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Secondary teachers' attitudes toward increased mainstreaming: use of effective instruction for students with learning disabilities

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SECONDARY TEACHERS ATTITUDES TOWARD INCREASED MAINSTREAMING: USE OF EFFECTIVE INSTRUCTION FOR STUDENTS WITH LEARNING DISABILITIES

by
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ABSTRACT

Nancy Tartaglione SecondaryTeachers' Attitudes Toward Mainstreaming: Use of Effective Instruction for Students with Learning Disabilities,1996. Project Advisor: Dr. Stanley Urban, Learning Disabilities.

The purpose of this study was to investigate the types of instructional strategies offered in mainstream classes. Twenty mainstream teachers of academic subjects in grades 9 through 12 were asked to complete a self-evaluation concerning instructional strategies used in their general education classes. Also, the teachers completed a questionnaire concerning their attitudes toward mainstreaming and their perception of the success of the mainstreaming program in their school. Results indicate that over one third of the teachers felt no strong commitment to mainstreaming and did not utilize many instructional modifications that are proven to benefit students with disabilities. Implications of these results in terms of recent educational initiatives resulting in increased inclusion programs are discussed.

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Chapter I

The Problem

Introduction

For more than a decade there has been an ongoing debate over how to reform special education services. Inclusion is one of the most widely discussed reform methods and is receiving a great deal of attention both in school districts and in the media. A broad definition of inclusion is " full time placement of children with mild, moderate, or severe disabilities in regular classrooms" (Staub and Peck, 1994, p.36). This idea has evolved from various interpretations from the Least Restrictive Environment (LRE) requirements of PL94-142 Act of 1975, as amended by PL 101-476. The LRE requirement means that a continuum of services must be available for children with disabilities, and each child's placement should be as close to the regular class placement as is appropriate for that child's needs and abilities.Self contained placement, or even a residential placement, is not illegal as long as that is the LRE for that child. The concept also implies that social integration is a desirable feature in a child's education.

The provisions of Public Law 101-476 that students must be educated in environments that are the least restrictive has been interpreted as "selecting the most normal educational setting" because "the placement of youngsters who have disabilities with youngsters who do not results in improved academic and social

development for pupils with disabilities and reduces the stigma associated with being educated in segregated settings" (Mercer, 1991, p.176). This type of programming is now being implemented in some schools by using inclusion, which evolved from the earlier concept of mainstreaming.

The only significant difference between mainstreaming and inclusion is that with mainstreaming there is some time spent in a separate resource room placement. In many situations inclusion has eliminated the resource room, and students now receive special education support some other way. A common arrangement is for inclusion students to receive their education in the regular classroom with teaching done by the general education teacher. Therefore, in order for inclusion programs to work, the cooperation of the general education teacher must be secured (Bender, Vail, & Scott, 1995).

The challenge to gain the cooperation of regular education teachers is especially great in secondary schools. One of the problems, however, is that most secondary teachers work with at least 100 students daily and contact time is limited (Schumaker & Deshler, 1994-1995). Another concern is that early studies showed that regular education teachers were apprehensive about the quality of work that mainstreamed students could produce. Because of these concerns over the increased usage of such diverse classroom settings, the question arises over what kinds of instructional programs should be used. Clearly more information is needed concerning how general education teachers teach students with LD and/or other disabilities in secondary regular education classes (Bender, Vail, & Scott, 1995).

Purpose of the Study

The general purpose of this study is to determine how a select sample of secondary general education teachers deal with mainstreamed and/or included

students.

Need for the Study

Programs of inclusion and mainstreaming have been in place for several years, but little research has been done on their effectiveness at the secondary level. The programs at this level are multifaceted since secondary students deal with several teachers across the content areas instead of the one basic teacher concept of the elementary level. How these secondary teachers have dealt with mainstreamed students in content area settings given the large number of students that they have contact with each day is what needs to be studied.

Research Questions

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

1) What kinds of curriculum instruction modifications are secondary teachers using to instruct special education students placed in their classroons?
2) What are secondary teachers' attitudes toward inclusion?
3) What are secondary teachers' perceptions of success?

Value of the Study

Since there has not been a great deal of research done at the secondary level, this study was done to investigate the types of instructional modifications being used by general education teachers and how they feel about the success of mainstreaming. Since mainstreaming and inclusion programs are being implemented so frequently, the results of this study could benefit both secondary general education teachers and

school districts that are implementing them. The teachers could benefit from the sharing of instructional strategies, while school districts could learn from the teachers' views on how well these programs are working.

Subjects of the Study

A subject pool of 20 general education teachers of Grades 9 through 12 was obtained from one secondary school which had been involved with mainstreaming for 10 years. The school had gone to a full inclusion program for the last 3 years of that 10 year period. These particular teachers were asked to participate because each had been involved in dealing with classified students in the regular classroom for at least 5 years. These 5 years had taken place in the mainstreaming program initially, for 2 years, and then the inclusion program for the last 3 years, which had replaced the mainstreaming program. Each teacher was asked to complete two questionnaires. The first one contained 40 questions with ratings about different instructional strategy modifications. The second one had 6 questions about the teachers' beliefs toward mainstreaming.

Limitations of the Study

There are certain limitations which must be taken into account when generalizing the results of this study.

1. The sample represents teachers of only 1 school who were studied because of their availability to the researcher. Although this is a non-random sample, the community is representative of a middle class suburban school district with above average academic achievement.

2. The results of the study were based on self-reports by the teachers and may include some misrepresentation related to a desire to respond in a socially desirable

manner.

3.The teachers' classes had different numbers of students with disabilities enrolled which might have affected the different types of strategies employed and also affected the teachers' attitudes toward inclusion.

Definition of Terms

Inclusion - The full time placement of children with mild, moderate, or severe disabilities in regular classrooms (Staub & Peck, 1994-1995).

Least Restrictive Environment - (LRE) According to Public Law 94-142 as amended by PL 101-476, LRE means that, to the maximum extent appropriate, a pupil with an educational disability is educated with children who are not educationally disabled. Placement of pupils with educational disabilities is provided in appropriate educational settings as close to home as possible.

Mainstreaming - The practice of integrating pupils with disabilities socially and instructionally into regular education as much as possible (Mercer, 1991).

* The terms "mainstreaming" and "inclusion" will be used interchangeably in this study.

Chapter II

Review of the Literature

In this chapter literature related to inclusion will be reviewed, and the views of individuals who are advocates as well as those who are critics will be included. In addition, articles which deal with the learning styles of adolescents who have learning disabilities and their need for special instructional modifications will be reviewed. Finally, a third area that is included is the specifications for an inclusive school which depends heavily on the cooperation of the general education teachers.

Views on Inclusion

Those advocates who are in favor of inclusion believe that inclusive schools have several advantages over traditional approaches (Stainback & Stainback, 1992). One of these advantages is that supposedly everyone benefits from these schools because they are supportive and caring and do not focus on just select categories of students. Another advantage is that personnel can provide support for all students because all students are mainstreamed, and valuable time is not lost classifying and labeling.There is also the ability to provide social and instructional supports for all students. In today's changing world, family and social units are not always there, and inclusive schools can help since they focus on building interdependence, mutual respect, and responsibility (Stainback & Stainback, 1992).

Evidence of this has been drawn from the experience of educators involved in inclusive programs in both the United States and Canada. The educators in these

programs believe that transforming educational settings to inclusive communities is at the vanguard of education today (Stainback & Stainback, 1992).

Other advocates who favor inclusion base their argument on the issue of most effective setting. Three meta-analyses in the educational literature address this issue for the education of special-needs students (Baker 1994, Carlberg and Kavale 1980, Wang and Baker 1985-1986). These meta-analyses generate a common measure called an *effect size*. They compared the effects of inclusive versus noninclusive educational practices for special-needs children.The two areas measured were academic outcomes and social outcomes (Baker, Wang & Walberg,1994).

The average effect sizes range from 0.08 to 0.44, and all are positive, which means that special-needs students educated in regular classes do better academically and socially than comparable students in noninclusive settings. The average of the six inclusion effects, 0.195, is near the average effect for effective instructional practices (Baker, Wang & Walberg,1994).

Inclusion also works because it "dispenses with labels" (Wang, Reynolds & Walberg, 1994-1995). This is especially true for students at the "margin" - students with special needs. For these students, both general and special education needs to be reformed.The one basic solution for this is that public schools should be inclusive and integrated. Statistics show that children in the margin are often from poor and minority backgrounds. These are the childern who are set aside in categorical programs, and reform is needed on order to change this pattern (Wang, Reynolds & Walberg, 1994-1995).

The suggestions for reform include: 1) make public schools inclusive and integrated 2) organize public schools into smaller units 3) step up research on marginal students 4) implement new approaches for students with special needs 5) shift the use of labels from students to programs and 6) apply concepts of inclusion to

government and professional groups. By utilizing these ideas, inclusion can bring schools into broader collaborative efforts for community betterment. (Wang, Reynolds & Walberg, 1994-1995).

Critics of inclusion can also be found. Albert Shanker, President of the American Federation of Teachers, feels that full inclusion is not always free and certainly not always appropriate (Shanker, 1994). He feels that "requiring *all* disabled children to be included in mainstream classrooms is not only unrealistic but also downright harmful" (p. 18).

Shanker quotes advocacy groups who doubt that a "one- size fits all approach" can work (p.19). These groups include ones who represent the blind, deaf, attention-deficit-disordered, and learning disabled children. Many in these groups feel that these children need comprehensive help which can be very expensive, and states are often using inclusion as a cost-cutting method. Therefore, students might not receive this help, help which they are presently receiving under the variety of present programs (Shanker, 1994).

These advocacy groups prefer to continue with a "continuum" of placements based on the nature and severity of the handicap. Shanker offers the suggestion that PL94 - 142 Act of 1975, as amended by PL 101-476, be further revised instead of adopting a total inclusion program. These revisions should include: 1) Congress must pay its fair share for special needs programs 2) the law should require districts to provide adequate training for all teachers who work with disabled students 3) equal weight should be given to parental and teacher requests and referrals for special education services 4) the child's teacher must be part of the team for the IEP 5) teachers should be legally protected if they "blow the whistle" on districts that are not providing the correct services and 6) the "stay put" revision should be rewritten (Shanker, 1994).

Other critics of inclusion argue that sometimes separate is equal (Fuchs & Fuchs, 1994). They believe that those who are arguing stridently for full inclusion do not necessarily speak for the majority of advocates of children with disabilities.

Often full inclusionists reject special education placements because they argue "historically special education has been general education's dumping ground" (Fuchs & Fuchs, 1994, p. 23). Inclusionists feel that by abolishing separate placement, it will force mainstream teachers and classrooms into a more resourceful and humane system. However, those who advocate separate placements are equally concerned with humane treatment, but they realize it may be a long term goal for many children instead of the only option. Often education placements are an option as means to an end. For example, students with special needs require teachers with special training. Often, when these students are put in regular classrooms, the general education teacher has had no special training. These teachers teach to the curriculum, not the students, because they are judged by the standardized test scores. Until all regular education teachers are trained in special education strategies such as collaborative learning, cooperative learning, peer teaching, and innovative scheduling, special needs students are going to require alternative placements (Fuchs & Fuchs, 1994).

Educational choices is another reason parents of several special needs children often disagree with the concept of full inclusion (Schive, 1995). Many of these parents believe that no single program can be right for all of the children. Often, as courts have recognized, the LRE requirement is sometimes in conflict with the appropriate requirement. This conflict is caused because the LRE requirement itself is very confusing. LRE is a place, not a process, and courts have stated that the regular classroon is the LRE for some; but, in other cases, a state school can be. Individual children have individual needs, and "it is ironic that the inclusion movement came about because school systems were making generic decisions about placement -

keeping kids out of regular classrooms" (Schive, 1995, p. 52). However, advocates for full inclusion now are saying " that *all* children with disabilities should be in the regular classroom, and they are doing the same thing to others" (Schive, 1995, p. 52).

Learning Styles of Adolescents with Disabilities

Mildly handicapped students face many problems as they move from elementary to secondary school with its increased curricular demands. Through research it has been found that students are more successful if students are taught how to learn (Deshler & Schumaker, 1986).

A set of learning instructional packets was designed and field tested for a study on teaching students to learn (Deshler & Schumaker, 1986). The curriculum was organized into three major strands.The first was Word Identification Strategy, the second was Notetaking Strategy, and the third was Writing Strategies. The first step was to match the instruction with the curriculum demands. This allowed the student to acquire skills that would enable him to cope with immediate academic pressures as well as prepare for the academic future.

These learning strategy interventions were tested in a variety of ways. Over the course of about seven years, each of the strategies was tested through multiple-baseline design studies. In all of the studies to date, once training in a strategy had been implemented, the students showed marked gains. As a result of many replications, it has become apparent that handicapped adolescents can learn to use a variety of learning strategies (Deshler & Schumaker, 1986).

Specifications for An Inclusive School: General Education Teachers

Proponents of inclusive schools believe that these schools should never be seen as a money-saving option for a school district. No support services should be

taken away; in fact, even more support services may be needed. In addition, all members of the inclusion team may need additional training (VanDyke, Stallings & Colley, 1995).

This team should include the special education teacher, the classroom teacher, and the principal. Curriculum and instruction must be overlapping, and the parent must play a vital role. All of these people have to collaborate to meet the needs of all students. There must also be communication, flexibility, shared ownership, recognition of differing needs, need-based instruction, willingness to be a team player, cooperative grading, and IEP responsibility (VanDyke, Stallings & Colley, 1995).

The special education teacher is crucial. He or she can act as the case manager, facilitate team meetings, determine curriculum adaptations, and document the IEP. This teacher should also be responsible for any direct instruction that is necessary. The special education must work closely with the classroom teacher who must believe that students with disabilities can learn successfully in age-appropriate classrooms. The classroom teacher must also be aware of effective strategies for use in inclusive classrooms. Effective discipline strategies must be utilized. Cooperative learning is a teaching strategy that works well. The classroom teacher should become very involved with the process of developing the IEP and making sure the services are provided (VanDyke, Stallings & Colley, 1995).

Inclusive schools are based on the belief that schools must reflect a society that is ready to embrace all children so that they can be educated together. Schools today should be creating environments that welcome all students. However, this must be approached as a team effort, and the general education teacher will play a key role (VanDyke, Stallings & Colley, 1995).

Teacher Attitude in An Inclusive Classroom

In 1995 Bender, Vail, and Scott found that teachers' attitudes had a definite effect on how effective mainstreaming was in their classes. The study utilized questionaires which were given to 127 mainstream teachers in Grades 1 through 8.

When inclusion programs have been introduced, there has been concern about teacher attitudes. In addition, concern over instructional strategies has also been voiced. Earlier studies have suggested that these attitudes may result in differential instructional practices. Since more information was needed, this study was undertaken (Bender, Vail & Scott, 1995).

In this study each of the 127 teachers was asked to complete a questionaire. These questionaires included teacher background, education, and instructional modification items. The answers were compiled using means, standard deviations, and ranges for the subject variables. A six question Likert scale was developed to assess teacher attitudes. The Teacher Effectiveness Scale measured teaching efficacy. The Bender Classroom Structure Questionaire was used to assess the use of instructional strategies (Bender, Vail & Scott, 1995).

Results from this study suggest several conclusions. First, many mainstream teachers do not use certain strategies that are known to facilitate learning for LD children. Second, negative attitudes were directly linked to teachers who used very few instructional modifications. Finally, the study also suggests that there is no great overlap of teachers' perceptions of their own efficacy and their support for mainstreaming. Apparently , a number of teachers with fairly positive outlooks about their own effectiveness are not positively disposed toward increasing mainstreaming (Bender, Vail & Scott, 1995).

Summary

Inclusion is a topic that is being discussed as a reform method for special education. According to the literature, there are groups on both sides of the issue. Those who argue for it see it as a social and academic plus for special needs children that retains the support services that go with it. Those who argue against it say that not any one program can fit all students, especially if cost-cutting is one of the primary forces driving this reform.

Several other considerations must also be weighed when talking about inclusion programs. Special needs students at the high school level need to develop learning strategies in order to deal with advanced curriculum. Along with the curriculum, teachers play an important role, especially the general education teacher, in helping mainstreamed students. These teachers often need special training and support. Since the IDEA Act is being reviewed presently, the concept of inclusion will continue to play an important role in this process.

Chapter III

Design of The Study

This study was designed to investigate what instructional modifications general education teachers in an inclusion program at the secondary level use, and to determine if these teachers feel inclusion is successful. The Bender Classroom Questionaire (BCSQ; Bender, 1990,1992; Bender & Ukije, 1989) was used. The first section of it assessed the teachers' utilization of instructional strategies that facillate inclusion. The second part of this questionaire assessed the teachers' specific attitudes toward inclusion.

Sample

A subject pool of 20 general education teachers from a public high school, who teach academic subjects in grades nine through twelve, was obtained on the basis of convenience and accessibility. The teachers were required to have had at least five years experience of teaching special education students in the regular classroom. This experience was obtained during an earlier mainstreaming program and the present inclusion program which replaced mainstreaming.

The community involved in this study is a suburban, middle-class town, (population 9,700), located 18 miles southeast of Philadelphia, Pennsylvania and 16

miles south of Camden, New Jersey. There are 3 elementary schools, one middle school, and one high school in this community. The population of the high school is 523 with 56 of these students being classified for special education services. There are 54 general education teachers and 4 special education teachers on the staff. The community is middle class and consists of above average academic achievement. In the Class of 1995, 58% were accepted at four year colleges and 27% were accepted at other post-secondary programs.

The sample was selected on the basis of convenience and accessibility. Of the 20 general education teachers selected, the only requirements were that they taught academic subjects, not electives, and that they had been involved with the earlier mainstreaming and present day inclusion program for at least five years.

The sample used in this study does not represent a cross section of all public school teachers since it represents only one school. This study is concerned with a limited population within a system.

Instrumentation

Teachers involved in the study were administered The Bender Classroom Structure Questionnaire (BCSQ; Bender, 1990, 1992; Bender & Ukije, 1989) which consists of two sections: first was the instructional modifications section, and second was the attitude toward inclusion part.The instructional modifications section was used to assess the teachers' utilization of instructional strategies. This is a 40-item Likert

scale that is a questionnaire which includes research-proven strategies for facilitating instruction in mainstream settings. Sample indicators include, "I suggest particular methods for remembering" and "I use advance organizers to assist students in comprehension of difficult concepts." A high score on this part of the questionaire indicates that the inclusion teacher is using a wide variety of instructional strategies fairly frequently. Internal-consistency reliabilities for the score is in the acceptable range for research purposes (.88; Bender & Ukije, 1989).

The second part of The Bender Classroom Structure Questionnaire (BCSQ; Bender, 1990, 1992; Bender & Ukije, 1989) was used to assess teachers' attitudes toward inclusion. This is a six question Likert scale with each question assessing a teacher's beliefs about the positive effects of inclusion. Sample questions include, "I believe that mainstreaming in my school has been successful" and "I support the mainstreaming of the handicapped." Each item was rated on a Likert scale ranging from 1(strongly disagree) to 5(strongly agree). The items were totalled to generate a composite score indicating a teacher's beliefs about inclusion. The test reliability was in the acceptable range for research purposes, $r=.81$, $p<.0001$ (Bender & Ukije, 1989).

Collection of Data

The group of teachers who were to take part in this study were asked to participate on a voluntary basis. After gaining their cooperation, the teachers were asked to meet in a classroom after school. There they were given the two part, two

page questionnaire and asked to fill it out immediately and return it as soon as they were finished. This precluded anyone from discussing their responses. Provisions were made for any teachers who were absent that day; they were seen individually later and given the questionnaire when it could be arranged for that block of time to be scheduled.

Research Questions

1) What kinds of curriculum instruction modifications are secondary teachers using to instruct special education students placed in their classroons?
2) What are secondary teachers' attitudes toward inclusion?
3) What are secondary teachers' perceptions of success?

Analysis of the Data

For the "Teachers' Attitudes Toward Inclusion" part of the questionnaire, percentages were derived by combining the two highest rankings, 4 and 5, for the group of teachers who were in favor of mainstreaming. The percentages for teachers who were against inclusion were found by combining the two lowest rankings, 1 and 2. Those teachers who responded with a 3, the middle ranking, were considered to have no strong committment to the concept.

For the " Instructional Strategies" part of the questionnaire, the same format and formula of the first questionaire was used - the combining of 4 and5 was considered high in the use of an instructional strategy, 1 and 2 were low, and 3 was considered non-committal. After those percentages were derived, then those results were

correlated with the results of the teachers' attitudes to see if those teachers with the more positive attitudes were using more instructional modifications.

Chapter IV

Analysis of Results

Mainstream Attitudes

Table 1 presents the percentages of teachers who responded in each answer category for each of the six questions on the mainstream attitudes scale. Results for Question 1 indicated that 10% of the teachers did not support the concept of mainstreaming (this percentage was obtained by adding the percentages for the two lowest rankings), and another 25% of these teachers felt no strong commitment to the concept. Clearly, if over one third of the mainstream teachers indicated this relative lack of support for mainstreaming, there may be some problems in successful implementation-at least in those teachers' classes. On Question 4, 15% of the teachers felt that mainstreaming was not successful in their school while another 20% felt no strong commitment. Once again, over 30% of the mainstream teachers indicated that they felt that the mainstreaming was not successful which indicates that there may be some problems in at least those teachers' classes. On each of the other questions, a sizable minority of regular education teachers indicated some disagreement with the concept of mainstreaming.

TABLE 1
TEACHER'S ATTITUDES TOWARD MAINSTREAMING N=20
RESPONSES ARE REPRESENTED IN PERCENTAGES

	RESPONSE				
QUESTION	1	2	3	4	5
1. I support mainstreaming the handicapped.		10	25	40	25
2. I believe mainstreaming has been beneficial for handicapped students.	5	10	15	40	30
3. I believe mainstreaming has been beneficial for nonhandicapped students in mainstream classes.	10	15	20	40	15
4. I believe that mainstreaming in my school has been successful.	5	10	20	50	15
5. I believe that mainstreaming has been successful in terms of improving the social skills and behaviors of the handicapped.	5	5	20	50	20
6. I believe that mainstreaming has been successful in terms of improving the academic skills of the handicapped.	5	10	25	50	10

Note. 1 = *Strongly disagree,* 5 = *Strongly agree*

Mainstream Instructional Modifications

Table 2 presents the results of teachers' responses to specific instructional strategy utilization. Percentages discussed below were generated by totaling the percentages for the two indicators on either end of the continum.

These data generate a number of issues. First, mainstream teachers reported that they used numerous instructionl strategies that facilitate mainstreaming. For example, on Question 20, 55% of the teachers indicated that they individualized within the mainstream class, when necessary. On Question 30, 55% reported they individualized with some degree of frequency. Also, on Question 24, 60% indicated that they utilized alternative test options. Finally, on Question 27, 65% indicated that they varied the instructional level with some degree of frequency. These modifications would greatly enhance the success of students with disabilities in those classes.

Several questions dealt with alternative instructional arrangements. On Question 12, 70% of the teachers indicated that peer tutoring was utilized frequently. Also, on Question 36, 45% of the teachers indicated that cooperative instruction was frequently used. On Questions 5 and 8, teachers indicated frequent use of metacognitive andlor strategic instructional principles; 70% and 50% of the teachers responded favorably, and those techniques are particularly important for students with learning disabilities. Each of these strategies has been shown to be effective in the academic success involved in mainstreaming.

However, there were a number of strategies that teachers were not using with great frequency. For example, on Question 23, 35% of the teachers indicated that they rarely used a specialized grading system. On Question 32, only one third of the teachers (30%) indicated that students used self-monitoring approaches on a frequent basis. Only about one third (35%) of the teachers reported using a token economy frequently (Question 33), and less than one third (30%) used behavioral contracts

frequently (Question 37). On Question 38, only 35% of these mainstream teachers indicated frequent use of advance organizers, whereas 40% of the teachers indicated infrequent use. Finally, 30% of the teachers indicated that they used direct and daily measurement rarely (Question 39). These responses do not indicate frequent use of strategies that are known to work for many children.

Intervention based on assertive discipline was frequently used. On Question 35, 85% of the teachers indicated that they utilized an assertive discipline plan frequently.

TABLE 2
PERCENTAGES OF TEACHERS USING
INSTRUCTIONAL STRATEGY MODIFICATIONS
IN THE MAINSTREAM

STRATEGY *NOTE 1=ONLY RARELY, 5=ALMOST ALWAYS*	1	2	3	4	5
1. I keep the lesson moving along quickly			10	65	25
2. The class reviews assignment papers when I return them.	5	10	30	20	10
3. Several students may be walking around in my class at any one time retrieving materials.	20	30	30	15	5
4. Students receive verbal praise from each other.	5	15	35	35	10
5. I encourage students to share various techniques that may help them memorize facts in class.	5		25	40	30
6. The class emphasizes correction of worksheets.	10	5	30	45	10
7. Students must raise their hand before standing.	30	10	20	20	10
8. I ask, "How did you learn that?" or some other question to focus on learning strategies.	5	15	30	40	10
9. I insist that doors be shut and students remain in their seats to minimize distractions.	15	15	30	25	15
10. New material is introduced fairly rapidly.	10	25	35	25	5
11. I suggest particular methods of remembering.		5	25	45	25
12. Peer tutoring is used to assist slow learners.	5	10	15	40	30
13. I emphasize the importance of working quietly.	5	5	20	35	35
14. I determine early in the year if a student needs the same concepts covered in several different ways.	5	10	30	40	15
15. I use physical touch, such as pat on the back, as a reinforcer.		5	10	30	55

16. I praise students for successful work whenever possible.				25	75
17. Students are encouraged to help each other informally on learning tasks.		5	20	40	35
18. I try to determine how students learn best.		5	15	45	35
19. I use reading materials that highlight the topic sentence and main idea for slow learners.	30	20	20	20	10
20. I individualize in my class when necessary.	5	10	30	40	15
21. Students are taught to use their own inner language to give themselves silent task instructions.	15	10	30	35	10
22. I use class privileges as rewards for work.	5	10	15	45	25
23. I use a specialized grading system that rewards effort for handicapped pupils.	20	15	20	25	20
24. I use several test administration options such as oral tests or extended-time tests.	10	15	15	35	25
25. Directions for educationa tasks are kept simple and are demonstrated to achieve clarity.		5	10	45	40
26. Differential curriculum materials are selected based on the learning characteristics of paricular students in my class.	5	15	30	30	20
27. I routinely vary the instructional level for different-ability children doing the same task.	5	10	20	45	20
28. Instructional materials are varied for different kids in my class.	5	20	25	30	20
29. I constantly monitor the on-task behavior of my students.			5	40	55
30. I individualize my class for low-ability students.	5	15	25	35	20
31. Visual displays and transparencies are used in class to aid comprehension.	5	5	20	40	30

32. Students use self-monitoring to record daily academic and behavioral progress.	20	20	30	20	10
33. A token economy is used for reinforcement.	40	10	15	20	15
34. I use the blackboard frequently to explain concepts.		5	5	20	70
35. I have an assertive discipline plan in effect.	5	5	5	25	60
36. Cooperative learning groups are frequently used.	10	15	30	25	20
37. I use individual behavioral contracts with students to improve behavior.	35	20	15	15	15
38. I use advance organizers to assist students in comprehension of difficult concepts.	20	20	25	20	15
39. Students complete direct daily measures of academic progress in class.	20	10	25	30	15
40. A set of class rules is on display in my class.	5	80	5	5	5

Chapter V

Summary and Conclusion

Results from this study suggest several interesting conclusions. First, these results are similar to earlier research on the implementation of mainstreaming programs, in that a significant percentage of mainstream teachers do not utilize certain strategies that are known to facilitate academic achievement for children with LD (Baker & Zigmond, 1990). Although these teachers do emphasize strategic thinking in their classes, the lack of utilization of self-monitoring, behavioral contracts, advance organizers, or token economies is difficult to understand since research is overwhelmingly supportive of these instructional approaches for students with LD. In addition, it is difficult to understand why mainstream teachers have not used these strategies more, even though they have apparently implemented assertive disciplinary strategies, peer tutoring, alternative assessment strategies, and cooperative learning in their classes.

Research done by Munson (1986) may help to explain this. Munson interviewed 26 mainstream teachers about the modifications they made in their classes. She found that many of them reported using typical modifications that a teacher might make for any student-such things as varying directions and using alternative testing procedures. It appears that teachers are more inclined to make relatively minor adaptions for low-achieving children in their classes, but they are reluctant to make the more substantial modifications that are necessary for successful mainstreaming (Munson, 1986).

The teachers' attitude results of this study, of which over one third indicated that they were not in favor of mainstreaming, were interesting also. If general education

teachers are not in favor of mainstreaming, then they are not going to learn to utilize strategies for the implementation of mainstreaming. Clearly, teachers who feel less than positive about mainstreaming will utilize effective mainstreaming strategies less frequently than other teachers. This offers certain negative implications for the implementation of inclusive class placements for students with LD if such a high proportion of regular classroom teachers are not in favor of mainstreaming nor think that the program has been successful.

These results suggest the possibility of a potentially negative cycle in which teachers with less than positive attitudes toward mainstreaming use effective strategies less frequently. Those teachers may become less successful in mainstreaming efforts eventually, and this decrease in instructional effectiveness could result in attitudes becoming more negative.

Teachers' attitudes toward mainstreaming is an area of major concern. The idea that different attitudes may result in different instruction is consistent with other research. For example, Gibson and Dembo (1984) found that teachers with a less than positive attitude toward their own effectiveness utilized fewer effective instructional techniques than did the teachers with more positive attitudes. Therefore, experimental research along these lines is warranted.

A number of limitations should be noted in the present study. First, each of the variables was based on self-reports by mainstream teachers and thus may involve some bias. Another limitation that must be mentioned concerns the experimental nature of the measurements used. Validity studies have not been conducted on either the mainstreaming attitude scale or the BCSQ, although the face validity of the indicators demonstrates the appropriateness of these measures. Although subjects were assured of confidentiality, some teachers may have reported using instructional strategies that they did not actually utilize.

Also, studies on the number of courses taken to improve teaching students with disabilities was not looked at. The number of students with disabilities in each teacher's class was also not considered. These limitations must be noted when evaluating the data overall. Classes to improve teaching students with disabilities taken by the teachers and number of students with disabilities per class might warrant further study.

However, these results do present an interesting approach to analyzing the complex relationship among attitudes and use of efficient and effective instructional strategies. Additional research on these relationships would certainly seem warranted.

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