An Evaluation of Culturally Responsive Practices in Special Education Program for Preservice Educators

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Abstract

Meeting the needs of students from culturally and linguistically diverse backgrounds is a serious concern that schools are facing. This article describes an evaluation of embedding culturally and linguistically diverse evidence-based practices in a master's program for teacher candidates seeking endorsement in special education. A cooperative-agreement was developed between one urban university and the U.S. Department of Education's Office of Special Education Programs (OSEP) to focus on infusing culturally and linguistically diverse evidence-based practices in a teacher preparation program. This study employed a mixed-method approach to describe the methodology, instrumentation, and progress made towards program improvements related to culturally diverse practices are discussed. Results suggest that while more opportunities for improvements to the program structure and program evaluation data collection are necessary, candidates are showing some evidence of improving skills related to culturally and linguistically diverse evidence-based practices. Although preliminary, the project methods of program revision provide helpful information for other programs on program revision and provide insight on the evaluation of program updates and interventions.

Keywords: *teacher evaluation; cultural diversity; evidence-based practices; teacher preparation*

As a growing number of students from diverse backgrounds enter into the 21st century classroom, teacher preparation programs are intensifying efforts to address practices to teach these students using culturally responsive methods. According to the U.S. Census Bureau (2012) the U.S. population is anticipated to become a majority-minority nation by 2043; therefore, by the year 2060, it is projected that minorities will make up 57% of the nation's population. The African American population is expected to show a considerable increase. The Asian population is projected to double. The Hispanic population is also projected to double and account for over 40% of the nation's population growth. Among the other race groups, American Indians, Alaskan Natives, Native Hawaiians, Other Pacific Islanders, and people who identify with having two or more races are all expected to have a rapid increase in growth (U.S. Census Bureau, 2012). As a result, the face of our nation and school-aged children enrolled in education programs are changing.

As a reply to these growing predictions about the changing diversity in schools, the federal government has funded a number of grant awards hoping to the quality of teachers' exiting higher education institutions who are prepared to use culturally responsive teaching methods. The U.S. Department of Education's Office of Special Education Programs (OSEP) awarded a number of discretionary grant awards to programs seeking to improve the results for children with disabilities. Many higher education institutes that received these discretionary grant awards focused efforts to increase the channel of well-prepared, fully credentialed special education teachers in their programs (U.S. Department of Education, 2013) through preparing teachers to implement evidence-based practices and practices to address the cultural diversity of students. This article details an OSEP funded cooperative agreement project with an urban university located in the southeast United States that attempts to increase preservice teacher's knowledge in culturally diverse teaching practices.

1. Background Literature

There has been an extensive collection of scholarship concentrated on exploring initiatives related to how teacher preparation programs address cultural diversity in their curricular (Jennings, 2008; Pennington, 2007; Trent, Kea, & Oh, 2008). Federal policies such as The No Child Left Behind Act (NCLB) of 2001 and the Individuals with Disabilities Education Act (IDEA) of 2004, use language to give emphasis to the importance of preparing teachers with culturally diverse practices to produce effective outcomes for students with disabilities. However, most scholarship and policy collection struggle to address effective methods to solidly advance curriculum that would address cultural diversity within teacher preparation programs. For students with disabilities, particularly students of color with disabilities who are disproportionately assigned to special education, the premise of including culturally responsive teaching in teacher preparation programs is even more critical. It is an alarming fact that culturally diverse students experience low academic performance (Nieto, 2010; Rothstein, 2004; Banks, etc., 2005). Dropout rate is consistently higher for children of color (Bennett, 2011; Boutte, 1998). Moreover, children of color are overrepresented in special education (Harry & Klinger, 2007). For students with disabilities, predominantly those of color in special education classrooms, the quality of their education can be improved by teachers using educational programs which reflects cultural heritages, perspectives, experiences, and instructional practices (Gay, 2010). Research indicates that in order for teachers to accomplish these effective practices, better preparation of teachers who can apply culturally diverse practices must first be addressed in teacher preparation programs (Dunn et al., 2009; Ford, 2010; Ford & Kea, 2009; Kaufman & Rosenbaum, 1992; Ladsons-Billings, 1991). As a result of this research and these initiatives, postsecondary institutes are positioning themselves to restructure and evaluate their existing teacher preparation programs to better prepare preservice teachers in the use of culturally and linguistically diverse evidence-based practices.

1.1 Culturally Responsive Teaching

Gay (2010) describes culturally responsive teaching practices as using the cultural characteristics, experiences, and perspectives of ethnically diverse students as a means to teach effective practices which aims aim to bridge the gap between academic content and real-world experiences. As a result of this aim, students will find that academic content has more meaning, student's interest levels will increase, and students will have an easier time managing and learning the academic content (Saifer, Edward, Ellis, Ko, & Stuczynski, 2011; Ford & Kea, 2009). Ethnically diverse students may achieve a higher academic performance through the development of culturally responsive teaching (Gay, 2010; Hollins, 1996). The educational institution, particularly higher education institutes offer the physical and administrative structure to educate teachers regarding best practices related to cultural diversity. While teacher preparation programs indicated they have integrated best practices of culturally diverse education into their curriculum, this claim was found to be inaccurate (Gollnick, 1995). Teacher education programs show little to no progress with reforming their college-and university-based programs to address culturally diverse practices (Ladson-Billing, 1995; Zeichner & Hoft, 1996). The incongruity to whether these practices are being addressed furthers the concern of the degree to which students with disabilities are receiving quality education, and CLDPs to achieve success from their teachers.

Saifer et. al. (2011) and other related studies of multicultural education in teacher preparation programs (Ford & Kea, 2009; Falls and Roberts, 2001) note that to ensure students are achieving success, teachers must understand, appreciate, and respect the background and differences that each student will bring into the classroom. Considering the increasingly diverse population of students in American schools, the question continues about where teachers learn about CLDPs? The logical place to remedy this issue of assuring that teachers develop CLDPs is in higher education teacher preparation programs. Smith (2009) noted that "the success or failure of multicultural education depends upon the effective preparation of teachers" (p. 45). Studies go on to show that it is important that teacher preparation programs explore innovative ways to infuse experiences of cultural diversity into their curriculum to widen teachers' experiences with diversity (Dunn et al., 2009; Parrish & VanBerschot, 2010) to positively impact students' performance in the classroom.

  In an effort to respond to this need, the U.S. Department of Education's Office of Special Education Programs (OSEP) funded a number of projects under the grouping "Personnel Preparation/Development to Improve Services and Results for Children with Disabilities" (U.S. Department of Education, 2013). A component of these projects are aimed at revamping teacher preparation programs to better prepare teachers to be knowledgeable and skilled in using CLDPs to instruct students with high-incidence disabilities, such as intellectual and learning disabilities. In 2008 this project was formed, with the support from OSEP, to revamp a pre-service teacher program of study in special education/academic curriculum that infuses the knowledge and skills needed to implement CLDPs in the classroom.

1.2 Culturally Responsive Competencies

In a closely related education field, counselor education, culturally diverse education of pre-service counselors is at the center of graduate programs of study, particularly those accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP, 2009). Since 1991 the Association for Multicultural Counseling and Development has posited that counselor education programs infuse a set of multicultural competencies into the counselor education curricula (Sue, Arrendondo & McDavis, 1992). These competencies include three tenets, awareness of one's attitudes and beliefs, knowledge and skills. These are detailed in the CACREP standards (CACREP, 2009). These standards are evaluated during each reaccreditation visit [every 7 years] for programs seeking to continue their CACREP accreditation (CACREP, 2009). Over the years, researchers have operationalized and stressed the importance of the multicultural competencies, attitudes and beliefs, knowledge, and skills, in educational and counseling studies (Arrendondo et al., 1996; Malott & Schmidt, 2012).

Multicultural attitudes and beliefs include one's awareness of and sensitivity to their own culture and how it impacts attitudes, values and biases (Bodur, 2012). Additionally, multicultural attitudes and beliefs involve one's ability to recognize the scope of their cultural competence and how discomfort due to such incompetence can be the source of contention between providers and clients they serve (Arrendondo et al., 1996). Multicultural knowledge is one's understanding about their personal race and culture and its influence on how they perceive what is normal or abnormal, and how this can lead to biased definitions of oppression, racism, discrimination and stereotyping in their daily tasks (Holcomb-McCoy & Day-Vines, 2004). Finally, multicultural researchers define culturally skilled practitioners as ones who seek continual professional development and consultation about multicultural issues, strive to understand themselves as racial and cultural beings and seek a nonracist identity (Castillo, 2007; Sue et al., 1992), and refer clients out to culturally appropriate resources when needed.

Multicultural competencies are taught in stand-alone courses or infused throughout counselor education curricula (CACREP, 2009). The purpose is to encourage multicultural pedagogy in counselor education programs that address cultural and linguistic diversity with diverse student populations. Students focus on this diverse pedagogy during practicum and internship experiences, and in the supervision process. Candidates seeking licensure as a mental health or school counseling credentials are required to show evidence of multicultural competency upon exiting their graduate programs.

Though teacher education programs and licensure requirements are not as specific regarding multicultural competency, the need for a movement toward this component in education programs is essential. Counselor educators are trained to address directly multicultural issues in courses they teach in both a didactic and experiential format. Hence, multicultural competence is a cognitive and developmental process in every aspect of counselor training. Our attempt here is to begin the conversation of a systematic method of addressing multicultural competence in teacher education programs. Using the counselor education multicultural competency requirements as a starting point, this project sought to improve and expand the program of study leading to licensure in the special education/academic curriculum through inclusion of culturally and linguistically diverse practices embedded throughout courses**.**

2. The Project

This article is presented as a case study that reflects program changes to support the inclusion and focus on culturally and linguistically diverse practices (CLDPs) for preservice teachers who service students with high incidence disabilities. Methodologies used to evaluate program changes, measures for evaluation of program goals, and evaluation of infusing CLDPs are reviewed. This information provides a replicable method of approaching program improvement to increase the academic and content knowledge of pre-service teachers for understanding and implementing evidence based practices. It is applicable for a wide range of teacher preparation programs in special education.

This project was developed as a 5-year cooperative agreement with OSEP in 2008 to improve and expand a master's degree program at an urban university in the southeast United States leading to licensure in special education general curriculum. The preservice teachers who complete the program of study will earn either state licensure and/or master's degree in education to teach special education in general education classroom. The project was designed to help improve the skills of preservice teachers and assure they graduate as well-prepared beginning teachers who are competent and ready to instruct utilizing evidence-based practices when working with students with high incidence disabilities in K-12 classrooms. The first step of the project was an assessment of the current curriculum/courses for evidence of instruction in or use of culturally and linguistically diverse practices. These findings were later used to

determine where and to what extent CLDPs were infused into redesigned courses. Instrumentation for collecting CLDPs was evaluated to determine further program improvement areas.

3. Method

A mixed-methods study was developed to examine the program status for collecting data towards CLDPs, evaluating program progress, and providing others with a transparent and replicable method that could be used for assessing similar program goals. Creswell and Clark (2011) noted the importance of educational research using mixed-methods as a way for educators to study complex issues in education. The authors' reference that by using a mixed-method approach that uses a measurement tool as well as open-ended questions, researchers can gain a greater understanding of the complex issue that may go unobserved with a single qualitative or quantitative method alone. This study highlights the use of mixed-methods through quantitative instrumentation and qualitative data collection methods that others may find valuable for obtaining similar evidence.

3.1 Changes to the Program

Review of existing teacher licensure/M.Ed. in special education courses was undertaken to determine the level to which each course included culturally and linguistically diverse practice knowledge and application. Each course syllabus was reviewed for evidence of essential components of teacher preparation and culturally and linguistically diverse practices. For example each course syllabus was reviewed to see if it included:

- various standards (e.g., Council for Exceptional Children, Virginia State Standards, Other standards as needed);

- evidence-based practices relating to (e.g., assessment, inclusion, behavior management, instructional strategies, literacy);

- culturally diverse practices (e.g., up-to-date quality research, diverse practices relating to language, diversity, disability, race, poverty, sexual orientation, urban youth, etc.)

Each syllabus was reviewed for each essential component and was awarded one point for each of the following categories if they were explicitly noted in the syllabi. Categories included:

- mention of the essential component in the syllabus

- readings and texts for the course included the essential component

- assignments and application of knowledge about the essential component was included in the syllabus

- supervised practice of the essential component was included in the syllabus

- course evaluations noted the essential component in the syllabus

Independent reviewers were asked to examine each course syllabus and note their findings.

3.2 Infusing Cultural Diversity Practices

Information gathered from the initial syllabi revision instrument was used to redesign/update courses in teacher licensure/the M.Ed. in special education program to reflect key components infused throughout the curriculum. The same rubric that was used in the initial review of courses was then used to examine the updated courses and the degree to which they now reflected (CLDPs) instruction and application throughout the curriculum.

3.3 Measures for Showing Progress on Program Goals (Instrumentation)

The Stages of Concern Questionnaire (SoCQ), developed in the 1970s has been used extensively to assess teacher concern about new strategy implementation (George, Hall, & Stiegelbauer, 2008). The SoCQ is a reliable and validated tool used to measure the implementation of change in school settings. This instrument identifies an individual's progress through a developmental continuum of stages of concern about an innovation they have been instructed to implement. The stages progress from little or no concern with the innovation to self or personal concerns about its use. They then move forward to task related concerns about adopting the innovation and finally center on the impact of adopting the innovation. According to the authors, individuals progress toward higher-level, impact concerns with "time, successful experience, and the acquisition of new knowledge and skills" (George et al., 2008, p. 9). There are seven stages of concern numbered from (0-6) identified under the categories of self, task, and impact:

Self-concerns. The self-category contains the first three stages. Stage 0 (Unconcerned) is interpreted as having little concern or involvement with the innovation. In Stage 1 (informational), individuals are interested in learning more

about the specifics of the innovation, but they have few personal concerns about how implementing the innovation will affect them. Stage 2 (personal), indicates that the individual is unsure about the demands of the innovation and his or her ability to meet those demands. Additionally, potential conflicts with existing structures and programs and personal commitment to the innovation occur at Stage 2.

Task concerns. Task concerns relate to the management (Stage 3) of implementing the innovation. Issues surrounding the use of information and resources focus on scheduling; managing, organizing, and efficiency take precedence in this stage.

Impact concerns. Impact concerns consist of the last three stages of the Stages of Concern. Stage 4 (Consequence) includes interest in the impact of the innovation on students, improving student outcomes, and the changes needed to improve student outcomes. In Stage 5 (Collaboration), the individual is interested in working with others to determine how to better use the innovation. Finally, Stage 6 (Refocusing) indicates that the individual is reflective of their implementation and practice of the innovation and wants to think of alternatives to strengthen its use.

The SoCQ consists of five items/statements for each stage of concern for a total of 35 items/concern statements. The instrument also includes a demographic page with an individual identifier for each student, the semester, the year, and the students' academic advisor. It also includes detailed information and instructions for completion of the questionnaire.

Responses to the SoCQ are on a six-point Likert scale. The Stages of Concern Questionnaire includes a scoring device which translates raw scores into percentile scores to determine the peak stage or stages of concern of the individual respondents. Descriptions and examples of profile interpretation are also included by the authors.

3.4 The Stages of Concern Questionnaire in the Project

The SoCQ was used in the project to determine students concerns with implementing culturally and linguistically diverse practices in teaching students with high incidence disabilities in K-12 classrooms. An initial baseline on the SoCQ was sought from each student prior to beginning coursework (less than one month after starting classes) for licensure or the M.Ed. in special education program. Each student enrolled in the pre-service teacher program received an email request to complete the SoCQ with a link to the online survey and instructions on how to complete the survey. Completion of this SoCQ survey identified the students' initial stage of concern regarding use of culturally and linguistically diverse practices.

Initially, additional SoCQs were sought from each student following the completion of each semester of coursework. Monitoring candidate progress through the stages of concern was used to evaluate individual needs for additional instruction, inform program design, and inform possible curriculum revisions. Frequency of administration of the SoCQ became problematic and subsequent SoCQs were sought at the mid-point and end of the students' program. The exit SoCQ indicated the students' final stage of concern about CLDPs.

3.5 End Of Course Evaluation

The End Of Course Evaluation (EOC) (Appendix A) was designed by project personnel to measure the effectiveness of course restructuring/redesign to improve/implement instruction in CLDPs. The EOC focused on the degree to which instruction in culturally diverse evidence-based practices were infused into course content. It consisted of nine statements that asked about students' knowledge, understanding, and competency/confidence about using CLDPs in their teaching. An additional two questions sought to determine what area of academic content students wanted to teach and what academic content areas were addressed in the particular course being evaluated. There were also two open ended questions to gain further understanding of what was working well, as well as areas for additional course improvement.

3.6 Participants

The project had 69 participants. Two additional people were enrolled at one time, but are no longer enrolled, nor graduated. The majority (81%) of the participants were female (n=56), with the remaining 19% male (n=13). The majority (72%) of the participants were Caucasian (n=48) with the remaining 20% African American (n=20) and 9% Hispanic/Other (n=11). Prior to enrolling in the university's graduate program, several points of data were collected on each student. The two common data points that were collected for every applicant are (1) GPA on the last 60 credits prior to applying to graduate school and (2) a standardized graduate school test score, such as the GRE or MAT. The following table shows these three data points.

Table 1. GPA, MAT Scores and GRE Scores for Candidates

Data Points	*N*	Minimum	Maximum	Mean
GPA	68*	2.05	4.00	3.30
MAT	25	379	476	416.52
GRE	37**	286	1220	927.68

*One person did not have a GPA or test score recorded in the database.

**After August 2011, the scaled GRE scores changed to a range of 130-170. Six project candidates took the GRE after this date, and their scores were not included in this table.

3.7 Procedures and Data Analysis

The Stages of Concern questionnaire was administered to all candidates at the beginning, the mid-point, and end of their tenure in the program. Responses were tracked so that confidence in teaching can be compared from the beginning to the end of their tenure in the program. The evaluator also used Research Electronic Data Capture (REDCap), a multi-university online survey host, to administer SoCQ questionnaires. One or two follow-up/reminder emails were sent to those who had not completed the SOCQ. In addition, candidates had the opportunity to complete the questionnaire by hand during student program meetings held each semester.

Candidates are expected to show progress on the Stages of Concern questionnaire (SoCQ) continuum throughout the program. The (SoCQ) is a tool used for measuring implementation and facilitating change in schools. Scores on the SoCQ would allow program faculty to assess candidates' concerns about the strategies, programs, or materials in the school. The SoCQ developers provided detailed instructions on how to analyze and interpret the questionnaire data. The data were analyzed to determine the candidates' current individual stages of concern. The authors stipulate that candidates can be in more than one stage at any given time. A high score in Stage 0 indicates that the innovation is not the only thing on the respondent's mind; conversely, a low score indicates that the innovation is a high priority. A high score in Stage 1 indicates that the person wants to know more about the innovation. A high score in Stage 2 indicates personal concerns that the candidate is concerned about, status and rewards, as well as the effect that teaching has on them. A high score in Stage 3 shows that the respondent is concerned with the management and time the innovation requires. A high score in Stage 4 shows that the individual is focusing on the impact on students that he or she could influence. A high score in Stage 5 shows that the candidate has a focus on coordinating and cooperating with others in working on the innovation. A high score in Stage 6 means that the respondent wants to look at more ways that others can benefit from the innovation.

The developers (George et al., 2008) state that the data can be interpreted individually and/or by group. Individual raw scores were calculated for each student in SPSS, then converted to percentile scores using the conversion chart provided by the developers. Because of the low number of responses, particularly for the final administration of the SoCQ, the evaluator calculated the group mean scores for each stage for the pre, mid, and final administrations of the SoCQ. Again, the raw scores were converted to percentile scores.

End of Course (EOC) evaluations were administered at the end of each semester. Each candidate received an EOC evaluation for each course in which he or she was enrolled. The evaluations were sent via email during the last week of class using REDCap. The evaluator also sent a follow-up/reminder email approximately one week later to students who had not yet completed the evaluation. The number of respondents varied for all courses, with a low response rate.

Descriptive statistics (means and standard deviations) were calculated for each item in SPSS. Open ended responses were reviewed using recognized qualitative data analysis techniques whereby data were broken down into meaning units and reorganized into themes (Creswell & Clark, 2011). Data was organized for each question based on themes or patterns derived from responses. This allowed for constant comparison during analysis. While the quantitative data provided useful feedback on evidence-based practices, the qualitative data also yielded some pertinent information.

4. Results

At the inception of the program, Stages of Concerns Questionnaire (SoCQ) data were collected at the end of each semester starting in Fall 2011. Since that time, 60 questionnaires have been collected – 37 initial; 16 mid; and 5 final. Table 2 shows the number of candidates in each stage at each administration.

The developers of the SoCQ recommend analyzing group data as well as individual data. They suggest taking the average raw score, then identifying the corresponding percentile score, as opposed to simply averaging the percentile

scores of the individuals in a group. In the same table below, the last three rows show the group average raw scores with the percentile score in parentheses. Note that the highest percentile score is in Stage 0 and the lowest percentile score is in Stage 4, which aligns with the individual data analysis.

Table 2. Stages of Concern Questionnaire – Numbers in Stages, Group Raw Scores and Percentiles

	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Initial administration (n=36*)	18	5	4	4	1	4	0
Mid administration (n=16*)	6	1	0	4	1	2	2
Final administration (n=7)	5	0	0	0	0	2	0
Average Raw Score (percentile) Initial	18 (96)	27 (93)	27 (89)	23 (85)	31 (82)	31 (91)	25 (84)
Average Raw Score (percentile) Mid	18 (96)	25 (90)	25 (85)	24 (88)	35 (96)	30 (88)	25 (84)
Average Raw Score (percentile) Final	24 (99)	24 (88)	25 (90)	23 (85)	27 (63)	32 (93)	24 (81)

*Numbers do not add up to total n because one candidate in each of these administrations did not answer enough items to generate a score for a particular stage.

The developers of the SoCQ indicate that respondents should progress through the Stages in order. However, they also state that some people can move through the Stages differently. (High scores at a particular Stage indicate more concern at that Stage.) When analyzing individual data, the developers suggest that the second highest Stage of Concern is typically adjacent to the highest Stage of Concern. For the 37 initial administrations, this was accurate for 14 respondents (38%). This was not the case for the average scores and corresponding percentiles; however, individual data show a more accurate picture.

The data also show that many of the responding candidates remain in Stage 0, which is a bit of a concern because they should be moving somewhat through the Stages. The SoCQ data would provide a better picture if the same people were completing all three (or at least the initial and final) questionnaires. The evaluator cautions against using these data because the three (initial, mid and final) represent different people.

The EOCs were administered at the end of every semester for each course. Data analyzed are through fall 2012, with 13 different courses represented (two additional courses had no responses). Evaluations were not analyzed for each individual course because so few responses were collected for each course (n=17 for the course with the highest number of respondents).

The EOCs evaluations included 9 items focused on cultural diversity. Those statements are: (1) This class addressed the cultural diversity of students and the school environment; (2) I don't know what cultural diversity is or how it affects teaching or learning; (3) I have limited knowledge of cultural diversity and its relationship to teaching and learning; (4) Cultural diversity does not affect teaching or learning; (5) This class increased my understanding of cultural diversity and its relationship to teaching and learning; (6) I feel competent in planning instruction for students of diverse backgrounds; (7) I need to improve my knowledge of cultural diversity and its impact on teaching and learning; (8) I feel confident that I can make teaching and learning accessible for students of diverse backgrounds; and (9) I would like to enhance my understanding of cultural diversity and its effect on teaching and learning.

Candidates were asked to rate their agreement to each statement on a Likert-style 5-point scale

(1=Disagree; 2=Somewhat Disagree; 3=Neutral; 4=Somewhat Agree; 5=Agree).

Table 3. Means and Standard Deviations Based on a 5-Point Scale for Items on Cultural Diversity

EOC Statement (n=115)	Mean	Std. Deviation
(1) This class addressed the cultural diversity of students and the school environment.	2.36	1.403
(2) I don't know what cultural diversity is or how it affects teaching or learning.	3.83	1.778
(3) I have limited knowledge of cultural diversity and its relationship to teaching and learning.	3.84	1.598
(4) Cultural diversity does not affect teaching or learning.	3.85	1.768
(5) This class increased my understanding of cultural diversity and its relationship to teaching and learning.	2.46	1.320
(6) I feel competent in planning instruction for students of diverse backgrounds.	2.28	1.361
(7) I need to improve my knowledge of cultural diversity and its impact on teaching and learning.	3.04	1.379
(8) I feel confident that I can make teaching and learning accessible for students of diverse backgrounds.	2.33	1.514
(9) I would like to enhance my understanding of cultural diversity and its effect on teaching and learning.	2.57	1.332

Recoding of items 2, 3, 4, 7 and 9 will be necessary for any further statistical analysis. These results show that the respondents feel as though they are not particularly knowledgeable or confident about cultural diversity. According to the results for Item 1, the courses are not necessarily addressing cultural diversity. The candidates would like to improve their knowledge (Item 7) perhaps because they do not feel confident in their ability to make teaching and learning accessible for students of diverse backgrounds (Item 8).

The open-ended items at the end of this section are: (1) How could this class have better met your needs for understanding cultural diversity and its relationship to teaching and learning?; and (2) What has this class addressed well in helping you understand cultural diversity? Comments were provided by 22 of the respondents, or 19%. The respondents would like more detailed instruction on cultural diversity, as well as strategies in dealing with a culturally diverse classroom. A few stated that they are more aware of the different cultures represented, but would like to know what they need to do differently to reach those populations. Again, three people stated that they did not learn about cultural diversity at all, and one respondent said that this topic could be incorporated into every course. For the second question in this section, the candidates feel that real-life examples are excellent tools for presenting cultural diversity. They also learned that this is always changing, so they need to keep current.

Results for the quantitative portion for this section indicate that the respondents do not think that cultural diversity affects teaching or learning (Item 4, mean=3.85). As one person suggested in the comments, this topic can be incorporated throughout all courses with a small amount of tweaking. Allowing the candidates' time to discuss those real-life examples with experienced teachers would help with their confidence. In-depth case studies could also be helpful.

5. Discussion

Culturally and linguistically diverse practices involve many components of multicultural education to impact the curriculum, instructional content, classroom environment, assessments, and student-teacher relationship (Gay, 2010). As noted in there are three educational perspectives of CLDPs to define culturally diverse practices to include empowering students to impact their knowledge, skills, and attitudes (Billing, 1995); using cultural knowledge and experience to make content more appropriate for students (Gay, 2000); and learning developed within a social context, and within a community and is influenced by cultural differences and cultural experiences (Nieto & Boder, 2008). Culturally diverse practice has been found to be effective by the most reliable research, and having the

potential to positively impact the learning of students with disabilities who require comprehensive, differentiated instruction delivered through the lens of cultural awareness (Delpit & Dowdy, 2002; Obiakor, 2007; Rueda, 2007). This importance has been documented in every level and practice of special education (Banks & Banks, 2004). However, a significant gap exists between the positive impact that culturally responsive practice has on students with disabilities and the actual use of culturally responsive practices and instruction that is implemented in the classroom (Gorski, 2008). Regrettably, the culturally responsive interventions proven to be reliable and common to the success of students with disabilities in the classroom are not frequently addressed in the classroom. The ultimate responsibility of utilizing culturally responsive practices for students with disabilities lies with the classroom teacher (Gay, 2002; Smith, 2009). However, teacher preparation programs must accept a level of responsibility for the lack of preparing teachers to implement and sustain culturally responsive practices (Dunn et al., 2009; Parrish & VanBerschot, 2010; Smith, 2009) to impact the outcomes of students with disabilities.

In this study, we wanted to enhance the implementation of CLDPs within the special education teacher preparation program. This effort began with examining the course syllabi, followed by infusing culturally responsive teaching practices and application into the course curriculum. We drove to examine the impacts of embedding culturally responsive instruction into the curriculum and on implementing these practices. We learned from the analysis of group data that during the initial administration of the SoCQ that the majority of participants (n=18) scored within stage 0 which is indicative of being preoccupied and concerned with other innovations rather than CLDPs. The test publishers state that nonusers concerns are highest on Stages 0, 1, and 2 and lowest on Stages 4, 5, and 6 and our findings mirrored these scores thus indicating that the teacher candidates entered the program with little knowledge of culturally responsive practices.

In addition, we sought to follow one cohort of teacher candidates as they progressed through a Master's program. We also sought to determine if the course design was effective to improve instruction and implementation of culturally responsive practices. Unfortunately, in each administration of the SoCQ the stage 0 score remained the highest score for the majority of participants. This is indicative of candidates' being preoccupied with things other than CLDPs, or other priorities are preventing a focus on CLDPs, spending little time thinking of this innovation, and being more concerned with other innovations. However, SoCQ developers state that not only should the highest score be examined, but additionally the next highest score should as well. Therefore during the mid-placement administration the second highest score was in stage 3 which is characterized by concern with the organization and management of daily activities, being conflicted with competing interests and responsibilities, and an inability to manage conflicting initiatives. This stage is however indicative of a teacher's implementation of the practice. Furthermore, when examining the last administration of the SoCQ, the second highest score was in stage 5 which indicates that teachers were seeking collaborative partners and relationships to help with and discuss the innovations usage. Again, indicating that teachers are implementing the practice, but seeking assistance with this process. While our results are preliminary, a slight shift from the lower scores to higher scores was possibly indicative of the dissonance felt by implementing culturally diverse practices in the classroom and the subsequent effects on students. Data collected from EOC evaluations supported the above findings.

While there was a very minimal move in teacher candidates' knowledge and implementation of CLDPs, it was not clear that candidates feel confident about their knowledge and practice or impact of culturally responsive teaching. Therefore, like other researchers we found that teachers must also take personal steps to better themselves to be conscious about the importance of CLDPs (Atwater et al., 2010). We also learned that the evaluation of teacher candidates' understanding of and ability to implement newly introduced practices is difficult. We used a variety of evaluation methods including course evaluations, SoCQ questionnaire, and open-ended questions in an attempt to evaluate learning outcomes at multiple levels; however, attempts to evaluate teacher candidates' abilities to synthesize and apply their knowledge proved difficult.

For some time research shifted the failure to improve teacher preparedness on culturally responsive practice on the shoulders of Higher Education Institutes. We believe that after revising syllabi to reflect CLDPs, assignments, and placing an increased emphasis on culturally responsive practices that this is not the one and only single factor to why teachers are not using culturally responsive practices. According to a study on teachers' perceptions of culturally responsive teaching, Phuntsong (2001) noted that 42% of teachers indicated that a color-blind approach to teaching was appropriate, despite what they had learned about the importance of culturally responsive teaching practices. Additionally, Ebbeck and Boahm (1999) noted the gap in teachers being aware of the need for culturally responsive practices and actual classroom practice. Consequently, these issues to practice have been noted and must be examined further as a potential barrier to implementation.

5.1 Recommendations for Future Practice

The need to better prepare preservice teachers to recognize the significance of the impact culturally responsive practices has on students with disabilities outcomes and applying these practices are well-established in the literature (Gay, 2002; Moule, 2004; Levine, 2006). Researchers in this study agree with Graff (2010), who concluded that teachers must also examine their complexities, attitudes, and behaviors towards the issues of diversity, as these issues may often manifest in methods in which curriculum is planned and how students of diverse cultures are viewed. Therefore, future studies may look to this issue of preservice teachers' perceptions of how they view responsive teacher, issues of diversity, and biases which impacts research on this topic and implementation in the classroom to impact student's outcomes.

Additional recommendations based on the findings shifts back to improvements that can be made to the Higher Education Institution's program model. After careful analysis of the data, researchers involved in the study agree that more work is necessary to incorporate CLDPs and meaning into the program to envelop the theory and practice of culturally responsive teaching for preservice teachers. Moreover, as noted by Gorski (2009) the role in which faculty expertise has on this topic in higher education institutes may require further examination in an effort to guide program and course development on culturally responsive teaching to translate into teacher practice in the classroom. It is understood that an instructor can "make or break" a class, and this assessment can often lend itself to how an instructor's expertise on course development and teaching the topic. Additional investigations are warranted in these areas to inform change. Moreover we would consider the use of the current model supported by CACREP standards (CACREP, 2009) for counselor educator programs to redesign courses in the special education curriculum. Special emphasis would focus on students' attitudes and beliefs, knowledge and skills about multicultural competence with diverse populations within special education populations. Collaboration with counselor education faculty will be an integral part of this redesign process, as they will serve as experts in curriculum and pedagogical design for special education courses. Special education courses will be redesigned and evaluated each academic year until the entire core curriculum shows evidence of multicultural infusion and students show increased competence. Additionally, students in the special education curriculum will be encouraged to take the multicultural course taught in the counselor education curriculum to add a different perspective to their education.

Finally, for more in depth analysis, we would use various other sources of evaluation to triangulate data for further confirmation about the acquisition of cultural and linguistic competencies of preservice teachers. Other data sources might include pre and post interviews with students to assess their understanding of these competencies as they relate to teaching special populations. Critical in the analysis would also be the perceptions of internship site supervisors and their observations of preservice teachers' ability to incorporate culturally and linguistically sensitive competence into their teaching practice. Additionally, we would adapt cultural and lingusitic competencies similar to the multicultural competencies used by counselor educators in their students' preparation. The cultural and linguistic competencies would be used for the purpose of evaluating preservice teachers' ongoing competence. Such evaluations would look at the developmental progress of preservice teachers from the beginning to the end of their teacher education program, providing enrichment activities to enhance students who might lag behind in their acquisition of these skills. Finally, we would strive to infuse cultural and linguistic competencies throughout the special education curriculum so that it is a continual focus for preservice teachers throughout their experience in the program. The effectiveness of the culturally and linguistically infused curriculum would be evaluated by students each semester and adjusted based on feedback to ensure we are meeting the needs of preservice teachers to work with an ever changing and diverse special education student population.

6. Limitations

This study is limited by its focus on one university's program, an available population of pre-service educators, and the mixed-method design. Scores and comments on EOC evaluations and SoCQ must be interpreted with caution due to low response rates. Additionally, despite efforts to the contrary, researchers in this study were not able to study the same candidates over time. Therefore, interpretations and generalizability of these findings should be viewed with some restraint.

Furthermore, little is known about other models and approaches to reform programs on areas of culturally responsive practices. Future research should focus on these models as well as preservice teachers' perceptions, attitudes, and behaviors about CLDPs. Additionally, these findings indicate that more data need to be collected for this model and perhaps involving faculty who have an expertise in the topic and course preparation may be necessary to ensure program development targets the link between theory and practice.

7. Conclusion

This article details one approach to revise a master's program for teacher candidates seeking initial licensure in special education. This case-based example highlights areas of concerns which support the need for additional research. That said, many have held responsible teacher preparation programs for a failure to address CLDPs in their programs. While perhaps teacher preparation programs need to look at ways to further support implementation of preservice teachers implementation of these practices in their classrooms, the findings in this study support findings in the literature that indicate there are multiple barriers to teachers implementing this practice in their classrooms. The present study reported that candidates agree they would like to improve their knowledge of culturally responsive teaching. We are encouraged that candidates in this study are open to improving these skills, as this eliminates one barrier to improving teacher preparation.

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Appendix A: Project End of Course Evaluation

Check the degree to which you agree with each statement and complete the open ended questions in each section.   Please respond to all questions.

Evidence-Based Practices

1.   This class addressed evidence-based practices.

Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
◎	◎	◎	◎	◎

2.   I don't know what evidence based practices are.

Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
◎	◎	◎	◎	◎

3.   I have limited knowledge of evidence based practices.

Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
◎	◎	◎	◎	◎

4. This class increased my understanding of using evidence based practices in my teaching.

Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
◎	◎	◎	◎	◎

5. This class increased my ability to locate evidence based practices for my teaching.

Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
◎	◎	◎	◎	◎

6. I feel competent in locating evidence based practices for use in my teaching.

Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
◎	◎	◎	◎	◎

7. I need to improve my knowledge of locating evidence based practices.

Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
◎	◎	◎	◎	◎

8. I feel confident in using evidence based practices in my teaching.

Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
◎	◎	◎	◎	◎

9. I would like to enhance my use of evidence based practices in the classroom.

Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
◎	◎	◎	◎	◎

10. How could this class have better met your needs for understanding and using evidence based practices in your teaching?

_____

_____

_____

_____

_____

11. What has this class addressed well in helping you understand and use evidence-based practices?

_____

_____

_____

_____

_____