INCLUSION CLASSROOMS AND TEACHERS: A SURVEY OF CURRENT PRACTICES

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This study investigates the current state of inclusion practices in general education classrooms via survey of 71 inclusion teachers currently serving as special educators across the state of New York. Specifically, small group instruction, co-teaching, oneto-one instruction, and planning support are explored in relationship to class size, number of students with disabilities, and severity of disability. The qualifications, strengths, and professional development experiences of inclusion teachers based on their reported years of teaching experience, preparatory course work, and professional development opportunities are examined. Finally, information on common forms of assistance including consultant special education teachers, teacher assistants, and classroom volunteers are documented. Quantitative analysis of survey responses indicate great variability among the inclusion practices employed in general education classrooms. Co-teaching, though frequently cited as the most beneficial model of inclusive practice, emerged as the least documented method of instruction, with the utilization of consultant teacher models emerging as the most prevalent. Endorsement of the use volunteer support was found to be the second most common support mechanism employed within inclusive classrooms. Few differences in the types of supports employed were found across population densities. Findings highlight the heterogeneity of current inclusion practices, and bear implications in terms of future research examining the qualifications of support staff assisting students with special needs, such as volunteers, and the overall efficacy of inclusion practices in general.

Adherence to federal mandates in the United States calling for the education of students with disabilities in the *least restrictive environment* has resulted in a decades-long drive toward the development of educational programs allowing for the inclusion of students with disabilities in the general education classroom to the maximum possible degree. Conceptually, the absolute least restrictive environment as per IDEA 2004 refers to the education of students with disabilities in the general education environment (IDEA, USDOE, 2004). Inclusion, by extension, has been inferred to include educational service provision in the least restrictive environment, contingent upon student strengths and needs, encompassing a substantial continuum of possible supports (Murwaski & Swanson, 2001). Bringing services and support to the student in the general education classroom, as opposed to removing students from learning experiences with same age peers, is largely viewed as the *hallmark* of inclusion. However, agreement regarding the nature of inclusive practices may be more elusive, as competing theories regarding what constitutes inclusion, as well as the realities of implementation, have yielded a wide variety of inclusive models documented in extant literature (Ryndak, Jackson, & Billingsley, 2000).

Further complicating ambiguity is the degree to which districts implement *conventional* inclusive practices in their classrooms versus *best* inclusive practices (Scruggs, Mastropieri, & McDuffie, 2007; Volonino & Zigmond, 2007). Certainly, the inclusion of students with mild, moderate, multiple, and severe disabilities in a general education environment requires a significant amount of thought and planning. The implementation of instructional practices matching the needs of students with and without disabilities can be a daunting task, contingent upon not only the inclusive model selected, but also educator facility in working with diverse learners (Shulte, Osborne, & Kauffman, 1993). In many instances, special educators with unique knowledge of best practices for students with disabilities may

serve only to assist in lesson planning and consultation with general educators in their efforts to tailor instruction to all students. In districts following a consultative or consultant teacher model of service provision, special educators may *push in* to the general education classroom for a predetermined amount of time to assist students in attainment of goals and objectives associated with their Individualized Education Program (IEP) (Scruggs, Mastropieri, & McDuffie, 2007). However, within the domain of consultant teacher services, which may at first glance appear as a unitary method of service delivery, a variety of implementation modalities emerge, including one- to- one instruction with students, small group instruction, and finally, co-teaching of academic material (Scruggs, Mastropieri, & McDuffie, 2007). Another, perhaps critical, factor mediating the nature of inclusive models and practices within K through 12 environments is the grade level at which services are provided. Undoubtedly, classroom constellations, duration and frequency of instructional periods, as well as the number of core content area educators involved influence the nature of inclusive service delivery. Consequently, the face of inclusion at the elementary level likely differs significantly from middle and high school levels, exemplifying the difficulty associated with understanding the nature of inclusion (Carpenter & Dyal, 2007; Mastropieri & Scruggs, 2001).

Despite federal mandates propelling the inclusion movement in the United States, relatively little has been done to explore the current state of inclusive practice in terms of service models most often employed and other relevant classroom characteristics including number of students with disabilities, training experiences of educators, and other available educational support persons. Based on extant literature (e.g., Ryndak, Jackson, & Billingsley, 2000; Walther-Thomas, 1997), it is not clear what teachers would commonly recognize as sufficient to enhance inclusive practice or even what the norms are for a general education classroom to be considered *inclusion*. In an era in which investigations of teacher perceptions of inclusion are replete, teachers can no longer be asked why they think inclusion is or isn't working or why they do or do not value it. Instead, it is necessary to identify commonly employed inclusive practices, evaluate their efficacy, and assist teachers in implementing evidence based, effective approaches. How much special education training do general education teachers need? What is the optimal inclusion class size? How many students with severe disabilities can be accommodated within a single class? How much and what kind of personnel support will make the class successful? The answers to these questions may help to improve the quality of inclusive education, but before these questions can be answered it is necessary to obtain a clearer understanding of the operational definition of inclusion in today's general education classes.

In recent years, it appears that the desire to measure and improve the quality of inclusive special education practices has been impeded by the need to provide a common understanding of what is meant by inclusion to facilitate communication and offer a starting point from which to measure the success of inclusion efforts. Although it is certain that the practice of inclusion is very broad and depends a great deal upon individual perspective (Scruggs, Mastropieri & McDuffie, 2007), providing educators with greater awareness of the range of inclusion programs in our schools is a first step toward measuring program success. This article therefore documents the demographics of inclusion classrooms including type of community, grade level, class size, and number of students with disabilities, severity of disability, and program models; as well as teacher characteristics including educational preparation, professional development and experience as reported by inclusion teachers themselves. It is hoped that this information will, at the very least, offer a common understanding of the diversity of inclusive special education, and perhaps allow educators to establish collective norms by which they can measure the success of our efforts.

Legal Mandates

Inclusive special education has become common in schools throughout the United States as a result of PL 94-142 and the Individuals with Disabilities Act (IDEA) amendments to this legislation (IDEA, USDOE, 2004). The recent reauthorization of the IDEA upholds the provision of the least restrictive environment (LRE) for students with disabilities dating back to the original 1975 special education law. The LRE initiative mandates that students with exceptional learning needs be educated in the setting that is most like that of peers without disabilities as long as their academic goals can be met in this setting (IDEA, USDOE, 2004). While securing a continuum of services for students with disabilities, this act reemphasizes the focus and intent on inclusive practice. The No Child Left Behind Act (NCLB; U.S. Department of Education [USDOE], 2002) has also impacted the educational community's perspective on inclusive special education programming since it mandates that all students be taught by a teacher who is highly qualified in the content area in which they are teaching. Taken together with the Least Restrictive Environment (LRE) provisions of IDEA, this has resulted in an increase in the

consultative/consultant model of delivery service for students with disabilities in the general education classroom, especially at the secondary level where special education teachers can not be expected to be experts in every content area.

The results of these legislative mandates for inclusion are apparent in national education statistics. While only 43.4% of students with disabilities received educational services within the regular classroom for all or most of the day in the 1993, a slow but steady increase to 48.2% has been noted in the latest statistics available (U.S. Department of Education, 2004).

Increases in national statistics regarding the number of students in inclusive placements do well to inform educators that fewer students are educated exclusively in restrictive placements, but do not, however, inform educators *how* they are receiving instruction via inclusive settings. Though analysis of local education agency data can yield information indicating the percent of time a student spends in an inclusive or more restrictive setting, such data does not indicate the model of inclusive education employed in their classrooms. Ascertaining the type of instructional model, educator preparedness, and other instructional supports available in various inclusion classrooms is a key first step to understanding the current state of the movement.

Factors Influencing Inclusion Success

Aptly titled, *inclusion*, as an educational placement, offers a variety of service delivery formats designed to educate students with disabilities in the general education environment. However, as the literature indicates, inclusion is anything but a unitary practice. Lipsky and Gartner (1998) note that inclusion is often limited to building-wide adoption rather than a component of systemic reform. Building leaders can therefore be viewed as important visionaries in the successful implementation of inclusion programs. Carpenter and Dyal (2001) suggest that inclusion is most effective when proactive principals establish models of effective co-teaching and recognize the need for manageable class sizes. Carpenter (2007) also offers building leaders a set of essential questions to facilitate quality inclusive programming. She asks principals to examine among other things:

- The qualifications and strengths of the teachers,
- The role of the special educator related to the content instruction,
- The professional development experiences teachers have had in understanding and applying inclusive special education models,
- The time available for planning and consultation.

Many have suggested that inclusion isn't so much a delivery model as it is a frame of mind for a learning community. Villa and Thousand (1995) call it an attitude—a value and belief system. Carpenter (2007) sees it as a philosophy that begins at a global level with the educational community celebrating diversity and determined to meet the individual needs of each student. Others have indicated that inclusive communities offer all students the opportunity to be successful learners by providing access to flexible curricula that is also engaging, challenging, and enriching (Fisher & Frey, 2001; Roach, Salisbury, & McGregor, 2002).

While inclusion can be viewed as both a community-oriented philosophy and a service delivery model, much has been said about the important factors contributing to its success. Unfortunately districts and schools vary greatly in the inclusion models that they implement, making it very difficult to identify best practices. As a result many general educators have become frustrated with inclusion and feel that it is not the best service delivery model (Liu & Pearson, 1999). These perceptions are commonly believed to negatively impact the quality of practice in inclusion classrooms.

The attitudes and perceptions of general education teachers toward inclusion have been evaluated using survey techniques for the past 50 years (Scruggs & Matropieri, 1996). In these research reports, teachers generally indicate that they do not have adequate training for work with students with special needs either in their teacher preparation programs or as part of their in-service professional development. They also report a need for more personnel assistance in the classroom to support their teaching. Other common concerns leading to less than positive perceptions toward mainstreaming students with disabilities include the size of the class, severity of disability, teaching experience, and grade level (Weddell, 2005). Given teacher reports indicating an overall lack of preparation for work with students with disabilities in their training programs or via in-service offerings, it is plausible that the quality of inclusion programs established in the schools may suffer as a result of both attitudinal, training, and administrative factors.

Of critical importance when understanding the implementation logistics and success of inclusive practices, including collaborative and consultative teaching models, is the profound impact that interpersonal factors may have in terms of the programs overall success. While teachers may seek to design cogent co-instructional plans delivered to both general and special education students with high fidelity, interpersonal dynamics between the general and special educators responsible for instruction within the same classroom may either facilitate or inhibit instructional aims. Cook and Friend (1995) identify the need for mutual understanding between general and special educators in terms of instructional beliefs, time for solid instructional planning, agreement on the establishment of classroom routines, establishment of classroom discipline norms, as well as parity, or the projection of both teachers as equally responsible for instruction, as critical components of strong collaborative teaching programs. However, underlying such efforts is the necessity of both general and special educators to work together in a mutually respectful manner that is devoid of territoriality or power struggle. Fuchs and Fuchs (1992) also acknowledge the role of interpersonal interaction as critical in the success of any consultation model. Components of successful interpersonal interactions such as mutual respect, conflict resolution, problem solving, and the development of strong communication skills are critical aspects of co-instructional efforts. Fuchs and Fuchs (1992) rightly caution that the drive for collegiality in collaborative and consultative efforts should not outweigh more substantive aspects of collaborative instruction such as assessment of student needs and progress, instructional practices, curriculum development, and modification of materials, indicating that both the style and substance of consultative models is of importance and integral to the success of consultation and inclusive practices.

The efficacy of inclusive practices, including the cohesion of such models, has been debated in the special education scholarly literature since the early 1990's. Of particular concern to some education scholars is the overall lack of evaluative research regarding the educational outcomes of students educated in inclusion programs (Fuchs & Fuchs, 1995; Scruggs, Mastropieri, & Mc Duffie, 2007). While a plethora of articles regarding the social and emotional benefits of such service delivery models is present in the literature, a dearth of quantitative program evaluations have been published, with qualitative and narrative accounts of program successes and caveats more readily accessible. The relative novelty of some approaches, such as co-teaching, has likely influenced the quantity of available empirical accounts of program successes or needs. To date, the literature regarding the efficacy of coteaching has been mixed, with some reports indicating certain academic gains for students with learning disabilities and high-risk students (Dieker, 1998; Rice & Zigmond, 1999; Welch, 2000; Walther-Thomas, 2002), and others indicating greater academic growth in particular content areas, such as mathematics (Bear & Proctor, 1990), or decreases in achievement (Boudah, Schumacher, & Deschler, 1997). As noted by Volonino & Zigmond (2007), Zigmond and Magiera (2001) identified the overall lack of quantitative research in support of co-teaching, locating only four quantitative evaluations of co-teaching programs for their meta-analysis, with other researchers (Murawski & Swanson, 2001), identifying only six with data that could lead to the calculation of effect sizes. In the later study, co-teaching was found to be moderately effective in improving student outcomes. Studies highlighting the social and emotional benefits of co-teaching to students are more replete than those highlighting academic gains, and frequently identify increases in peer relationships, social skills, and self-esteem (Walther-Thomas, 1997).

Certainly, the diverse forms that inclusive programming may take serve to influence the ability of researchers to readily evaluate their efficacy, further highlighting the importance of understanding the structure of the most frequently used inclusive instructional formats. As with all educational innovations, understanding the spirit of the initiative, which is, in the present case, instructing a heterogeneous group of students within the same classroom is key when understanding the modal means of implementation. However, when considering inclusion, one may be challenged to determine which type of instruction is considered *best practice*, as inclusion, in all of its' constellations, consists of a variety of instructional supports ranging in intensity. The lack of a comprehensive body of literature identifying the most effective inclusive practices obscures efforts to illuminate best practices.

Models of Inclusion

Frequently referred to as the premier format for inclusive instruction, co-teaching can be defined as *two* or more professionals delivering substantive instruction to a diverse, or blended, group of students in a single physical space (Cook and Friend, 1995, p. 1). According to Cook and Friend, each educator is engaged and involved in the instruction of students, both general and special education, within the same classroom in the co-teaching model. Within such instructional situations, general and special educators may engage in parallel teaching, station teaching, alternative teaching, and team teaching, or

may opt to rotate primary teaching responsibilities throughout the day, with the other teacher serving in a support capacity (1995). Through such modes of instruction, each teacher is indeed jointly responsible for the instruction of students with and without special needs, allowing for greater differentiation of instruction and employment of intervention techniques designed to benefit both general and special education students.

Conversely, while the spirit of collaborative instructional formats clearly indicates joint instructional responsibility, a consultative or consultant teacher model of service delivery serves as a broad umbrella under which students with special needs are served by a variety of direct and indirect service modalities. Consultative models of inclusion may feature instructional support provided to general education teachers seeking guidance in their instruction to students with disabilities (indirect support), while also allowing special educators to provide instruction to special education students within the general education classroom via one- to -one or small group formats (direct support) (Shulte, Osborne, & Kauffman, 1993). Some states, such as New York, have elected to explicitly identify consultant teacher support as a service option within state special education law. As mandated by Sections 200.1(m) and 200.6(d) of Part 200 of the New York State Special Education Regulations, consultant teacher services means direct and/or indirect services provided to a student with a disability who attends general education classes and/or to such student's general education teachers. Direct services are defined as specially designed individualized or group instruction provided by a certified special education teacher to a student with a disability to aid such student to benefit from the student's general education classes, with indirect services defined as consultation provided by a certified special education teacher to general education teacher(s) to assist them in adjusting the learning environment and/or modifying their instructional methods to meet the individual needs of a student with a disability who attends their classes.

While direct service provision to students with disabilities clearly indicates one to one or small group instruction and intervention, the notion of indirect service to students *and* teachers remains more nebulous, allowing for a diverse array of services to educators and students, many of which may be viewed as ancillary and more supportive in nature as opposed to intervention oriented. Such supports, including assistance with planning, instructional adaptation and modification for particular students, as well as behavioral or academic intervention development, certainly serve to ameliorate the educational outcomes of students with disabilities, but may be more challenging to evaluate in terms of overall efficacy and impact on student performance.

Given the aforementioned, this study attempts to document the current condition of inclusion by presenting the accounts of general educators identified by their principals as inclusion teachers regarding some of the essential elements of quality inclusion noted above. Specifically the qualifications, strengths, and professional development experiences of inclusion teachers are described based on their reported years of teaching experience, the course work they received in their teacher preparation programs, and the professional development opportunities they have received. Information on class demographics including overall class size, number of students with disabilities, and severity of disability, is also presented. Finally, information on the common forms of assistance including consultant special education teachers and co-teachers, teacher assistants, and classroom volunteers is discussed.

Method

The present study serves as a descriptive inquiry into inclusive practice in New York State. In order to identify inclusion teachers for participation in this study, consent letters were sent to 50 elementary, 50 middle, and 50 secondary school principals across the state selected randomly from a database offered on the New York State Department of Education website. This letter asked administrators to provide their consent for the study and indicate the number of general education teachers in their building working in settings that they would define as *inclusion*. Stamped self-addressed surveys were mailed to these administrators who were requested to distribute them to general education teachers working in classrooms that included children with special needs in the general education classroom. Follow up post-cards and a second mailing was sent to all administrators not responding after 30 days.

Completed surveys were received from 71 *inclusion* teachers and these responses were aggregated to develop a picture of inclusive special education in the state. Responses were gleaned from 39 teachers working in rural communities, with 26 responses gathered from those working in suburban districts, and two respondents working in urban districts. When evaluating grade level served it was found that 36 respondents worked in elementary school settings, with five working in middle school environments

and 27 working in secondary schools. Despite attempts to distribute and collect information randomly by community type and evenly to schools of each level, information from more respondents in rural and elementary settings was received. As data was collected from respondents teaching both single and multiple classes per day (e.g., elementary teachers versus high school teachers), large standard deviations can be found across multiple response categories and likely reflect variability in teaching load.

Results

The responses provided a rich description of the teacher characteristics including teacher gender, gender by building level, years of teaching experience, teacher preparation, and professional development experiences. The evaluation of commonly reported inclusion support types, as well as the duration of support provision, provides insight into contemporary trends in inclusion practices.

Gender by Grade Level Served

Four male respondents indicated employment at the elementary level, four at the middle school level, and eight at the secondary level. Thirty two respondents indicated employment at the elementary level, with one reporting service at the middle school level, and nineteen at the secondary level. Female inclusion teachers outnumber male inclusion teachers 8 to 1 at the elementary level and 2.4 to 1 at the secondary level. Although the number of middle school respondents was low at the middle level, it appears that male inclusion teachers outnumber female inclusion teachers at the middle level.

Education and Experience

Table 1 depicts the education and experiences of inclusion teachers throughout the state including years of teaching experience following certification, number of initial and advanced teacher preparation courses completed that directly address the instruction of students with disabilities, and number of professional development experiences in working with students with disabilities. The mean, standard deviation, and score ranges illustrate the diversity of experiences and preparation that current inclusion teachers have.

Teacher Characteristics	Mean	Standard Deviation	Minimum	Maximum
Years of Teaching Experience	18.57	11.10	1	36
Number of College Courses	2.83	3.21	0	13
Number of Professional Development Experiences	4.15	4.03	0	13

Table 1 Teacher Experience and Education

Classroom Demographics

Table 2 illustrates the classroom demographics of the inclusion programs throughout the state. Total class size, as well as number of students with disabilities and severity of the disabilities of students **Table 2**

Classroom Demographics					
Number of Students	Mean	Standard Deviation	Minimum	Maximum	
Total Class Size	23.75	12.95	7	85	
Students with Disabilities	9.05	7.29	0	39	
Students with Mild to Moderate Disabilities	8.28	7.33	0	7	
Students with Severe and/or Multiple Disabilities	1.43	1.95	0	7	

included in the classroom for all or part of the school day, is presented. The large maximum number of students in the secondary programs illustrates the fact that teachers serve different groups of students throughout the day in these settings. They may have a higher overall case load but spend less time throughout the day with each student.

Classroom Supports

To obtain a broader picture of the activities taking place in the inclusion classroom, teachers were asked to identify the types of classroom supports they received and the amount of time each day that they received these supports. Consultant special education teachers were a very prevalent type of support. Fifty-eight (58) of the 71 inclusion teachers indicated that they had the assistance of a consultant special education teacher. The primary supports of these consultant teachers included working with small groups of students, co-teaching, one-to-one student assistance, and planning. Teachers indicated the number of minutes per day of the most prevalent type of support they received. Table 3 presents the number of minutes per day for each form of support if it were the most prevalent form of support.

Table 3 Consultant Special Education Teacher Support						
Type of Support	Number of Teachers Reporting this Type of Support as Most Prevalent	Minutes Per Day Average	Minutes Per Day SD			
Small Group Instruction	17	58	42.96			
Co-Teaching	8	52.50	57.88			
One-to-One Student Assistance	16	45.21	39.61			
Planning	17	43.94	55.16			

The number of teachers reporting the aforementioned genres of support, as well as the amount of time engaged in such supports, were calculated across population densities (rural, suburban, and urban), and are presented in Tables 4 and 5. Small group instruction emerged as the most commonly reported support type across demographic areas, with the number of teachers reporting co-teaching in suburban areas more prevalent than rural or urban areas. One-to-one assistance was uniformly common across rural and suburban areas, with a slightly higher number of suburban teachers endorsing planning support than rural teachers. A Chi-Square analysis was performed to evaluate relationships between the type of support received and population density. A significant relationship was found between population density (rural, suburban, and urban) and type of support provided to inclusion teachers, x2(12) = 37.01, $p = \le.001$. Post-hoc tests (Cramer's V) indicated that co-teaching supports were significantly less common in rural regions than suburban and urban regions. The effect size was .364.

Table 4					
Type	of Sunnort	hv	Population	Density	

Type of Support sy Topulation Density						
Type of Support	N Rural	N Suburban	N Urban			
Small Group Instruction	11	5	0			
Co-Teaching	2	5	0			
One-to-One Student Assistance	8	8	1			
Planning	8	10	0			

Independent sample t-tests, reported in Table 6, were conducted to evaluate differences in the duration of supports received across demographic areas. Limitations in the sample size of urban respondents (N=2) precluded their data from analysis in accordance with commonly held assumptions for t-testing. Results indicate that teachers located in rural regions report significantly more time engaged in planning support (X=26.13) than suburban teachers (X=0), t(21)=1.96, p=.028.

Type and Duration of Support by Population Density						
Type of support SD	Mean Rural	SD	Mean Suburban	SD	Mean Urban	
Small Group Instruction	93.93	191.56	40.91	25.72	*	*
Co-Teaching 31.81	49.61	47.20	39.57	50.03	22.50	
One-to-One Student Assistance	24.28	53.22	5.29	15.0	*	*
Planning	26.13	52.05	0	0	0	0

Table 5
pe and Duration of Support by Population Dens

* No cell values reported

Table 6 Differences in Duration of Support and Population Density						
Type of Support and Location	Ν	Mean	SD	t	df	р
Small Group						
Rural	30	93.93	191.56	1.31	51	.194
Suburban	23	40.91	25.72			
Co-Teaching						
Rural	34	49.61	47.20	812	60	.420
Suburban	28	39.57	50.03			
One-to-One						
Rural	21	24.28	53.22	1.422	36	.164
Suburban	17	5.29	3.64			
Planning						
Rural	22	26.13	52.05	2.355	21	.028
Suburban	15	0.00	0.00			

Support from a teacher assistant or aide (TA) was another commonly reported practice. Fifteen (15) of the 71 inclusion teachers indicated that they had the support of a TA. The primary supports of these TAs included working with small groups of students, co-teaching, and one-to-one student assistance. Teachers indicated the number of minutes per day of the most prevalent type of support they received. Table 7 presents the number of minutes per day for each form of support if it were the most prevalent form of support.

Teacher Assistant or Aide Support					
Type of Support	Number of Teachers Reporting this Type of Support as Most Prevalent	Minutes Per Day Average	Minutes Per Day SD		
Small Group Instruction	2	165	219.20		
Co-Teaching	3	40	0		
One-to-One Student Assistance	10	46.25	56.24		

Support from a classroom volunteer was a more commonly reported practice than the use of teacher assistants. Forty-five (45) of the 71 inclusion teachers indicated that they had the support of a volunteer. The primary forms of assistance of these volunteers mirrored that of TAs and included working with small groups of students, co-teaching, and one-to-one student assistance. Teachers indicated the number of minutes per day of the most prevalent type of support they received. Table 8 presents the number of minutes per day for each form of support if it were the most prevalent form of support.

Table 8 Classroom Volunteer Support					
Type of Support	Number of Teachers Reporting this Type of Support as Most Prevalent	Minutes Per Day Average	Minutes Per Day SD		
Small Group Instruction	11	33.33	78.48		
Co-Teaching	7	22.5	24.85		
One-to-One Student Assistance	27	10.63	20.40		

When evaluating the types of consultant teacher support reported by teachers in comparison to the number of students with disabilities in their class (Table 9), a relatively uniform pattern was noted, with most teachers engaged in co-teaching, providing one to one assistance, and receiving planning support reporting an average of 9 to 11 students in their classes. However, teachers who engaged in small group instruction noted a significantly smaller number of students with disabilities in their courses, with an average of 5.76 students.

Table 9 Number of Students with Disabilities and Type of Support					
Type of Support	Mean Number of Students with Disabilities	Number of Teachers Reporting	SD	Minimum	Maximum
One-to-One Student Assistance	9.66	18	5.88	2	21
Small Group Instruction	5.76	17	2.96	1	12
Co-Teaching	11.13	8	6.87	2	23
Planning	10.83	18	6.22	1	21

Efforts to evaluate the types of support services provided to teachers in relationship to the number of students with mild to moderate disabilities in their classes yielded the finding that teachers offering one to one assistance to students with disabilities, teachers engaged in co-teaching, and teachers receiving planning support served between 9.22 and 9.65 students with mild to moderate disabilities. Teachers reporting small group instruction noted, on average, 4.65 students with mild to moderate disabilities (Table 10).

Table 10 Number of Students with Mild/Moderate Disabilities and Type of Support						
Type of Support	Mean Number of Students with Mild/Moderate Disabilities	Number of Teachers Reporting	SD	Minimum	Maximum	
One-to-One Student Assistance	9.65	17	6.75	1	22	
Small Group Instruction	4.65	17	2.96	1	12	
Co-Teaching	9.5	8	8.26	1	23	
Planning	9.22	18	6.21	1	20	

When investigating types of support in relationship to number of students with severe disabilities in the classroom (Table 11), it was found that teachers engaged in small group instruction, co-teaching initiatives, and receiving planning support reported between 1.39 and 1.5 students with severe disabilities in their classrooms. Teachers who reported students receiving one to one assistance noted the greatest number of students with severe disabilities in their classes, with an average of 4.71 students with severe disabilities.

Table 11 Number of Students with Severe Disabilities and Type of Support						
Type of Support	Mean Number of Students with Severe Disabilities	Number of Teachers Reporting	SD	Minimum	Maximum	
One-to-One Student Assistance	4.71	17	10.31	0	44	
Small Group Instruction	1.5	17	1.94	0	5	
Co-Teaching	1.86	7	3.28	0	9	
Planning	1.39	18	2.17	0	7	

Summary of Results

The present study evaluated several variables related to the implementation of inclusion programs in elementary, middle, and high school settings across the state of New York. Specifically, we aimed to describe the qualifications, strengths, and professional development experiences of inclusion teachers based on their reported years of teaching experience, the course work they received in their teacher preparation programs, and the professional development opportunities they have received related to educating students with special needs. Likewise, information regarding class constellation, including overall class size, number of students with disabilities, and severity of disability among students within the inclusion class was garnered from survey responses. Information related to the common forms of available teacher assistance including consultant special education teachers, teacher assistants, and classroom volunteers was ascertained.

Analysis of 71 inclusion teacher surveys yielded the finding that most respondents instructed in rural settings and in elementary classrooms; teachers working in suburban and high school settings were the second largest reporting group. Female inclusion teachers significantly outnumbered male inclusion teachers at both the elementary and secondary level. The number of college level and continuing education courses related to inclusion teaching completed by respondents ranged from 0 to 13, with a mean of 2.83 for college courses completed, and a mean of 4.15 for continuing education courses. On average, teachers reported a class size of 23.75 students, and indicated that they served approximately 9.05 students with disabilities within those classes. Of the 9.05 students with disabilities, 8.28 were noted to fall within the mild to moderate disability classification range, with 1.43 noted as severely or multiply disabled.

When evaluating the type of supports that inclusion teachers typically received, it was noted that 58 of 71 inclusion teachers received consultant teacher supports, lending to the finding that consultant teacher support was the most prevalent type of support provided to inclusion teachers. Small group instruction, planning assistance, and one to one student assistance were found to be the most common forms of instructional support provided by consultant teachers. The second most prevalent inclusion teacher support mechanism was volunteer support, with 45 of 71 inclusion teacher respondents indicating that they received such assistance. Fifteen out of 71 respondents reported that they received support from teacher assistants. Analysis of respondent data across the population density of districts identified trends in the type of supports and time spent engaged in support provision across rural, suburban, and urban regions. Results of Chi-Square analysis indicated a relationship between support type and population density, with co-teaching supports emerging as significantly less common in rural districts than suburban or urban districts (effect size of .364). Rural teachers were found to spend significantly more time engaged in planning activities than teachers in suburban regions, t(21)=1.96, p=.028. No other relationships or differences were noted between support type or duration and population density.

Investigation of the types of support services provided to teachers in relationship to the number of students with mild to moderate disabilities in their classes yielded the finding that teachers offering one to one assistance to students with disabilities, teachers engaged in co-teaching, and teachers receiving planning support served between 9.22 and 9.65 students with mild to moderate disabilities. Teachers reporting small group instruction noted, on average, 4.65 students with mild to moderate disabilities. A similar pattern of findings was noted in reference to service to students with severe disabilities. Teachers engaged in small group instruction, co-teaching initiatives, and receiving planning support reported between 1.39 and 1.5 students with severe disabilities in their classrooms. Teachers who reported students receiving one to one assistance noted the greatest number of students with severe disabilities in their classes, with an average of 4.71 students with severe disabilities.

Discussion

The findings from this study provide insight into the current condition of instructional practice within inclusive classrooms. While seemingly simplistic, identification of common approaches to inclusive instruction fills a void in the literature in terms of understanding the frequency with which various supports are employed. As noted by previous researchers, descriptions of the types of support provided within inclusion programs present within the literature are often vague or not operationally defined, leading to difficulty in understanding which combination(s) of instructional supports or modalities might be the most beneficial to students (Scruggs, Mastropieri, & McDuffie, 2007; Volonino & Zigmond, 2007). Without clear understanding of the manner in which inclusion supports are employed, generalization of results is extremely limited.

Of particular importance is the finding that co-teaching, frequently referred to as the type of consultant teacher support most reflective of the principles of inclusion and education in the least restrictive environment (Cook & Friend, 2007; Murwaski & Swanson, 2001), is the least employed avenue for inclusive instruction as reported by teachers. Such a finding is relevant as co-teaching, consisting of joint instructional efforts designed to cohesively meet the needs of diverse learners, is valued by many due to its' emphasis on shared core instruction. In short, the instructional approach that may most clearly exemplify inclusive practice is the least utilized method of LRE mandate implementation. The nature of this study, however, does not allow for exploration of why it was rarely employed. Other frequently cited forms of support such as small group instruction, one to one support, and planning, largely involve *push in* special education teacher support as opposed to the integration of special education expertise into the regular education curriculum on a continuous basis. The increased representation of other forms of consultant teacher supports relative to co-teaching may stem from several factors related to ease of implementation, school building infrastructure, administrative support, and staffing. Conceptualization of consultant/consultative teacher supports as being attached to particular IEP students as opposed to constant fixtures within particular classrooms may be another consideration. The assignment of support to students rather than students and classrooms may perpetuate the predominance of consultation, planning, and group oriented service provision over coteaching.

An additional consideration related to implementation of co-teaching models was the finding that, while co-teaching was the least reported type of support overall, those who reported utilization of co-teaching models indicated somewhat larger numbers of students with disabilities (x=11.13) in their classrooms than those who noted small group (x=5.76) and one to one supports (x=9.66) as predominant. Such a finding is of importance as it may, pending future investigation utilizing an efficacy outcome measure, refute the sentiments of some who view co-teaching as prohibitive when working with large groups of students with special needs. Teachers who reported small group instruction as the dominant form of support served approximately half the number of students with disabilities in their classrooms when compared to co-teachers.

Interestingly, one to one student support, plausibly the least inclusive form of instruction depending upon implementation logistics, emerged as the most prevalent type of support provided in inclusive classrooms. Though one to one support serves as a necessary and integral means of reinforcing novel information and remediation of extant skill deficits within the general education classroom, the role of such instructional formats must be carefully monitored to ensure compatibility with best practice. Students presenting with considerable need for remediation, severe delays in information processing and the retention and mastery of novel concepts, require intervention delivered with the integrity and intensity provided in a one to one situation. However, depending upon the frequency and duration of student separations from larger instructional groups, one to one support may be perceived by some as

an instructional format consistent with more restrictive placement options. The frequency with which teachers indicate utilization of one to one support, as well as the duration of such one to one instructional periods, is worthy of further evaluation, as, despite best efforts, such forms of service delivery may not be consistent with the spirit of IDEA and other related mandates.

Limitations

A relatively small sample size, limited number of middle school respondents, and under representation of responding teachers working in urban settings serve as limitations to the findings. Survey questions related to the training experiences of volunteers assisting general and special educators were not included, which, given the large numbers of educators reporting use of volunteers for intervention, would have provided great insight into their suitability for such roles. Furthermore, data regarding the percent of time each teacher employed particular supports in their inclusion classroom for all support types was not gathered. Though the primary aim of this study focused on identifying the most prevalent forms of support provided and how often they received them, ascertaining the degree to which teachers received all supports, if indeed provided in their classrooms, would have provided additional depth to the data. Disaggregating teacher service to students with disabilities beyond the traditional mild/moderate and severe/multiple clustering approach may also be viewed as a limitation, as deeper inquiry into the types of supports provided related to severity of disability would afford additional interpretive options.

Implications and Future Directions

The present study serves as a successful effort to document the status of inclusive practices commonly found across New York State, including the types of supports commonly reported by special educators, the amount of time such supports are provided, and differences in support provision across population densities. Though this study was conducted in New York information gleaned from survey responses provides solid insight into the diverse inclusive service constellations present and possible within a state that has aggressively implemented LRE mandates for several decades. Given strict adherence to federal and state mandates regarding education in the least restrictive environment, examination of common service options present within New York may serve as a frame of reference for educators and administrators in states or countries seeking to broaden their awareness of inclusive practice in regions with well-established programs.

In an era of increased attention to the importance of employing evidence based practices in education, the findings of the present study highlight areas of need in future investigations of the efficacy of inclusion programs and co-teaching in particular. In the present study, co-teaching was operationally defined as the joint instruction of students with and without disabilities by general and special educators in the general education classroom. Inherently, this definition implies shared instructional responsibility between the general and special educators working within a classroom. This concise definition can be contrasted with broader co-teaching practices featuring the special education teacher in a *drift* capacity providing support to individual students while the general education teacher maintains the primary instructional role. Though still considered co-teaching (Scruggs, Mastropieri, & McDuffie, 2007), the instructional differences between these two distinct approaches may undoubtedly yield differences in academic achievement gains for students with disabilities. However, in the literature, co-teaching practices are often homogenously clustered or vaguely described when, in fact, practices within the domain of co-teaching may differ significantly (Scruggs, Mastropieri, & McDuffie, 2007). Given such, quantitative efforts to review the efficacy of co-teaching practices on student achievement should seek to accurately and fully operationally define the methods of co-instruction employed within classrooms.

Efforts to further quantify teacher time engaged in each genre of co-teaching practice (e.g., parallel teaching, station teaching, or team teaching-typically the form of co-teaching most reflective of the co-instructional spirit of co-teaching) should also be emphasized, as subtle instructional differences across co-teaching classrooms may bear significant implications in terms of teacher time engaged in specialized instruction, student success, and teacher satisfaction. As stated by Volonino and Zigmond (2007), results from studies on co-teaching have indicated that special educators frequently assume the role of instructional aid and a variety of factors inhibit their ability to provide specialized instruction within the general education classroom (p. 295). Efforts to illuminate the true nature of the instructional co-teaching relationship are necessary to demonstrate the efficacy of the practice. Similar needs are extended into the investigation of inclusive practices in general, since, as observed in the present study, inclusive instructional practices are comprised of a wide variety of supports,

consultation, and intervention practices that vary by classroom, building, and district. Inquiry into the efficacy of inclusion can be obscured by lack of attention to the myriad of instructional practices employed, oftentimes in tandem, in inclusive classrooms. Such investigations could lend insight into its' lack of reported use in the present study, while also identifying if co-teaching should indeed be viewed as the best approach to inclusive instruction.

An additional consideration in relationship to the present study is the finding that relatively few respondents indicated engaging in the practice of co-teaching, more often endorsing use of supports consistent with direct and indirect consultative models. This finding conflicts with previous reports by the National Center on Educational Restructuring and Inclusion (1995) that co-teaching is the form of inclusive support most often employed. As in the present study, the NCERI did distinguish between co-teaching and consultative/consultant teacher supports, barring any suggestion that consultative and co-teaching models were clustered under the domain of co-teaching.

Findings regarding the most common forms of inclusion support, including planning, small group instruction, and one to one instruction, may highlight a trend for special educators engaged in inclusive service provision to remain ancillary presences in general education classrooms, denoting a largely *push in* service culture. The relative lack of co-teaching models represented within this sample suggests that integrated models of inclusive service provision were an exception. Further investigation into types of intervention provided in small group and one to one instructional formats, as well as the frequency and duration of such forms of service provision within the general education classroom, are necessary to expound awareness of the exact composition of inclusive supports. Similarly, investigation into factors contributing to the dominance of planning, group, and one to one support provision over co-teaching is necessary in efforts to understand decision making relative to inclusive programming.

Though consultant teacher support was found to be the most common type of special education support, utilization of volunteer services was noted to be the second most common, far exceeding the number of teachers indicating assistance from teacher aides. While volunteer assistance is a strong means of increasing guidance provided to students, further inquiry into the nature of the roles that volunteers fill as related to special education support provision is warranted. Given the importance of ensuring that instruction and intervention is provided with integrity by individuals with appropriate training, exploration of training experiences relative to the daily roles of volunteers may also prove helpful.

In general, future research efforts should seek to broaden data collection to a greater number of regions while also expanding inquiry into the content, frequency, and duration of inclusion supports provided, as well as the roles and training of teacher aides and volunteers working with students. The implementation of Response to Intervention (RtI) in districts is yet another factor that may serve to influence the nature and number of support services and staff available to general educators working with special education students. As best practice models of RtI require increased staffing for instructional consultation and intervention provision, it is plausible that such increases may result in enhanced support options and staff availability for general educators (Kratchowill, Volpiansky, Clements, & Ball, 2007). Although RtI efforts are targeted toward students without IEP's, changes in classroom and building infrastructure as a result of tiered intervention systems and additional resources may indeed influence the nature of inclusive service provision.

While implementation of a student's individualized education plan is not contingent upon instructional support offerings, consideration of available instructional methods and supports and their impact on student attainment of goals and objectives is a relevant concern. From an evaluative perspective, much needed examination of the efficacy of inclusive programs in general is likely obscured by the diversity in instructional formats represented within and across classrooms. In an era of data-based decision-making and accountability, evaluation of the outcomes of students with disabilities educated via the plethora of instructional mediums present in the classroom is critical. Comprehensive, quantitative outcomes based inquiry in relationship to the types of inclusion service models employed is an important and overdue next step in the evaluative literature.

References

Bear, G. & Proctor, W. (1990). Impact of a full time integrated program on the achievement of non-handicapped and mildly disabled children. *Exceptionality*, *1*, 227-238.

Boudah, D., Schumacher, J., & Deschler, D. (1997). Collaborative instruction: Is it an effective option for inclusion in secondary classrooms? *Learning Disabilities Quarterly*, 20, 293-316.

Carpenter, L. B. & Dyal, A. (2007). Secondary inclusion: Strategies for implementing the consultative teacher model. *Education*, *127*(3), 344-350.

Carpenter, L. B., & Dyal, A. (2001). Retaining quality special educators: A prescription for school principals in the 21st century. *Catalyst for Change*, *30*(3), 5-8.

Cook, L. & Friend, M. (1995). Co-teaching: Guidelines for creating effective practices. *Focus on Exceptional Children*, 28(3), 1-16.

Dieker, L. (1998). Rationale for co-teaching. Social Studies Review, 37(2), 62-65.

Fisher, D. & Frey, N. (2001). Access to the core curriculum: Critical ingredients for student success. *Remedial and Special Education*, 22, 1148-1157.

Friend, M. & Cook, L. (2007). Interactions: Collaboration skills for school professionals (5th ed.). Boston: Pearson.

Fuchs, D. & Fuchs, L. S. (1992). Limitations of a feel-good approach to consultation. *Journal of Educational and Psychological Consultation*, *3*, 93-97.

Fuchs, D. & Fuchs, L.S. (1995). Sometimes separate is better. Educational Leadership, 52(4), 22-27.

Lipsky, D., & Gartner, A. (1998). Taking inclusion into the future. *Educational Leadership*,56(2), 78-81.

Liu, J. & Pearson, D. (1999). Teachers' attitudes toward inclusion and perceived professional needs for and inclusive classroom. (ERIC Document Reproduction Service No. ED 438 274)

Mastropieiri, M.A. & Scruggs, T.E. (2001). Promoting inclusion in secondary classrooms. *Learning Disability Quarterly*, 24(4), 265-275.

Murwaski, W.W. & Swanson, H.L. (2001). A meta-analysis of co-teaching research: Where are the data? *Remedial and Special Education*, 22(5), 258-267.

Rice, D. & Zigmond, N. (1999). December. Co-teaching in secondary schools: Teacher reports of developments in Australia and American classrooms. *Resources in Education*. ERIC Document Reproduction Services N. ED432558.

Roach, V., Salisbury, C., & McGregor, G. (2002). Applications of a policy framework to evaluate and promote large scale change. *Exceptional Children*, 68, 451-464.

Regulations of the commissioner of education: Part 200-students with disabilities. Retrieved April 3, 2008 from

http://www.vesid.nysed.gov/specialed/publications/lawsandregs/200contents.htm

Ryndak, D., Jackson, L., & Billingsley, F. (2000). Defining school inclusion for students with moderate to severe disabilities: What do experts say? *Exceptionality*, 8(2), 101-116.

Scruggs, T., Mastropieri, M., & McDuffie, K. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children*, 73(4), 392-416.

Scruggs T. & Mastropieri, M. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. *Exceptional Children*, 63(1), 59-74.

Shulte, A., Osborne, S., & Kauffman, J. (1993). Teacher responses to two types of consultative special education services. *Journal of Educational and Psychological Consultation*, 4(1), 1-27.

U.S. Department of Education (USDOE). (2002). *No Child Left Behind: ESEA Reform*. Washington, DC: Author.

U.S. Department of Education (2004). Twenty-sixth annual report to Congress on the implementation of the Individuals with Disabilities Education Act. Washington, DC: Author.

http://www.ed.gov/about/reports/annual/osep/2004/26th-vol-1-sec-1.pdf

Villa, R. & Thousand, J. (1995). Creating an inclusive school. Alexandria, VA: Association for Supervision and Curriculum Development.

Volonino, V. & Zigmond, N. (2007). Promoting research-based practices through inclusion? *Theory into Practice*, 46(4), 291-300.

Weddell,K.(2005).Dilemmas in the quest for inclusion.*British Journal of Special Education*,32(1), 3-11 Welch, M. (2000). Descriptive analysis of team teaching in two elementary classrooms: A formative experimental approach. *Remedial and Special Education*, 21(6), 316-376.