JOB ATTITUDES OF SPECIAL EDUCATORS RELATED TO INCLUSION OF STUDENTS WITH SIGNIFICANT DISABILITIES

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This study measured the attitudes of teachers of students with significant disabilities using the Attitudes of Teachers of Students with Significant Disabilities about Aspects of Their Jobs survey. Teachers who worked with at least one student with significant disabilities were contacted via e-mail and other on-line means across four geographical areas in the United States. The survey results were compared with the teacher's reported rates of student inclusion and geographical areas. The post - hoc analysis produced significant results, displaying that teachers whose students were included in general education were more likely to display positive overall attitudes related to their jobs. Teachers in suburban and rural areas with students included more fully were more likely to display positive attitudes towards their job design. These results expand the field of inclusion research from having positive impact on students, to demonstrating a significant relationship between increased rates of inclusion and positive teacher attitudes toward aspects of their job

Inclusion, as defined by Gal, Schreur, and Engel-Yeger (2010), *is a philosophy of acceptance and belonging to the community so that a class is structured to meet the needs of all of its students* (p. 89). Yet, creating an environment accepting of inclusion can be met with resistance and *attitudinal barriers* (p. 91) that can be difficult to overcome. Indeed, for students with significant disabilities promoting inclusive practices often is met with resistance, resulting in the students being less included (Brandes & Crowson, 2009; U.S. Department of Education, National Center for Education Statistics, 2012). Furthermore, developing and promoting inclusive practices requires the special educator to understand the curricular demands of both general education and special education, presenting a daunting task for the educator (Goessling, 1994; Goessling, 1998; Olivier & Williams, 2005).

In the past, teachers of students with significant disabilities were rarely a part of the general education culture and only had to address the demands of special education (Goessling, 1994). As a result of recent movements toward more integrated education, special education teachers and students with more significant disabilities participate in the general education environment more frequently, but they are still not fully participating in that environment (Chung, Carter, & Sisco, 2012a; Chung, Carter, & Sisco, 2012b; Carter & Hughes, 2006). Teachers of students with significant disabilities are often seen as *saints and models of patience* and are coexisting in a school culture where students with severe disabilities *are invisible or nonexistent* (Goessling, 1998, p. 239). Unfortunately, such illusions about this group of educators may still exist making it even more difficult to promote inclusion and increase the beneficial educational experience of their students and their own job satisfaction.

As a result, the attitudes of special educators towards inclusive practices are often reported as mixed. Most studies aggregate the attitudinal data across all special educators instead of organizing the data by the population of students the teachers educate (Brandes & Crowson, 2009; Elhowens & Alsheikh, 2004; Martin, Johnson, Ireland, & Claxton, 2003). This technique presents a global picture of the attitude towards inclusion by special educators and raises the question as to why the attitudes are mixed. A few attrition studies have disaggregated the data by types of special educators and specifically categorizing

teachers serving students with significant disabilities (American Association for Employment in Education [AAEE], 2006; AAEE, 2008; Muller & Markowitz, 2003). Across these studies, the population of teachers who taught students with significant disabilities were often rated within the top three groups of special educators with high attrition resulting in positions left empty or filled with under-qualified teachers (AAEE, 2006; 2008). Even though results were similar when disaggregated, the studies were inconsistent in categorizing special educators.

To adequately view the impact the demands of being a special educator of students with significant disabilities has on attrition, it is necessary to analyze the variety of services they provide. The job of a special educator working with students with significant disabilities may include challenges other teachers do not often experience (Olivier & Williams, 2005). Instead of teaching one grade level or one subject, teachers of students with significant disabilities must teach to various needs and levels: learning, physical, social, communication, and independence (Oliver & Williams, 2005). These daily job requirements present *unique challenges that go far beyond the normal requirements of teaching…[and] involve additional work and responsibility* (Olivier & Williams, 2005, p. 20, 24). Teachers of students with significant disabilities must be familiar with a large range of intellectual and communication abilities and must address behavior in a complex way to be effective (Billingsley, 2010; Conderman & Katsiyannis, 2002). Yet, teachers in these positions are often under-qualified to handle the complexities of the position (Billingsley 2010; Carlson, Brauen, Klein, Schroll, & Willig-Westat, 2002).

In addition to their under-qualifications for the position, most special education teachers are certified to work with students with specific disabilities, yet they may be teaching and providing services to multiple students with varying types of the IDEA classifications because some buildings and districts may have a multi-categorical system, which requires any certified special education teacher to serve any student with a disability regardless of category or the teacher's certification which can lead to role confusion (Billingsley 2010; Carlson, et al., 2002; Wrightslaw, 2009). This model may require each teacher to provide a continuum of services from resource and collaborative teaching services to functional curriculum services (Swanson, 2008). The struggle of providing a continuum of services can be further aggravated in a rural environment, where sometimes the special educator is the only special education teacher in the building or an urban environment, where the staff and financial resources are sparse (Albrecht, Johns, Mounsteven, & Orlorunda, 2009; Crawford, 2007; Romano & Chambliss, 2000).

Additionally, past studies have displayed that teacher's attitudes toward different aspects of their jobs may be influenced by the geographical areas in which they work (Bostelman, 1993; Crawford, 2007; Familia-Garcia, 2001; Romano & Chambliss, 2000). Research has indicated that differences in socioeconomic status and availability of resources related to geographical area have impacted educator's experiences and attitudes as well the quality of services such as inclusion (Short & Martin, 2005). With the additional responsibilities that special educators face when working with students with significant disabilities and the extra demands of sparse resources and support in urban and rural districts, it can be even more discouraging to break through the cultural barriers between special education and general education to help students obtain a successful and meaningful educational experience (Cochran-Smith & Dudley-Marling, 2012; McDonnell, 1998). Yet, a meaningful education experience often encompasses securing access for students with significant disabilities to the general education curriculum and population. Once students are within the general education environment, there remains a complex layer of social barriers they have to overcome to be successful in the inclusive environment (Trammell, 2009) Thus, special education teachers must have intimate knowledge of the school infrastructure to make the inclusion experience successful and prevent the social barriers. Unfortunately, special educators experience similar barriers, as most of their experiences have been through the lens of special education (Goessling, 1994).

It is necessary, then, when measuring the attitudes of special educators toward aspects of their job that studies compare data among the categories of students with which the educators work, the rate of inclusion of their student population, and the geographic representation of the student population. This method may better represent the complicated factors that affect teacher attrition and the relationship between successful inclusion and the attitudes of teachers of students with significant disabilities. This study's research questions asked the following:

1.   what are the attitudes of teachers of students with significant disabilities toward various aspects of their job,

2. how are their attitudes influenced by rates of the inclusion of their students and the geographic area (i.e., urban, rural, or suburban) of their school, and

3. is there a relationship between rate of inclusion and geographic area (i.e. urban, rural, or suburban) on the attitudes of the teachers of students with significant disabilities .

Methods
This study used the survey, *Attitudes of Teachers of Students with Significant Disabilities about Aspects of Their Jobs* (Pearson, 2010) to examine the attitudes of teachers of students with significant disabilities and determine the relationship of geographic area and rate of inclusion to their attitudes. The survey used a Likert scale. Demographic information was collected on the grade range of students taught, the length of time teachers taught and the length of time teachers taught students with significant disabilities, and the percent of inclusion of students. Students with significant disabilities were defined as students with (a) an IQ of 70 or lower, (b) adaptive behavior skills ranging at least 2 standard deviations below the mean, and (c) a disability typically considered low-incidence as defined by IDEA 2004 (AAEE, 2006).

Survey Development
The researchers conducted a multi-step process to develop the valid and reliable instrument, *Attitudes of Teachers of Students with Significant Disabilities about Aspects of Their Jobs* (Pearson, 2010), which examined the hypotheses. Initially, two pilot studies were conducted to design the content of the survey. The survey was then tested by 92 teachers of students with significant disabilities from a Midwestern state. The resulting data informed improvements in content, criterion, and construct validity, and Cronbach's Alpha produced moderate to high results for reliability on each of the three dependent survey sub-domain variables:

1. Direct attitudes about position: 0.821
2. Attitudes about actions related to job design: 0.874
3. Attitudes about experiences related to actions of others: 0.787

Item analysis results indicated which items were to be eliminated, which strengthened the criterion validity. The survey items and sub-scale structure measured what they claimed to measure. Literature was reviewed and sub-scale theoretical premise was checked to ensure content validity. A sample set of questions from the survey is included in Appendix A.
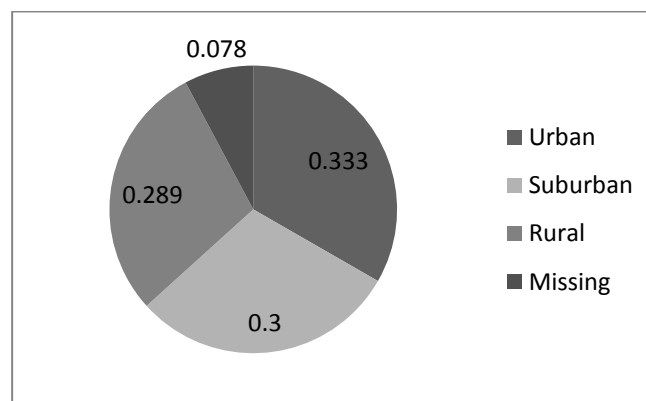
Participants
When gathering a large enough number of participants to complete a survey, Yun and Trumbo (2000) recommended gathering participants in more than one way. The researchers chose four participant gathering methods. First, researchers gathered e-mail addresses of special educators who likely worked with students with significant disabilities from district and school websites. These teachers were sent an initial e-mail requesting their participation with a direct link to the online survey and a request of them to forward the survey to other teachers they knew who worked with students with significant disabilities. This created the next participant gathering method called snowballing (Shriyan, 2008). Direct e-mails were sent to teachers who were verbally told about the study through interactions with the researchers. These teachers were also asked to pass on the opportunity to take the survey to their teaching peers creating further snowballing. Finally, two online support groups were accessed: one for parents of students with significant disabilities and the other for special education teachers of students with significant disabilities. A posting within the groups was sent to members of the groups, requesting that interested teachers contact the researcher and that interested parents contact their children's teachers to ask the teacher to take the survey.

Initial eligibility questions identified qualified participants as teachers who worked with at least one student who met the previously stated outlines for having a significant disability and were currently teaching at least 50% of the day (e.g. not in an administrative position). The final set of participants included 180 teachers of students with significant disabilities from states within the western, mid-western, and eastern United States. The teaching experience of the180 final participants ranged from 1 to 37 years with a mean of 11.93 years and a standard deviation of 9.74. The majority (87.2%) were fully certified to teach students with significant disabilities, 8.9% were certified in other classifications of special education, 2.2% held emergency certification waivers, 1.1% were certified in general education, and 0.6% were not certified at all. The vast majority of the participants reported being Caucasian. Table 1 organizes this demographic information.

Table 1. Participant Certification and Ethnicity Distribution

Teacher's Certification Level	
Certification Level	Frequency
Fully Certified	157
Certified for other disability in special education	16
Emergency waiver	4
Certified in general education	2
Not certified at all	1
Ethnic Group	
Ethnicity	Frequency
Caucasian	164
Hispanic	6
African American	3
Asian	2
Multi-Racial	2
Native American	1
Missing	2
TOTAL	180

The geographic areas in which the participants were teaching were almost equally distributed across the three categories: rural, urban, and suburban. Figure 1 graphically represents the geographic area distribution of the participants. One third (33.3%) of the teachers were located at schools in suburban areas, 30.0% were in urban areas, 28.9% rural, and 7.8% of participants did not report any geographical area information.

Figure 1. Participant Geographic Area Distribution

Participants were asked the educational level of students they served and the primary disability categories of their students. For educational level, 83 reported elementary, 126 reported middle school, 89 reported high school, and 50 reported that they work with students that are at the post-high school level. This totals 348 responses indicating that many teachers served students across different educational levels. The primary disability categories of students that participants taught were distributed among the thirteen IDEA disability classifications as follows: Intellectual Disabilities at 34.4%, Learning Disabilities at 20.0%, Multiple Disabilities at 16.7%, Autism at 13.3%, Emotional Disabilities at 3.9%, Communication Disorders at 2.8%, Visual Impairments at 2.8%, Other Health Impairments at 1.7%,

Deafness at 0.6%, and 1.1% of participants did not indicate a primary disability category of their students. Each participant was asked if they taught at least 1 student who fell within the outline of significant disability for this study, but the teachers could potentially teach students with other disabilities, so those who reported primarily teaching students with classifications considered high incidence likely were those teachers who worked with a small number of students with low-incidence disabilities.

Participants were also surveyed on the rate of inclusion of their students by indicating the predominant educational setting of their classroom. Table 2 explains this distribution of educational setting. More than half the participants (57.8%) reported their students' educational setting as a self-contained special education classroom defined as more than 50% of the day in special education. A little more than forty percent of the participants' reported that their students were in general education more than 50% of the day with 18.9% in general education 51-80% of the time, 15.7% in general education 80% or more of the day, and 3.9% in general education 100% of the day. A few participants reported that students were in community-based classes (2.8%) or home-bound placements (0.6%), and one did not answer (0.6%).

Table 2. Participant Educational Setting and Inclusion Code Distributions

Educational Setting	Frequency	Percent	Inclusion Code	Frequency	Percent
self-contained special education	104	57.8%	self-contained special education	104	57.8%
mainstreamed gen ed 51-80%	34	18.9%	inclusion general education	74	41.1%
general education 80% or more	28	15.6%			
general education 100%	7	3.9%			
community-based class	5	2.8%			
home-bound	1	0.6%	not included	2	1.1%
missing	1	0.6%			
Total	180	100%	Total	180	100%

These six categories of educational setting were re-coded into a new variable called Inclusion Code, which consisted of 2 categories: self-contained and inclusion in general education. The original categories were combined in order to increase the number of subjects in groups being compared and obtain more statistical power for detecting group differences. The *self-contained* category remained the same as the previous variable with 104 participants. The inclusion in general education category collapsed the categories of general education 100% of the time, general education 80% or more of the time, mainstreamed 51 - 80% of the time, and community-based classes into a total of 74 participants. The participants missing educational setting information and those working with home-bound students were excluded from analysis.

Data Analysis
One-Way Analysis of Variance (ANOVAs) were conducted to examine the main effects of the inclusion code and geographic area on the three survey sub-domain scores. Multiple independent t-test comparisons were utilized post - hoc to probe significant main effects for each survey sub-domain to identify the specific groups that were significantly different from each other. Then the variables of inclusion code and geographic area were combined to create six groups: inclusion urban, inclusion, rural, inclusion suburban, self-contained urban, self-contained rural, and self-contained suburban. A one-way ANOVA was conducted to examine the presence of group differences for each sub-domain of the survey, and a series of independent t-tests were utilized to probe for differences among the six groups within each survey sub-domain.

Results
The one-way ANOVA for inclusion code revealed a significant difference between the inclusion and self-contained groups for survey sub-domain 1, overall attitudes about job, with $F_{(1,175)}= 5.381$ and a p-value of 0.022. Table 3 indicates the results for survey sub-domain 1. Review of the group means showed that the inclusion group (M=3.573) scored significantly higher than did the self-contained group (M=3.307). However, sub-domain 2, attitudes about actions related to job design, with $F_{(1,175)}= 1.671$

and p=.198, and sub-domain 3, attitudes about experiences related to actions of others, with F(1,175)= 0.320 and p=0.572 did not result in significant differences between the inclusion and self-contained groups. Tables 4 and 5 organize the results for survey sub-domains 2 and 3. Table 4 shows that the one-way ANOVA for geographic setting revealed a significant difference among the urban, rural, and suburban groups for survey sub-domain 2 with F(2, 161)= 6.158 and a p-value of 0.003. Sub-domain 1 and sub-domain 3 did not result in significant group differences. Survey sub-domain 3 did not produce any significant effects as is noted in Table 5.

Three independent t-tests were conducted for survey sub-domain 2 means comparing the geographical area groups using the Bonferroni adjustment for multiple post - hoc tests. These results of this post- hoc are presented in Table 6. The comparison between urban and rural rendered a statistic of t(103)= -2.931 with p=0.005, and a review of the group means showed that rural participants (M=3.292) scored significantly higher on attitudes related to job design, sub-domain 2, than did urban participants (M=2.604). The comparison between urban and suburban rendered a statistic of t(110)= -3.076 with p=0.003, and a review of the group means showed that suburban participants (M=3.309) scored significantly higher on sub-domain 2 than did urban participants (M=2.604). The comparison between rural (M=3.292) and suburban (M=3.309) rendered a statistic of t(109)= -0.079 with p=1.000, which was not a significant difference. Thus, on survey sub-domain 2 both the rural and suburban groups had significantly higher means than did the urban group.

Table 3. Analysis of Variance Results for Sub-domain 1

Group	N	Mean	Std Dev	df	F	p
Educational Setting Main Effects						
Inclusion general education	74	3.573	0.075	1, 175	5.381	0.022
Self-Contained	103	3.307	0.754			
Geographical Area Main Effects						
Urban	53	3.296	0.757	2, 162	0.986	0.375
Rural	52	3.506	0.767			
Suburban	60	3.384	0.783			
Educational Setting by Geographical Area Interaction Main Effects						
Inclusion Urban	15	3.292	0.763	5, 159	1.603	0.162
Inclusion Rural	33	3.631	0.735			
Inclusion Suburban	24	3.612	0.750			
Self-Contained Urban	38	3.297	0.764			
Self-Contained Rural	19	3.290	0.791			
Self-Contained Suburban	36	3.232	0.778			

Table 4. Analysis of Variance Results for Sub-domain 2

Group	N	Mean	Std Dev	df	F	p
Educational Setting Main Effects						
Inclusion general education	73	3.249	1.102	1, 173	1.671	0.198
Self-Contained	102	3.022	1.182			
Geographical Area Main Effects						
Urban	52	2.604	1.141	2, 160	7.109	0.001
Rural	52	3.292	1.068			
Suburban	59	3.309	1.092			
Educational Setting by Geographical Area Interaction Main Effects						
Inclusion Urban	14	2.571	0.964	5, 157	2.991	0.013
Inclusion Rural	33	3.339	1.113			
Inclusion Suburban	24	3.458	1.039			
Self-Contained Urban	38	2.616	1.211			
Self-Contained Rural	19	3.211	1.010			
Self-Contained Suburban	35	3.206	1.130			

Table 5. Analysis of Variance Results for Sub-domain 3

Group	N	Mean	Std Dev	df	F	p
Educational Setting Main Effects						
Inclusion 80%	73	3.585	0.803	1, 172	0.320	0.572
Self-Contained	101	3.658	0.857			
Geographical Area Main Effects						
Urban	52	3.474	0.811	2, 159	1.239	0.293
Rural	52	3.664	0.813			
Suburban	58	3.717	0.889			
Educational Setting by Geographical Area Interaction Main Effects						
Inclusion Urban	14	3.143	0.802	5, 156	1.375	0.236
Inclusion Rural	33	3.749	0.716			
Inclusion Suburban	24	3.630	0.862			
Self-Contained Urban	38	3.597	0.791			
Self-Contained Rural	19	3.517	0.963			
Self-Contained Suburban	34	3.779	0.916			

Table 6. Geographical Area Group Post-Hoc Comparisons for Sub-domain 2

Group 1	Grp 2	Mean	Mean Dif	Std Err	p
Urban (M=2.604)	Rural	3.292	-0.688	0.216	0.005
	Suburban	3.309	-0.705	0.209	0.003
Rural (M=3.292)	Urban	2.604	0.688	0.216	0.005
	Suburban	3.309	-0.016	0.209	1.000
Suburban (M=3.309)	Urban	2.604	0.705	0.209	0.003
	Rural	3.292	0.016	0.209	1.000

The main effects of inclusion code and geographical area detected significant differences in survey sub-domain 1 and sub-domain 2, respectively. The possible interaction between inclusion code and geographic area was investigated by conducting a one-way ANOVA comparing the inclusion urban, inclusion rural, inclusion suburban, self-contained urban, self-contained rural, and self-contained suburban group means for the three survey sub-domains. This analysis rendered a significant result in

sub-domain 2 at $F(5,157)= 3.668$ with $p=0.013$. Results from sub-domains 1 and 3 did not show significance with $F(5,159)= 1.603$ with $p=0.162$ for sub-domain 1 and $F(5,156)= 1.375$ with $p=0.236$ for sub-domain 3.

This significant difference among groups for sub-domain 2 was followed by a series of all possible pairwise comparisons using the Bonferroni adjustment for multiple post - hoc tests. One comparison between inclusion suburban (M=3.458) and self-contained urban (M=2.616) approached significance for a post - hoc test with a p-value of 0.061. The ranked means in each survey sub-domain for all inclusion codes by geographic area comparison groups can be found in Table 7 and a graphical representation in Figure 2.

Table 7. Ranked Means for Interaction Groups by Survey Sub-domain

Domain	Group	Mean
Sub-domain1	Inclusion Rural	3.6307
	Inclusion Suburban	3.6122
	Self-Contained Urban	3.2974
	Inclusion Urban	3.2923
	Self-Contained Rural	3.2895
	Self-Contained Suburban	3.2315
Subdomain2	Inclusion Suburban	3.4583
	Inclusion Rural	3.3394
	Self-Contained Rural	3.2105
	Self-Contained Suburban	3.2057
	Self-Contained Urban	2.6158
	Inclusion Urban	2.5714
Subdomain3	Self-Contained Suburban	3.7790
	Inclusion Rural	3.7487
	Inclusion Suburban	3.6296
	Self-Contained Urban	3.5965
	Self-Contained Rural	3.5168
	Inclusion Urban	3.1429

Discussion
Researchers have indicated that including students with significant disabilities presents challenges above and beyond those of including students with less severe disabilities and often results in decreased inclusionary opportunities for this population (Brandes & Crowson, 2009; Kitmitto, S., 2011). Furthermore, studies have noted that inclusion as a service delivery model presents a significant challenge to educators due to the extensive planning, modifying, and organizing of services as well as the daily problem solving and increased professional development required to adequately facilitate the service in the general education environment (DeBoer, Piji & Minnaert, 2010; King & Youngs, 2003; Gal, Schreur, & Engel-Yeger, 2010; Dickens-Smith, 1995). These added responsibilities can lead to negative teacher attitudes. Educators of students with significant disabilities have increased challenges due to the multiple variables that accompany working with this population from creating highly modified or alternate curricula to organizing multiple staff members to foster success across various environments (Oliver & Williams, 2005; Conderman & Katsiyannis, 2002).
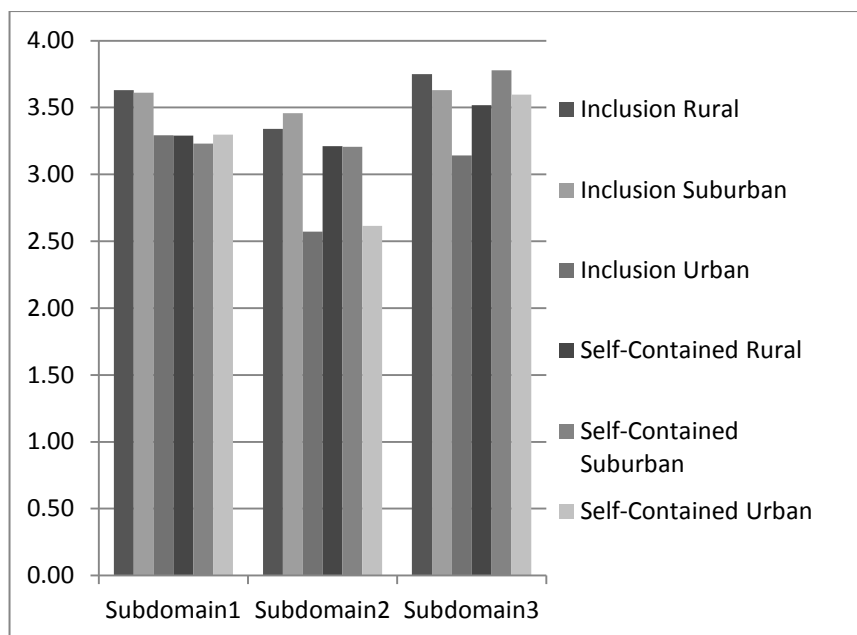
Figure 2. Interaction Group Means by Survey Sub-domain

Hence, it was expected when conducting examinations and post - hoc testing during this study that the attitudes of special educators whose students with significant disabilities were fully included would have less than favorable opinions of their jobs and job designs, similar to other educators involved in an inclusive environment. Yet, this study yielded positive attitude results for teachers of students with significant disabilities who reported that their students were included in general education for 51% or more of the day. It is known that students with significant disabilities benefit from experiencing high quality, sustainable inclusive programs and practices (Carter & Hughes, 2006; Ernest, Heckaman, Thompson, Hull, & Carter, 2011). This study indicates that having students with significant disabilities involved in inclusive programs may result in a positive impact on the job satisfaction of their teachers as well, especially if compared to working in a self-contained setting. Overall, in this study teachers in self-contained settings rated their attitudes towards their jobs significantly lower than those who had students included in general education, suggesting higher job satisfaction when students are included. If inclusion is provided with high quality and the teachers, both general and special educators, have co-decision making responsibilities as well as considerable training and support, their attitudes towards the program and towards their jobs may be higher as a result (King & Youngs, 2003; Ross-Hill, 2009; Dickens-Smith, 1995).

Historically, it has been shown that teachers in urban areas have significantly high attrition rates as compared to teachers in suburban or rural areas, often as a result of feeling under-supported and overwhelmed by the challenges faced in an urban setting (NCTAF, 2007; Cooper & Alvarado, 2006). Consequently, urban school districts often have difficulty initiating and sustaining viable, productive programs due to these high turnover rates (NCTAF, 2007; Waddell, 2010). According to Jiminez-Castellanos (2010), suburban districts have greater resources at their disposal from high teacher retention rates and new building structures to more instructional funds. It is possible that with these increased resources they have the ability to implement high quality inclusion programs. Short and Martin (2005) indicated that rural school teachers identified adequate training and resources as some of the most significant barriers to inclusion being successful. The authors presented proposed that training and resources need to be of the utmost priority in rural districts so the staff can be well-prepared for providing high-quality services to students with special needs. In this study, teachers of students with significant disabilities in both suburban and rural districts rated themselves higher in job satisfaction and positive attitudes towards job design if their students were included in general education 51% or more of the time than those in urban districts. It is possible from the current study results that the rural and suburban districts surveyed have focused their training and resources to provide high-quality inclusive practices.

This study provides additional data supporting the challenges special educators face in urban school districts and the need for further assistance to make programs sustainable and improve the job satisfaction of teachers of students with significant disabilities. In addition to the comparison to suburban

and rural district teachers, this study indicated that self-contained teachers in urban areas had higher positive rating means than their urban counterparts who had students included in general education settings, indicating that a self-contained setting may be more satisfying in an urban district than an inclusive setting for this population of educators. DeBoer, et al., (2010) focused primarily on the attitude and satisfaction of the general educator in the inclusive setting noting that their dissatisfaction was often a result of lack of training, experience, and knowledge. It is possible that a lack of training, experience, and knowledge for teachers in urban districts regarding inclusive practices, as supported in Waddell (2010) may be playing a part in the negative attitudes of teachers of students with significant disabilities included in urban school districts.

Inclusive settings increase the opportunities for students with significant disabilities to have access to content delivered in the general education setting as well as increased opportunities to interact with same-age peers without disabilities (McDonnell, 1998; Carter & Hughes, 2006). Past research shows that the geographical differences between urban, rural, and suburban communities can influence teacher's attitudes toward aspects of their jobs and inclusion (Bostelman, 1993; Carter & Hughes, 2006; Crawford, 2007; Familia-Garcia, 2001; Hanushek & Rivkin, 2007; Romano & Chambliss, 2000). The results from this study indicate that teachers from suburban and rural areas may rate their attitudes about aspects of their job design more positively than urban area teachers, especially if their students with significant disabilities are in high quality inclusive settings.

Limitations
The main limitations of the statistical analysis for the current study is in regards to the number of participants in each group, and the lack of statistical power for detecting significant differences between those groups. Perhaps if a larger sample had been achieved, significant differences would have been revealed between pairs of the six inclusion groups when paired with geographic area groups in survey Sub-domain 2, or even in Sub-domains 1 and 3 prior to conducting Post- Hoc tests. A further limitation involves the survey sub--domains. Although reliability was measured for each sub-domain and was significant enough for the measures to be considered quite reliable, no statistically significant findings were discovered via the analysis connected to Sub-domain 3. This could be related to the lack of higher number of participants, but could also be a sign of issues with the reliability in Sub-domain 3 as it was the lowest of the three.

Another limitation is that these data were gathered via an attitudinal survey, which involves self-reporting. Responses may not reflect the experiences of teachers regarding certain job aspects. For example, some teachers who took the survey did not work in a general education setting, therefore their experiences with general educators may have been limited, and their ratings on items about interactions with general educators may not be accurate. Further, the generalizability of these findings to all teachers of students with significant disabilities is limited, as participants were sampled using a convenience sample.

Washburn-Moses (2005) stated, *survey research is limited in that it provides a broad picture of the phenomenon being studied* (p. 157). One of the purposes of the survey used for this study was to discover more specific attitudinal data about job aspects for teachers of students with significant disabilities. Unfortunately, all aspects of these teacher's jobs cannot be included within such a survey, resulting in the data collected through the survey only being compared to limited independent variables, resulting in limiting the scope.

Defining, identifying, and locating specific groups of special educators who work with students with significant disabilities is difficult, and a limitation for this research study. As Goessling (1998) stated *the definition of a severe disability varies according to state regulations, federal guidelines, and medical interpretations* (p. 238). Thus, identifying the teachers who work with the variety of students who make up the national group of students with significant disabilities is also difficult, especially as more students with a variety of significant disabilities are included in general education classes or taught by educators certified in areas other than significant disabilities (Kleinert, Miracle, & Sheppard-Jones, 2007). Although defined for this study, it is difficult to identify all of the teachers who may work with students with significant disabilities, as each state utilizes different methods of special education services. Because many states and geographic areas utilize special educators of all different types of certifications to teach students with significant disabilities, another limitation of the study may be that any teacher who taught at least one student who had a significant disability could take the study. Although this likely increased participation in the study, special educators who primarily worked with students with more

high-incidence disabilities may be more likely to have differing attitudes than those who work primarily with students who have significant disabilities. Thus, the range of special educators who may have taken the survey must be considered when interpreting the results of the survey.

A final limitation involved the use of post - hoc testing, mainly because of the small participant groups. Although utilizing post - hoc testing in a study such as this is not a limitation, the use of post hoc testing means a higher level of difficulty to achieve significance because groups being compared must meet an increased significance level based on the number of comparisons being performed. This Bonferroni adjustment would lead to an alpha level of p=0.05 divided by the number of comparisons being made (i.e., p=0.025 for two comparisons, p=0.017 for three comparisons) to adjust for the increase in the Type I error rate. While post hoc tests are not actually a limitation, they make reaching a level of significance more difficult. More groups being compared means there are a fewer number of participants in each group. This may be part of the reason why smaller participation numbers in the post - hoc comparison groups resulted in means that were not found to be significantly different, yet were displaying a possibility of potential future significance if higher participation numbers were obtained.

Conclusion
The results of this study suggest a preliminary positive impact of including students with significant disabilities on the attitudes and job design satisfaction of special educators working with students with significant disabilities. It is important for the field to consider the benefits of inclusion for both the students involved as well as the teachers facilitating the program's daily activities. When considering these benefits, it is also critical for the field of special education, teacher recruitment and retention, and teacher education to contemplate the need for professional development, teacher support, and administrative guidance when designing and implementing an inclusive program for students with significant disabilities, especially in urban areas where attrition is so high. Inclusion can be a highly productive and motivating experience for students; with meaningful and ongoing support, it may also mean the increased job satisfaction of master teachers of students with significant disabilities.

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Appendix A:
Sample Questions from *Attitudes of Teachers of Students with Significant Disabilities about Aspects of Their Jobs* survey:

Sub-domain 1: Direct attitudes about position
1.   I feel supported by the administrators I regularly work with.
1.   I have felt frustrated with the amount of administrative support I have received related to working with paraeducators.

Sub-domain 2: Attitudes about actions teachers have taken related to their job design
1.   When trying to gain the appropriate support I need in my classroom I have replaced paraeducators, been assigned unqualified paraeducators, or have been assigned paraeducators who have failed in other settings within the school.

Sub-domain 3: Attitudes about experiences related to actions of others
☐   I have seen discriminatory behavior from adults (e.g. co-workers, faculty, staff, administrators, etc.) toward my students (i.e. a teacher has excluded a student from their classroom).