ATTITUDES, SENTIMENTS, AND CONCERNS OF PRE-SERVICE TEACHERS AFTER THEIR INCLUDED EXPERIENCE

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In order for educators to effectively include more students with exceptional learning needs in general education classrooms, the international community of educators must overcome barriers toward inclusion including existing attitudes. The purpose of this study was to determine the effects of an INCLUDED Experience on the attitudes, sentiments and concerns of pre-service teachers toward students with exceptional learning needs after 12 weeks of student teaching in secondary education classrooms. The INCLUDED Experience is an eight step performance based reflective child study of pre-service teachers' attitude, concerns, knowledge, and skills during their inclusion in the classroom. The sample consisted of 85 education majors seeking secondary teaching certification across the content areas. Results provided evidence that after completing an INCLUDED Experience, pre-service teachers had positive attitudes and decreased concerns toward inclusion. The overall findings suggest that the INCLUDED Experience shows promise as a model that pre-service teachers should follow to support, teach and engage students with exceptional learning needs in general education classrooms.

The education of all students, including students with exceptional learning needs, continues to be a goal within the international community of educators; however, barriers to implementation often exist in policy, practice and procedures. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has provided guidance for member nations, highlighting inclusion as *a dynamic approach of responding positively to pupil diversity and seeing individual differences not as problems, but as opportunities for enriching learning* (UNESCO, 2005, p. 12). If change towards more inclusive education is to occur in our nations' schools, then the actions of teachers, students, and all stakeholders must begin to overcome the obstacles of existing attitudes and values; lack of understanding; lack of necessary skills; limited resources; and inappropriate resources (UNESCO, 2005).

Inclusion has become the term most frequently used when describing special education as specially designed instruction in general education and special education classrooms. In some countries, legislation and action has brought both inclusive practices and the attitudes and concerns of teachers toward students with exceptional learning needs to the forefront of the educational community. For example, in the Unites States, the Individuals with Disabilities Education Improvement Act (IDEIA) requires that students with disabilities be educated with students who are not disabled to the maximum extent appropriate (IDEIA, 2004). With the federal mandate well established in the US, educators have been developing and implementing education programs and services with the intentions of including more students with exceptional learning needs in general education classrooms. A primary outcome is to provide teachers with models to use and follow when teaching all students in inclusive schools.

Each year, aspiring teachers are assigned to general education classrooms to begin their student teaching experience. They enter the classroom with their own personal beliefs, values, attitudes and concerns toward inclusion and their new primary responsibility to teach all students, especially students with exceptional learning needs. New laws, standards, and guidelines have focused educational leaders on establishing expectations that all students, including students with disabilities, be educated by highly qualified teachers and learn in free and appropriate educational settings. The Center for Studies on Inclusive Education (2003) has designed an Index for Inclusive Schooling to guide teachers and

administrators through the stages of preparing, investigating, developing, and reviewing effective inclusive practices and strategies applied in schools and classrooms. Pre-service teachers, have the challenge of providing students eligible for special education with specially-designed instruction in a supportive general education learning environment while they are completing their student teaching requirements.

The purpose of this study was to determine the effects of an INCLUDED Experience on the attitudes, sentiments and concerns of pre-service teachers toward students with exceptional learning needs after 12 weeks of student teaching in secondary education classrooms. *The INCLUDED Experience: a Pre-service Teacher's Inclusion in a Secondary Education Classroom* is an eight step performance-based reflective child study of pre-service teachers' attitudes, concerns, knowledge, and skills during their inclusion in the classroom. The INCLUDED Experience requires pre-service teachers to: 1. Identify elements that affect learning; 2. Navigate through a student's Individualized Education Plan; 3. Categorize student's strengths and achievements; 4. List student's needs and barriers to success; 5. Utilize cooperating teacher's expertise; 6. Document their own ability to select and apply specific accommodations, modifications or strategies; 7. Evaluate student's performance and progress; and 8. Describe and recommend a plan of specific accommodations, modifications and strategies for the student's continuous improvement.

Inclusion
Salend (2008) highlighted four Principles of Effective Inclusion: 1. All learners have equal access to general education programs; 2. Individual strengths and challenges and diversity are accepted, appreciated and accommodated; 3. Reflective practices and differentiated instruction engage all students; and 4. Community and collaboration are linked to provide quality programs and services for all students. In Principle 3, the author explained that *effective inclusion requires reflective educators to examine their attitudes and differentiate their assessment, teaching, and classroom management practices, to accommodate individual strengths and challenges and provide all students with meaningful access to and progress in the general education curriculum* (Salend, 2008, p. 8). The goal of inclusion is to engage all learners in collaborative, supportive, and nurturing classroom environments. All teachers are expected to give all students the services and accommodations they need to succeed.

Mastropieri and Scruggs (2010) described inclusion as the education of students with disabilities in the general education setting. In inclusive classrooms, the general education teacher has primary responsibility for the instruction and evaluation of all students' learning. Students with disabilities in inclusive classrooms can also receive instructional support from special education teachers and/or instructional assistants in the general education classrooms or the special education resource rooms in the school.

Friend and Bursuck (2009) explained their use of the phrase *inclusive practices* in place of the term *inclusion*. According to the authors, the concept of inclusive practices implies that all educators have the responsibility to welcome and teach all students in the classroom regardless of their abilities or disabilities. They defined inclusive practices as a variety of strategies and options designed and applied by education professionals to meet the needs of all students. In each edition of their textbook, Friend and Bursuck describe a strategy designed to accommodate students' individual needs based on classroom demands and expectations of the teacher. The INCLUDED Experience, designed to determine the attitudes, concerns, knowledge, and skills of pre-service teachers during their inclusion in a secondary education classroom, was adapted from their strategy.

Attitudes of In-service Teachers
In a review of the literature, Mastropieri and Scruggs (2001) highlighted the complexities of inclusive instruction at the secondary level. Their study supported the view that the attitudes of secondary education teachers toward inclusion have been seen to be less positive than the attitudes of elementary or middle level teachers. A teacher's perception of the time and effort necessary to implement inclusive practices affected the teachers' overall attitudes toward inclusion.

Larrivee and Cook (1979) found that teachers' attitudes towards inclusion were less positive as investigators moved up grade levels. Junior high school teachers were far more negative toward inclusive practices than teachers of younger grades and represented a major target group for professional development. A more positive attitude was required of teachers at this level.

Secondary teachers with high levels of special-education training and experiences working with students with disabilities reported positive attitudes towards inclusion, intended to seek out additional inclusive educational practices and were more willing to be assigned to inclusive classrooms (Van Reusen, Shoho, & Barker, 2001). The study concluded that the successful implementation of inclusion at the high school level is dependent upon the attitudes of teachers and the support they receive. Elhowersis and Alsheikh (2006) found similar results in their study. They concluded that a teacher's attitude towards inclusion is related to the amount of training or experience the teachers had in teaching students with disabilities. Fakolade and Adeniyi (2009) encouraged teachers to attend seminars and conferences to improve their knowledge of inclusion and to maintain positive attitudes towards inclusion through systematic programming within the general education classroom.

Kamens, Loprete and Slostad (2003) identified two primary needs of practicing general education teachers: 1. Education and information; 2. Administrative and collegial support. The data suggested that in order to accomplish effective instruction, professional development programs should focus on meeting the needs of teachers to enhance their knowledge and skills to teach students with exceptional learning needs. After participating in three university credit workshops, elementary faculty increased their knowledge of special-education issues and practices. The data indicated a positive increase in teachers' attitudes towards inclusion and a new willingness to collaborate with other professionals (Coombs-Richardson & Mead, 2001).   Increased opportunities to collaborate and adequate training have been found to be the needs of elementary school teachers (Hammond & Ingalls, 2003). Positive attitudes toward inclusion could increase if teachers were helped to develop skills for effective collaboration and for implementing inclusive programs and services. Idol (2006) found most elementary and secondary teachers were positive about educating students with disabilities when included students were accompanied by an instructional assistant or special education teacher in the general education classroom or the special-education resource room. Most educators reported a positive attitude toward working collaboratively with their peers; however, increased levels of support were required to offer effective inclusive education programs.

Attitudes of Pre-service Teachers
The practice of including students with exceptional learning needs into general education classrooms is being reinforced by federal legislation, and numerous studies examining the attitudes of pre-service teachers in general education classrooms have been conducted. Sze (2009) analyzed literature on pre-service teachers' attitudes towards students with disabilities. The study revealed that the attitude of the general education teacher is one of the most important predictors of successful integration of students with disabilities in general education classrooms. The findings confirmed a significant link between pre-service teacher attitudes and instructional practices.

Elhoweris and Alsheikh (2006) reached a similar conclusion. The attitudes of teachers toward their students with disabilities were critical for the successful inclusion of each student in the general education classroom. When the attitudes of special-education and general education teachers were compared, special education teachers were found to be more supportive of full inclusion than general education teachers.

McHatton and McCray (2007) compared the perceptions of elementary education majors and secondary education majors toward the practice of inclusion. Elementary education majors were found to have more favorable perceptions towards inclusion. Secondary education majors tended to disagree with the benefit of inclusion and the ability to educate students with special needs in the secondary education classroom. Alghazo, Dodeen, and Algaryouti (2003) concluded that pre-service teachers in general have negative attitudes towards students with disabilities.

Hastings and Oakford (2003) examined the attitudes of 93 student teachers. Their findings showed that pre-service teachers were more negative about the impact of children with emotional and behavioral disorders on other children in the general education classroom than they were about children with intellectual disabilities. Cook (2002) examined the attitudes of pre-service teachers and found that pre-service teachers were more positive towards the inclusion of students with learning disabilities than students with behavior disorders, mental retardation, or multiple disabilities. However, pre-service teachers expressed a positive attitude toward the benefits of inclusion for students with these special needs.

Forlin, Loreman, Sharma and Earle (2009) concluded that the personal engagement and involvement in teaching students with disabilities will most likely continue to further acceptance and understanding of inclusion of students with disabilities in general education classrooms and improve attitudes toward inclusion. Yellan et al.,(2003) added that changing the attitudes of pre-service teachers toward students with special needs will require more than simple exposure to the students in general education classrooms. If students with special needs were to be completely integrated and accepted in the general education classroom, long-term changes in the attitudes of educational professionals would be required.

Method
Design
The INCLUDED Experience, an eight step performance-based reflective child study of a pre-service teacher's knowledge and skills to engage students with exceptional learning needs during the teacher's inclusion in a secondary education classroom, was introduced as an assignment to secondary pre-service teachers enrolled in student teaching during each of three semesters when this study was conducted. Secondary education students, representing five intended certification areas, were invited to participate in an initial research study to determine pre-service teachers' attitudes and concerns toward inclusion and their knowledge and skills to teach students with exceptional learning needs after completing an INCLUDED Experience.

After reading and signing the required consent, ninety-two pre-service teachers agreed to participate. Students were informed that the Sentiments, Attitudes, and Concerns about Inclusive Education (SACIE) scale would be used to determine their attitudes and concerns toward inclusion as well as their feelings about themselves and students with disabilities. After the pre-service teachers completed a pre-experience survey at the beginning of the seminar, the INCLUDED Experience assignment was introduced. All students in each semester attended an introductory seminar that provided the directions and instructions to complete the INCLUDED Experience during one of three twelve week student teaching semesters. Prior to the end of the pre-service teaching experience, students were administered the same survey as a post-experience measure.

Sample
The sample consisted of a total of 85 secondary education majors attending a private university, including 63.5% female (n=54) and 36.5% male (n=31) student teachers. The students were seeking secondary teaching certification in several content areas including Biology (n=2, 2.4%), English (n=7, 8.2%), Math (n=21, 24.7%), Social Studies (n=24, 28.2%), or Business, Computer and Information Technology (n=31, 36.5%). The student teachers represented a wide range of ages, with 44.7% (n=38) reporting that they were 25 and under, 20.0% (n=17) falling between the ages of 26-29, 22.4% (n=19) being 30-39 years old, and 12.9% (n=11) reporting that they were 40 years of age or older.

Students were asked about their level of experience and interactions with students with disabilities prior to the start of their student teaching experience. Nearly half of the sample (45.9%) reported having had significant interactions with persons with disabilities, but only 21.2% (n=18) reported having a high level of confidence in teaching students with disabilities, with 62.4% (n=53) reporting average confidence levels and 16.4% (n=14) reporting low or very low confidence in teaching students with disabilities.

Instrument
The Sentiments, Attitudes, and Concerns about Inclusive Education scale (SACIE) was the primary instrument used to collect data (Loreman, Earle, Sharma & Forlin, 2007). The authors reported that the SACIE was an improved scale for measuring pre-service teachers' sentiments, attitudes, and concerns about inclusive education. The SACIE is a 19 item scale measuring sentiments, attitudes and concerns related to students with disabilities. Items are measured on a 4-point Likert scale, with responses Strongly Agree (SA= 4), Agree (A = 3), Disagree (D = 2) and Strongly Disagree (SD=1). The authors of the scale indicate that several items need to be reverse coded so that higher values correspond to more positive responses. The items on the SACIE are presented in Table 1.

Internal consistency reliability coefficients in the current study as measured by Cronbach's coefficient alpha for the pre-test were high for the scale overall (α = 0.87) and for the sentiments (α = 0.43), attitudes (α = 0.85) and concerns (α = 0.85) item subsets on the pre-survey. Reliability coefficients were also high for the post-test overall (α = 0.87) and for the sentiments (α = 0.47), attitudes (α = 0.84) and concerns (α = 0.89) item subsets on the post survey. For both the pre- and post-survey data, the sentiments subscale resulted in the lowest reliability values.

Table 1. Items on the SACIE

SACIE Items
1. It is rewarding when I am able to help people with disabilities.
2. I am grateful that I do not have a disability.
3. I feel comfortable around people with disabilities.
4. I am afraid to look a person with a disability straight in the face.
5. Students who have difficulty expressing their thoughts verbally should be in regular classes.
6. Students who need assistance with personal care should be in regular classes.
7. Students who are physically aggressive towards others should be in regular classes.
8. Students who need an individualized academic program should be in regular classes.
9. Students who require communicative technologies should be in regular classes.
10. Students who are inattentive should be in regular classes.
11. With appropriate support all students with disabilities should be in regular classes.
12. Students who frequently fail exams should be in regular classes.
13. I am concerned that my workload will increase if I have students with disabilities in my class.
14. I am concerned that there will be inadequate resources/staff available to support inclusion.
15. I am concerned that I do not have knowledge and skills required to teach students with disabilities.
16. I am concerned that it will be difficult to give appropriate attention to all students in an inclusive classroom.
17. I am concerned that students with disabilities will not be accepted by the rest of the class.
18. I am concerned that the academic achievement of students without disabilities will be affected.
19. I am concerned that I will be more stressed if I have students with disabilities in my class.

Tables 2-4 present pre- and post- summary data including the percentages of students having each response and the mean (M) and standard deviation (S.D.) of the responses, for the areas of Sentiments, Attitudes, and Concerns, respectively. Items 1-4 shown in Table 1 are related to sentiments.

As can be seen in Table 2, students tended to agree with the statements related to sentiments before the study began, with the exception of item 4 related to being afraid to look a person with a disability in the eye. After participating in the INCLUDED experience, students' sentiments were similar or more positive. When sentiments were changed, higher percentages of students agreed or strongly agreed with positive sentiments. Post scores related to item 1 (t(84)= 3.64, p <.001) and item 3 (t(83)= 3.64, p <.001) were significantly higher than the corresponding pre-test means.

Table 2 Pre- and Post-Responses Related to Sentiments

	Pre-SACIE Data						Post-SACIE Data					
Item	SA	A	D	SD	M	S.D.	SA	A	D	SD	M	S.D.
1.	61.2	37.6	1.2	0.0	3.6	0.52	80.0	20.0	0.0	0.0	3.8*	0.40
2.	63.5	34.1	2.4	0.0	3.6	0.54	61.2	36.5	2.4	0.0	3.6	0.54
3.	23.5	61.2	14.1	1.2	3.1	0.65	35.3	60.0	3.5	0.0	3.3*	0.54
4.	0.0	5.9	47.1	47.1	1.6	0.60	3.5	3.5	47.1	44.7	1.7	0.72

Note: n=85 for all items except 3 and 4 on the post-test with n=84
*Mean difference from pre- to post is statistically significant at the .05 level of significance.

Table 3 presents students' responses to SACIE items 5-12 that relate to attitudes towards students with disabilities. Again, students' attitudes before implementation of the INCLUDED Experience were positive, and stayed that way after the experience was completed. When change in attitudes occurred, they were again improved, with higher percentages of students agreeing or strongly agreeing with more positive attitudes towards students with disabilities after participation in the model.

Table 3 Pre- and Post-Responses Related to Attitudes

	Pre-SACIE Data						Post-SACIE Data					
Item	SA	A	D	SD	M	S.D.	SA	A	D	SD	M	S.D.
5.	15.3	75.3	8.2	0.0	3.1	0.49	20.0	68.2	9.4	2.4	3.1	0.62
6.	9.4	62.4	27.1	1.2	2.8	0.61	15.3	58.8	21.2	4.7	2.8	0.73
7.	0.0	20.0	62.4	17.6	2.0	0.62	2.4	21.2	60.0	16.5	2.1	0.68
8.	17.6	69.4	11.8	1.2	3.0	0.59	35.3	54.1	8.2	2.4	3.2*	0.70
9.	20.0	60.0	16.5	3.5	3.0	0.71	35.3	50.6	12.9	1.2	3.2*	0.70
10.	16.5	69.4	12.9	1.2	3.0	0.59	24.7	61.2	12.9	1.2	3.1	0.65
11.	25.9	43.5	27.1	3.5	2.9	0.82	36.5	49.4	11.8	2.4	3.2*	0.74
12.	15.3	60.0	23.5	1.2	2.9	0.66	21.2	61.2	15.3	0.0	3.1	0.61

*Mean difference from pre- to post is statistically significant at the .05 level of significance.

Table 4 shows students' responses to SACIE items 13-19 related to their concerns about teaching students with disabilities. Again, the results were similar for many of the concerns both before and after the INCLUDED Experiences were completed. However, when changes occurred, they resulted in less concerns. Specifically, the mean post scores for item 15 related to concerns that pre-service teachers do not have the knowledge and skills necessary to teach students with disabilities were significantly lower than the pre-scores (t(84)=4.858, p<.001), as were the post-test scores for item 19 related to students' concerns that they will be more stressed with students with disabilities in their classrooms (t(84)=2.144, p=.035).

Table 4 Pre- and Post-Responses Related to Concerns

	Pre-SACIE Data						Post-SACIE Data					
Item	SA	A	D	SD	M	S.D.	SA	A	D	SD	M	S.D.
13.	12.9	49.4	28.2	9.4	2.7	0.82	18.8	41.2	32.9	5.9	2.7	0.84
14.	18.8	52.9	24.7	3.5	2.9	0.75	20.0	43.5	31.8	4.7	2.8	0.82
15.	11.8	49.4	32.9	5.9	2.7	0.76	3.5	35.3	45.9	15.3	2.3*	0.76
16.	18.8	62.4	12.9	5.9	2.9	0.75	21.2	48.2	22.4	8.2	2.8	0.86
17.	10.6	43.5	37.6	8.2	2.6	0.79	12.9	27.1	51.8	8.2	2.4	0.82
18.	9.4	40.0	40.0	10.6	2.5	0.81	5.9	40.0	42.4	11.8	2.4	0.77
19.	10.6	42.4	37.6	9.4	2.5	0.81	10.6	27.1	50.6	11.8	2.4*	0.83

*Mean difference from pre- to post is statistically significant at the .05 level of significance.

Discussion

The purpose of this study was to determine the effects of an INCLUDED Experience on the attitudes, sentiments, and concerns of pre-service teachers toward students with exceptional learning needs after 12 weeks of student teaching. The overall findings suggest that the INCLUDED Experience shows promise as a model for pre-service teachers to follow while interacting with and engaging students with exceptional learning needs in general education classrooms. Pre-service teachers, having completed all of their education and special education courses and field experiences, had positive attitudes and sentiments towards students with disabilities prior to student teaching. Results of the study indicate that after an INCLUDED Experience during student teaching, pre-service teachers' attitudes and sentiments were even more positive and overall concerns were reduced.

It is widely believed that the attitudes teachers have towards inclusion impact the success of inclusive teaching models (Elhowersis & Alsheikh, 2006; Sze, 2009). However, research has also shown that attitudes of secondary teachers towards inclusion are lower than those of teachers at other grades (Larrivee & Cook, 1979; Mastropieri & Scruggs, 2001), but that adequate support can impact these

attitudes (Elhowersis & Alsheikh, 2006; Fakolade & Adeniyi, 2009; Kamens et al., 2003). By designing a structured experience that encouraged our pre-service teachers to engage, teach, and support students with exceptional learning needs in inclusive secondary education classrooms, we have presented a model that has positively impacted student teachers' attitudes and reduced their concerns.

Results of the study show that after participating in the INCLUDED Experience, sentiments and attitudes were even more positive and concerns were reduced. Specifically, results of pre-post mean comparisons were statistically significant for items 1 and 3 that relate to sentiments, items 8, 9 and 11 that relate to attitudes, and items 15 and 19 that relate to concerns.

Pre- and post-survey results provided encouraging evidence that pre-service teachers had positive attitudes toward inclusion, and their concerns about inclusion were decreased after completing an INCLUDED Experience,. These results are meaningful because they show that pre-service teachers found the experience rewarding and became more comfortable around students with disabilities after their individual experiences. The findings of this study are consistent with the study by Carroll, Forlin, and Jobling (2003) that found pre-service teachers reported more positive sentiments after completing a course of study that included direct involvement with students with exceptional learning needs. Henning and Mitchell (2002) reported improved attitudes toward students with exceptional learning needs when pre-service teachers were required to adapt lessons, reflect on improving their own practices, and collaborate with general education and special education teachers about curriculum. Sharma, Forlin, and Loreman (2008) presented a strategy to reduce concerns of pre-service teachers before beginning their student teaching experience.   Pre-service teachers participated in a single course elective and implemented an individually designed action plan for addressing identified concerns.

The findings of positive increases in pre-service teachers' sentiments and attitudes and a reduction in their concerns towards inclusion also suggest increased opportunities for pre-service teachers to achieve and apply specific knowledge and skills standards established by the Council for Exceptional Children (2009) that match and support completion of the eight performance-based action steps taken by pre-service teachers during their INCLUDED Experience. Tables 5, 6, and 7 show the statistically significant SACIE scale items matched with the Council for Exceptional Children (CEC) knowledge and skills standards and the INCLUDED Experience performance-based action steps.

Table 5 Sentiments: Link between Statistically Significant Items, Standards and Steps

SACIE Scale Items	CEC Knowledge and Skills Standards	INCLUDED Experience Steps
1. It is rewarding when I am able to help people with disabilities. 3. I feel comfortable around people with disabilities**.**	Knowledge of similarities and differences of individuals with and without exceptional learning needs. Knowledge of similarities and differences among individuals with exceptional learning needs. Knowledge of differing ways of learning of individuals with exceptional learning needs including those from culturally diverse backgrounds and strategies for addressing these differences.	**Navigate** through an IEP and summarize the student's present levels of academic achievement, functional performance levels, program modifications, and specially designed instruction **Categorize** positive examples of student's strengths and achievements in and out of the classroom **List** examples of student's needs in and out of the classroom; barriers to student's achievement and performance Reflect on your INCLUDED experience and the knowledge and skills you have acquired to teach students with disabilities in a secondary education classroom.

Table 6 Attitudes and Link between Statistically Significant Items, Standards and Steps

SACIE Scale Items	CEC Knowledge and Skills Standards	INCLUDED Experience Steps
8. Students who need an individualized academic program should be in regular classes. 9. Students who require communicative technologies should be in regular classes. 11. With appropriate support all students with disabilities should be in regular classes.	Skills to select, adapt, and use instructional strategies and materials. Knowledge of the demands of the learning environment. Skills to identify and prioritize areas of the general curriculum and accommodations for individuals with exceptional learning needs. Skills to evaluate instruction and monitor progress of individuals with exceptional learning needs.	**Identify** elements in your secondary education classroom that effect learning. **Utilize** your cooperating teachers' expertise and experience to collaborate on five specific accommodations, modifications, and/or strategies (SAMS) that could increase the student's access to the curriculum and participation in the secondary education classroom. **Document** the selection and application of at least three SAMS designed to meet the student's needs in the secondary education classroom **Evaluate** student's performance, progress and overall effectiveness of SAMS: consider grades; observation data; analysis of student work portfolios; performance assessments; teacher comments Reflect on your INCLUDED experience and the knowledge and skills you have acquired to teach students with disabilities in a secondary education classroom.

Table 7 Concerns: Link between Statistically Significant Items, Standards and Steps

SACIE Scale Items	CEC Knowledge and Skills Standards	INCLUDED Experience Steps
15. I am concerned that I do not have knowledge and skills required to teach students with disabilities. 19. I am concerned that I will be more stressed if I have students with disabilities in my class.	Skills to develop and implement comprehensive, longitudinal individualized programs in collaboration with team members. Skills to reflect on one's practice to improve instruction and guide professional growth. Skills to collaborate with school personnel and community members in integrating individuals with exceptional learning needs into various settings.	**Navigate** through an IEP and summarize the student's present levels of academic achievement, functional performance levels, program modifications, and specially designed instruction. **Describe** an individualized plan recommended for your student's continuous improvement. Reflect on your INCLUDED experience and the knowledge and skills you have acquired to teach students with disabilities in a secondary education classroom.

This study examined the attitudes, sentiments, and concerns of pre-service teachers included in secondary classrooms during a 12 week student teaching experience. Our data spanned across three semesters and five certification areas of the pre-service teachers. Further, the sample involved eighty-five pre-service teachers who were placed in secondary education classrooms in school districts located within a forty mile radius around the university where they were supervised by their cooperating teachers and taught 85 students with varying exceptional learning needs. Because the sample of pre-service

teachers, cooperating teachers, and students with exceptional learning needs was diverse, changes in attitudes, sentiments and concerns were noteworthy.

Future Studies
The sample in this study includes only secondary education pre-service teachers who have completed the INCLUDED Experience. It would be useful to examine the impact of the INCLUDED Experience for groups of student teachers who do and do not participate in an INCLUDED Experience during their student teaching semester.

Further, extending the analysis to examine the attitudes and concerns of elementary education pre-service teachers and content specific (math, business, social studies, English, biology) pre-service teachers and their personal reflections on their knowledge and skills after their inclusion in a general education classroom would provide insight into the impact of the INCLUDED Experience for these aspiring teachers. Research has suggested that the attitudes of secondary education teachers are less positive that those of elementary students (McHatton & McCray, 2007). While our data showed positive attitudes from secondary education students both pre and post participation in the INCLUDED experience, it would be useful to compare attitudes for secondary and elementary pre-service teachers from the current institution. The curriculum at the current institution includes multiple courses in special education at both the elementary and secondary levels, and could be one influence on the initial attitudes.

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