

Interactions and Gains in Cultural Responsiveness in Pre-Service Educators

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Abstract: All teachers, special educators included, need to build competencies to honor and respond to the cultures of the students in their classrooms and school communities. This study of 64 pre-service teachers investigated interactions between their culturally responsive experiences specific to teaching children with disabilities and their self-efficacy for culturally responsive teaching of diverse children who qualify for special education. Participants self-rated their experiences and self-efficacy using the *Culturally Responsive Special Education Experiences and Efficacy Scale* which worked as a measure of self-efficacy. Variance in culturally responsive experiences explained nearly half of the variance in culturally responsive self-efficacy. Participants made very large effect size gains in both culturally responsive experiences and culturally responsive self-efficacy, though post-assessment self-efficacy remained merely moderate, indicating a next step for program improvement to increase culturally responsive experiences.

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Introduction

To meet the unique needs of all learners, teachers and future teachers must employ culturally responsive practices. This is especially true when supporting the learning of students with disabilities.

Competencies in Cultural Responsiveness

The Council for Exceptional Children is the leading international organization in the field of special education, setting standards for initial practice, advanced practice, and teacher preparation. One key emphasis in their Initial Practice-Based Professional Preparation Standards for Special Educators (Berlinger & McLaughlin, 2022), is development of cultural responsiveness. Special educators should pursue “...improved outcomes for individuals with exceptionalities.. with diverse social, cultural and linguistic backgrounds” as well as improved outcomes for their families (standard 1.2). Special Educators should “...plan and implement learning experiences and environments” that are culturally responsive (standard 2.2). Special educators should also learn to design and use “...culturally and linguistically appropriate...” assessments (standard 4.2). This means that teacher education for future special educators must explicitly teach such competencies of cultural responsiveness while teaching skills and competencies of planning, interventions, assessments, and collaborations with families.

What about future teachers who are not pursuing teacher certification in special education? *The Framework for Teaching Evaluation Instrument* (Danielson, 2013) is an instrument useful for setting goals and assessing teaching performance of both in-service and pre-service teachers. Used by certification programs, school districts, and

even states, that framework values cultural responsiveness throughout. Examples from that framework include: anticipating how a student’s home culture or language proficiency might interact with content learning (subdomain 1b); setting instructional outcomes appropriate for ALL students, including those of various diversities (subdomain 1c); creating a learning environment respectful of every learner, including those of diverse backgrounds (subdomain 2a); responding to student behaviors with sensitivity to culture and dignity (subdomain 2d); employing an extensive tool box of teaching strategies to flexibly adapt to meet the unique needs of learners, including those with disabilities or diverse cultures (subdomain 3e); and respectful communication with families (subdomain 4c). Clearly, such a framework shows that cultural responsiveness is an important competency in preparation of teachers in all fields.

Intersections of Disability and Diversity

Why prepare teachers to consider how disabilities interact with other factors of diversity? Educational research has long revealed evidence of discrepancies in special education services and learning outcomes. In 2018 synthesis research, McFarland and fellow researchers revealed that disproportionality continues in special education eligibility as well as learning outcomes. For example, they revealed that 13% of total student populations are found eligible for specific learning disabilities, but 16% of students who are black, and 17% of students who are American Indian or Alaskan Natives are found eligible for special education with learning disabilities. Of students served in special education only 62% of those students who are black graduate from high school, while 74% of students in special education who are white

graduate from high school. With such discrepancies continuing, teachers must reflect upon personal bias in both assessment and expectations of learning outcomes.

Self-Efficacy for Teachers

Self-efficacy is one's confidence to achieve outcomes that can either be broad such as self-efficacy for earning strong grades in math or very specific such as self-efficacy for solving word problems in geometry. (Woolfolk Hoy, 2007). For teachers, research has shown self-efficacy to be an important predictor for success in early career teaching and especially toward retention in the field of teaching. Sensitive to timely specific feedback, self-efficacy can grow in response to training, experience, and especially feedback (Erdem & Demirel, 2007).

Research shows that growth in self-efficacy for teaching interventions interacts with important skills in special education. Within teacher preparation for special education, research demonstrated interactions between self-efficacy and finding and judging evidence-based teaching practices (Burchard & Myers, 2019), writing quality IEPs (Burchard & Vargas, 2020), and designing math intervention lessons (Burchard, et al., 2022).

Promoting cultural responsiveness in teachers

Researchers demonstrated that teachers grow in efficacy when prompted to think about their thinking, specifically applied to shared vocabulary, persistence, and listening with empathy (Costa, et al., 2021). Specifically focused on building self-efficacy for cultural responsiveness, teachers need safe relationships to process bias, need to share motivation to solve problems, and

need ways to encourage growth and celebrate growth (Jones, 2021). Teacher growth in cultural responsiveness specific to special education requires support with repeated routines of regular targeted reflection (Kelly & Barrio, 2021).

Improving Teacher Preparation for Cultural Responsiveness

Responding to an emphasis in cultural responsiveness in teacher competencies and standards, various teacher preparation programs implemented program improvements specific to cultural responsiveness. Research by McCall, et al. (2014) revealed the importance of teacher attitudes specifically about diverse students with disabilities. They emphasized the importance for teachers to engage authentically in wrestling with such issues. More recently, Williams, et al. (2021) recommended applying a culturally responsive lens as a framework for course development.

Assessing Cultural Responsiveness in Teacher Preparation

A clear gap exists in instrumentation to assess cultural responsiveness of teachers serving children eligible for special education. After gathering results of this study, a similar study (Williams, et al., 2021) reported development of similar instrumentation for pre-service teachers to self-rate cultural responsiveness using a checklist within the context of a special education course specifically about cultural responsiveness. The researcher compares the instrumentation from this study with the instrumentation from that study in the later discussion of results.

Purpose of this Study

The purposes of this study are twofold. First, this study required development of instrumentation to measure needs of teachers specifically related to serving diverse students with disabilities. Secondly, the researcher designed this study to investigate interactions between culturally responsive experiences and self-efficacy for cultural responsiveness specific to serving diverse students with disabilities.

Procedures

Participants

The researcher recruited participants for this study from one mid-sized private co-educational university in the northeastern region of the United States. That university offers bachelors, masters and doctoral degrees, with just over 2,300 students registered as degree seeking undergraduates in the fall semester of 2021.

During a pandemic, this university emphasized in-person learning with very few students approved for fully remote learning. Other students temporarily participated remotely when safety protocols required. Therefore, course instruction occurred in-person with some students simultaneously participating remotely.

Participants included juniors in a teacher preparation program enrolled in junior fall pre-student teaching field experiences with a concurrent special education course. Most participants' concurrent course emphasized inclusion of students with disabilities in the regular education curriculum and setting. Participants pursuing teacher certification in special education enrolled in a concurrent high incidence special education course that also emphasized inclusion with additional training in academic interventions.

Participation criteria excluded those who took the course as an elective, or those who did not complete all instruments.

Application of inclusion and exclusion criteria resulted in data use from 64 participants, 19 pursuing teacher certification in special education, 45 pursuing certification in other teaching fields. Those participants included 53 females and 11 males, 16 individuals who disclosed a disability, and 3 individuals of an underrepresented race. Study results revealed no statistically significant difference between participants in the two special education courses, discussed later in results, allowing the researcher to combine results for participants in both courses.

Instrumentation

The researcher used two instruments in investigation of interactions and gains in cultural responsiveness, the *Culturally Responsive Special Education Experiences and Efficacy Scale, CRSEES*, and the *Multi-Tiered Instruction Self-Efficacy Scale, MTISES*. For instructional purposes, the researcher used one additional instrument, the *Finding Belonging through Children's Books Scale*.

Culturally Responsive Special Education Experiences and Efficacy Scale, CRSEES.

The researcher found no existing scale to assess cultural responsiveness specific to special education practices or serving students with disabilities. Using the DeVillis model for scale development (2017), the researcher developed and refined a self-reporting instrument with two subscales, one to self-rate frequency of culturally responsive experiences specific to serving students in special education, the second to self-rate one's need for

professional development in broad constructs of self-efficacy for culturally responsive practices specific to teaching in special education or serving students with disabilities. That work resulted in the *Culturally Responsive Special Education Experiences and Efficacy Scale, CRSEEEES* (Appendix A) (Burchard, 2021a).

The CRSEEEES is a 29-item instrument. Because some educators may lack full awareness of culturally responsive knowledge or skills, the first 24 items ask respondents to self-rate their frequency of engagement with specific teaching actions. Items on the experiences subscale represent those in common competencies of special education, such as IEP writing or behavior interventions, as well as common experiences of culturally responsive practices, such as supporting navigation of Medicaid Waiver processes or accessing translation services. The next five items ask respondents to self-rate the amount of professional development needed in broad categories of cultural responsiveness in serving students with disabilities who identify with additional identities of marginalization, under-represented race, poverty, etc. Such questions about professional development needs worked as a measure of self-efficacy in development of previous scales for use with teachers (Barnes & Burchard, 2016).

For program evaluation, students completed the CRSEEEES during class on the second day of junior fall semester and then again in the last week of junior fall semester. One question with that survey allowed students to consent whether or not they wanted to participate in this study.

Finding Belonging through Children's Books Scale.

The researcher developed an instrument supporting teachers' instructional

decisions about children's books, the *Finding Belonging through Children's Books Scale* (Burchard, 2021b) (Appendix B). That instrument is a 24-item questionnaire. The first item asks which book is rated. The second item asks teachers to identify any topics covered in the book that require sensitivity, such as death of a parent. The next two questions are a checklist of identities and experiences addressed. Then respondents use 20 Likert-Scaled items to rate degree of agreement or disagreement with statements, 6 items each in subscales of identity and catharsis with 8 items in the subscale of solutions. Within each of those constructs, some items support critiquing helpfulness for promoting children's awareness of marginalization, empathy for other's experiences, or pursuing reconciliation.

During in-class engagement with selected children's books, course participants critiqued wording and illustrations of books in three categories of identity, catharsis and solutions, including cultural responsiveness within those categories. The researcher computed overall means, as well as mean scores for each subscale of identity, catharsis and solutions. The instructor/research reported mean scores to course participants as they then engaged in group discussion of the texts. While the researcher used this instrument in instruction, the researcher did not use those results in analysis of interactions.

Multi-Tiered Instruction Self-Efficacy Scale, MTISES.

All participants completed a pre- and post- survey of self-efficacy, the *Multi-Tiered Instruction Self-Efficacy Scale, MTISES*. The MTISES is a 28-item survey with responses on a scale of how much professional development is needed in each specific teaching action. The MTISES works

to assess professional development needs of teachers and/or pre-service teachers for practices in multi-tiered interventions. The MTISES also works to measure gains in response to professional development. Previous research demonstrated that instrument works with strong internal consistency, validity and reliability (Barnes & Burchard, 2011; Barnes & Burchard, 2016). With strong consistency with other scales of teacher self-efficacy, results of such self-reported need for professional development work as a measure of self-efficacy (Barnes & Burchard, 2011; Barnes & Burchard, 2016). Self-efficacy as measured by the MTISES interacts with such competencies as math interventions (Burchard, et al., 2021), IEP quality (Burchard & Vargas, 2020), and finding and judging evidence-based teaching practices (Burchard & Myers, 2019). The MTISES is published for free use in teacher professional development or pre-service teacher program evaluation (Barnes & Burchard, 2016).

For program evaluation purposes, participants self-rated their needs for professional development on the items of the MTISES, (Barnes & Burchard, 2016) at the beginning and at the end of the junior fall semester.

Methods

At the beginning and end of fall junior special education courses, pre-service teachers completed both the MTISES, (Barnes & Burchard, 2011; Barnes & Burchard, 2016) and the CRSEES (Burchard, 2021a).

During the fall semester of junior year, all participants enrolled in pre-student teaching field placements. That included common group training by the field experience program coordinator, and field supervision by a mentor teacher and university supervisor. All participants

learned to design lessons and unit plans, practiced authentically in those junior fall field placements. Through participation in one of the two junior fall special education courses, students all learned how to find and judge evidence-based teaching practices, applications of high leverage practices (such as mnemonics and teaching with interactive materials), how to write measurable IEP goals, and how to adapt for unique needs of learners.

While topics of cultural responsiveness were explicitly discussed in course content, course participants also participated in some activities designed specifically to promote culturally responsive perspectives. Course participants observed such days as Indigenous People's Day, a United States holiday to commemorate history and experiences of Native Americans. Course participants also critiqued a selection of books for bibliotherapeutic purposes in special education, layered with critique of how the words and illustrations of each book work for identities such as disabilities, race, ethnicity, gender, poverty, nationality of origin, religion, and interactions of such identities. In those book critiques, students used the *Finding Belonging Through Children's Books Rating Scale* first, then using those ratings to inform small group discussion critiques.

The study used within-group pre to post methods. To analyze quantitative data, the researcher used the Statistical Package for Social Sciences, SPSS. The researcher calculated interactions through analysis of frequencies, group t-scores, correlations, and co-variance of individuals' paired data. The researcher then calculated effectiveness of gains using the Cohen's *d* formula comparing the pre-assessment group mean to the post-assessment group mean with the pooled standard deviation. Cohen's *d* is a standard measure of effect size. This statistic

allows the researcher to evaluate the size of effectiveness of gains from the group means at the beginning of the semester to the group means at the end of the semester. The researcher then interpreted effectiveness using effect size ranges for education.

Results

No differences between groups

The researcher used the pre-assessment experiences subscale scores to check for differences between groups of participants. The researcher conducted two-tailed *Mann-Whitney U tests* on participants' ratings of from the start of the junior fall semester for both culturally responsive

experiences and culturally responsive self-efficacy. At the beginning of the semester, students pursuing special education certification (19) scored mean culturally responsive experiences with a mean score of 1.05 (SD .75) (See Table 1). At the beginning of the semester, students pursuing all other types of teacher certifications (45) reported culturally responsive experiences with a mean score of .73 (SD .75). Comparing those samples with two-tailed Mann-Whitney U tests at a significance level of .05, results showed that $U=316.5$, $z=-1.62$, $p=.10524$, which means there were no statistically significant differences between the two groups in starting culturally responsive experiences.

Table 1: *No Differences between Group Scores on Culturally Responsive Experiences and Self-Efficacy*

Group	Culturally Responsive Experiences Mean (STD)	Culturally Responsive Self Efficacy Mean (STD)
Special Education	1.05 (.75)	2.34 (.69)
Other Certifications	.73 (.75)	2.02 (.70)

At the beginning of the semester, students pursuing special education certification (19) reported culturally responsive self-efficacy with a mean score of 2.34 (SD .69). At the beginning of the semester, students pursuing all other types of teacher certifications (45) reported culturally responsive self-efficacy with a mean score of 2.02 (SD .70). Comparing those samples with two-tailed Mann-Whitney U tests at a significance level of .05, results showed that $U=303$, $z=-1.8221$, $p=.06$. That means there is no significant differences between the two groups in starting culturally responsive self-efficacy.

Results demonstrated no significant differences in either starting culturally responsive experiences or starting culturally responsive self-efficacy. Therefore results

from both cohorts (those in each of the two junior fall special education courses) could be combined for statistical analysis of this construct.

Correlations between Measures of Self-Efficacy

The experiences subscale of the CRSEES worked as a measure of self-efficacy, with strong correlation with the proven self-efficacy scale of MTISES. Culturally responsive experiences correlated with self-efficacy for multi-tiered interventions, $r=.541$, $p<.01$. The self-efficacy subscale of the CRSEES also worked as a measure of self-efficacy, with strong correlation with the MTISES. Culturally responsive self-efficacy

correlated with self-efficacy for multi-tiered interventions, $r=.689, p < .01$. (See Table 2.) That means that either subscale of the

CRSEEEES works as an assessment of self-efficacy.

Table 2: *Correlations between Pre-Assessment Scores for Culturally Responsive Experiences and Self-Efficacy in Special Education and Scores for Self-Efficacy for Multi-Tiered Instruction*

	Correlation with Self-Efficacy for Multi-Tiered Instruction MTISES
Culturally Responsive Experiences CRSEEEES – Experiences Subscale	.541**
Culturally Responsive Self-Efficacy CRSEEEES – Experiences Subscale	.689**

* means $p < .05$ ** means $p < .01$

Correlation and Co-variance of Culturally Responsive Experiences and Culturally Responsive Self-Efficacy

Within the CRSEEEES, mean scores on the subscale of experiences correlated to mean scores on the subscale of self-efficacy $r=.71, p < .01$. Of greater significance, results further revealed significant co-variance with 47% of variance in self-efficacy explained by variance in experiences, $F(1,62)=54.80, p < .001, R^2=.47$. While co-variance is not an indicator of cause and effect relationships, it works as a more predictive type of correlation showing how variance in one factor interacts with variance in a second factor. In this case, results mean that the variance in culturally responsive experiences predict almost half of the variance in self-efficacy for culturally responsive teaching practice for students with disabilities.

Effectiveness of Gains in Culturally Responsive Experiences

Computing statistical results into effect sizes allows researchers, and in this case educators, to compare results. An effect size explains strength of difference between two groups or degree of change across standard deviation. The researcher used Cohen's d to compute effectiveness of pre to post gains within this group. This study resulted in large effect sizes for educational research (Cohen, 1988; Hedges, 2008; Kraft, 2019) though limited by within group study design.

Survey responses resulted in a pre-assessment mean score for culturally responsive experiences of .83 (.77 STD) on a scale of 0- 4 and a post-assessment mean of 1.59 (.85 STD), with mean gains of .77 (.78 STD). Student responses showed a very large effect size gain in culturally responsive experiences of Cohen's $d= .95$ (See Table 3). This means that across one semester, students encountered significantly newer culturally responsive experiences or increasing frequency in culturally responsive experiences that were specific to children with disabilities.

Table 3: Effectiveness of Gains in Culturally Responsive Experiences and Self-Efficacy for Special Education Across One Semester

	Pre-Assessment Mean (STD)	Post- Assessment Mean (STD)	Gains Mean (STD)	Effects Cohen's <i>d</i>
Culturally Responsive Experiences	.83 (.77)	.83 (.77)	.77 (.78)	.95
Culturally Responsive Self-Efficacy	2.11 (.71)	3.03 (.78)	3.03 (.78)	1.23

Effectiveness of Gains in Culturally Responsive Self-Efficacy

Survey responses resulted in a pre-assessment mean score for culturally responsive self-efficacy of 2.11 (.71 STD) on scale of 1-5, and a post-assessment mean of 3.03 (.78 STD), with mean gains of .92 (.74 STD). Student responses showed a very large effect size gain in culturally responsive experiences of Cohen's $d= 1.23$ (See Table 3). This means that across one semester, students demonstrated significant growth in self-efficacy for culturally responsive practices specific to children with disabilities.

Discussion

Addressing Intersections of Disability and Diversity

Guided by international standards and teacher certification guidelines, and more importantly propelled by values, teacher preparation for future special educators must prioritize development of cultural responsiveness. Specifically, future special educators need preparation to address needs of diverse students with disabilities. Beyond this present study,

teacher preparation faculty, will navigate how to support development of such competencies in future teachers.

One value of this study is development of an instrument to guide self-reflection and to assess growth over time. Use of such an instrument in this study revealed helpful priorities for program improvements. This study also demonstrated helpful information about the connection between culturally responsive experiences and the development of culturally responsive self-efficacy for teaching diverse children who are eligible for special education.

Utility of the *Culturally Responsive Special Education Experiences and Efficacy Scale*

The Culturally Responsive Special Education Experiences and Efficacy Scale worked to rate self-efficacy in culturally responsive practices for diverse students with disabilities. That's certainly helpful. Still, practitioners must acknowledge that self-rating of such an important competency as cultural responsiveness in the context of special education is not the same as measuring authentic demonstrations of such competencies in pre-service classroom field experiences. The researcher acknowledges

that use of this sort of instrument is limited to promoting self-reflection toward more authentic growth in actual practice.

After this data was gathered, researchers Williams, et al. (2021) published a framework for implementing cultural responsiveness in curriculum and course revisions. That framework included a self-efficacy checklist scale. Similar to that scale, the CRSEES supported student reflection upon their own self-efficacy for culturally responsive practices. Unlike the instrument in that study, this instrument asked students to first consider their frequency of engagement in culturally responsive experiences, before self-assessing self-efficacy for culturally responsive practices.

With this emphasis on cultural responsiveness, teacher educators should expect development of similar scales. Such anticipated options in instrumentation will offer a choice of what works for the priorities of each teacher preparation program.

Implications of Interactions between Culturally Responsive Experiences and Self-Efficacy

What does it mean that this study revealed covariance between culturally responsive experiences and culturally responsive self-efficacy? This result seems so logical, but the strong covariance result gives hope for the future of advancing cultural responsiveness for teachers of diverse students with disabilities. These results suggest that increasing culturally responsive experiences should then support growth in self-efficacy specific to teaching diverse students with disabilities.

School administrators and teacher educators alike can prioritize professional development opportunities to actively engage in the classroom, school and larger community targeting cultural

responsiveness. What would that look like in a teacher preparation program? To raise awareness of poverty, such might involve promoting student participation in a poverty simulation training. Libraries can intentionally build collections of culturally responsive juvenile literature, and actively support professional development with those collections. School districts and teacher preparation programs can collaborate in professional development for specific competencies of cultural responsiveness, such as building sensitivity for a specific immigrant population of a geographic region.

Implications of Gains in Culturally Responsive Experiences and Culturally Responsive Self-Efficacy

This study revealed strong effectiveness in gains in self-efficacy for culturally responsive teaching practices for diverse students with disabilities. What does it mean? Encouragingly, even in a teacher preparation program with very limited diversity, cultural responsiveness did grow across one semester. Teacher educators can make a difference through curriculum and learning experiences, hopefully to a greater degree across several semesters. Logically, one should expect such gains to be even greater in more diverse teacher preparation programs or in schools and school districts with great diversity.

Implications of Post-Assessment Mean Scores in Culturally Responsive Self-Efficacy

Even with strong gains in self-efficacy for cultural responsiveness across one semester, mean post-assessment scores still fell in the mid-range of self-efficacy. That means students did not demonstrate strong post-self-efficacy for cultural

responsiveness, an inadequate learning outcome. Despite the growth, the researcher acknowledges much room for continued growth.

Limitations

The researcher notes important limitations of this study. All participants were enrolled in one mid-sized university, one with significantly low diversity. Students participated across one semester. The researcher conducted this study during a semester impacted by a pandemic, and though students engaged with in-person teaching field experiences, the pandemic did limit community engagement activities such as poverty simulation events or other collaborative professional development opportunities beyond field experiences.

Both self-efficacy instruments used in this study allowed participants to self-rate their need for professional development. This study did not use instrumentation to rate authentic demonstrations of cultural responsiveness in teaching field placements.

Next Directions and Importance

Results suggest the value of replicating such a study at a teacher preparation program with greater diversity, or with new teachers in a school district. Scaling such a study across multiple universities with varied demographic diversity and situated in varied settings (urban versus rural, etc.) would expand the utility of instrumentation.

At this same university, this researcher is extending this study across multiple semesters specifically for future teachers pursuing certification in special education. Such an extension across multiple semesters will support evaluation of more meaningful program effectiveness toward

development of cultural responsiveness among pre-service teachers.

Clearly, this study points to one obvious next step. The variance in culturally responsive experiences so significantly explains the variance in culturally responsive self-efficacy. That points to intentional promotion of multi-cultural experiences both on the campus and engaging with the surrounding community. The researcher is collaborating with diversity advisors to pursue such enriching experiences for future academic years.

What do these results mean for the preparation of future educators?

Especially, what do these results mean for the preparation of future special educators? All teachers must be prepared to engage with cultural responsiveness to those students in classrooms and schools and districts, even as they engage with families in the community. This study gives hope that pre-service teachers benefit from training and field practice to grow in both culturally responsive experiences and self-efficacy. This study also provides clear direction that to grow the self-efficacy of pre-service teachers specific to culturally responsive practices, teacher educators must intentionally design and promote culturally responsive experiences in courses, on campuses, and in collaboration with nearby communities.

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Appendix A

Culturally Responsive Special Education Experiences and Efficacy Scale, CRSEES

This instrument may be used at your discretion. Find a printer ready copy at <https://mosaic.messiah.edu/>

Please reference the following citation:

Burchard, M.S. (2021). *Culturally Responsive Special Education Experiences and Efficacy Scale*. <https://mosaic.messiah.edu/>

This survey asks a total of 29 questions and should take about 10 minutes to complete. 24 questions ask about your experiences. The last 5 ask you to identify professional development needs. There are no right or wrong answers.

Part One Directions: For each of these statements, please select the response that BEST matches your current experience with this skill. If you don't know the meaning of a term or don't know if you can do the skill, choose "Have not YET tried this/ OR CANNOT YET do this."

Response options for Part One Items:

I have not YET done this/ OR I CANNOT YET do this. = 0	I have done this once. = 1	I have done this a few times using support. = 2	I have done this a few times without support. = 3	I do this regularly without support. = 4
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1. I read **articles** or chapters by experts on how **learning with a disability interacts with sociocultural factors** such as gender, race or ethnicity, English language learning, or economic status.
2. I examine **state and/or national performance data about how student disabilities interact with sociocultural factors** such as gender, race or ethnicity, English language learning, or economic status.
3. I examine **local progress monitoring data about how student disabilities interact with sociocultural factors** such as gender, race or ethnicity, English language learning, or economic status.
4. I use **students' comments** to understand **how learning with a disability interacts with sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status.
5. I use students' **nonverbal behaviors** to understand **how learning with a disability interacts with sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status.

6. I design my **classroom environment** with materials that welcome children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE Strategy posters showing learners with varied skin colors).
7. I build my **classroom library** with books that are inclusive of children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE book illustrations depicting a child with both a disability and garments specific to a particular ethnicity).
8. I **adapt vocabulary of texts** to meet the unique needs of children with **disabilities** with additional interacting **sociocultural factors** such as race or ethnicity, culture or faith, English language learning, or economic status (IE reading level of text, or names used in word problems).
9. I **adapt instruction** to meet the unique needs of children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE avoiding idioms or geographically specific terminology in examples).
10. I **adapt assessments** for children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE adjusting a rubric for group collaboration grade to acknowledge culturally expected gender roles).
11. I implement **class routines and rules that are culturally respectful of sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE rules about how to dress or wear hair during physical education do not clash with culture or religion of my students).
12. I **adapt proactive behavior practices** for children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE respecting faith-based dietary restrictions for positive behavior events).
13. I **adapt behavior intervention practices** for children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE explicitly teaching code switching from a home culture to the social expectations in school culture).
14. I **honor cultures** of my children with disabilities in our class events (IE how we celebrate holidays, OR whether a child's face shows in photos used in class newsletters).
15. I **flex** how to **engage families** of my **students with disabilities** who also **struggle financially** (IE flexing timing of meetings when parents lose pay to miss work for meetings, OR communicating through paper instead of digitally).

16. In my **visual communications with families**, I vary **illustrations** showing varied **types of families** (IE showing families with foster or adopted children with varied skin tones).
17. In my **written communications with families**, I use **culturally sensitive vocabulary** (IE describing a teaching unit using the name of a specific Native American tribe).
18. I actively engage **parent priorities in planning** for a child’s special education (IE incorporating IEP goals that honor the parent’s hopes for their child’s future).
19. I **provide translated documents** for **families** of children with **disabilities** who are **English language learners** (IE providing a copy of parent rights in Special Education translated into Spanish).
20. I **use interpreters** or interpreting services to make **communication accessible** for **families** of children with **disabilities** who are **English language learners or who use American Sign Language** (IE holding an IEP meeting using video sign language interpreting).
21. I **advocate** for unique needs children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE organizing community Wi-Fi hot spots for access to on-line learning).
22. I **problem-solve** for unique needs of children with **disabilities** respecting additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE collaborating with a neighborhood homework support program).
23. I **critique** how my own special education practices may be **biased** concerning **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE expecting less of students of one gender or race, OR interpreting cultural expressions as inappropriate behaviors).
24. I **change my special education practices** as I learn about how disability interacts with **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status.

Part Two Directions: For each of these statements, please select the response that BEST matches your current need for professional development with this skill. If you do not know if you can do the skill, choose “I’ll take anything.”

Response options for Part Two Items:

I’ll take anything = 1	I’m starting to get it, but I want lots more = 2	I do this, but I could benefit from more = 3	I don’t feel the need for more = 4	I feel ready to help others =5
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25. How much professional development do you need to **inform yourself how learning of a student with a disability interacts with sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?
26. How much professional development do you need to **design a positive environment** to support unique needs of **a student with a disability with additional sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?
27. How much professional development do you need to **adapt practices** to support unique needs of **a student with a disability with additional sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?
28. How much professional development do you need to **engage with families of students with a disability** with additional **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?
29. How much professional development do you need to **problem-solve** to support unique needs of **a student with a disability with additional sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?

Appendix B

Finding Belonging through Children's Books Rating Scale

This instrument may be used at your discretion. Please reference the following citation:
Burchard, M.S. (2021). *Finding Belonging through Children's Books Rating Scale*.
<https://mosaic.messiah.edu/>

This scale is developed to guide selections of children's books to support children finding belonging through various identities or challenges.

Directions: Read through the book. Identify characters and topics, including topics requiring care. Then rate.

Book critiqued: _____

List Topics Requiring Care: List events or emotions that require care in use (IE death, suicide, abuse, trauma):

CHARACTERS and TOPICS

Identity of Characters: Who is represented in primary characters/illustrations? Check ALL that apply.

- | | |
|--|---|
| <input type="checkbox"/> Disability or Learning Difficulty | <input type="checkbox"/> Marginalized Age (IE child with adults) |
| <input type="checkbox"/> Marginalized Ethnicity or Race | <input type="checkbox"/> Differences (IE language, accent, clothing, weight, height, skin color, eye shape) |
| <input type="checkbox"/> Language Learner | <input type="checkbox"/> Experience (IE adoption, foster care, hunger, bullying, trauma) |
| <input type="checkbox"/> Immigrant or Refugee | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Low Socio-economic Status | |
| <input type="checkbox"/> Marginalized Gender (IE girls in STEM.) | |

Challenges Addressed: What challenges or struggles are directly addressed? Check ALL that apply.

- | | |
|---|--|
| <input type="checkbox"/> Racial or Ethnic Barriers to Access or Inclusion | <input type="checkbox"/> Relationships: Barriers, Hurt, Healing |
| <input type="checkbox"/> Disability Barriers to Access or Inclusion | <input type="checkbox"/> Behaviors: in Trouble or Self-Regulation |
| <input type="checkbox"/> Historical or Personal Events | <input type="checkbox"/> Emotions: Identifying, or Struggling |
| <input type="checkbox"/> Rights, Privilege or Lack of Privilege | <input type="checkbox"/> Processing Trauma |
| <input type="checkbox"/> Academics: A Struggle or Frustration | <input type="checkbox"/> Processing a Demographic Factor or Difference |
| <input type="checkbox"/> Communication: Disorders or Barriers | <input type="checkbox"/> Other: _____ |

Response options for the following items:

Strongly Agree =4	Agree =3	Disagree =2	Strongly Disagree =1	N/A =no score
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Critique use of this book for IDENTITY

The **wording** in this book provides opportunity for children of one marginalized group to *see themselves in a character*.

The **vocabulary** is both *appropriate and sensitive to the identity* of a specific population.

The **wording** in this book provides opportunity for children who are NOT of one marginalized group to *grow in awareness of peers or community members of one marginalized group*.

The **illustrations** in this book provide opportunity for children of one marginalized group to *see themselves in a character*.

The **illustrations** are both *appropriate and sensitive to the identity* of a specific population.

The **illustrations** in this book provide opportunity for children who are NOT of one marginalized group to *grow in awareness of peers or community members of one marginalized group*.

Critique use of this book for CATHARSIS

This book **supports** children to *identify emotions*.

This book **invites** readers to *process emotions*, or emote with and through the story.

This book provides a *healthy model for processing emotions*.

This book **provides opportunity** for individual children to *connect with a challenge* in the story.

The **vocabulary** is both *appropriate and sensitive to the challenge* addressed.

The **challenge(s)** in this book **provides opportunity** for children who are NOT of one marginalized group to *grow in empathy for challenges experienced by peers or community members*.

Critique use of this book for SOLUTIONS

This book **promotes inclusion** of a marginalized group *or reconciliation* in social justice.

This book **supports discussion** of 2 or more **intersecting issues of marginalization or social justice**.

This book *models accessing a supportive individual or community support* through a challenge.

This book *promotes perseverance or resilience* through a challenge.

This book *promotes self-efficacy* (belief in self-worth and capability) OR *self-regulation* (self-awareness or using strategies) OR *self-determination* (goal setting, decision-making).

For use with a classroom or group, this book *promotes growth in disability awareness or cultural intelligence*.