Instructional Tactics That Facilitate Inclusion

Are We Doing Successful Inclusion in Secondary Classrooms?

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Abstract

While inclusive educational placements have become the bedrock of national policy, there are questions concerning support for inclusion among both general and special educators. Further little is known concerning what instructional tactics teachers are actually using in their classes to facilitate inclusion. Ninety-one teachers from grades kindergarten through high school, teaching in either general or special education positions, completed three questionnaires; a) a demographics measure, b) a questionnaire on their use of effective instructional strategies that facilitate inclusion, and c) an attitude scale. Results suggest that attitudes toward inclusion among both general and special educators are less than positive, indicating that special educators may not be strong advocates of inclusive class practices. However, more positive attitudes toward inclusion among middle school teachers were related to increased use of instructional tactics much less frequently than elementary school teachers, suggesting that additional professional development on effective inclusion tactics may be necessary for teachers in the higher grade levels in order to facilitate effective inclusion.

Instructional Tactics That Facilitate Inclusion

Within the last 5 years, there have been further calls for increased education of students with mild or moderate disabilities in inclusive classes (Commission, 2002). As inclusion placements grow around the country, it becomes increasingly important to expand our understanding of how teachers feel about inclusion as well as how frequently teachers are using strategies that facilitate effective instruction for students with disabilities in the inclusive classroom. For example, with inclusion mandates firmly embedded within various national policy initiatives (Commission, 2002), one may well expect that special education teachers are advocating for inclusive instruction. However, little extant research has

investigated special education teachers' attitudes toward inclusive education, and research has not documented that special educators are serving as an advocacy group for effective inclusion.

Further, some research has raised questions concerning the efficacy of inclusive classroom practices for enhancing the academic achievement of students with mild disabilities (Blankenship, Boon Fore III, Hagan-Burke, 2007; Fuchs & Fuchs, 1994; Sowers & Powers, 1995; Vaughn, Schumn, & Klingner, 1995). While these studies have raised questions on the overall efficacy of inclusion, only a few studies have addressed the factors that may impact the efficacy of inclusive classroom instruction (Austin, 2001; Bender, Vail, & Scott, 1995; Blankenship, fore III, & Boon, 2005; Fore III, Hagan-Burke, Burke, Boon, & Smith, 2007; Katz, Mirenda, & Auerbach, 2002; Minke & Bear, 1996), and none of these efforts has been comprehensive. Thus, we do not know all of the particulars that impact successful inclusion.

There has been limited research during the last decade on certain isolated variables that impact the implementation of inclusive education. For example, several researchers have investigated the attitudes of general education teachers toward inclusion (Daam, Beirne-Smith, & Latham, 2001; Minke & Bear, 1996; Shade & Steward, 2001). Other researchers have described the instructional strategies that teachers have employed in inclusive classes (Bender, Vail, & Scott, 1995; DeBettencourt, 1999). Unfortunately, many of these studies involve small numbers of teachers and are limited in the grade levels described. For example, the evidence on instructional strategies utilized by general education teachers in secondary grades is quite limited (DeBettencourt, 1999). Nevertheless, these studies do provide a basis for continued investigations of attitudes and instructional practices in the inclusive classroom.

Attitudes of General Educators Toward Inclusion

It has been fairly well established that general education teachers at some grade levels may exhibit less than positive attitudes towards inclusive instruction (Daam, Beirne-Smith, &Latham, 2001; Katz, Mirenda, & Auerbach, 2002; Shade & Steward, 2001). Consequently, researchers have focused more explicitly on this issue of teacher attitudes (Bender, Vail, & Scott, 1995; Chalmers, 1997). For example, Chalmers (1997) conducted a guided interview study in order to identify attitudes of regular education teachers who were perceived as effective instructors in the inclusive setting. To select the participants, the researchers polled both special education teachers and administrators. In order to be included in the subject sample, the teachers had to be nominated for participation by both the special education teacher and the principal. Thus, this design highlights attitudes toward inclusion held by a group of highly effective regular education teachers in the inclusive classroom. Once selected the participants took part in an open-ended one-hour guided interview based on 12 specific questions. Ten regular education teachers were selected; these teachers averaged 12.6 years in their current teaching position, and included 5 secondary teachers and 5 elementary teachers. These secondary teachers worked with students with mild mental disabilities, learning disabilities, or behavioral problems. The elementary teachers were serving a wider range of students with disabilities in terms of type and severity. All of these teachers were receiving consultative services for the students with disabilities in their classroom. Researchers transcribed all interviews and sent follow up questionnaires.

The results indicated that teachers who have been identified as excellent inclusive teachers, share common positive beliefs about inclusion, as well as similar instructional skills. For example, these teachers shared the belief that individualized expectations were one requisite modification for effective inclusion services. Further, these teachers perceived that they were responsible for the academic success of all the students in their classes. Next, these teachers evidenced attitudes favoring

interpersonal warmth and acceptance in interactions with students. The data showed that these general education teachers strived to maintain a positive working relationship with the special education teacher.

However, the Chalmers (1997) study did indicate some differences between elementary and secondary teachers. Specifically, teachers in lower grades believed that they needed to provide environments fostering students' development, whereas secondary teachers did not indicate this as imperative. This difference suggests that teachers at different grade levels may value inclusion differently at different grade levels, and future research should incorporate this grade level factor into the research design.

Daam, Beirne-Smith, and Latham (2001) compared attitudes towards inclusion between several groups of educators. These researchers investigated the perceptions of elementary teachers, both general educators and special educators, as well as building administrators toward inclusive education. The subjects were 324 elementary general educators, 42 special educators, and 15 building administrators. A 24-item survey was designed by the researchers using a Likert-type scale. In addition, semi-structured interviews were conducted with 12 participants, four persons from each group. This design allowed the researchers to compare attitudes towards inclusion among these different groups of educators. Surprisingly, the attitudes of both special education teachers and general education teachers towards inclusion were less than positive, and these groups were not significantly different in their attitudes. Both groups of teachers believed that pull-out programs were more likely to be an effective instructional setting for many students with special needs. This is an important finding, since special educators have historically served as advocates for individuals with disabilities. If inclusive instruction is going to be successfully implemented, at a minimum one would assume that the special educators involved should be supporting and advocating for inclusion.

In contrast, a study by Minke & Bear (1996) seemed to demonstrate positive attitudes towards inclusive instruction among general and special educators. These researchers focused on teachers' perceptions relating to special education services. Four hundred and ninety three teachers were asked to complete a 5-page questionnaire that was developed to examine teacher attitudes toward inclusion. These questionnaires were returned by 320 elementary school teachers. Regular education teachers' return rate was 59% as compared to 90% return rate for special education teachers. These results suggested that both special education and regular education teachers report positive views of inclusion education.

Finally, some research has suggested that attitudes towards inclusion may be somewhat malleable. For example, Shade and Steward (2001) conducted a study to assess the attitudes general education and special education pre-service teachers have towards inclusion of students with disabilities before and after they have completed an introductory course in special education. The subjects were 122 general education students enrolled in a required special education course in college, as well as 72 undergraduate special education majors. The first day of each course, subjects were administered a 48-item inclusion inventory. Upon completion of the course, the subjects completed the same instrument as a posttest measure. The results of this study suggest that a single course can significantly change pre-service teacher attitudes toward inclusion for both groups of teachers.

Instructional Strategy Utilization in Inclusive Classes

In addition to the extant research on attitudes towards inclusion, a number of other studies have investigated teachers' use of instructional strategies that may facilitate effective inclusion. This research has suggested that teachers are not utilizing a wide array of instructional strategies in the general education classroom (Bender, Vail, & Scott, 1995; DeBettencourt, 1999; Welch, 2000). For example,

Bender, Vail, and Scott (1995) used the Bender Classroom Structure Questionnaire (Bender, 1992) to investigate regular education teachers' attitudes towards inclusion, as well as their self-reports concerning the instructional strategies they employed in the inclusive classroom. This study involved a survey of 127 general education teachers in 11 school districts in a Southeastern state. Teachers from grades 1 through 8 participated in the study. Each participant completed three questionnaires; the Bender Classroom Structure Questionnaire assesses the teachers' background, education, and the teachers' use of instructional tactics that facilitate inclusion. Further, the teachers' attitudes towards their personal teaching efficacy were measured by the Teacher Efficacy Scale, a self-report measure developed by Gibson and Dembo (1984). Participants included 10 male and 117 female general education teachers. Results indicated that instructional strategies that have been shown to be effective in facilitating inclusive instruction (e.g. a variety of student groups, metacognitive or learning strategy instruction, self-monitoring and self-instruction) are not being widely used in many inclusive classes. Second, these data indicate that negative attitudes towards inclusion resulted in less frequent use of effective instructional strategies. Finally, additional analysis of these data indicates that teachers who had more students with disabilities possessed a more positive attitude toward inclusion than those teachers with fewer students. However, interpretation of this particular result is difficult. Specifically, do general education teachers who are exposed to students with disabilities become more favorable towards inclusion, or do teachers who are favorable towards inclusion receive an increased number of students with disabilities, as principals and guidance counselors determine class membership prior to the school year?

In an effort to document efficacy of various instructional procedures in the inclusive classroom, Welch (2000) conducted a study on team teaching in two inclusion classrooms. This research employed a new field based design that utilized both qualitative and quantitative assessments of student outcomes, teacher procedures and teacher impressions. Participants included students in two elementary classrooms in two different schools in a suburban area. General education teachers, all of whom were involved in inclusive team teaching, were required to keep logs which provided information regarding planning time, type of instructional format used, student grouping for instruction, and follow up evaluations for quantitative assessment. Qualitative assessment was conducted by utilizing focused discussions and written comments regarding teachers' satisfaction with the implementation of team teaching. Curriculum-based assessment was the instructional method utilized to facilitate inclusion. The results showed an increase in reading and spelling performance of all students suggesting that curriculum-based measures may be one effective instructional approach that facilitates successful inclusion. However, the results also showed that, even in these team-taught classes, the dominant instructional grouping pattern was whole group instruction.

DeBettencourt (1999) conducted a study to investigate instructional strategies used by general educators at the middle school level. This study paralleled that of Bender, Vail, and Scott (1995), and sought to determine teachers' attitudes toward inclusion together with their use of instructional strategies to facilitate inclusion. However, DeBettencourt's study differed from Bender et al.'s (1995) earlier investigation in that this study focused exclusively on teachers at the middle school level. The subjects were seventy-one general educators from three middle schools in a rural southeastern state. The BCSQ (Bender, 1992) was used as a survey instrument. In total, eighty three percent of the teachers responded. The findings, similar to Bender et al.'s (1995) demonstrated that among elementary teachers, indicated that teachers were not utilizing many instructional strategies that have been shown to be effective in enhancing the education of students with disabilities. However, use of effective instructional strategies by these general educators increased with the number of special education classes taken. Finally, these data, like the Bender et al. (1995) study above, indicate that some general

educators may not have a positive attitude toward including students with disabilities in their classrooms.

Austin (2001) investigated the instructional practices in inclusive classrooms, as well as factors that affect inclusion. The research method consisted of using a semi-structured survey created by the researcher and by interview to collect informative data from a random sampling of collaborative teaching team members. Ninety-two teachers, from kindergarten through grade twelve, who were currently co-teaching in inclusive classes completed surveys concerning their teaching tactics. From this group, six general educators and six special educators were randomly selected and interviewed. The results showed that general education teachers did more direct instruction in the inclusive setting than do their collaborative special education team partners, and that the typical role for the special education teacher in theses inclusive classes was primarily a support role rather than a direct teaching role. Of course, this raises certain questions concerning optimal use of these highly trained special education professionals.

Based on these inconclusive and often contradictory data, the purpose of this study is to address an array of questions on attitudes towards inclusion and instructional strategy utilization in inclusive classes, across the grade levels. We believe it is important to consider both attitudes and instructional practices together in one study, since these clearly may impact each other. Therefore, both teacher attitudes and instructional strategy utilization will be explored in varying grade levels, elementary, middle school, and secondary school, in order to describe how teachers at various grade levels view inclusion, and employ strategies that are known to be effective for enhancing inclusive education. Finally, we sought to directly compare the attitudes toward inclusion between special educators and general educators, in order to explore the belief that special educators are serving as advocates for inclusive instruction.

Method

Subjects and Setting

A subject pool of special education and general education teachers was obtained for this study from a large graduate education class. Ninety-one teachers representing a wide geographical area within the state of Georgia participated in this study. Initially, thirty-two special education teachers who were participating in a web-based special education class at the University of Georgia were identified and invited to participate in a study on inclusive instructional strategies. Each of the special education teachers who chose to participate were instructed to randomly select two general education teachers from their school and invite their participation in this study.

Each of these 96 teachers were asked to complete three measurement instruments, a) a self-report questionnaire on their attitudes towards inclusion, b) the Bender Classroom Strategies Questionnaire (Bender, 1992; Bender, Vail, & Scott, 1995), and c) a set of demographic questions. One general education teacher and four special education teachers did not complete the measurement instruments in a usable form, yielding a total of 28 special education teachers and 63 general education teachers who completed the questionnaires for this analysis.

Measures

Demographics and Classroom Experience. The demographics questionnaire included certain questions relative to teachers' background, such as questions about race, gender, teacher certification areas, the number of special education courses the teachers had taken, years of teaching experience, and years of teaching experiences in which teachers taught students with disabilities. Teachers were also asked questions about their teaching experiences and their current instructional classes, including the number of students with disabilities in inclusive classes, and the grade level they taught.

The Attitude Questionnaire. A nine-question Likert scale was developed to assess teachers' specific attitudes toward inclusion. Questions assessed attitudes toward inclusion in general, as well as inclusion practices in the teachers' particular school. Each question assessed a teachers' belief about the positive effects of inclusion. Sample questions include, "I believe that most students with disabilities are better served in special education classes than in general education classes" and "I believe schools are equipped to serve individuals with disabilities in general education classes." Each item was rated on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scores for the indicators items were totaled for each teacher to generate a composite score indicating the teachers' belief regarding the benefits of inclusion for students with and without disabilities. A higher score indicated a more positive attitude toward inclusion.

A test-retest reliability procedure was used to establish reliability for this attitude scale. Twenty-seven teachers completed their scale twice over a one-month interval. The test-retest correlation on the total score on the attitude scale was .79 ($p < 0.001$), indicating acceptable overall test-retest reliability for an experimental measure. Further, correlations on the scores for each of the nine individual indicators were significant ($p <. 003$), and ranged from .54 to .84.

Bender Classroom Structure Questionnaire. The Bender Classroom Structure Questionnaire, (BCSC) described previously in the literature (Bender, 1990, 2002, 1992), was used to assess teachers' utilization of instructional strategies that facilitate effective inclusive instruction. This 40-item Likert scale is a self-report questionnaire that includes research-proven strategies that facilitate effective inclusive settings, and has been used in a variety of earlier studies (Bender, Smith, & Frank, 1998; Bender & Ukije, 1989; Bender, Vail, & Scott, 1995). Sample indicators include, "I suggest particular methods for remembering;" "I use advance organizers to assist students in comprehension of difficult concepts;" "I praise students for successful work whenever possible;" and "I use a specialized grading system which rewards effort for pupils with disabilities."

Three separate scores may be generated from the BCSQ – the Total BCSQ, Individualized Instruction, and Metacognitive Strategy Instruction. A high score on the Total BSCQ indicates that the teacher is using a wide variety of instructional strategies that facilitate inclusion fairly frequently. Bender and Ukje (1989) completed a factor analysis of the scores on the various indicators of the BSCQ, and a two-factor structure was identified. A high score on the first factor indicates that a teacher is using instructional methods that facilitate metacognitive understanding (Bender, 1992; Bender & Ukijie, 1989), while a high score on the second factor indicates that a teacher is using instructional grouping strategies that result in high levels of individualized instruction in the classroom. Internal-consistency reliabilities for each of there scores are in the acceptable range for research purposes (.88, .84, and .74, respectively; Bender & Ukije, 1989).

Results

Correlational Analysis

Table 1 presents the relationship between instructional strategies used by general education teachers in the inclusive classroom, teachers' attitudes towards inclusion, and various characteristics of those teachers. Table 1 demonstrates four significant correlations. First, the total years of teaching experience was positively related to how frequently the teachers' individualized instruction in their classroom. Next, the size of the inclusion classroom was negatively related to each of the three measures of teachers' utilization of effective inclusive instructional strategies, suggesting that larger general education classes are less characterized by strategies that facilitate successful inclusion. Interestingly, these data demonstrated no relationship between the use of effective inclusion strategies and attitudes toward inclusion.

Table 1

General Education Teachers Instruction Strategies

	Years of Teaching	Years of Teaching Students With Disabilities	Courses on Teaching The Disabled	Number of Special Education Students in The Class	Class Size	Fore Attitude Scale
Metacognitive Instruction	.13	.04	.07	-.16	-.30**	-.13
Individualization Instruction	.32*	.19	.11	-.13	-.25*	.06
BCSQ Total	.21	.11	.11	-.20	-.32	-.02
Fore Attitude Scale	-.07	-.11	.03	.06	-.04	---

Note. * $p < .05$. ** $p < .01$.

In our efforts to better understand inclusive instructional practices, these data were subdivided by grade level, and the same correlational analyses were run again. Among the general education teachers, 31 teachers were elementary teachers, 20 were middle school teachers, and only 12 were high school teachers. Correlations were produced for the elementary and middle school teachers, whereas the limited number of high school teachers prevented data interpretation. For the elementary teachers, only one of the 23 correlations (the same relationships depicted in Table 1 above) was significant. For elementary teachers, teachers with more students with disabilities in their inclusive classroom had less positive attitudes about inclusion overall ($r = -.34$; $p < .05$).

For the middle school general educators, four of 23 relationships were significant. First, the years of teaching experience for middle school teachers was positively correlated with increased use of individualized instruction ($r = .50$; $p < 02$). Next, teachers' attitudes towards inclusion correlated positively with every measure of effective instructional strategy utilization ($r = .44$, .58, and .58 for the metacognitive instructional strategies, individualized instructional strategies and the total BCSQ, respectively; $p < .05$). This demonstrates that among middle school teachers a more positive attitude toward inclusion was related to increased use of effective instructional techniques.

Special Education vs. General Education Instructional Strategies

Table 2 presents data comparing effective inclusive instructional strategies utilization and attitudes of general education and special education teachers towards inclusion. One may expect that special education teachers used more effective instructional strategies that would be likely to facilitate inclusion, in order to advocate for inclusion as well as prepare students with special needs for their inclusive classes. Further, one may well expect that special education teachers would be more positively disposed to inclusion. However, significant results were demonstrated on only one of the three instructional strategy utilization measures. Special education teachers did report using more individualized grouping strategies than the regular education teachers. On the measure of teacher attitude toward inclusion, special education teachers were no more positively disposed towards inclusion than were general educators.

Table 2

Comparison of Instructional Strategies Used By General Education & Special Education Teachers

	General Education Teachers		Special Education Teachers			
	M	*SD*	*M*	*SD*	*F* (2, 60)	*p*
Instruction	40.19	5.98	40.36	5.02	.02	---
Individualization Instruction	49.60	6.71	52.50	6.32	3.74	.05
BCSQ Total	146.02	16.83	150.54	15.83	1.45	---
Fore Attitude Scale	30.02	3.59	29.21	3.55	.97	---

Effective Inclusive Instruction Across Grade Levels

Table 3 presents the means and standard deviations on effective instructional strategy utilization and teacher attitudes towards inclusion for general education teachers in three grade level groups; a) elementary, b) middle school, and c) high school. The results of analysis of variance comparisons between these three groups are also presented. The results identified differenced among these three groups of teachers on each of the measures of effective instructional strategy utilization from the BCSQ, but not on the attitude indicator.

Table 3

Means and Standard Deviations

	Elementary		Middle		High			
	M	*SD*	M	*SD*	*M*	*SD*	*F* (2, 60)	*p*
Metacognitive Instructive	42.51	4.25	38.45	5.74	30.08	7.99	5.52	.01
Individualization Instruction	51.51	6.04	48.70	5.82	46.16	8.41	3.23	.04
BCSQ Total	153.32	12.83	141.35	16.38	134.92	18.96	7.65	.001
Fore Attitude Scale	30.16	3.16	30.45	3.31	28.92	4.98	.73	--

Post hoc analyses were then conducted on the three instructional strategy utilization measures to identify specific differences between the groups using Tukey's Studentized Range Test (HSD). On the frequency of use of metacognitive instructional strategies, and the frequency of use of individualized grouping strategies, the elementary teachers reported using these strategies more frequently then the high school teachers. On the total score on the BCSQ, the elementary teachers reported using effective instructional strategies overall more than either the middle school teachers or the high school teachers.

Discussion

The results from this study suggest several interesting conclusions. First, teachers' backgrounds, experience, and educational level are related to how frequently teachers utilize effective inclusive strategies in the general education classroom. These data would seem to hold some implications for practitioners, in that the increased teaching experience would tend to be related to more effective inclusion. Charmer's (1997) data would also seem to support this contention in that the average years of teaching experience among teachers who were perceived as effective inclusion teachers was over 12 years. Next, increasing the size of the inclusive classroom was related to less frequent use of appropriate inclusion teaching strategies. This would seem to suggest that inclusion might be more effective in smaller general education classes, in which the teachers may spend more time with each individual student.

The relationships between general education teachers' attitudes and teachers' of effective instructional strategies for inclusion, as demonstrated herein, are interesting. While no relationship was observed among the composite teachers' scores from all grade levels, the correlations for middle school teachers between teacher attitude and self-reported use of effective instructional strategies were significant. In that group of middle school teachers, a positive attitude toward inclusion among teachers was related to increased use of effective inclusive instructional strategies. These data support the suggestion by Bender, Vail, and Scott (1995) that positive attitudes towards inclusion among teachers are related to increased use of effective instructional strategies in the inclusive classroom. We can offer no explanation for the lack of correlations between teacher attitudes toward inclusion and use of appropriate instructional strategies among the elementary teachers.

In comparing instruction and attitudes toward inclusion between general educators and special educators, several findings emerged. First, special education teachers apparently use more

individualized instructional grouping strategies than general educators, as one may well expect. However, no difference was noted between the groups in use of metacognitive instructional tactics. Further, that attitude comparisons documented no difference in attitude towards inclusion between these groups of teachers. Clearly, with inclusion receiving increased support from federal legislative policy (Commission, 2002), one may well hope that special education teachers should serve as advocates for inclusive instruction. In contrast, these data do not seem to document strong positive perceptions on inclusion among special education teachers. This finding is consistent to those of Damm, Bernie-Smith, and Latham (2001); Murawski & Dieker (2004), who demonstrated that special education teachers and general education teachers alike were not comfortable in collaborative teaching situations. Clearly researchers who investigate implementation of inclusion in the future should build some measure of "teacher attitude" into their designs. Moreover, the easy assumption that special education teachers, who have historically been advocates for students with disabilities, are also strong advocates for inclusion seems to be incorrect. Inclusion has become the foundation of national policy, as stated in legislation as well as the recent Report for The Commission on Excellence in Special Education (2002). Thus, some type of intervention to impact the attitudes toward inclusion among special educators may be warranted. Shade and Steward (2001) showed that one course could positively impact the attitudes of special and general educators towards inclusion, and clearly some emphasis on attitude change in college courses on education of students with disabilities in the general education classroom is certainly in order.

Data derived from the studies of Murawski & Dieker (2004) and later from Murawski (2006) confirm the gap in research as just described but suggests that successful inclusion classrooms should be a true collaborative, co-teaching model between the regular and the special education teacher. Further results of the study, "also clearly imply that teachers need to be trained in how to co-teach effectively and efficiently" (Murawski, p.245).

Murawski (2006) study stressed the idea that before any new teaching delivery systems or strategies are implemented, professional development should be jointly provided for teachers charged with delivering the instructional changes. Murawski reminds the reader that " ongoing staff development is mandatory for co-teaching to be successful" (p.235). Inclusion and collaboration are two sides of one coin.

Finally, these data document that teachers at different grade levels implement effective inclusive instructional strategies with different frequency; specifically teachers in middle school and high school use these effective inclusion strategies less frequently. As reported earlier, Charmers (1997) documented that upper grade teachers felt less positive towards inclusion overall than do elementary teachers. Clearly, these studies taken together do not bode well for the overall success of inclusive placements in middle and secondary schools. It would seem that educators are doing a more effective job providing inclusive instruction in the lower and elementary grades, and a less effective job in the secondary school. This seems to suggest a need for increased professional development activities in middle and secondary schools aimed at increasing the use of effective instructional tactics that may facilitate successful inclusion. Bender (2002) recently suggested that the growing emphasis on differentiated instruction (see Tomlinson, 1999) might provide a vehicle through which such professional development could be provided. In fact, efforts to differentiate the instructional strategies in general education classrooms closely parallel the goals of increased modifications in general education that have long been advocated by special educators.

There are a number of limitations that should be noted in the present study. First, each of the independent variables was based on self-reported data by inclusion teachers and thus may have involved some bias. In the future, researchers may wish to couple this type of self-report measurement

with actual observations in the classrooms to determine which specific instructional tactics teachers are using. Next, while this study was somewhat more comprehensive than some studies in that participants herein came from a variety of schools and school districts, only teachers from one state were included here. Future studies should involve schools and teachers across a more comprehensive geographic area.

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