objective for lesson obvious	11	4	3
Teachers use multiple ways to demonstrate	7	11	0
Amount of praise is	8	8	2
Amount of individual help	12	5	1
Expectations are clear	8	9	1
Pace	10	6	2
Modeling	15	3	0
Guided Practice	12	5	1
Structured	4	10	4
Positive Atmosphere	11	5	2
Disciplined	4	12	2
Varied and frequent response	9	9	0
Review relevant past learning	8	10	0

I feel good about my progress in math this year. ___18___ yes ___0___ no

Reason: _____

Would you like to see the cooperative math class continued? ___17___ yes ___1___ no

Reason: _____

Would you like to be a part of a cooperative math class next year? ___17___ yes ___1___ no

Reason: _____

Total Eighth Grade Math Accommodation Class	More than in other classes	Just like other classes	Less than in other classes
My participation is	7	9	1
My attention in class is	3	14	0
Objective for lesson obvious	9	7	1
Teachers use multiple ways to demonstrate	13	4	0
Amount of praise is	6	8	3
Amount of individual help	14	2	1
Expectations are clear	8	9	0
Pace	7	8	2
Modeling	12	5	0
Guided Practice	12	5	0
Structured	5	9	3
Positive Atmosphere	12	4	1
Disciplined	6	9	2
Varied and frequent response	7	9	1
Review relevant past learning	10	7	0

I feel good about my progress in math this year.   __13__ yes __4__ no

Reason: _____

Would you like to see the cooperative math class continued?   __15__ yes __2__ no

Reason: _____

Would you like to be a part of a cooperative math class next year?   __15__ yes __2__ no

Reason: _____

Dear Parent:

In order to gain information about the cooperative math class, we would appreciate your taking a few minutes to complete this survey. Your input will help us make future plans to meet the needs of our students.

Sincerely,

Math Teacher and S.C.I./Resource Teacher

I feel good about my child's progress in the
cooperative math class. _____ yes _____ no

I feel that suggestions that I make regarding
my child's program will be acted upon. _____ yes _____ no

I feel welcome to call or visit school. _____ yes _____ no

I feel there has been adequate communication
about the cooperative class. _____ yes _____ no

I feel there has been adequate communication
about my child's progress in the cooperative
math class. _____ yes _____ no

How well does your child like math after taking part in the cooperative math class? Would you like to see the cooperative math classes continued?

_____

_____

Would you like your son or daughter to participate? _____

The following things concern me most about my child.

1._____

2._____

3._____

If I could change or recommend three things about the accommodation class, I would:

1._____

2._____

3._____

Note.   16 of 35 7th and 8th grade combined, received.
PLEASE RETURN THIS FORM AS SOON AS POSSIBLE.
THANK YOU FOR YOU COOPERATION

Appendix F

8TH PERIOD/7TH GRADE LANGUAGE ARTS

12-16-87

GOAL- Increase communicative abilities to receive and respond through the processes of reading, writing, listening, speaking, thinking, and viewing.

OBJECTIVES-

READING

1. Increase reading for enjoyment

2. Selection
3. Appreciation
4. Reaction
5. Elements of story or written piece
        Analysis - Theme
                        Purpose
                        Audience, form, voice
6. Library/research skills

WRITING

1. Encourage legible writing
2. Writing - appropriate (form, voice) for particular purpose, audience
3. Use of appropriate mechanics in final drafts
        eg. punctuation, capitalization, word usage, spelling

MEANS FOR MEETING GOALS AND OBJECTIVES

Sentence Writing Strategy (PENS)
Error Monitoring Strategy (COPS)
Daily Oral Language - Start daily class sessions with this.
Reading for Enjoyment - Reading/Language Connection
Spelling
Word Processing - increase opportunities as kids become adept at keyboarding.
Writers' Workshop - Daily

MEANS OF EVALUATION

Pre and post Strategy tests

ITBS scores - carefully used

Work in In Process folders

Observation

Investigate holistic scoring of written work

Investigate Curriculum Based Assessment

Ongoing in-class testing and evaluation

LEARNING FORMATS

Cooperative learning - various structures possible - will increase...

- motivation
- interaction (social)
- on task behavior
- organization

Individual -   Writing Workshops

Incentives -   language or reading items to be awarded
           -   Computer use - language software, eg. vocabulary
               programs

FURTHUR IMPLICATIONS

Combining reading and language arts - eg. 6th grade class being done this year 1987-88. Also at Hoover Middle School team taught classes in Waterloo.

Restructure spelling program

Relate L.A. skills more across content areas (Social Studies - letters)

More coordination between Reading and L.A. classes as they are now structured

Appendix G

DATE: DAY:

COOPERATIVE TEACHING LESSON PLAN
7TH GRADE - 8TH PERIOD

===
2:04 - 2:09   Anticipatory Set - D.O.L. (Daily Oral Language)

===
2:09 - 2:14   Check and/or review previous assignment

===
2:14 - 2:24   State Objective, Provide Input, Model, and Check for
               Understanding (Mini-lesson)

===
2:24 - 2:30   Guided Practice

===
2:30 - 2:43   Independent Practice

===
2:43 - 2:44   Closure Evaluation

===

Appendix H

OBSERVATION

Teacher	Student
	Date

YES   NO

1. Homework completed on time

2. Attentive to class discussion

3. Participates when called on

4. Volunteers in class discussions

5. Attentive to seatwork assignment

Appendix I

Total Seventh Grade Language Arts Accommodation Class ( ) Indicates Special Ed. student opinions	More than in other classes	Same as other classes	Less than in other classes
I participate in this class.	8	11 (4)	1 (1)
I pay attention in this class.	4 (1)	15 (4)	1
I know what I'm going to learn from each assignment.	6 (1)	12 (3)	2 (1)
My teachers use different ways to explain assignments.	10 (2)	8 (3)	2
My teachers tell me when I do something well.	9 (3)	11 (2)	1
I get the help I need for assignments.	11 (2)	7 (3)	1
I know what I'm expected to do on an assignment.	2	17 (4)	1 (1)
I feel this class goes quickly.	14 (5)	4	2
We do parts of our assignment together.	12 (4)	8 (1)	0
I know what routine to expect for each different activity.	6	13 (4)	1 (1)
I enjoy this class.	14 (3)	5 (2)	1
Students are disciplined when necessary.	5 (1)	15 (4)	0
I have opportunities to respond in different ways in class.	8 (2)	12 (3)	0
We review what we've learned before.	6 (3)	13 (2)	1

I feel good about my progress in language arts this year. 18 (5) yes   2   no

Reason: _____

Would you like to see the cooperative language arts class continued?   19 (5) yes   1   no

Reason: _____

Would you like to be a part of a cooperative language arts class next year?   17 (5) yes   3   no

Reason: _____

Appendix I

STUDENT ATTITUDE SURVEY- LANGUAGE ARTS
RESPONSES OF I.D. SPECIAL ED. STUDENTS

1. I feel good about my progress in language arts this year.

    - My grade is up.
    - I get better grades than I did last year.
    - Getting more out of it with two teachers
    - I'm doing good on assignments
    - I'm doing better than I used to.

2. Would you like to see the cooperative language arts class
    continued?

    - Students learn more.
    - It's helped me a lot.
    - It's a lot more fun and enjoyable.
    - It is easier.
    - You get a better grade, and you learn better.

3. Would you like to be a part of a cooperative language arts
    class next year?

    - The teachers help me.
    - I get more help with two teachers.
    - You do a lot more things, and it's more interesting.
    - I thought it was fun.

(What did you like and why?)

    - I thought that it was great.
    - I liked the help I got with two teachers.
    - PENS because it's fun.
    - The help; the activities

(What didn't you like and why?)

    - Having to get over 90% to pass a paper.
    - D.O.L.s - boring
    - None

Dear Parent:

In order to gain information about the cooperative language arts class, we would appreciate your taking a few minutes to complete this survey. Your input will help us make future plans to meet the needs of our students.

Sincerely,

Language Arts Teacher and Resource Teacher

I feel good about my child's progress in the
cooperative language arts class. _____ yes _____ no

I feel that suggestions that I make regarding
my child's program will be acted upon. _____ yes _____ no

I feel welcome to call or visit school. _____ yes _____ no

I feel there has been adequate communication
about the cooperative class. _____ yes _____ no

I feel there has been adequate communication
about my child's progress in the cooperative
language arts class. _____ yes _____ no

How well does your child like language arts after taking part in the cooperative language arts class? Would you like to see the cooperative language arts classes continued?

_____

_____

Would you like your son or daughter to participate? _____

The following things concern me most about my child.

1._____

2._____

3._____

If I could change or recommend three things about the accommodation class, I would:

1._____

2._____

3._____

PLEASE RETURN THIS FORM AS SOON AS POSSIBLE.
THANK YOU FOR YOU COOPERATION

PARENT ATTITUDE SURVEY - LANGUAGE ARTS

RESPONSES OF PARENTS

- She likes the cooperative class better. Sometimes if she can't understand one teacher, she can understand the other.

* - She is doing much better in language arts.

- Doesn't like it much - feels she can do more than what's given. (higher achieving student)

* - He feels OK about it.

- She thinks class and school is fun. She likes doing sentences and not doing homework in a workbook. Her grades have improved.

- She thinks it's fine. Concerned about her understanding what whe reads.

- He seems to like it, and he seems to stay with his task if given more help or attention which this class does. I feel he has improved in organization, completing work, and attitude about his work since he's been in this class. Just recently, I have noticed a big change in his organization of things at home. Whether due to his age or the class, I believe he's improved.

* - He is enjoying the class now (because of programs like this and the teachers that participate in them), whereas before he was discouraged.

- I can see my daughter is doing very well with your program.

Note. * Parents of special education

Appendix J

Special Education

Cooperative Teaching Begins at Starmont Middle School

The traditional approach to resource and special classes with integration programs has been to pull low achieving students from the regular classrooms and provide the remediation needed in another classroom. This traditional approach has been criticized for years for its ineffective methods, scheduling problems, and damage it has caused to students self-concepts. In an attempt to correct these problems the Starmont Middle School has started a cooperative teaching program, teaming regular and special education teachers. At this time they have team teaching in two math classes (7th & 8th grades), with plans to expand second semester into Language Arts. Students with various learning problems are scheduled into specific math courses regardless of individual differences.

Mark Klinger, math teacher, and Carol Straka, resource teacher, discuss plans for their next math class where they share teaching responsibilities.

Starmont student Chris Crawford receives assistance with his assignment from multicategorical teacher Cindy Breitbach.

Principal Denny Coon said, "One student told Cindy Breitbach, Multi-Categorical teacher, 'I'm like the other kids now.' That is one of the reasons I really feel good about this program. The special education children are gaining more confidence in themselves and it is a very positive learning process."

The benefits of this program are the exchange of techniques between teachers, and the reduction of the labeling of students. It also serves more students, especially those who wouldn't have qualified for assistance; develops more positive and effective approaches to serving mildly handicapped students; increases teacher to student contact; detects problems earlier; and improves attitudes toward the staff and students involved in special education.

A big key to the success of this project has been the matching of personalities, sharing of responsibilities, and the scheduling of common planning periods for the teachers teaming together.

"We do a lot more talking and thinking about the individual needs of our students. We can do a lot more monitoring with two of us than we could do before," said Carol Straka, Resource Teacher. "The kids who are struggling but who have not previously had access to supplemental help also benefit from it.. Students never leave the classroom without their questions answered."

The project has been partially funded by a grant from the DOE, made available through Keystone's Special Education Services Division.

Appendix K

NON-PARTICIPANTS' INTERVIEW COMMENTS

1. What was your initial reaction to the team teaching project
    in the middle School? Why?

    -Looked at it as being positive
    -Didn't see it as a threat to participant teachers
    -Kids needed it
    -Don't know that much about it--supposedly working fine
    -Smaller classes don't necessarily need another teacher--
     inequality in class sizes
    -Tracking (ability) system used in this school several years
     ago was not a positive experience
    -Good idea for Language Arts and Math departments
    -Some of those students could use the help
    -Didn't understand at first - Didn't understand the
     combination (reg. and spec. ed.) had not been informed or
     told why

2. Is your current opinion the same or different? Why?

    -Don't know a whole lot more about it
    -Have read more about it
    -Don't yet understand the rationale behind it - thought
     resource room great (Increased self-esteem of kids and
     some improvement in skills) If working well, why change?
     Research?
    -Is this better?
    -Little early to see any results
    -Imagine it is working--don't know that much about it
    -Can see that it's helping the kids
    -Need two teachers to stay on top of it
    -The planning time that you need and have is used
    -More positive picture of special ed. by staff, students.
     and parents---don't see it as isolation
    -Ignorant - All resented fact that it was done without
     general dispensing of information. Staff was outside of
     something they should have been inside of.

3. What questions do you have regarding it?

    -Teacher combinations--how to get compatible ones?
    -How are top kids dealt with? How do they accept it?
    -See a need for planning
    -How do resource teachers follow all kids--eg. 8 different
     ways?
    -Prep periods needed--don't have enough
    -Is discipline more of a problem? (because all/most
     students are at a low level of achievement)

-Repeat - Is it better? Rationale?
-Funding--how keep up--other teachers hve bigger classes, more duties?

4.   Would you be open to participating in a team teaching situation if that were possible? Why or why not?

-Sure. I like to try things--want to know if it will do a better job.
-Wouldn't want a class of students all at one level in my content area (discipline a potential problem)
-Wouldn't bother me--but the way I teach, another teacher wouldn't always be needed
-Yes, but both need to be strong teachers--one shouldn't overshadow the other

5.   What suggestions do you have toward the team teaching effort?

-Teaming - compatibility
            personalities
            teaching goals
-Physical arrangement - two rooms are helpful
-Beginning of year better for starting than the middle of the year
-Can't team teach all classes - prep time, etc., not feasible
-It was good that information was presented about it
-Make aware of it
-Team teaching with same philosophy - part of same forward effort
-Good only on paper? Lip service?
-Have a built in aversion to tracking - need the inspiration (of variety of abilities)

Appendix L

PARTICIPANTS´ INTERVIEW COMMENTS

1.   Why did you participate in the team teaching project?

      -Always in favor of keeping kids in class as much as
       possible
      -Sensed that pulled-out kids felt different no matter
       how good sp. ed. teacher was
      -Sp. ed. teachers trained well to meet kids´ needs
      -Opportunity to help kids who were struggling in L.A. class
      -Gain new ideas and strategies from another person
      -Has worked with multi-handicapped persons outside school
       setting--not a great change to combine
      -Has always run a slow math class
      -Has been concerned about at risk kids--had dealt with that
       several years ago
      -Math class for slower kids to be dropped--so pushed for
       this project
      -Opportunity to increase integration-especially for SCI kids

2.   Were the project goals met?

      -Yes, for first year--went very well
      -Affective goals
      -Teacher awareness
      -Yes
      -Kids like it--glad they´re part of other kids
      -Yes, kids´ needs being met
      -Changed over the course of the year? Skills (content) and
       survival skills
      -Some student attitudes still not good
      -Some student attitudes much improved toward selves and
       others

3.   Were the individual class objectives met?

      -Math skills improved
      -Use of calculators on proportion assignments increased
       speed and confidence
      -Yes--cover curriculum. Have everyone pass.
      -What we set out to do, we did.
      -Not quite the same objectives or material covered as in
       other group at this grade

4.   Postitives

      -Regarding the kids who were added to the class--in general,
       they feel good about L.A.
      -Struggling kids appreciated having two teachers

-Good to have experience with resource teacher--
 accommodation insights (for teacher)
-Could keep better tabs on kids this way
-Boosted self-concepts of lots of kids
-Better attitude toward math (kids)
-Increased willingness to participate in class (kids)
-Kids feel better about themselves
-Causes good interaction with other staff
-Academic gains better in regular program than in pull-out
 program
-Boost in special ed. teacher morale
-More follow-up on kids was done
-Kids not allowed to fall through cracks
-Carry over to other classes
-Nice to have extra eyes--additional opinion regarding
 evaluation
-SCI kids have had more interaction with reg. classroom
-Other teachers' opinions of SCI kids have risen
-Helped SCI teacher be updated on pace and flow of reg.
 classroom
-SCI and R teachers used more as resources--other teachers
 are becoming more risk takers
-If an attitude problem develops between a BD kid and one
 teacher, that student may be OK with the other--so whole
 period is not lost for that student
-Kids in accommodation class were dropped from Ch.I Math,
 therefore, other kids were able to serviced in Ch.I Math

5.   Negatives

-TIME - increases needed planning time
-When someone else is added to the classroom it changes the
 atmosphere (once role is established--not any harder or
 easier--might be more effective--harder at first)
-Scheduling
-Planning time
-Potential problem - if a child really needed pull-out and
 didn't get it
-Hassle with scheduling/planning time
-Would like to have more kids involved
-Concerned about the possibility of no extension to H.S.
-Upper kids - needed challenging more--maybe didn't need
 some of the structure that was provided for others

6.   What would you do the same?

-Structure - homework policy--liked in some ways
-Beginning of class--attention and academic benefits(D.O.L.)
-Writing strategy good for some of them--would use again
-Almost everything
-Visited Mason City at right time
-Can't answer-the make-up of class and roles for teachers

   will dictate what is done
   -It might not work anywhere else--unique to S.M.S.
   -Plan tentatively--flexibility- Plan B, C, etc.

7.   What would you have done differently and how would you have
     done it?

     -Test differently
     -Early attitude survey
     -Intent of class more carefully explained to kids--be more
      specific--extra help available for kids
     -More into own writing--year long class would better
      facilitate this
     -More planning for reinforcements/incentives
     -Communicate better the year before with staff
     -Goals - more time together prior to school starting
     -Have more heterogeneous grouping
     -Hardest thing regarding replication--matching of teachers--
      what if reg. ed. techers not open to it?
     -More daily and preplanning --another workshop day or two in
      fall to iron out bugs
     -More sharing of ideas with Elementary and H.S. teachers
     -SCI teacher - more teaching

Table 1

Special Education Student Project Participants

Seventh Grade

Student	Category	Identified Areas of Disability
A	BD	Written expression, math, social skills
B	LD	Written expression, reading, organization skills
C	LD	Written expression, organization skills
D	LD	Math, organization skills
* E	BD	Social skills
F	MD	S.C.I. - total

Note. *Student E was staffed 4/88.

Eighth Grade

Student	Category	Identified Areas of Disability
A	LD	Written expression, reading
* B	LD	Math, organization skills
C	MD	S.C.I. - total
* D	LD	Math, written expression
E	LD	Written expression, reading
F	MD	Math, organization skills

Note. *Student B had resource room support reinstated in March.

Student D was exited from special education roster in October, 1987, at parental request.

Table 2

Pre/Post Math Text-Related Tests
Sept., 1987 / May. 1988

7th Grade Students		Pre %	Post %
A		13	65
B		29	72
C		27	60
D		22	53
E		40	80
F		27	88
	Mean	26	70
	Mean improvement	44%	

Eighth Grade Students		Pre %	Post %
A		43	76
B		31	50
C		29	56
D		37	48
E		37	70
F		57	68
	Mean	39	61
	Mean improvement	22%	

Table 3

Pre-/Post- Stanford Diagnostic Math Scores

7th Grade Students	Sept.,'87			Apr.,'88		
	Raw	G.E.	%	Raw	G.E.	%
A	42	3.7	3	58	4.6	8
B	71	5.3	23	71	5.3	18
C	58	4.6	11	80	6.2	28
D	57	4.5	10	65	4.9	12
E	62	4.8	14	94	8.9	59
F	49	4.1	6	73	5.5	20

8th Grade Students	Sept.,'87			Apr.,'88		
	Raw	G.E.	%	Raw	G.E.	%
A	56	5.9	24	58	6.2	22
B	45	5.1	13	66	7.0	32
C	39	4.8	8	59	6.2	23
D	33	4.4	4	42	4.9	8
E	49	5.4	16	65	6.9	30
F	57	6.1	26	71	7.7	39

Table 4

Math Semester Grades for Two Years

'87-'88 7th Graders	'86-'87 6th Grade 1	2	'87-'88 7th Grade *1	*2
A	F	F	C	D
B	C+	D	B	C
C	F	F	C	D
# D	?		B	C
ⓐ E	?	?	B	C

Note.
  # M.H.I.-6th Gr.
  ⓐ Pull-out 6th Gr.
  * Team-taught semesters

'87-'88 8th Graders	'86-'87 7th Grade 1	2	'87-'88 8th Grade *1	*2
A	D	D	C	C
B	F	F	D	D
C	D	D	D	C
# D	F	D	D	F
E	D	D	C	C
ⓐ F	C	C	B	C

Note.
  # Withdrawn from sp. ed. by parents 10-87
  ⓐ Pull-out math - 7th grade
  * Team-taught semesters

Table 5

Two Year - Language Arts Semester Grades

'87-'88 7th Graders		'86-'87 6th Grade 1 2			'87-'88 7th Grade 1 *2	
# A	L.A.	F	F		B	C-
	Sp.	C	F			
B	L.A.	D	D		D-	B-
	Sp.	C+	D-			
C	L.A.	D	D		D-	C
	Sp.	B	C			
D	L.A.	F	D+		D	C
	Sp.	C-	B-			
ə E	L.A.	?	F		F	D+
	Sp.	?	C-			

Note.
     # Pull-out 1st sem. 7th - Language Arts
     ə M.H.I. 6th grade
     * Team-taught semester

     L.A. = Language Arts
     Sp. = Spelling

Table 6

Pre-/Post- Writing Sample Scores

Student	% Complete Sentences	% Complicated Sentences	% Complicated Punctuated Correctly
A	75/ 83	25/ 33	50/ 0
B	71/ 86	29/ 29	50/ 50
C	50/100	13/ 50	0/ 33
D	100/ 80	83/ 20	80/100
E	100/ 91	0/ 25	0/100

Table 7

Pre-/Posttest Results*
7th Grade Language Students

Behavior Rating Profile - Student Rating Scales
Linda L. Brown and Donald D. Hammill

Student	HOME Pre #R	#S	Post R	S	SCHOOL Pre R	S	Post R	S	PEER Pre R	S	Post R	S
A	11	8	16	11	13	9	16	11	7	5	17	11
B	13	9	14	10	12	9	18	13	13	9	16	10
C	16	11	15	11	19	14	17	12	18	13	19	14
D	18	13	17	12	16	11	18	13	13	9	18	12
E	17	12	14	10	15	11	12	9	10	7	14	9

*   Pre-test - Feb., '88; Post-test - May, '88

Note. # R = Raw score
         S = Scaled score