

Mainstreaming: Modifications and Interventions  
for Mainstreaming Mildly Academically Handicapped Students  
in Regular Education

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## ABSTRACT

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Mainstreaming has been receiving increased attention following the implementation of the 1975 Education for All Handicapped Children Act and related judicial decisions. Teachers in regular classes have been asked to accommodate a wide range of ability levels of handicapped students. The research on the efficacy of mainstreaming has been scanty and inconsistent. The purpose of this study was to review relevant literature concerned with effectively mainstreaming mildly handicapped students in the regular education setting and to survey regular teachers, who have taught mildly handicapped students, for the purpose of identifying practical academic modifications used by regular classroom teachers.

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## CHAPTER I

### Introduction

The Education for All Handicapped Children Act of 1975 (P.L. 94-142) has been one of the most powerful forces responsible for allowing handicapped children to more fully participate in the mainstream of American education. Public Law 94-142 states that each handicapped child must be educated in the least restrictive environment. The least restrictive environment mandate requires that students be educated in regular education settings unless it can be demonstrated that a more restrictive setting will be more beneficial. Handicapped students who were formerly taught in self-contained special education programs have been spending more time in the regular program (Madden & Slavin, 1983).

As a result of this mandate to mainstream, teachers in regular classrooms have been asked to accommodate a wide range of ability levels of handicapped students. Not only have previously self-contained handicapped students been mainstreamed into the regular setting but handicapped students who have been identified since the mandate have added to the numbers of handicapped students remaining in the regular classroom for much of the school day. Mainstreaming and the least restrictive environment concept have required educators to rethink educational placement procedures and to implement modifications and effective interventions within the regular classroom setting (Gottlieb, 1981).

Problems in the mainstream setting led to the development of special classes and current evidence has revealed that placement of mildly academically handicapped students in regular classes is still laden with problems. Positive effects of mainstreaming appear to depend on the use of appropriate programs designed to meet the needs of handicapped students in the regular class (Madden & Slavin, 1983). Efficacy studies, as reviewed by Ito (1981), show the resource room to be an effective educational alternative for handicapped students. Sabatino, (1971) and Deno, (1978), also indicate that students demonstrated an increase in academic achievement and appropriate behaviors as a result of resource placement and mainstreaming.

Much concern has been raised regarding mainstreaming and strategies to accommodate learning differences and specific learning needs in regular instructional programs (Roddy, 1982). Partial mainstreaming or inclusion of exceptional students in regular classes for only part of the school day, has resulted in the focus on placement, rather than on education, in the least restrictive environment. Carlberg & Kavale (1980) suggest that the present trend towards mainstreaming by regular class placement may not be appropriate for certain academically handicapped children. Concern has been raised over administrative changes that have occurred in the provision of special education, without the "in-class" programming changes essential for realistic implementation of

concepts. It has been stated, however, that realization of the vision of full-time mainstreaming in the regular classes must be preceded by a major shift in implementation focus (Wang & Birch, 1984). It is further stated that the spotlight must be turned to increasing the capabilities of the regular school environment to meet the needs of individual students, rather than instituting mere cosmetic changes in the placement of students with special learning needs (Wang & Birch, 1984).

Teachers have not, for the most part, had the kind and level of preparation necessary for dealing with handicapped students within regular school settings. Regular teachers have felt that they did not possess the necessary skills to teach handicapped students (Salend, 1984). Regular classroom teachers who were informed about handicapped students and were given inservice opportunities to understand reasons for integration and practical suggestions of how mainstreaming could help the handicapped student, were reported to be significantly influenced in a positive manner towards mainstreaming (Stainback, Stainback, Strathe, & Dedrick, 1983).

There has been a lack of precise guidelines and procedures available in the professional literature for implementing mainstreaming (Salend, 1984). A major issue for educators to address has been the identification of factors and procedures that contribute to ensuring the development and implementation of

effective mainstreaming programs (Salend, 1984). Lacking a data base from which to identify potentially successful or unsuccessful mainstreaming candidates, many educators have indiscriminately placed handicapped students in the regular education setting in order to comply swiftly with the law (Salend, 1984).<sup>STOP</sup> The research on the efficacy of mainstreaming has been inconclusive (Carlberg & Kavale, 1980). A primary cause for the scanty and inconsistent results of most efficacy studies of mainstreaming has been the prevailing practice of enrolling exceptional students in regular classes, only to withdraw them for "special" instruction in a resource room (Gottlieb, 1981).

A high number of handicapped children have been identified as being capable of achieving normal growth in the regular classroom. These high risk children would only be successfully mainstreamed if they would be academically and socially prepared before re-entry (Haring & Krug, 1975). The intensive emphasis on the placement of handicapped children in contact with nonhandicapped peers was the primary indication that, from a practical perspective, mainstreaming has focused almost exclusively on administrative and process issues. As cited by Gottlieb (1981), the content of the educational program to which handicapped children should be exposed while they are in the mainstream and the specialized methods that may be required to deliver the content have seldom been a major consideration in the professional literature (Jose P., 1979).

As educators who work with mainstreamed mildly handicapped children of varied skills and abilities, teachers must become aware of the need to keep abreast of practical techniques and modification practices that better help the mainstreamed child succeed within the regular classroom setting. This paper attempted to help the regular classroom teacher to better understand mainstreaming and to provide examples of strategies and practical modifications that have helped regular classroom teachers better serve the mildly handicapped child. The purposes of this paper were (a) to review relevant literature on effective mainstreaming practices, (b) to survey 7th- and 8th-grade regular classroom teachers as to modifications and teaching procedures used for effective mainstreaming, (c) to identify academic modifications that have been effectively used by regular classroom teachers in mainstreaming mildly handicapped students, and (d) to discuss suggested modifications and changes within the present educational framework in terms of their usefulness and practical implications.

## CHAPTER II

## Review of Literature

The review of literature chapter was designed to systematically review research on mainstreaming of mildly academically handicapped children. The review considered studies examining the effects of placing students with mild academic handicaps in part-time regular classes with resource support or in full-time regular classes. The placements were designed to improve the achievement of mildly academically handicapped students. Although ~~social-emotional~~ adjustment and social acceptance of academically handicapped students by nonhandicapped students has been shown to have an indirect effect of academic achievement, ~~the~~ the main thrust of this review dealt with academic achievement. ✓

Use of certain terms related to exceptional students has changed dramatically over time and has varied from study to study and place to place. Many students identified as EMR in the 1970's may be labeled as LD (or some other category) today, and might be identified differently in different school districts or states. The students considered in this review were students who were administratively defined as being in need of special services because of mild academic learning problems, either specific or general. In this review they are referred to as mildly academically handicapped (MAH).

### History of Mainstreaming

One of the most controversial and often divisive issues in American education of the past decade has been mainstreaming. The mainstreaming movement has required educators to rethink educational placement of handicapped students (Madden & Slavin, 1983). One early argument for special class placement of mildly handicapped students was that the academic needs of these students could be better met in smaller classes with specially trained teachers and specially designed curriculum materials. Johnson's study (cited in Madden & Slavin, 1983), documented the frequent rejection of academically handicapped students by their nonhandicapped peers, and argued that the regular class was detrimental to the handicapped students' progress.

In the late 1960's the wisdom of putting students with mild academic handicaps in separate classes was questioned. According to a review by Madden and Slavin (1983), Dunn (1968) noted that instruction in classes for handicapped students was often inferior to that in regular classes, while MacMillan (1977), reported that students in these classes were often given a watered-down curriculum by teachers who were often seen as less qualified than regular class teachers (Jones & Gottfried, 1966; Dunn, 1968). Further, placement in special classes was criticized for labeling students as "special", thus making it difficult for them to reenter the mainstream (J. Johnson, 1969). For these reasons, school districts began to put students with mild academic, behavior and learning

problems back into the regular classes for part or all of the day. Parents of handicapped students (especially minority parents) began to push mainstreaming for their children (Turnbull & Turnbull, 1982).

A variety of educational policies and programs have been reviewed in the literature for implementing the "least restrictive placement" provision of P.L. 94-142. Most school districts now have a continuum of special services for academically handicapped students, ranging from separate, special schools to complete integration in the regular class (Turnbull & Turnbull, 1982).

Affleck, Lowenbraun, & Archer, (1980) defined a continuum that they maintained should be present in all school systems. Their recommended options were:

1. Special Class Placement: The child is primarily assigned to a special class and is integrated with nonhandicapped students for as much of the day as the child can be successfully placed.

2. Resource Room Placement: The child is assigned primarily to a regular classroom and receives individualized assistance, usually in academic subjects in which the student is behind expectations, from a specially trained "resource" teacher outside his or her regular class for a portion of the school day.

3. Special Services: The child is assigned primarily to the regular classroom but receives assistance in a specialized area, such as reading, mathematics, or speech, from appropriate support personnel on an individual or small group basis, usually one to

three times weekly.

4. In-class Assistance: The child is assigned to the regular classroom, and receives supportive assistance within the classroom to enable the child to succeed in this setting. This assistance might involve the use of aides, tutors, or interpreters.

5. Teacher Consultation: The child is placed in the regular classroom, and support given to the teacher to design appropriate curriculum and programs for the handicapped child.

Implementation of mainstreaming has been uneven and rarely has approached the ideal described by Affleck, Lowenbraun, and Archer (1980). In their opinion, when mainstreaming was done well, it appeared to make a dramatic difference in the behavior and self-confidence of many academically handicapped students. However, as reported by Madden and Slavin (1983), it was not uncommon to see a classroom in which a teacher was teaching 29 students a unit on verb tenses while one "mainstreamed" student was sitting back in the corner coloring or doing nothing at all (Horne, 1979).

Much has been written about the inadequacies of mainstreaming outcomes. Gottlieb (1981), reported that earlier reviewers of mainstreaming effectiveness (e.g., Cegelka & Tyler, 1970; Goldstein, 1964; Guskin & Spicker, 1968; Kirk, 1964; MacMillan, 1977; Quay, 1963; Semmel, Gottlieb, & Robinson, 1979; Strain & Kerr, 1981) concluded that the available evidence at that time concerning mainstreaming outcomes was inadequate to support useful conclusions

regarding it's effectiveness.

In a recent review by Madden & Slavin (1983), instructional problems were addressed. They concluded that in addition to the continuing problems of poor social relationships between mildly academically handicapped and nonhandicapped students, other problems were inherent in classes that contain a wide range of abilities. Very often, they stated, a lesson directed to students at one level is too difficult or too easy for students at another and this in turn leads to frustration or boredom on the part of the students at the low or high ends of the academic continuum. In turn, these feelings of frustration or boredom could precipitate behavior problems and lack of motivation to learn. According to Madden & Slavin (1983), although some regular classroom teachers may have felt ill prepared (Gickling & Theobald, 1975), others felt as if time spent in developing such lessons, or in managing the behavior or motivational problems of the mildly academically handicapped child, took time that they should have been spending with their regular students. Mainstreamed students with academic handicaps were thus likely to have been seen as an additional burden placed on the teachers. Shotel, Iano, & McGettigan (1972), suggest that teacher attitudes became less positive as experience with mainstreaming increased. ✓

A study by Ritter (1978), concluded that handicapped children from an LD resource program placed in mainstreamed classes were

able to maintain a rate of academic gain during the regular mainstreamed year similar to the gain acquired during enrollment in the special LD program. He further concluded that the concept of regular mainstreamed classroom enrollment without the provision of supplemental programming was brought into question, since regular classroom instruction alone may have been insufficient to sustain previous levels of academic gain for children with academic handicaps.

In addition to the development of good resource programs to provide necessary academic support, another approach was to use the strategy of intervening within the mainstreamed classroom itself. Strategies that have taken this approach are reviewed below.

Gottlieb & Leyser (1981), and Gresham (1981), (cited in Madden & Slavin, 1983), suggested that the problem of social rejection of mainstreamed mildly academically handicapped students be remedied directly within the regular classroom setting by assisting the regular teacher with strategies for providing social skills training to academically handicapped students. Some research has evaluated programs in which specially trained teachers serve as consultants to regular teachers of mainstreamed classes. Other research has focused on interventions designed to reorganize the regular classroom so that it becomes more receptive to individual differences and more likely to elicit prosocial and accepting behavior on the part of all students (Madden & Slavin, 1983). Among

the alternatives are cooperative learning interventions (Slavin, 1980; Madden & Slavin, 1983), in which mildly academically handicapped and nonhandicapped students work together in small groups to achieve common goals, and follow individualized instruction intervention, designed to deal with the problem of heterogeneity in learning rates and styles brought about by mainstreaming. Wang (1981) stated that, when utilized in mainstreaming classrooms, individualized instruction was viewed as an important intervention strategy that improved the schools effectiveness in providing quality education for exceptional and normal children alike.

Another approach, Adaptive Learning Environments Model (ALEM), described by Wang (1981), provided educational experiences that were adaptive to the learning needs of each student. Wang (1981), stated that, in essence, it could be said that a major goal in designing the ALEM was to modify the "handicapping" conditions in the learning environment which are likely to prevent efforts to meet the learning needs and characteristics of the individual child while systematically modifying each child's "handicap" to increase his/her ability to profit from the school learning environment.


Few researchers agree on solutions to the problems created by the mainstreaming of handicapped students. A summary of research relating to the proposed solutions to the problems of mainstreaming follows.

It is believed that academically handicapped students often have deficits in social skills and social information processing (Gottlieb & Leyser, 1981). Therefore, social skills training and reinforcement of appropriate social behaviors would seem to be a direct means of improving the social acceptance of mainstreamed mildly academically handicapped students (Madden & Slavin, 1983). Although substantial literature on social skills training exists (e.g., Gottlieb & Leyser, 1981; Gresham, 1981; Strain & Kerr, 1981), little research in this area has involved academically handicapped students. Much of the research completed dealt with self-contained special education students who were withdrawn, isolated, disruptive, or rejected. Gottlieb & Leyser, (1981) concluded that because academically handicapped students are frequently isolated or rejected and often lack social skills, social skills training methods almost certainly are relevant to problems of mainstreaming academically handicapped students.

#### Current Mainstreaming Efforts

Recent research has identified various factors which appear to contribute to the development of successful mainstreaming programs. Salend (1984), concluded that developing good criteria for mainstreaming, preparing the academically handicapped student for mainstreaming, and promoting good communication among educators were most important. After identifying the skills needed to be successful in the mainstream of the regular class, he concluded

that only those students who demonstrated mastery of the identified criteria were to be candidates while those lacking the necessary competencies received instruction in those areas to increase their readiness.

Clifford Baker, Associate Professor in the Department of Special Education at the University of Northern Colorado and Gayle Baker, a first grade teacher experienced with mainstreaming the academically handicapped child, offer several suggestions on how to more effectively mainstream the MAH child (see Appendix A for complete list of suggestions on preparing the regular teacher, the regular students, and the MAH child). In Bakers' review (1983), the way the teacher was approached in the placement of the handicapped student in the regular class was an important factor. They found that not all teachers are receptive or willing to work with MAH children. This made it necessary that every effort be made to match personality characteristics of the teacher and the student and to match the teaching and learning style. Communication between the special education teacher and the regular classroom teacher was found to be the most important element necessary for successful mainstreaming (Salend, 1984). The emphasis on the importance of communication between the "special" teacher and the regular teacher was not new. J.D. Chaffin, (1974) insisted that communication not only has been important but will always be an important "spoke in the wheel" to assure successful academic gains of the MAH child. 

(See Appendix B for suggestions to consider when expanding or initiating a mainstreaming program).

Special class teachers should have the opportunity to observe the regular classroom and to talk to the potential receiving teacher (Grosenik, 1971). In his investigation, Grosenik concluded that there were three prime considerations in the selection of an appropriate regular classroom in which to place an academically handicapped child. They included: (1) the cooperativeness of the regular classroom teacher, (2) the personality of the receiving teacher as compared to the special child and his needs, and (3) special academic needs of the child.

Promoting communication among educators, Salend (1984) agreed, is the key to successful mainstreaming. He reported that communication and cooperation among educators should be an ongoing process, starting with the decision to mainstream a student into a specific classroom (Goodman, 1979; Hundert, 1982). In response to the need for continuous communication and cooperation, some researchers have begun to develop communication strategies to facilitate interaction among educators (Salend, 1984). For example, Salend & Hanke (1981), identified several kinds of information special educators should provide to regular educators prior to mainstreaming a student. Information to be provided, included academic achievement, social development, supplementary support services needed, medical information, and preparedness for entering

the mainstream. Salend agreed that collaborative efforts between the regular and special educator should extend beyond the handicapped student's initial placement into the mainstream and that, special educators should provide follow-up support and consultative services (Miller & Sabatino, 1978; Salend, 1984).

Most regular teachers, unfortunately, were educated in segregated schools (void of handicapped students) and have had no or little experience with teaching MAH students (Stainback, et.al., 1983). Recent research has indicated that the attitudes of undergraduate students in elementary education can be easily influenced in regard to the integration of handicapped students into regular schools (Stainback, et.al., 1983). Since positive teacher attitudes toward mainstreaming appeared to be related to the ability of teachers to instruct the MAH student (Salend, 1984), inservice training was concluded to be an important focus directed at skill aquisition pertaining to competencies educators needed in order to implement mainstreaming successfully.

Based on a 1981-1982 study (Hart, L., Hill, J. M., Healy, S., & Fagen, S. A., 1983), school inservice for mainstreaming, progress reports were gathered from 96 schools in Montgomery County Public Schools, Gaithersburg, Maryland. The following conclusions were drawn:

1. Of the priority objectives established for school-based training in mainstreaming, the following were most frequently

selected: (a) knowledge of classroom strategies, access to special education services, behavior management, or instructional materials, (b) understanding of handicapping conditions, (c) skills for adapting own classroom methods or using specialized techniques (see sample reports in Appendix C).

2. Local schools utilized an imaginative variety of types of inservice activities, ranging in degree of intensity from written communications to 15-session school-based courses. The most prominent vehicles for inservice training were required faculty meetings and authorized release time workshops.

3. Learning activities which directly included students were found to be more frequently used as a result of increased staff knowledge and skill.

Inservice training at the orientation/awareness level and the knowledge level was not likely to affect educational academic improvements unless the learner was highly motivated to study further or implement suggestions (Hart, et.al., 1983). Most teachers were already too burdened with existing responsibilities to engage in altering techniques or materials. The number of referrals for "special" education was directly related to the ability and motivation of the classroom to "individualize" (Roddy, 1979). The limiting factor, however, was time and energy available for training (Hart, et.al., 1983).

In addition to the inservicing of teachers and the opening of

communication lines, a major problem has existed with maintaining communication between teachers (Aloia, 1984). Demanding schedules limit the amount of time available for discussion between teachers. Aloia (1984), has offered a monitoring form to circumvent the communication problem. This special form (see Appendix D) could be employed by the special educator to enable an ongoing monitoring of the student's progress in the regular class without an undue demand on the time or resources of either special or regular teachers. Aloia stated that the information generated by the form represented only initial stages of monitoring and served as a general indicator of student progress. He suggested an orientation of the regular staff before using the form. To avoid confusion that may arise from placing a new form in the hands of teachers, he suggested a workshop to emphasize the following points:

1. The form (see Appendix D) was very simple and could be completed in less than two minutes.
2. The information assisted the special teacher in providing the best consultant/resource room services.
3. The form represented a willingness to work closely with the classroom teacher.
4. The form showed that the special class teacher was willing to meet with the teacher for a conference.
5. The procedure moved monitoring from a hit-or-miss operation to an efficient and effective process.

Kravitz, (1984) concluded that students, too, must take some responsibility by accepting that to achieve success with "learning differences," good work habits and consistency of effort will be the difference between life, not just school, success and failure. Kravitz suggested that students should be made aware of the reasons for any additional considerations given them, and that they should be guided to work towards normalization of classroom performance.

Conducting small group workshops that are directed toward a specific goal have proven to have had a lasting effect on the regular classroom teacher. Stainback, Stainback, Strathe, & Dedrick (1983) found support for presenting regular classroom teachers inservice but only when the inservice information was specific. Teachers who were given only general information in control group did not show any improvements in their procedures or attitudes towards the teaching MAH students.

A review by Slade, (1984) identified several specific points for educators to consider to promote positive transition experiences between environments. Slade suggested that educators:

1. Identify the new situations or environments to which the child would be exposed (cafeteria, gym, etc.).
2. List the activities that would be required of the child in each of the new environments (unlocking lockers, changing into P.E. clothes, etc.).
3. Specify the skills the child would need in order to

function properly (memorizing lock combination, etc.) and

4. List those skills the child has already mastered.

In their experimental study, designed to prepare classroom teachers for the integration of handicapped students, Stainback, Stainback, Strathe, & Dedrick (1983) concluded that the ultimate goal of inservice procedures should not be overlooked. That is to say, the purpose of such training is to change the behavior of the teacher and that stated attitudes and intentions of teachers can be considered only indicators of possible behavior change. Finally, they suggested that because of apparent changes in attitudes and behavioral intentions of teachers (included in their study) to help MAH students, the need existed for more extensive research designed to evaluate actual long-term behavior changes of teachers as evidenced by inservice training.

For some time, the role of the regular education teacher has not been clear in implementing the Individual Educational Program (IEP). The objective of a recent study by (Nevin, McCann, & Semmel, 1983) was to analyze the role of the regular elementary classroom teacher in implementing IEPs for special education students placed in regular classrooms. The regular classroom teachers in the study, who were struggling to cope with increased demands related to serving special education students, had substantial discretion as to how they actually worked with students and specialists, and relied heavily on informal rather than formal processes to implement

IEPs. A majority of IEP records reviewed (61%) indicated that regular class teachers were implementing a wide variety of modifications of their regular programs to accommodate the special education needs of the special education student assigned to their classes. However, only 24% of these modifications were actually written into the IEP, raising serious policy issues related to the regular educator's role in serving special education students (Nevin, et.al., 1983). Appendix E, shows the types of modifications implemented by regular classroom teachers categorized as consequential modifications, curriculum modifications, or process modifications. Responses from teachers who were interviewed stated that they did "nothing special" in educating the handicapped child that they were not already doing for all the students, making it debatable as to what modifications belong on the IEP in the first place (Nevin, et.al., 1983).

Two different approaches to IEP development and implementation were compared with respect to IEP goal attainment and practical utility of the approaches to modifications within the regular classroom (Maher, 1983). The two approaches were the traditional approach to IEPs and the COMPASS (COMplementary Program And Service System) approach. The study involved 28 pupils with IEPs developed using the traditional method. The mean Goal Attainment Score across all goal areas was 58.6 for the COMPASS approach and 25.1 for the traditional approach. According to the evaluation by

Maher (1983), COMPASS may be a practical and effective procedure for development and implementation of IEPs. Classroom teachers were more satisfied with the COMPASS approach for classroom level planning. Although successful, further replications of the study would need to be made before confident statements about generalizations to other settings could be made (Maher, 1983).

Adaptation of educational material was frequently mentioned in the literature as a vital part of providing suitable curriculum for the academically handicapped child. In a report prepared by Allen, J., Clark, F., Gallagher, P., & Scofield, F. (1982), evidence was presented that showed that special education teachers found fault with existing materials and felt an overwhelming need to adapt materials and to search for materials in specific areas which would better meet the academically handicapped child's needs.

In a national survey related to materials and media of over 30,000 special educators, Vale (1980) found that 82% of the teachers indicated a need for time, resources, and training for developing materials for exceptional children. Fifty-eight percent of the teachers surveyed had made at least 25% of their materials. Although teachers indicated that developing and adapting media and materials was a skill critical to their job ranking in the top 6 of 47 skills; less than half of the special teachers had any training in materials adaptation or design (Allen, et.al., 1982).

Four areas to consider when adapting materials were offered

by Allen, et.al. (1980): motivation, length of task, complexity of task, and concept load. Materials to be adapted were considered by types (see Appendix F). Within each type, consideration was given to skills required by the student, the student's need(s), technique used, and the rationale. Types of adaptations included: change in format (task remains the same), change input and output modes, combining/resequencing published materials, supplementing published materials, and developing curriculum materials.

### CHAPTER III

#### Empirical Research

The reality of mainstreaming is here. Numerous interventions have been suggested to facilitate mainstreaming efforts. The purpose of this study was to survey regular classroom teachers to identify current modifications and techniques used in mainstreaming mildly handicapped students.

#### Method

Subjects. Subjects for this study were 52 regular 7th- and 8th- grade classroom teachers teaching academic content areas from a suburban Milwaukee school district. Teachers from each of two schools were surveyed concerning modifications they have made within the regular classroom setting and other special intervention techniques attempted to assist mildly academically handicapped learners classified as learning disabled, educable mentally retarded, or emotionally disturbed.

Materials. A questionnaire, developed to survey regular classroom teachers (see Appendix G), solicited information concerning techniques used to modify programs for the purpose of accomodating mildly academically handicapped students assigned to their classrooms. Regular classroom teachers were asked to report both successful and unsuccessful modifications and techniques that had been tried. The questionnaire asked teachers to indicate their subject area, grade level, and years of experience. In addition,

they were asked to check a list of modifications (adapted from Riegel, 1981), they may have tried and would try again. Teachers were requested to check reasons for not making classroom modifications.

Data Collection Procedures. A pilot study was done involving three junior high school teachers from another district prior to the questionnaire being distributed to the entire group. Phone contact had been made previously with the school principals from each of the two schools, to request participation and to determine the number of teachers on staff. A questionnaire and self-addressed stamped envelope were provided for each teacher on staff assigned to teach an academic subject area.

Data Analysis. A compilation was made from responses of (a) successful techniques, (b) unsuccessful techniques, (c) ways in which mildly academically handicapped students receive special education help, (d) use of the 11 modifications listed on the questionnaire, (e) reasons for not making modification, (f) number of EEN students taught in one period/day, (g) years of teaching experience, and (h) special education training.

### Results

In total, 52 questionnaires were distributed and 21 were completed and returned. Of those, three were not included in the results due to their special nature - library, music, and intermediate EMR classroom. The net return was 41%.

Teaching experience of the group surveyed ranged from 2 to 35 years. The mean teaching experience was 14 years with two-thirds of the entire group falling within the 10-18 years range.

Enrollments in the regular classrooms, including both handicapped and nonhandicapped students, ranged from a low of 15 students to a high of 29 students. The average number enrolled in the regular classroom was 23 students. Mildly academically handicapped students made up an average of two students within each classroom. The greatest number of EEN students any one teacher was assigned per teaching load was nine, with a high of six EEN students in one class period. The lowest number of EEN students assigned to any one teacher was two students with one student per class period. The average number of EEN students per teacher was five students.

When regular classroom teachers were asked what type of services EEN students receive in their schools, 15 indicated tutorial, 11 indicated instructional, two indicated both tutorial and instruction, and two teachers indicated resource room with daily reports when problems occur.

All teachers responding had EEN students enrolled in their class at some time. Seven of those responding have had special education training consisting of university courses (7), workshops (2), and inservice credits (1).

The regular classroom teachers completing the questionnaire

indicated reasons for not making more modifications within their classrooms (see Table 1 for complete results). The most common responses were: it took too much time and they could not alter texts, color code books, or mark up books. The next most frequently checked response was not knowing how to, but wanting to make modifications and needing help to make them.

Teachers were asked to indicate which of 11 modifications (see Table 2) suggested by Riegel (1981) they have tried and would try again. Results were tallied and recorded.

Modifications solicited from classroom teachers (see Table 3) were grouped by categories adopted from Riegel, (1981). Under each subject heading are three numbers. The first number indicates the number of teachers making that modification. The second number indicates the average number of EEN students assigned per day to those teachers and the number in parentheses indicates the average of the largest number of EEN students within one class period (e.g., 6(4)).

### Discussion of Results

Teachers were asked to check what type of services EEN students received in their schools. Their choices to make were tutorial, instructional or other. When the questionnaire was constructed, the desired knowledge was what type of help mildly handicapped students received within special education. Tutorial was meant to represent the resource room (mainstreamed supplemented by special

Table 1

Results of Reasons for Not Making Classroom Modifications

Responses	Modification
-	a) I feel I should not have to do so.
4	b) I would like to, but don't know how to; I need help in implementing.
5	c) It takes too much time.
-	d) I do not know what to do.
3	e) Idea is too difficult to implement.
2	f) The funds are not available for alternative choices.
6	g) I cannot alter texts, color code, or mark up.
2	h) Other (Please describe) Already making adaptations for "slow" students.

Table 2

Results of 11 Surveyed Modifications by R. Hunt Riegel

Type of modification	Tried	Try again
<b>Modifying Input</b>		
Having students listen to tape recording of text	4	3
Reading test questions aloud to student	11	10
<b>Modifying Content</b>		
Highlighting student texts	4	4
Using filmstrips or films instead of textbooks	11	10
<b>Modifying Response Methods</b>		
Omitting assignments which require copying in a timed situation	7	6
Asking questions requiring short answer instead of essays	12	11
<b>Modifying Criteria</b>		
Reducing length of assignments	15	14
Reducing number of assignments	16	15
Grading on individual progress or effort	11	10

(table continues)

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Type of modification	Tried	Try again
<hr/>		
Modifying Environment		
Checking student's notebook daily	14	11
Breaking the Task Down		
Breaking the tasks down into smaller steps	14	15

Table 3

Modifications Made by Classroom Teachers

Type of modification	Science	Social studies	Reading	English	Math	Foreign language
<b>Modifying Input</b>						
Taped chapters	<u>1</u> 4(1)					
Oral reading	<u>4</u> 6(4)		<u>1</u> 7(5)	<u>1</u> 8(4)		
Hands on tasks	<u>1</u> 4(1)					
<b>Modifying Content</b>						
Special materials	<u>1</u> 8(3)* <u>5</u> 6(3)			<u>1</u> 4(4)		
<b>Modifying Response Method</b>						
Give tests orally	<u>4</u> 6(3)					
Taking test home to redo	<u>1</u> 9(6)					
Notes for test				<u>1</u> 4(4)		
Review sheets for tests				<u>1</u> 8(4)		
<b>Modifying Criteria</b>						
Help before and after school	<u>1</u> 3(3)*	Y ?				
Reteaching				<u>1</u> 8(4)*		
Modified assignments	<u>4</u> 6(4)				7(3)	
Fewer problems	<u>1</u> 4(1)	<u>1</u> 3(2)			<u>2</u> 6(3)	
Smaller assignments	<u>3</u> 6(4)	<u>1</u> 3(2)	<u>1</u> 7(5)		<u>1</u> 7(3)	
Extending due date	<u>1</u> 4(1)					

(table continues)

Type of modification	Science	Social studies	Reading	English	Math	Foreign language
<b>Modifying Environment</b>						
Special groupings	<u>3</u> 7(3.3)			<u>1</u> 2(1)		
Group work	<u>1</u> 4(1)	<u>1</u> 3(2)				
Smaller classes		Y ?				
Placed according to skill level			<u>1</u> 7(5)			
<b>Breaking the Task Down</b>						
Test questions into smaller units	<u>1</u> 4(1)			<u>1</u> 8(4)		
Use of resource teacher		Y ?		<u>3</u> 4.6(3)	<u>1</u> 4(3)	<u>1</u> 3(3)
<b>Changing Reinforcers</b>						
Immediate reinforcement			<u>1</u> 7(5)			
<b>Teaching Strategies Directly</b>						
Assignment notebook		Y ?				
Class notes - note taking		Y ?				
Study skills		Y ?				

Note.

Y = successful

\* = unsuccessful

? = class size not indicated

Number underlined = number of teachers reporting

7(3) = 7=students assigned to a teacher per day, 3=largest number EEN in one class

education). Instructional was meant to mean self-contained (EEN instructed in special education class). The words instructional and tutorial were used in place of resource and self-contained to avoid confusion. The results from both schools were similar, 15 & 11, with tutorial the choice of 15. It is unclear just what type of help EEN students receive. If the 11 teachers indicated instructional (e.g., self-contained) they would not be making modifications for EEN as they would receive content within special education. No statements can be made about type of service supplied.

Special education training did not seem to influence modifications teachers made. Only 7 out of 18 teachers had special education training which was primarily university courses. All teachers returning the questionnaire made modifications.

Time and inability to alter texts were the two most often checked reasons for not making classroom modifications (see Table 1). The next most frequently checked reason was wanting to, but not knowing how to do so, needing help in implementing. The two items never checked would appear to indicate that teachers know they are to make modifications (I feel I should not have to do so) and that they know what to do (I do not know what to do). Perhaps they have ideas and feel they know what to do or the statement is one that would not be checked due to the negative teacher connotation.

When teachers were given 11 modifications (see Table 2) and

asked to indicate whether they had tried them or would do so again, all but one modification (checking student's notebook daily) appeared to be successful, although no judgement can be made regarding the success of these interventions. Modifications of criteria were most often checked. Modifications of input and content were checked least when areas were averaged.

The modifications made by teachers surveyed (see Table 3) were classified by type when the results were compiled to give some frame of reference for discussion. Modifications of criteria were the ones most frequently made by teachers. This was also substantiated when teachers were asked to check modifications from a given list. Regular classroom teachers modified assignments, gave fewer problems, and made smaller assignments. Teachers chose oral reading of material as the most frequent way of modifying input; giving tests the most frequent modification of response method; and special groupings for modifying the environment.

Modifications such as help before and after school, reteaching, special groupings, placement according to skills level, and immediate reinforcement would appear to be characteristic of good teaching practices for any student, not just an EEN student. The teaching of strategies such as developing study skills, note taking, and use of an assignment notebook also would appear to be part of the curriculum. All of the above mentioned modifications, except for special groupings, were noted by only one teacher, and

in some cases, by the same teacher.

Three modifications were pointed out as unsuccessful. They were reteaching, use of special materials, and help before and after school (three other teachers used special materials and felt them successful).

Though only receiving a single response each, several modifications required teacher modification of the teacher's role or preparedness. They were taping chapters, reviewing sheets for tests, grouping work, and hands on tasks.

#### Summary

This study found that teachers are making modifications for mildly academically handicapped students in their classes. Modifications ranged from good teaching practices to modification of a given teacher's presentation or instructional materials. Neither years of experience nor special education training appeared to be a factor as to which teachers in the study made or did not make modifications. Teachers who gave reasons for not making modifications, in general, indicated that they did not do so because of not being able to alter materials, or that making modifications required too much time.

## CHAPTER IV

### Interpretation

#### Synthesis of Literature

Adequate research comparing the academic achievement of MAH in regular classes to full-time special education is limited to very few studies and the effects are not entirely consistent. However, there are a few conclusions that can be drawn from the available research (Madden & Slavin, 1983; Wang, 1981).

#### Conclusions

There is strong evidence that if curriculum is modified to meet individual needs of children in regular classrooms in which MAH students are mainstreamed, the achievement of these students is significantly higher than in special education classes using the same programs (Gottlieb, 1981; Roddy, 1984; Wang, 1981). It appears that when individualized education techniques are used, MAH students make significant progress in regular education settings, whereas, there is little or no difference in progress when MAH students are placed in a regular classroom where no modifications exist (Madden & Slavin, 1983; Roddy, 1984). It can then be concluded that most MAH students would benefit most from a placement where modifications are used. This conclusion is not to be construed to mean that academically handicapped students should all be moved into the regular classroom.

The evidence is clear that the regular class is probably the

setting in which the problems of MAH students should be addressed. Positive effects of mainstreaming appear to depend on the use of the programs designed to meet the special instructional needs of MAH students within the regular classroom. Mainstreaming using a Team Assisted Individualization (TAI), for example, appears to have a significant positive affect on MAH students (Baker & Baker, 1983; Madden & Slavin, 1983; Salend, 1984). It can be concluded that using the regular classroom as a base and adjusting and modifying the curriculum makes the best climate for the MAH student.

Because there is little evidence that a self-contained special education class is superior to placement in regular classes in terms of increasing the academic performance of MAH students, it is this writer's conclusion that, in general, regular class placement with appropriate supports is better for the achievement of the MAH student. There is no support in the research for a retreat from mainstreaming toward self-contained special education classes except perhaps for low IQ students in cases where individualized instruction or other supports cannot be used in the regular classroom (Baker & Baker, 1983; Carlberg & Kavale, 1980; Haring & Krug, 1975; Madden & Slavin, 1983).

It can be concluded by the research that training programs for regular teachers to help them meet the instructional needs of academically handicapped students must continue. Teachers should receive training in methods (such as individualized instruction)

that enable the regular teacher to better meet the needs of the wide range of abilities within the regular classroom setting (Aloia, 1984; Baker & Baker, 1983; Hart, et.al., 1983).

The conclusion that mainstreamed placement of appropriate support tends to be superior to full-time, special-class placement for students with mild academic handicaps in no way implies that if MAH students are simply assigned to regular classrooms, their problems will be solved. Placement of MAH students within the regular classroom using modifications to fit the individuals special needs is the best method of meeting the needs of the MAH student. Evidence supports the position that inservice education at the local building level is most important (Aloia, 1984; Baker & Baker, 1983; Chaffin, 1984; Stainback, et.al., 1983). Regular classroom teachers must continue to seek ways to modify the curriculum.

Although special education teachers are primarily concerned with the progress of EEN students, classroom teachers are concerned about all students in their classes. It is most important that inservice education be supported by the administration and staff to provide a vehicle for continuing motivation and development of appropriate curriculum for all students.

## CHAPTER V

### Implications

Future decisions to continue mainstreaming as a method to meet the needs of the MAH child should be accompanied by the decision to provide a comprehensive instructional support system for the children involved and their teachers. No mainstreaming effort should be attempted without serious attention given to providing inservice education. Because mainstreamed teachers are concerned about all students in their classes, workshops need to be designed to help teachers cope with the needs of the EEN child. It has been implied that regular classroom teachers are often more willing to make instructional modifications for EEN students if benefits to other students are realized.

Apparently, patience and tact are prime prerequisites if mainstreaming is to succeed. The persons responsible for mainstreaming must believe that mainstreaming is the best way to meet the EEN child's needs, as it is not a process to be undertaken halfheartedly. Many times educators appear to know what to do but not know how to get started. Teachers need to see how it works. They need not be programmed to exact methods but could be exposed to different ways of adapting materials and making modifications within the classroom and then could choose the best methods and modifications from many sources.

Since regular classroom instruction alone may be insufficient

to sustain satisfactory levels of academic gain for MAH students, the common concept of regular mainstreamed classroom placement without the provision of supplemental programming is questionable. It is recommended that whenever interventions designed for the mainstreamed classroom are evaluated, the effects on the nonhandicapped students must also be evaluated. It would be inappropriate to use a program that improved the achievement of academically handicapped students if it did so at the expense of the nonhandicapped student.

Most research has little or no impact upon changing existing educational practices in the field. One reason for this is that researchers do not translate their methods and findings into useful form. To have any effect on the education of children researchers must supply concepts, categories, materials and methods that are practical to implement.

Continued effort must be made to search for ways to improve mainstreaming. Effort must be made to incorporate strategies and modifications that fit all students in the regular classroom. Researchers may find that the most effective mainstreaming methods are those that recognize that all students are "special", in that they have unique academic and social needs, and that classrooms organized to respond to these needs in the regular classroom setting are needed for all students, whether or not they are identified as having an academic handicap.

## References

- Affleck, J. Q., Lowenbraun, S., & Archer, A. (1980). Teaching the mildly handicapped in the regular classroom, (2nd ed.). Columbus: Merrill. Book
- Allen, J., Clark, F., Gallagher, P., & Scofield, F. (1982). Classroom strategies for accomodating exceptional learners. Extending the Challenge; Working Toward a Common Body of Practice for Teachers, (Grant from Division of Personnel Preparation, Special Education Program, Office of Special Education and Rehabilitation Services, U. S. Department of Education).
- Aloia, G. F. (1984). An effective approach to monitoring the mainstreamed students. Journal for Special Educators, (19)2, 21-24. J
- Baker, C., & Baker, G. (1983). Suggestions on how to more effectively mainstream special education students. Special Education in Canada, (57)3, 16-18. J
- Carlberg, C., & Kavale, K. (1980). The efficacy of special versus regular class placement for exceptional children: A meta-analysis. Journal of Special Education, (14), 295-309. J
- Chaffin, J. D. (1974). Will the real "mainstreaming" program please stand up! (or...Should Dunn have done it?). Focus on Exceptional Children, 6(5), 1-18. J
- Gottlieb, J. (1981). Mainstreaming+ Fulfilling the promise? American Journal of Mental Deficiency, (86), 115-126. J
- Grosenick, J. K. (1971). Integration of exceptional children into regular classes+ Research and procedure. Focus on Exceptional Children, 3(5), 1-8. J
- Haring, N. G., & Krug, D. A. (1975). Placement in regular programs; Procedures and results. Exceptional Children, 41(5), 413-417. J
- Hart, L., Hill, J. M., Healy, S., & Fagen, S. A. (1983). Objectives and types of inservice training for mainstreaming. Pointer, (28)1, 25-28. J
- Ito, H. R. (1981). After the resource room-then what? Academic Therapy, (16)3, 283-287. J
- Kravitiz, M. (1984). Assisting "learning different" students in the regular classroom: A practical guide for the classroom teacher. Special Education in Canada, (58)2, 68-69. J

- 5
- Nevin, A., McCann, S., & Semmel, M. I. (1983). An empirical analysis of the regular classroom teacher's role in implementing IEP's; Training implications. Teacher Education and Special Education, (6)4, 235-247. J
- Madden, N. A., & Slavin, R. E. (1983). Mainstreaming students with mild handicaps: Academic and social outcomes. Review of Education Research, (53)4, 519-569. J
- Maher, C. A. (1983). Development and implementation of effective individualized education programs (IEPs): Evaluation of two team approaches. Journal of School Psychology, (21)2, 143-152. J
- Miller, M. (1984). The three faces of mainstreaming. Academic Therapy, (19)5, 561-564. J
- Miller, T. L., & Sabatino, D. A. (1978). An evaluation of the teacher consultant model as an approach to mainstreaming. Exceptional Children, (56)2, 86-91. J
- Public Law 94-142, 94th Congress, S. 6., (November 29, 1975).
- Riegel, R. H. (1981). Making modifications in the mainstream: A consultant's guide to cooperative planning (Grant from E.S.E.A. Title N-C). United States Office of Education.
- Ritter, D. R. (1978). Surviving in the regular classroom: A follow-up of mainstreamed children with learning disabilities. Journal of School Psychology, (16), 253-256. J
- Roddy, E. A. (1984). When are resource rooms going to share in the declining enrollment trend? Another look at mainstreaming. Journal of Learning Disabilities, (17)5, 279-281. J
- Roddy, E. A. (1979). Teacher-the forgotten component of the IEP and other issues in teachers' mental health. Middletown Public Schools. (ERIC Document Reproduction Service No. ED 171 027). M F
- Salend, S. J. (1984). Factors contributing to the development of successful mainstreaming programs. Exceptional Children, (50)5, 409-416. J
- Salend, S. J., & Hanke, C. (1981). Successful mainstreaming: A form of communication. Education Unlimited, (3), 47-48. J
- Shotel, J., Iano, R., & McGettigan, J. (1972). Teacher attitudes associated with the integration of handicapped children. Exceptional Children. (38), 677-683. J
- 6

- Slade, E. (1984). Helping LD students make transitions: Six suggestions. Academic Therapy, (19)5, 543-547.
- Slavin, R. E. (1980). Classroom reward structure: An analytic and practical review. Review of Educational Research, (47)4, 633-650.
- Stainback, S., Stainback, W., Strathe, M., & Dedrick, C. (1983). Preparing regular classroom teachers for the integration of severely handicapped students: An empirical study. Education and Training of the Mentally Retarded, (18)3, 204-209.
- Turnbull, H. R., & Turnbull, A. P. (1982). Free appropriate education: Law and implementation. Denver: Love.
- Wang, M. C. (1981). Mainstreaming exceptional children: Some instructional design and implemental considerations. Elementary School Journal, (81)4, 195-221.
- Wang, M. C., & Birch, J. W. (1984). Effective special education in regular classes. Exceptional Children, (50)5, 391-398.

APPENDICES

## APPENDIX A

Adapted from Suggestions on How to More Effectively Mainstream Special Education Students.

by: Clifford and Gayle Baker

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## PREPARING THE REGULAR CLASS TEACHER:

The special class teacher should meet individually with the regular classroom teacher to discuss the student to be mainstreamed. Following is a list of the type of information that could be provided to the regular classroom teacher:

- Student's general ability level.
- Student's achievement level.
- Student's personality characteristics.
- Any behavior problems the student may have.
- Suggestions for discipline which have been used by the special education teacher (i.e., mini-contracts)
- Type of work or assignments the student is presently doing in the subject area into which he/she will be mainstreamed.
- Learning environment most productive for the student.
- Schedules of time appropriate to be mainstreamed into class.

## INFORMATION TO BE PROVIDED BY REGULAR TEACHER:

- Where coats are hung, which doors to use, bathroom times, jobs, desk to be used, etc.
- Rules for the classroom (Do students raise their hands to talk? etc.)
- Description or sample of materials used in the subject area the student is being mainstreamed into.

## APPENDIX B

## Suggestions to Consider When Expanding or Initiating a Mainstreaming Program

Adapted from:  
Will the Real "Mainstreaming" Program Please Stand Up.

by: Jerry D. Chaffin, Ed.D.

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1. The decision to mainstream should be accompanied by the decision to provide a comprehensive instructional support system for the children involved and their teachers.
2. Not all handicapped children will benefit from mainstreaming. Selection of the children to be involved should be done carefully and should be based on the recommendations of persons thoroughly familiar with the educational and social needs.
3. Mainstreaming plans should be developed at the school building level.
4. Participatory planning may be the most important element in mainstreaming efforts.
5. If regular classroom teachers are made responsible for exceptional children in their classroom, they should be allowed to make decisions related to the kind and amount of special education support they, or the child, are to receive.
6. No mainstreaming effort should be attempted without serious attention given to providing inservice.
7. The procedures for providing instructional support in each building should be carefully delineated.
8. Develop a pupil accounting system as part of the mainstreaming plan.
9. Obtain data related to student progress and other important variables such as teacher attitudes.
10. Report the results to administrators, teachers, parents, and the community.

## APPENDIX C

Table C-1

Cover Sheet Summary: School Progress Report  
(Hart, et.al., 1983; Montgomery Schools)

School: Seneca                      SICM: Judy T.                      Period: '81-'82

- Part I.
1. Planning/Involvement with Principal
  2. Establish/Maintain Committee
  3. Conduct Staff Needs Assessment

Part II: Activities Related to Objectives for Mainstreaming

Priority Inservice Objectives	Related Activities
1. To promote skill in adapting classroom methods to accommodate handicapped students.	1. Individualized study in mainstreaming projects.
2. To increase knowledge of teaching strategies.	1. School-based inservice course (issues).
3. To promote knowledge and understanding to ensure the success of mainstreaming.	<ol style="list-style-type: none"> <li>1. SICM and committee investigate accessibility of test data to staff.</li> <li>2. Guidelines for proper utilization of resource room developed.</li> <li>3. A monitoring procedure for evaluating the placement of students.</li> <li>4. Mainstreaming information survey conducted.</li> </ol>
4. To enhance knowledge for matching materials with special needs students.	1. Optional staff inservice on special problems.

Table C-2

## (Priority Objectives for Mainstreaming)

I. ORIENTATION/AWARENESS 12 (5%)	
(Topics included: Role of SICM; Issues of Mainstreaming; Federal/ State/Local Regulations; Functional Life Skills; Inservice Resources)	
II. KNOWLEDGE 111 (47%)	
* Classroom Strategies	29
* Access to Special Education Services	16
* Behavior Management	15
* Instructional Materials (Selection & Adaptation)	12
* Handicapping Conditions	5
* Assessment of Learner Styles/Abilities	5
* Working with Parents	4
* Process for Mainstreaming	4
* Use of IEP	2
* Coping with Frustration	2
* Respectful Communication	2
* Identifying Gifted Minorities	2
* Other	13
III. ATTITUDE/UNDERSTANDING 78 (33%)	
* Staff Understanding of Handicapping Conditions	38
* Student Understanding of Handicapping Conditions	10
* Parent Understanding of Handicapping Conditions	9
* Empathy for Parents of Handicapped Children	7
* Positive Attitudes Toward Mainstreaming	5
* Staff Understanding of Minority and ESOL Students	4
* Other	5
IV. SKILL 37 (15%)	
* Adapting Own Classroom Methods	14
* Techniques with Special Needs Students	11
* Training Volunteers	4
* Parent Conferencing	2
* Behavior Management	2
* Communicating with Students	2
* Other	2

TOTAL NUMBER OF PRIORITY OBJECTIVES = 238

- KEY:
- I. Intended to acquaint or introduce learner
  - II. Intended to change amount or quality of information learner knows about the subject
  - III. Intended to change learner's feelings/perceptions
  - IV. Intended to change learner's behaviors/practices

## APPENDIX C

Table C-3

## Types of Inservice for Mainstreaming Activities

Continuum of School-Based Inservice Activities	Extent of Utilization: Number of Schools	(%)*
1. Written Communication/Visual Display (e.g., newsletter, bulletin bd., report)	10	(10)
2. Dissemination/Use of Professional or Child-Centered Materials (e.g., kit on handicapping conditions, behavior videotape)	14	(15)
3. Individualized Learning or Consultation Formats (e.g., meetings with special teacher, observation in class, learning packets put in teachers' lounge, filmstrip/tapes)	12	(13)
4. Small Group Mini-Sessions During Day (e.g., during planning periods)	13	(14)
5. Group Sessions During Non-Teaching Time (e.g., voluntary breakfast, lunch, etc.)	3	( 3)
6. Out-of-School Visitations (e.g., to special programs or schools)	5	( 5)
7. Evening or Weekend Meetings (e.g., PTA)	12	(13)
8. Required Faculty Meetings (e.g., Mondays)	41	(43)
9. Authorized Release Time Workshops	45	(47)
10. School-Based Seminar (e.g., issues in mainstreaming)	1	( 1)
11. Individualized Study Projects	14	(15)
12. School-Based Courses (e.g., teaching children with special needs)	13	(14)
A. School-Wide Student Program	7	( 7)
B. In-Class Programs with Students	6	( 6)

\* TOTAL NUMBER OF SCHOOLS REPORTING



## APPENDIX E

Modifications of the Regular Program Reported by Regular Class Teachers Surveyed.

Cited in:

An Empirical Analysis of the Regular Classroom Teacher's Role in Implementing IEPs: Training Implications.

by: Ann Nevin, Scott McCann  
and Melvin I. Semmel

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Type of modification	Percent reporting the modification
<hr/>	
Consequence modifications	9
Daily progress reports	4
Positive reinforcement	5
Curriculum modifications	31
Adaptation of assignments	18
Assignment to lower grade	5
Use of special reading system	1
Use of science and art curriculum	7
Process modifications	55
Cross age tutoring	4
Flashcard training	1
Extra time to complete	8
Staying after school for help	2
Team teaching between special and regular class teachers	15
Appropriate leveling/grouping	19
Cooperative learning	3
Precision teaching	3

APPENDIX F

MATERIALS ADAPTATIONS

Type of Adaptation	Skills Required	Student Need(s)	Technique	Rationale
Change in format; task remains same	Knowledge of task	Short attention span	<p>Reduce size of assignment to be completed at one time; teach student to "chunk" large assignment into smaller units.</p> <ul style="list-style-type: none"> <li>- Cut page of 30 math problems. Student then completes six small, manageable assignments rather than one large, overwhelming assignment.</li> <li>- Teach a secondary student who is required to read lengthy chapters to "chunk" the information into manageable units by dividing the chapter at the major sections.</li> </ul>	<p>The student experiences satisfaction of completing tasks rather than failing to complete lengthy assignments. The student is allowed to break his/her concentration legitimately as one short assignment is completed, submitted to the teacher, and another begun.</p>
		More explanation of task	<p>Model the task</p> <ul style="list-style-type: none"> <li>- Provide a model of the task from beginning to end for the student. "Think aloud" as the task is modeled so the student can observe the thought processes that must take place.</li> </ul>	<p>The student will hear (or see) a model of the task that shows exactly what steps s/he must follow in order to complete the task. These steps are not left to chance, but are explained clearly and thoroughly.</p>

APPENDIX F (Continued)

MATERIALS ADAPTATIONS

Type of Adaptation	Skills Required	Student Need(s)	Technique	Rationale
Change in format; task remains same (cont.)			<ul style="list-style-type: none"> <li>- Provide visual models of the task that allow only one interpretation; (examples in commercial materials sometimes may be confusing and may allow for an erroneous conclusion about the task.</li> </ul>	
		Additional or simplified directions	<p>State the directions for task completion clearly ("Circle the words that go together") rather than giving a set of directions ten sentences long).</p>	<p>Directions given clearly and simply are more apt to be interpreted correctly. Extraneous comments and lengthy directions may be forgotten more easily than one clear concise statement.</p>
		Difficulty focusing on single stimulus item (page too crowded)	<p>Separate stimulus items so students can focus on single items more easily</p> <ul style="list-style-type: none"> <li>- Cut page apart so fewer items are in the student's view at one time.</li> <li>- Provide a template or mask so student can isolate one stimulus item at a time.</li> </ul>	<p>Separating, chunking, or masking items allows the student to respond to the task as it was originally designed. Reduction of incoming stimuli allows the student to focus his/her attention.</p>

APPENDIX F (Continued)

MATERIALS ADAPTATIONS

Type of Adaptation	Skills Required	Student Need(s)	Technique	Rationale
Change in format; task remains same (cont.)			<ul style="list-style-type: none"> <li>- Teach student to "chunk" material and only attend to smaller portions at one time.</li> </ul>	
Change input and output modes	<p>Planning techniques</p> <p>Knowledge of alternative delivery and student evaluation modes</p>	<p>Unable to receive information through mode being used (e.g., unable to read social studies text)</p>	<p>Change input mode</p> <ul style="list-style-type: none"> <li>- Teach student how to gain information from orally presented material.</li> <li>- Have the student listen to taped version of a written text.</li> <li>- Use audiovisual materials (films, filmstrips, video tapes, etc.) that contain the same or similar content.</li> <li>- Have the student participate in or listen to a group discussion of the content.</li> </ul>	<p>Reading is not the only mode through which information may be received even though it is the most common mode used in school settings. Students who know how to listen often can gain the content effectively from listening even though they cannot read a text containing that information.</p>
		<p>Unable to express known information in written form (reports, themes, tests, etc.)</p>	<p>Change output modes</p> <ul style="list-style-type: none"> <li>- Have the student present the information orally rather in a written form.</li> </ul>	<p>By selecting alternative output modes, the student may be given credit for known information without being penalized for poor writing skills.</p>

APPENDIX F (Continued)

MATERIALS ADAPTATIONS

Type of Adaptation	Skills Required	Student Need(s)	Technique	Rationale
Change input and output modes (cont.)			<ul style="list-style-type: none"> <li>- Teach the student how to take written tests.</li> <li>- Teach the student to take oral tests; then give tests orally.</li> <li>- Select other alternatives for expressing the information that minimize writing, yet require the same (or a similar) degree of analysis and synthesis of information. For example, the student might describe orally (and tape record) the results of a science experiment rather than writing a detailed summary.</li> </ul>	
Combining/ resequencing published materials	Knowledge of skill sequence in curriculum areas	More practice on particular steps of skill sequence or different sequence of skills	Materials from two or more curricula providing instruction and/or practice of needed skills are combined. For example, practice exercises may be selected from one curriculum to augment a curriculum that provides only a few practice exercises.	Resequencing materials allows the teacher to develop the curriculum to meet the needs of the student related to practice (number of trials) and developmental sequence. Teacher time is minimized because existing materials are used.

APPENDIX F (Continued)

MATERIALS ADAPTATIONS

Type of Adaptation	Skills Required	Student Need(s)	Technique	Rationale
Combining/resequencing published materials			Materials from two or more curricula may be used to develop a sequence different from that present in either curriculum.  Materials within a single curriculum may be resequenced to teach several levels of a single skill in sequence (rather than spread throughout the school year) or to provide additional practice.	
Supplementing published materials	Knowledge of skill sequence Knowledge and skills in curriculum development	More practice on particular steps of skill sequence	Write additional materials that provide for specific need of exceptional students to augment published materials.	Some commercially available materials may not provide a skill as specific as some exceptional learners require. Therefore, the teacher may need to write materials for intermediate steps in the skill sequence.
Developing curriculum materials	Knowledge of skill scope and sequence Knowledge and skills in curriculum development	Skill, format, or special need that is not considered in existing curricula	Develop and write materials that teach the needed skill, are presented in the appropriate format, or consider the student's special need.	Materials written by the teacher for a particular student potentially can meet all the special considerations necessary for that student.

APPENDIX G

Teacher Questionnaire

Grade Level \_\_\_\_\_

Period

Subject Area \_\_\_\_\_

# students

School Model  
K-8 \_\_\_\_\_ 7-8 \_\_\_\_\_

# EEN\* students

# years taught \_\_\_\_\_


Are students tracked? Yes \_\_\_\_\_ No \_\_\_\_\_

Do you have now, or have you had, EEN\* students enrolled in your classes? Yes \_\_\_\_\_ No \_\_\_\_\_

Have you had any special education training? Yes \_\_\_\_\_ No \_\_\_\_\_  
 University course(s) \_\_\_\_\_ Workshop(s) \_\_\_\_\_  
 Inservice credit(s) \_\_\_\_\_

Please list specific techniques or modifications you use with EEN\* students.  
 (e.g., chapter reading assignments broken down into daily tasks  
 fewer problems assigned)

Modification tried	Successful?	
	Yes	No

Comments on modifications listed above

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\*EEN students - Mainstreamed special education students

## APPENDIX G

What type of supportive services do EEN\* students receive in your school?

\_\_\_\_\_ tutorial (Mainstreamed, supplemented by special education)  
 \_\_\_\_\_ instructional (EEN\* instructed in special education class)  
 \_\_\_\_\_ other (Specify: \_\_\_\_\_)

Please check any modifications you have tried and whether you would do so again.

<u>Modification</u>	<u>Tried</u>	<u>Try Again</u>
Having students listen to tape recording of text	_____	_____
Reading test questions aloud to student	_____	_____
Highlighting (color coding) student texts	_____	_____
Using filmstrips or films instead of textbooks	_____	_____
Omitting assignments which require copying in a timed situation	_____	_____
Reducing length of assignments	_____	_____
Reducing number of assignments	_____	_____
Grading on individual progress or effort	_____	_____
Checking student's notebook daily	_____	_____
Breaking tasks down into smaller steps	_____	_____
Asking questions requiring short answers instead of essays	_____	_____

Please check your reasons for not making classroom modifications:

- \_\_\_\_\_ a) I feel I should not have to do so.  
 \_\_\_\_\_ b) I would like to, but don't know how to; I need help in implementing.  
 \_\_\_\_\_ c) It takes too much time.  
 \_\_\_\_\_ d) I do not know what to do.  
 \_\_\_\_\_ e) Idea is too difficult to implement.  
 \_\_\_\_\_ f) The funds are not available for alternative choices.  
 \_\_\_\_\_ g) I cannot alter texts, color code, or mark up.  
 \_\_\_\_\_ h) Other (please describe) \_\_\_\_\_

## APPENDIX H

Comments on Modifications Listed by Classroom Teachers

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"One of the skills I stress is note taking and the organization to do so correctly. This skill carries over into all classes and future education."

"I sometimes feel that the mainstreamed LD students rely too much on the LD Resource Teacher and not enough on their own initiative. They must start to learn independence if they're going to make it in the 'real world'. In the lower grades I feel a lot of extra help is fine, but by the time they get to 8th grade they need to be weaned to rely on their own talents or at least learn to cope with their deficiencies."

"Our District doesn't modify class size enough for severe reading problems. One-half of my first hour class have severe reading problems making eighteen too many to work with at one time."

"I've always made modifications for the gifted and talented students as well."

"I don't have any EEN students presently but have had them in the past. I don't modify the course for them. In 7th grade, the course is exploratory in nature and just four weeks long. They generally don't take German in eighth grade. I imagine the feeling is that their basic subjects are more important. I think at least one elective subject is eliminated to give the student study time with a special teacher."

"It seems doubtful that an EEN student would use German in his lifetime. Therefore, the tremendous effort it would take to teach him would probably be wasted effort."

"One student was in my Spanish class for about three weeks; then had his mother pull him out to give him more time to work on his 'house subjects' rather than Spanish. (Spanish is an allied art at our school").

"I do believe in grading EFFORT. In my classes I have 'D' students getting a 'C' or 'B'. I also have 'C/D' students getting F's because of lack of effort. If a grading system allows this, I would think one could mainstream an academically handicapped student. The behavior modification is where I need help."

"I have many other 'slow' students in my class as well and feel that much of the needed adjustments I have already made."

"All relate to working with individuals at their level of ability to progress."

"If class sizes are too large, modifications take too much time."

"Study habits of the student generally determine whether any of these program modifications are successful. Decreasing the number of problems doesn't help if those problems don't get finished because of a lack of effort on the student's part."

"Sometimes the modifications work - sometimes they don't! Individual students respond very differently to each of the various modifications tried."

"The only way that I can use modifications is in special groups like remedial and/or slow paced classes."

"I feel its important to have students display work 'they' are proud of - did they feel they did 'better'. These do not have to be 'A' papers but if they felt they did a good job. They become good judges and apply more effort. Add to this enthusiasm, a lot of caring, and little 'negative' but lots of faith and encouragement."

## Mainstream Me?

Connie Hall Stockard



Thank you — but

I need no more from you  
beyond the basic good manners  
set down in any society:  
unwritten guidelines  
concerning  
how one human being treats another—

I am not rare  
any more than your nephew  
or a redheaded teacher  
or a skinny cheerleader—

I am sorry laws were necessary  
to mainstream me—  
. . . such a humorous gesture . . .  
like mainstreaming a colt in a pasture  
I was baptized in the stream of life  
the day I was born—

I am a part of the earth  
like the leaves on that tree,  
the fingers on your hand,  
the stones and mountains  
of various shapes and hues

I am simply a child  
to whom you are responsible:  
to teach, to guide, to discipline  
and depending on your size as a person,  
to Love.

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*Connie Hall Stockard is Poet-in-Residence  
at Region IX Education Service Center,  
Wichita Falls, Texas.*

*Artist: Angela Eakins, Seymour, Texas*

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