The Cultural Proficiency Continuum Dialogic Protocol: An Emergent Tool for Assessing and Codifying Preservice Teachers' Cultural Competence

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ABSTRACT: In this article, the author summarizes his efforts to design the Cultural Proficiency Continuum Dialogic Protocol (CPCDP), a tool purposed to assess and codify educators' cultural competence. The design and development of the CPCDP took place within four school-university partnerships (e.g., Professional Development School and Hybrid Partnership). This study used an Educational Design Research (EDR) methodology, which empowered participants (*n=20*) to offer feedback (e.g., process and affect) used to increase the usefulness of the CPCDP. Findings from this study are discursive and embedded within the procedures used in the design and development of the CPCDP. This study provides insights into how stakeholders within school-university partnerships can use EDR to design and develop curricula and pedagogical artifacts to develop preservice teachers' cultural competence.

NAPDS Essentials addressed: 1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community; 2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community; 3. Ongoing and reciprocal professional development for all participants guided by need; 4. A shared commitment to innovative and reflective practice by all participants; 5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants; 6. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;

As of 2014, U.S. PreK-12 public schools have experienced a majority-minority demographic transformation, meaning that students of color are the majority within the U.S. PreK-12 student population. Conversely, the PreK-12 teacher workforce, overwhelmingly White, does not represent the current majority-minority student population. Inherently, the racial and ethnic disparity between the PreK-12 student populations and the teacher workforce is complicated by factors implicated by differences in race, culture, and class between educators and students. Many argue that these complications have to be mitigated by teacher education programs (Gay, 1993; Howard, 2010; Milner IV, 2006). Castro (2010) found the abovementioned complications within teacher education programs were exacerbated by preservice teachers (PSTs):

- lack of understanding of complex multicultural issues,
- deficit views/prejudice towards students of color (e.g., Black and LatinX),
- contradictory attitudes/perceptions towards students of color and social justice, and
- limited exposure to instructional practices that foster praxis in diversity, social justice, and multicultural education.

A remedy to address the problematic teaching dispositions held by PSTs, which subsequently are brought with them into the PreK-12 teacher workforce, is for teacher education programs to assess, codify, and develop PSTs' cultural competence.

Cultural competence is understood as educators' capacity to teach students from racial and ethnic backgrounds other than their own. Note, it is essential not to conflate the concept of culture with conceptions of race[1] and ethnicity[2]. Culture is defined as "deep-rooted values, beliefs, languages, customs, and norms shared among a group of people". Further, culture is the medium that "shapes how individuals learn and evolve" . Accordingly, enhancing PSTs' cultural competence will increase their "understanding of how cultural knowledge is acquired, expressed, maintained, and transformed across space and time".

In this paper, I will provide an overview of my dissertation research aimed at developing a teaching and learning protocol [i.e., the Cultural Proficiency Continuum Dialogic Protocol (CPCDP)] that enabled teacher educators within multiple school-university partnerships to assess, codify, and develop PSTs' cultural competence. While developing the CPCDP, I addressed three broad research aims:

1. I explored questions regarding the effectiveness of an educational design research (EDR) methodology, the Compleat Cycle of Design Research (CCDR; Lamberg & Middleton, 2009; Middleton, Gorard, Taylor, & Bannan-Ritland, 2008), for conceptualizing, designing,

Table 1. Theoretical Framework: Sociocultural Theory - Concepts and Structures Utilized to Design and Describe a Socially Mediated Structure

The Zone of Proximal Development	"The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers".
Scaffolding	A schema and process educators use to move a learner from the level of potential development to the level of actual development.

and prototyping the CPCDP within a distinguished professional development school (PDS) program.
2. I explored questions regarding the effectiveness of the CPCDP when scaled up and implemented within a range of school-university partnerships (e.g., PDS and Hybrid Partnerships).
3. I explored questions gaining insights into participants' perceptions (e.g., observed and experienced) of the CPCDP.

Rationale for the Study

The United States is a de facto segregated society, which denotes that people voluntarily live and socialize with people they share racial and ethnic identities. Subsequently, de facto and de jure (law mandated) segregation, a socialization process, have had immutable consequences on PreK-12 schooling. Essentially, these consequences have to do with individuals' economic mobility (i.e., access to wealth), which ultimately affects where individuals live and the quality of the school their children can attend. Sociologically, de facto and de jure segregation has led to the perpetuation of the sociocultural gap. The sociocultural gap is the social and cultural distance between educators, most of whom are White, and persons who are minoritized, marginalized, and otherized within PreK-12 school systems (Castro, 2010; Gay, 1993).

Twenty-eight years ago, Gay (1993) theorized that the sociocultural gap is growing and creating an alarming schism in the instructional process in PreK-12 schools, a theory that is evident today. This alarming schism has materialized into various forms of marginalization and otherization (e.g., racism, sexism, ableism, classism, homophobia, xenophobia, linguistic discrimination) within U.S. PreK-12 school systems. To put it simply, because of de facto and de jure segregation, teachers do not have the "frames of references and points of view similar their [majority-minority students] because they live different existential worlds". Furthermore, historically, teacher education programs have not normalized measures that hold PSTs accountable for their cultural competence (Castro, 2010; Cormier, 2020; Ladson-Billings, 1998; Milner IV, 2006). The lack of accountability detailed above was observed while completing doctoral work at a Research 1 (R1) University associated with a distinguished PDS program (i.e., a school-university partnership). Subsequently, this observation, together with my curiosity in the PDS, motivated me to engage in the rigorous process to design and develop the CPCDP, a protocol purposed to bridge the sociocultural gap within PreK-12 schooling.

Theoretical and Explanatory Framework Construction

This study used a theoretical and explanatory framework comprised of multiple perspectives and approaches to design the CPCDP assess, codify, and develop PSTs cultural competence. This study's theoretical framework used a sociocultural theory view of teacher development, which is a view that teacher development is mediated by cultural, historical, and institutional factors . Specifically, the design of the CPCDP, together with examining how PSTs understood their cultural competence, was informed by the following sociocultural theoretical (SCT) concepts: (a) the zone of proximal development and (b) scaffolding (see Table 1; Bakhtin, 1981, 1986; Vygotsky, 1978; Wertsch, 1991).

To increase effectiveness and analysis of the CPCDP, I added an explanatory framework (see Table 2) that incorporated asset-based pedagogies, which were crucial in helping me design the CPCDP as well as further describe the sociocultural structures, interactions, and reproductions that took place within school-university partnerships as well as the emerging

Table 2. Explanatory Framework: Perspectives and Utility

Critical Pedagogy	A way of knowing and doing intended to liberate individuals who are socially, politically, and economically repressed within institutionalized contexts (e.g., teacher and PreK-12 education)
Disorientating Dilemma	A type of disequilibrium (i.e., a learning and transformative opportunity) that is necessary for initiating a change in one's beliefs (Mezirow, 2002; Taylor, 2002a).
Cultural Proficiency	A framework intended to shift the culture of a schooling context through individual transformation and organizational change.
Cultural Proficiency Continuum (the Continuum)	The Continuum is language (e.g., Cultural Destructiveness - Cultural Proficiency), which is used to describe both unhealthy and healthy polices, practices, values, and behaviors in schooling contexts.
Courageous Conversations About Race	A structured protocol that uses a dialogic process to facilitate scaffolding dialogue about racial, cultural, and ethnic differences .

protocol. This framework included the following perspectives and approaches: (a) Critical Pedagogy (Freire, 1970), (b) Cultural Proficiency and the Cultural Proficiency Continuum (Lindsey et al., 2009), (c) Courageous Conversations About Race (Singleton, 2015), and (d) Disorientating Dilemma (Mezirow, 2002; Taylor, 2002a).

The utilization of the frameworks described above resulted in the CPCDP, a protocol that uses SCT instructional approaches together with asset-based pedagogies and approaches (i.e., Critical Pedagogy, Cultural Proficiency, and Courageous Conversations About Race). Most important, the CPCDP included semiotics (e.g., signs and symbols) that represented the lived experience and perspectives of students and families who are minoritized, marginalized, and otherized within PreK-12 school systems. Subsequently, participants had multiple opportunities to engage with semiotics that facilitated critical self-reflection, inquiry, and dialogue regarding the interactions that maintain the sociocultural gap in teacher education and PreK-12 contexts.

Method

The research methodology used for this study was the Compleat Cycle of Design Research (CCDR), which is a variant of educational design research (EDR). EDR is an iterative and cyclical inquiry process aimed to design curricula and pedagogical artifacts from inception to scaling up the emerging tool to broader and relevant audiences. The CCDR (see Figure 1) is divided into two comprehensive phases:

1. artifact design, Phases 1-3; and
2. artifact implementation research, Phases 4-7.

Subsequently, the development of the CPCDP took place across Phases 1-5 within the CCDR methodology.

Procedures (i.e., the CCDR Phase 1-5) and summary of key findings are discussed discursively across each phase of the CCDR. In the summary of findings, the research provides rationales and empirical data that warranted advancing the development of the CPCDP across each phase of the CCDR methodology. Likewise, throughout the summary of findings, I will provide nuances relevant to the use of the CCDR for designing and developing the CPCDP together with the perceptions and effects of the protocol on participants.

Summary of Key Findings

Participants and Sampling

Research activities for this study took place within three school-university partnerships across our occasions. Convenience and purposeful sampling strategies were used to recruit subject matter experts (SME), school-university partnerships (contexts), and school-university partnerships' participant stakeholders (Palinkas et al., 2015). All participants were empowered, having

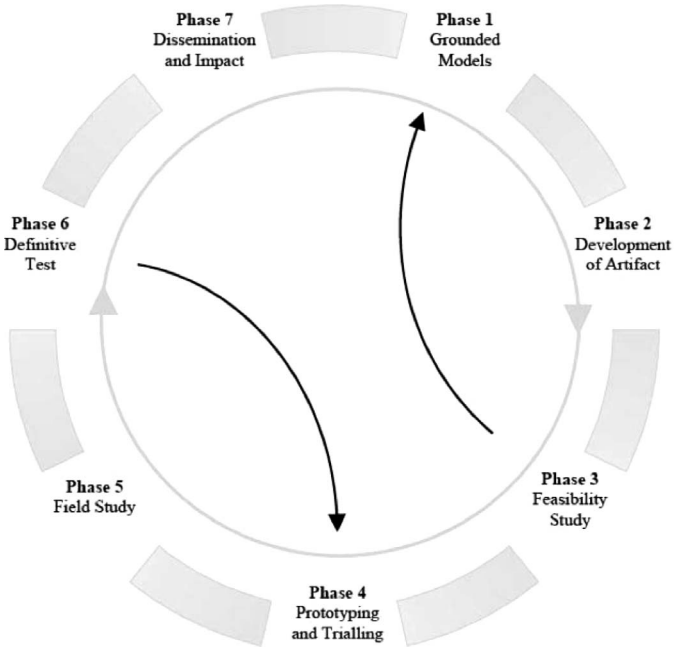

Figure 1. The Compleat Cycle of Design Research (Lamberg &Middleton, 2009)

agency in processes that led to the design, development, and validation of the CPCDP (Akker et al., 2006).

Procedures: Compleat Cycle of Design Research Phases 1 - 5

Phase 1: Problematizing and Theorizing

The initial phase of the CCDR involved conceptualizing the problem. Broadly, during my doctoral work, I observed that PSTs, specifically within the PDS, were not graduating prepared to teach students from diverse racial and ethnic backgrounds (Castro, 2010; Gay, 1993). Effectively, PSTs in the observed PDS possessed low levels of cultural competence. Subsequently, the lack of exposure and dialogue about racial, social, and economic inequities in PreK-12 schools and their effects on majority-minority students maintained PSTs' existing sociocultural gaps (Castro, 2010; Gay, 1993). Thus, developing PSTs' cultural competence with bridging sociocultural gaps became the phenomena of interest for this study.

Using observational data, conducting a literature review, and consulting SMEs, I developed a local theory for the intent (e.g., theoretical intent) for the CPCDP, specifically the Cultural Proficiency Continuum Q-Sort (CPCQ). The CPCQ uses a forced-choice method aimed to systematically study participants' subjectivities or reactions to a host of culturally proficient interactions that take place in PreK-12 school systems (Brown, 1986; Cormier, 2020; Lindsey et al., 2009; Prasad, 2001; Stephenson, 1935; Watts, 2005; Yang & Montgomery, 2013). Early iterations (i.e., prototypes) of the CPCQ created useful tensions (e.g., disorienting dilemma and cognitive dissonance) that empowered PSTs to critical self-reflect, make inquiries, and

Reactive>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>Tolerance			Proactive>>>>>>>>>>>>>>>>>>>>>>>>>>>>Transformation		
Cultural Destructiveness	**Cultural Incapacity**	**Cultural Blindness**	**Cultural Pre-Competence**	**Cultural Competence**	**Cultural Proficiency**
See the difference; stomp it out.	See the difference; make it wrong.	See the difference; dismiss it.	See the difference; recognize what you don't know.	See the difference; understand the difference that difference makes.	See the differences; respond positively and affirmingly.
Unhealthy Behaviors			Healthy Behaviors		

Figure 2. Lindsey et al. (2009) Cultural Proficiency Continuum

dialogue about their cultural competence concerning students from diverse racial and ethnic backgrounds (Festinger, 1962; Golombek & Johnson, 2004; Lindsey et al., 2009; Taylor, 2002b).

Subsequently, the theoretical intent for the CPCQ was established, which guided all research activities and inquiries for this study. Accordingly, I positioned that engagement with the CPCQ creates a disorienting dilemma, which was envisioned to empower PSTs to critically self-reflect, make inquiries, and participate in rich dialogue concerning their sociocultural gaps and cultural competence. The perceived usefulness of the CPCQ, together with insights and observations described above, warranted advancing the development of the CPCQ within a Secondary PDS via my role as a PDS consultant at an R1 University located in central Pennsylvania via the CCDR methodology.

Grounding this study in a local problem and establishing theoretical intent provided me with data-informed conjectures that enabled me to advance the development of the CPCQ, subsequently the CPCDP. At this juncture of the research process via the CCDR, the first iteration of the CPCQ was developed. However, after initial testing and engaging with SMEs, the q-set items (e.g., instrument items or vignettes) needed refinement and increased validity and reliability. Accordingly, the primary research activities for the next phase of the CCDR were refining q-set items to increase the validity and reliability of the CPCQ.

Phase 2: Refining the Q-Set Items Within the CPCQ

The first iteration of the CPCQ was designed using Wiggins and McTighe's (2005) backward design principles and Badiali's (2005) q-sort—the *Educational Philosophy Q Sort*—as a template. After many rounds of engaging with and studying Badiali's q-sort, I began to construct or reverse engineer the CPCQ. In general, q-sorts have three components: (a) q-factors (domains), (b) q-set (vignettes or concourse), and (c) categories (situated contexts) (Brown, 1986; Stephenson, 1935), components which were all found in Badiali's q-sort. After many rounds of studying Badiali's q-sort, I began constructing or reverse-engineering the CPCQ. First, I developed q-factors using each of the six levels within the Cultural Proficiency Continuum (the Continuum; see Figure 2). In the CPCQ, Q-factors were used statically, which facilitated developing q-set items or vignettes that corresponded with each level on the Continuum and each Category.

Next, I developed 30 q-set items (e.g., vignettes), situating them in five categories: (a) Attitude, (b) Empathy, (c) Policy, (d) Professionalism, and (e) Teaching Practice. The development of the q-set items was the most laborious task for developing (e.g., establishing validity and reliability) the CPCQ. The composition of the initial q-set was as follows:

- 15 q-set items corresponding with unhealthy culturally proficient sociocultural interactions, categorized as Cultural Destructiveness, Cultural Incapacity, and Cultural Blindness;
- 5 q-set items corresponding with Cultural Pre-Competence, a unique category that represents sociocultural interactions, depending on context and intent, interpreted as a healthy or unhealthy behavior; and
- 10 q-set items corresponding with healthy, culturally proficient sociocultural interactions, categorized as Cultural Competence and Cultural Proficiency.

Establishing Q-Set Validity and Reliability. Ozer (1993) explained, "once a pool of items [(i.e., q-set items; vignettes)] has been assembled and piloted, various statistical criteria can be used to identify poor items… items with low judge agreement… and with undesirable correlations to other items may all be candidates for deletion" or modification. Using Ozer's prescription and feedback from SMEs (e.g., critical friends), I developed an iterative and cyclical process for developing / modifying q-set items. The iterative and cyclical process for developing/modifying q-set items illustrated in Figure 3 guided the development and construction of q-set items within the emergent CPCQ. This process shown in Figure 3 used a mixed-methodological design to validate the CPCQ's q-set items with the intent to yield a valid and reliable tool. The process, shown in Figure 3, was repeated until the q-set items proved to be valid and reliable.

Establishing Validity and Reliability for Q-Set Items for the First Iteration of the CPCQ. As mentioned above, there was an emerging prototype of the CPCQ in development, meaning that the first two steps shown in Figure 2 already happened. Therefore, I began the process of developing the CPCQ's q-set items at step three, establishing reliability. Koo and Li (2016) suggested that "researchers should try to obtain at least 30 heterogeneous samples and involve at least 3 raters whenever possible when conducting a reliability study". With the

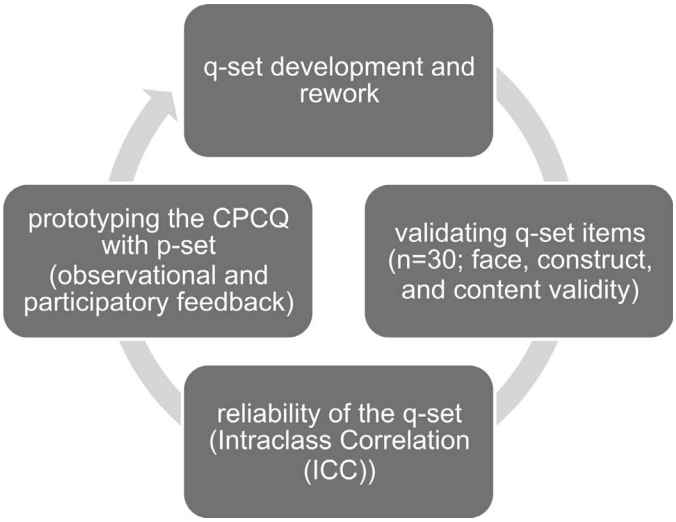

Figure 3. Iterative and cyclical democratic process for q-set development

suggestions put forth by Koo and Li, I conducted a focus group that included 14 participants who were tasked with rating each of the 30 q-set items (i.e., designate a culturally proficient behavior to each vignette) using the Continuum (see Figure 2). Before participants were asked to complete a survey purposed to rate each q-set item, first, I gave a workshop on the Continuum. After the workshop, focus group 1 (FG1) participants were given a handout that listed the Continuum definitions to aid them as they rated q-set items within the first iteration of the CPCQ. Additionally, while completing the survey, FG1 participants were encouraged to offer verbal or written feedback for q-set items viewed as problematic.

After FG1 activities were completed, I estimated the interclass correlation coefficient (ICC) and 95% confidence interval to obtain inter-rater reliability for the rated q-set items. ICC and 95% confidence interval were estimated using the Statistical Package for the Social Sciences version 25, with a mean-rating (k=14), absolute-agreement, and one-way random effect model. The ICC single measure = 0.606 with 95% confident interval = 0.48-0.74. Koo and Li suggested that "ICC values less than 0.5 are indicative of poor reliability, values between 0.5 and 0.75 indicate moderate reliability, values between 0.75 and 0.9 indicate good reliability, and values greater than 0.90 indicate excellent reliability". Based on Koo's and Li's recommendations, the CPCQ's q-set's inter-rater reliability was "moderate.

Q-set items reliability at this juncture warranted prototyping the CPCQ, issues needed to be addressed before implementing with PDS TIs. First, FG1 participants indicated that the Continuum constructs were ambiguous and difficult to differentiate during the rating process. The single measure 95% confident interval lower bound (.48) and upper bound; (.74) wide range pointed to the ambiguity. In developing the content for the emerging CPCQ and FG1 materials, I used an earlier edition of Lindsey et al.'s (1999) *Cultural Proficiency*. The later version of Lindsey et al. (2009) *Cultural Proficiency* addressed the Continuum definitions' ambiguous nature. Thus, in subsequent PD and research activity, newer Continuum definitions were used to update focus group materials and future iterations of the CPCQ. Second, FG1 participants or raters indicated that some q-set items within the q-set needed to be eliminated or modified (*n*=11)—this was addressed before prototyping.

Prototyping the First Iteration of the CPCQ. As a PDS consultant, I prototyped the first iteration of the CPCQ with three PDS TIs in my first consultant group of the 2016-2017 academic year. All of the TIs indicated that the CPCQ raised their awareness of sociocultural interactions within majority-minority PreK-12 schools and student populations. Moreover, they found the CPCQ helpful and appropriate for facilitating critical self-reflection, inquiry, and dialogue regarding students' lived experiences from diverse racial and ethnic backgrounds. One intern stated that the CPCQ helped them recognize "what my students are going through, and how can I use that to either help us in the classroom, or how can I find strategies and ways to allow that student to be successful as they possibly can. . ." (PDS TI, personal communications, September 29, 2016). PDS TIs' insights and conjectures also led to modifying additional q-set items and the instructions for the q-sorting process. Lastly, TIs from the first consultant group suggested developing a protocol purposed to facilitate follow-up discussions with participants after they engaged with the CPCQ.

First-Round Summary. Evidence showed that the CPCQ was developing into a viable tool. The CPCQ helped teacher educators (i.e., the researcher) facilitate inquiry and dialogue concerning PDS TIs' subjectivities regarding majority-minority schools and student populations. However, evidence showed it was necessary to repeat the iterative and cyclical process shown in Figure 3 to improve q-set items' validity and reliability. Accordingly, the second round of development aim was to improve the CPCQ's q-set items' validity and reliability and develop a formal protocol for efficiently implementing emerging q-sort.

Establishing Validity and Reliability for Q-Set Items for the Second Iteration of the CPCQ. Participants (e.g., SMEs and TIs) involved with research activities leading to the development of the first iteration of the CPCQ provided important insights. These insights were used to modify additional q-set items and materials for upcoming focus group activities. First, I made data-informed (e.g., ICC and participant feedback) modifications to the problematic q-set items. Next, I made a significant modification to the instructions for the rating guide section (see Appendix A) of the CPCQ. In the first iteration of the CPCQ, TIs were asked to tally up the sum of the ratings in columns (i.e., q-factors), which represented each level of the Continuum. I replicated this design from Badiali's q-sort but found via observations and feedback; there was no need to have participants tally their scores; the tallying process detracted from the initial aims of the CPCQ. The tallying process was replaced with a new process that enabled facilitators to locate opportunities for critical self-

reflection, inquiry, and dialogue via warranting q-set items that emerged during the q-sorting process. Because q-set items were assigned to a Continuum definition within a category via the process shown in Figure 3, there was a predetermined order in which sorts may unfold during the q-sorting process. However, those sorts that did not unfold in that predetermined order precisely sorted two or more ordinal values from its predetermined value within the Continuum; those sorts (i.e., warranting sorts) became subject of further inquiry and dialogue with TIs. The completion of the activities shown in Figure 3 demarcated the second iteration of the CPCQ (see Appendix A).

In addition to addressing the q-set items and the overall structure of the CPCQ, at the advisement of PDS TIs, I developed a semi-structured interview protocol. The interview protocol is an artifact designed to follow-up with participants after they engaged with the CPCQ. Broadly, the interview protocol addressed two questions: (1) What were your perceptions of the CPCQ (e.g., process and perceived usefulness) and (2) A set of questions fashioned to unpack participants' cultural competence regarding the culturally proficient interaction(s) within each of their warranting q-set items.

Fourteen individuals were recruited to participate in a focus group [i.e., Focus Group 2 (FG2)]. Participants were tasked with rating the q-set items within the second iteration of the CPCQ. The modifications made to focus group materials, specifically the Continuum definitions, led to a well-coordinated focus group. Additionally, the time between FG1 and FG2, seven months, I gained a deeper understanding of the *Cultural Proficiency* framework, ensuring an effective presentation of the Continuum definitions during FG2 activities. After FG2 participants engaged with the Continuum presentation, participants, via a survey, were asked to assign one of the Continuum definitions to each of the 30 q-set items.

After FG2 participants completed their surveys, using SPSS, I estimated the ICC and the 95% confidence interval for the revised q-set items (n=30) with a mean-rating (k=14), absolute-agreement and one-way random effect model. FG2 ICC single measure = 0.73 with 95% confident interval = 0.63-0.83. The ICC measure for FG2 was a "moderate" measure, with a 0.13 increase compared to FG1 indicated more agreement between raters in FG2. Additionally, the 95% confident interval = 0.63-0.83 for FG2 significantly improved compared to FG1's 95% confident interval = 0.48-0.74. This pointed to a lower-bound increase of 0.15, moving it from a "poor" reliability measure to a "moderate" reliability measure. Second, the range between the lower and upper bounds between FG1 and FG2 decreased by 0.28, showing that modifications made to the focus group presentation, specifically the Continuum definitions, enabled raters to make clearer distinctions while FG2 participants rated q-set items for the second iteration of the CPCQ. The ICC estimations from FG2 showed that the second iteration of the CPCQ's 30 q-set items was reliable; the greater consensus among raters warranted prototyping with the next group of PDS TIs.

Prototyping the Second Iteration of the CPCQ. After the conclusion of FG2 activities, the second iteration of the CPCQ was prototyped with three PDS TIs in my third consultant group during the 2016-2017 academic year. I replicated the same PDS consultant meeting protocols used while prototyping the first iteration of the CPCQ. After TIs completed the q-sorting activity, their perceptions of and experience with the second iteration of the CPCQ was gathered via the newly developed semi-structured interview protocol. The new interview protocol provided focused insights into TI's understandings of the culturally proficient interactions that take place in majority-minority PreK-12 schooling contexts via unpacking their warranting sorts. Subsequently, the semi-structured interview data and the modified rating guide within the CPCQ enabled further identification of TIs' cultural competence.

Second-Round Summary. Processes via procedures shown in Figure 3 led to an improved iteration of the CPCQ. TIs from the third consultant group found that the subsequent dialogue via the newly developed semi-structured interview protocol helped make them aware of and reflect on what they did not know regarding students who are minoritized, marginalized, and otherized in PreK-12 schools. One TI said: "it made me reflect a lot, because it put me in a situation to think about things I never really thought about before. . .um, so I thought it was beneficial, it gave me a lot of things to think about" (PDS TI, personal communications, February 23, 2017). The same TI also said that the CPCQ, compared with other methods of facilitating intercultural dialogue, was more focused, allowing her to "focus on specific things [i.e., culturally proficient behaviors/interactions]" (PDS TI, personal communications, February 23, 2017). The evidence detailed above illustrated the effectiveness of the second iteration of the CPCQ, which warranted advancing the development of the CPCQ to the next phase of the CCDR.

Phase 3/4: Feasibility/Pilot Study

Phase 2 of the CCDR process focused largely on developing a viable iteration of the CPCQ, which was evident by the second iteration of the CPCQ's adequate validity and reliability estimates with SMEs and PDS TIs positive feedback. While developing the second iteration of the CPCQ, other artifacts emerged that improved the CPCQ's effectiveness and utility. Subsequently, the CPCQ with the newly developed supporting artifacts has evolved into the Cultural Proficiency Continuum Dialogic Protocol (CPCDP), which comprises six artifacts used to assess and codify educators' cultural competence (see Appendix B).

Research activities in Phase 2 of the CDDR warranted combining Phases 3 and 4 to conduct a Feasibility/Pilot Study. During the Feasibility/Pilot Study, I rigorously tested the design and robustness of the CPCDP together with the CPCQ's effect on PDS TIs (Middleton et al., 2008). I also examined and coded participants' utterances from the Post-CPCQ Semi-Structured Interview Protocol. To examine the effect and fidelity of the CPCDP during implementation, I used the Cultural Proficiency Continuum Implementation Protocol to facilitate Phase 3/4 of the CCDR process.

Table 3. Time Length for Dialogue and Number of Sorts per Participant

Participants (n=5; Pseudonyms)	*Time Length for Dialogue (hrs./mins.)*	*Number of Sorts Warranting Inquiry and Dialogue*
Megan	24:49	3
Gal	32:53	3
Becky	33:37	3
Martha	43:03	2
Wally	1:08:51	10
Sum(s)	**3:23:13**	**21**

A Summary of Findings From Feasibility/Pilot Study. During this feasibility/pilot study, I focused mainly on inquiries and observations on the CPCDP's fidelity during implementation, together with the dialogues the CPCQ enabled me to facilitate. The five PDS TIs who participated in the feasibility/pilot study provided rich data, which showed that the CPCDP could sustain a meaningful dialogue and illuminate TIs' sociocultural gaps and/or cultural competence through their warranting sorts and subsequent dialogues.

The average length for the dialogues with TIs was 40 minutes and ranged from 24 to 69 minutes, suggesting that the dialogues were engaging. This engagement was evident from the unique opportunities the CPCQ provided for facilitating inquiry and dialogue with each TI about a host of culturally proficient interactions within warranting q-set items (i.e., vignettes) unique to each participant. The total number of q-set items within this feasibility/pilot study that warranted inquiry and dialogue with PDS TIs concerning culturally proficient interactions in PreK-12 schools was 21, ranging from 3 to 10 per TI. See Table 3 for a breakdown of each participant's length of dialogue and the number of warranting q-set items. These findings demonstrated that the CPCDP effectively sustained intra- and intercultural dialogue, providing rich data that was used to assess and codify PDS TIs cultural competence. Subsequently, these findings warranted advancing the examination of the CPCPD to Phase 5: Field Study within the CCDR.

Phase 5: Field Study - Examining the CPCDP within Various School-University Partnerships

Phase 5 was the beginning of the second phase of EDR methodology (i.e., Design-Based Implementation Research). Phase 5 aimed to examine the CPCDP during implementation and addressing problems that affect its transportability to other PDS and school-university partnerships (Fishman et al., 2013). Thus, to examine the effectiveness and fidelity of the CPCDP within various school-university partnerships, I used purposeful sampling (e.g., criterion-I and maximum variation) to select partnerships and participants (e.g., cases) for the field study (Palinkas et al., 2015; Patton, 1990; Yin, 2014). With the adopted sampling strategies, I located partnerships that espoused various pedagogical and equity frameworks to explore if context affected participants' cultural competence. The sampled partnerships (n=3) are described in the following:

- Case one is a center dedicated to urban education at an R1 University located in western Pennsylvania, which espouses social and transformative pedagogies as well as a commitment to community partnerships and engagement.
- Case two is situated within a PDS at an R1 University located in central Pennsylvania, which espouses sociocultural theoretical and pedagogical approaches as well as a commitment to critical inquiry.
- Case three is a PDS at an emerging R1 University located in south New Jersey, which espouses sociocultural theoretical and pedagogical approaches as well as a commitment to equity.

At each location, I recruited a university liaison (e.g., graduate student) to facilitate the CPCDP at their respective locations. Each liaison was asked to recruit two candidates (e.g., PSTs or fellows) to participate in this study. Liaisons were asked to recruit participants who were articulate, expressive, and active in their school-university partnership. Before liaisons facilitated the CPCDP with their recruits, I conducted a Train-the-Trainer session, which allowed me to model the implementation of the CPCDP, allowing liaisons to experience the effects of the protocol. After the Train-the-Trainer sessions were complete, I observed the university liaison facilitate the CPCDP with the two PSTs or fellows they selected to participate in this study.

Multiple Case Study Design. The CPCDP was the primary data source in the field study, using a multiple case study design. A featured tool within the CPCDP is the Continuum, which describes productive and counterproductive culturally proficient behaviors/interactions within U.S. public schools (Lindsey et al., 2009). First, the levels within the Continuum were used to name the culturally proficient behaviors within each q-set item or vignette. Second, the Continuum was used to develop a rubric, which allowed facilitators and the researcher to rate PSTs and fellows' reactions to their warranting sorts via semi-structured interview protocol. Accordingly, at each school-university partnership, I collected pre-and post-rubric data (Q-Sort activity and rating reactions to warranting q-set items) during the implementation of the CPCDP. These data are displayed in Table 4. In the table, a colored schema (red-green) denotes a q-set item (pre-rubric) or reaction (post-rubric) to a q-set (e.g., vignette) item level of reactiveness or proactiveness, respectively, via the Cultural Proficiency framework and Continuum.

The pre-rubric ratings represented in Table 4 at this stage of the CPCDP were a place holder for the impending dialogue via the Post-CPCQ-Semi-Structured Interview Protocol. Therefore, the Continuum at this point is not a reflection of an individual's cultural competence. This study's post-rubric ratings showed that participants had problematic reactions (i.e., Cultural Incapacity and Cultural Blindness) to 29.31% (17/58) of their warranting q-set items yielded by the CPCQ. Essentially, these reactions illustrated that participants within this study did not respond positively and affirmingly to the social issue within the corresponding q-set item or vignette. Fifteen or 25.86% of

Table 4. Pre- and Post-Rubric Ratings for Warranting Q-Set Items at Each Location

			Pre-Rubric Ratings (n=58)				
Loc.	*Cultural Destructiveness*	*Cultural Incapacity*	*Cultural Blindness*	*Cultural Pre-Competence*	*Cultural Competence*	*Cultural Proficiency*	*Total*
PA 1	4	4	3	4	2	3	20
PA 2	3	2	6	3	1	0	15
NJ 3	4	6	2	6	1	4	23
Total	11	12	11	13	4	7	58
			Post Rubric Ratings (n=58)				
Loc.	*Cultural Destructiveness*	*Cultural Incapacity*	*Cultural Blindness*	*Cultural Pre-Competence*	*Cultural Competence*	*Cultural Proficiency*	*Total*
PA 1	0	2	1	3	4	10	20
PA 2	0	1	3	8	2	1	15
NJ 3	0	6	4	4	2	7	23
Total	0	9	8	15	8	18	58

Note. Loc. = Location; PA 1 = Location 1; PA 2 = Location 2; NJ 3 = Location 3; n = number of warranting q-set items; Pre-Rubric Ratings = Participants' warranting q-set items; Post Rubric Ratings = Researcher's rating/codes for participants' rationales for their warranting q-set items; the levels of the Cultural Proficiency Continuum and their corresponding ratings: Cultural Destructiveness =1, Cultural Incapacity = 2, Cultural Blindness = 3, Cultural Pre-Competence = 4, Cultural Competence = 5, and Cultural Proficiency = 6

warranting q-set items yielded mixed reactions or Cultural Pre-Competence. First, and most often, participants did not have the language (e.g., xenophobia, racism, sexism) to describe the social injustices within a vignette. Second, participants denoted some level of cultural competence but ultimately found fault with students and families rather than see the cause of social inequity due to systemic issues (e.g., redlining) within the PreK-12 schooling process. Lastly, this study showed that participants reacted positively and affirmatively to 44% (26/58) of the warranting q-set items yielded by the CPCQ. Via the rubric, these 26 items were rated either Cultural Competence or Cultural Proficiency.

In addition to looking into how participants' responses to their warranting sorts fell on the Continuum after consulting the rubric, I also examined participants' effectiveness in unpacking the social issues and hidden assumptions within their warranting q-set items. This inquiry was embedded in the Semi-Structured Interview Protocol. First, I observed whether participants could explain why each of their warranting q-set items was associated or situated within its respective level on the Continuum, which served as a baseline for the subsequent inquiries. The next inquiry was two-fold, asking participants to identify and name the social issues and/or hidden assumptions [(e.g., language discrimination) together with their causes (e.g., xenophobia)] within the warranting q-set item. Last, participants were asked if they were in this context or situation, how they would respond (e.g., disrupt, advocate, adopt) to the social issues and/or hidden assumptions within the warranting q-set item. In essence, I wanted to observe participants as they sought to problematize and react to problematic assumptions within their warranting q-set items. These reactions revealed a host of sociocultural factors that informed participants' teachers' beliefs and cultural competence regarding various cultural proficient interactions in PreK-12 schools.

The reactions were transcribed and analyzed using NVivo and the criteria detailed above. Specifically, I coded participants' effectiveness in unpacking the social issues and hidden assumptions within each of their warranting q-set items. The data in Table 5 illustrated the frequency and percentage of occasions in which participants either effectively, somewhat

Table 5. Naming the Social Issue or Hidden Assumptions within Warranting Q-Set Items by Location – Count and Percentage

	Level of Effectiveness							
	Not at all Effective		*Somewhat Effective*		*Effective*		*Total*	
Location	*n*	%	*n*	%	*n*	%	*n*	%
PA 1	2	10	5	25	13	65	20	34.48
PA 2	4	26.67	9	60	2	13.33	15	25.86
NJ 3	5	21.74	8	34.78	10	43.48	23	39.66
Total	11	18.97	22	37.93	25	43.1	58	100

Note. PA 1 = Location 1; PA 2 = Location 2; NJ 3 = Location 3; n = frequency of warranting q-set items

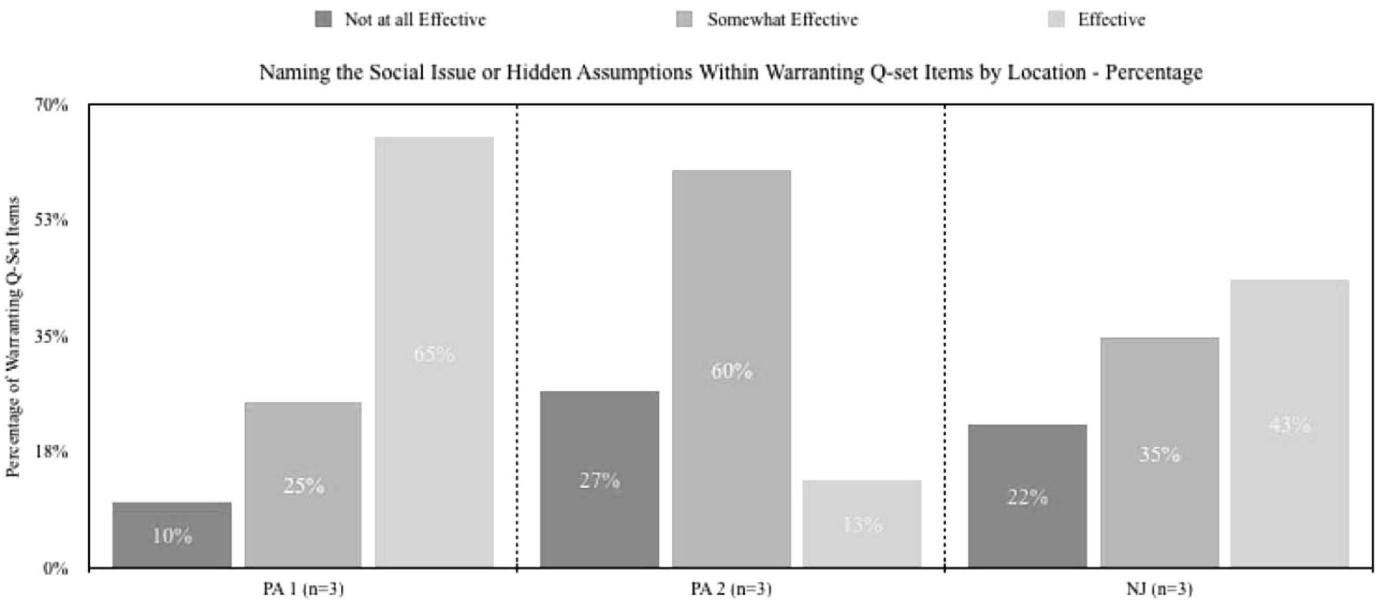

Figure 4. Naming the Social Issue or Hidden Assumptions within Warranting Q-Set Items by Location – Count and Percentage

effectively, or not at all effectively unpacked the social issues and hidden assumptions across and within each location's warranting q-set items. Aggregately, the data showed that participants' ability to unpack the social issues and hidden assumptions for their warranting q-set items gradually increased as you look across the three levels of effectiveness. Notably, data showed that participants (*n*=9) unpacked their warranting q-set items effectively less than half of the time, precisely 43.1% (25/58).

Table 5 provided a holistic view of participants' effectiveness unpacking their warranting q-set items. Collectively, this view of the data showed that participants were trending in the right direction with their ability to unpack and discuss the issues within their warranting q-set items. The data in Table 5 across all locations showed that participants (*n*=9) unpacked their warranting q-set items effectively less than half of the time. However, when these data were looked at by location, the data illustrated significant variation across locations concerning participants' ability to unpack and speak to the issues within each corresponding q-set item (see Figure 4). For example, participants at PA 1; Location 1 effectively unpacked 65% (13/20) of their warranting q-set items, whereas participants at PA 2; Location 2 effectively unpacked only 13% (2/15) of their items. PA 2; Location 2 was the only location where most participants' warranted q-set items were coded as somewhat effective. Participants at NJ; Location 3 effectively unpacked their q-set items less than half the time, 43% (10/23). The patterns within Figure 4 correlates with pre-survey data that asked each participant the number of asset-based pedagogies and concepts (e.g., culturally responsive/relevant teaching, critical pedagogy) participants were taught at their respective locations. Essentially, the more educational concepts participants engaged with, the more effectivity they could unpack and discuss the issues within each warranting q-set item.

Implications

Implications for Researching and Developing Teaching Practices and Policies in School-University Partnership

This study has yielded several significant implications for practice and policy for teacher education. Thus, I will broadly discuss how PDSs are an opportune space to research and develop equity-minded practices and policies for teacher preparation programs (Bensimon et al., 2007; Darling-Hammond & McLaughlin, 2011). Data sourced by the CPCDP illuminated the consequences for the lack of diversity within the sampled PDS and school-university partnerships. The lack of diversity in PDS is critical because of the majority-minority demographic transformation that has already taken place within the U.S. student population as of 2014. Most of the preservice teachers I encountered or researched have a deep appreciation for their clinical experience and time within the PDS. However, with my role in PDS, I had the opportunity to speak with PDS graduates who had taught in a PreK-12 classroom. Within these discussions, graduates indicated that the PDS did not adequately prepare them to effectively teach students who are minoritized, marginalized, or otherized in PreK-12 schools. Many factors contribute to this lack of preparation, with the most notable being the lack of faculty representative of the majority-minority U.S. student population .

Subsequently, PDS partnerships have to increase their capacity and willingness to address diversity in a meaningful and effective way. The leading organization for PDSs, the National Association for Professional Development Schools (NAPDS), within their nine essentials request that members "advance equity within schools and, by potential extension, the broader

community. . . [and commit] to the preparation of future educators [to] embraces their active engagement in [their impending] school community" . Despite the present reality, my experience with the PDS leads me to believe that if PDS partnerships exhaust their resources and efforts to diversify their faculty, mentor teachers, preservice teachers, and clinical experiences; PDS can be an innovative space, model, and national leader for developing teachers who espouse and implement asset-based pedagogies, having the capacity to be responsive and effective for all students (Banks, 2013; Castro, 2010; Gay, 2010; Howard, 2010; Khalifa, Gooden, & Davis, 2016; Ladson-Billings, 1998; Melnick & Zeichner, 1998; Peters, McMullen, & Peters, 2018; Villegas & Lucas, 2002).

Conclusion

This study demonstrated that school-university partnerships are ideal contexts to research and develop curricula and pedagogical artifacts to develop PSTs' teachers' beliefs and practices specific to effectively educating students from diverse racial and ethnic backgrounds (Darling-Hammond & McLaughlin, 2011). Nevertheless, it is important to disclose that this study's situatedness within a host of school-university partnerships did come with its dilemmas and challenges (e.g., knowledge generation with partnering stakeholders and the perceived value of generated knowledge by partnering stakeholders) (McLaughlin & Black-Hawkins, 2007). However, the dilemmas and challenges and the affordances of school-university partnerships (e.g., school-based inquiry and cooperation) provided insights and findings that added new knowledge to the broad field of teacher education.

Secondly, this study demonstrated that school-university partnerships are useful contexts for developing and enhancing curricula and pedagogical artifacts. More so, artifacts designed to (e.g., the CPCDP) assess, codify, and develop educational stakeholders' cultural competence concerning minoritized, marginalized, and othered students in PreK-12 schools and classrooms. Before engaging in this study, it was understood that school-university partnerships, specifically PDS, have challenges addressing diversity, equity, and inclusion (Melnick & Zeichner, 1998; Peters, McMullen, & Peters, 2018; Zeichner, 1992). This study provides a model for school-university partnership stakeholders to leverage human and economic resources to develop and research a host of curricula and pedagogical artifacts and approaches, especially those aimed to increase individuals' cultural competence.

Finally, this study demonstrated the usefulness of the Educational Design Research (EDR) methodology within school-university partnerships, specifically PDSs. EDR is a process of inquiry that evolves through three iterative and cyclical phases: analysis, design, and evaluation (EDUCAUSE, 2012). Specific to this study, EDR enabled the researcher together with end-users (e.g., teacher leaders and PSTs) to design a pedagogical artifact from inception within the context of multiple school-university partnerships (Barab & Squire, 2004; Cole et al., 2018; Lamberg & Middleton, 2009; Middleton et al., 2008). This study demonstrated that EDR products (e.g., the CPCDP) have an immediate impact on teacher development. Similarly, this study demonstrated that the CPCDP was transferrable to similarly aimed partnerships. Thus, within the context of school-university partnerships, which are spaces that engage in democratic practices and commit to innovation, EDR was useful for developing the CPCDP, which was used to address a localized problem, broadly the sociocultural gap. Subsequently, this study provided a model of using EDR when situated in school-university partnerships to develop and scale-up newly developed curricula and pedagogical artifacts.

Notes

1 Throughout this article, race is understood as term that is "constructed physically, socially, legally, and historically" (Milner IV, 2017, p. 6) within the context of the United States. "Race within teacher education and PreK-12 education is used to draw distinctions between students, which may be of benefit (e.g., emancipate) or a detriment (e.g., subjugate and oppress) to students who are non-White (e.g., Black, LatinX, and Asian)" (Cormier, 2020, p. 9).

2 Throughout this article, ethnicity is a term used to characterize an individual's national origin together with their ancestry, language, or other cultural characteristics (Delgado & Stefancic, 2017).

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Appendix A

Cultural Proficiency Continuum Q-Sort (CPCQ; Key Components)

Contextualizing the Cultural Proficiency Continuum Q-Sort: Setting Norms and Being Open-minded

Before you engage with the Cultural Proficiency Continuum Q-Sort (CPCQ), situate yourself as a new teacher in a US public school that educates a majority-minority student population. You are at this school for an interview as a potential new teacher. The principal is taking you on a tour of the school during which you will observe a variety of sociocultural interactions. While you are completing CPCQ, consider how you may respond to the sociocultural interactions you will observe. Please understand that this is not a "gotcha moment" and do not try to anticipant what the facilitator may want to hear, but rather give an honest response. Thank you for your cooperation and trust the process; this will make this experience more impactful.

Setting norms for dialogue, creating a professional and safe environment, with Glenn E, Singleton's (2015) Four Agreements of Courageous Conversations. They are as follows:

1. Stay engaged.
2. Speak your truth.
3. Experience discomfort.
4. Expect and accept non-closure.

Authored and Intellectually Designed by Dwayne Ray Cormier, last updated 4/02/2018.

Cultural Proficiency Continuum Q-Sort: Examining Sociocultural Reproductions that take place within Majority-Minority US Public Schools and Student Populations

Below are 30 sociocultural interactions, memes[1], describing culturally proficient behaviors, that occur daily in majority-minority US public schools. There are six memes in each of the five following categories: Attitude, Empathy, Policy, Professionalism, and Teaching Practice. Your task is to prioritize these memes by numbering them 1 to 6 within each of the five categories. Assign the number 6 to the meme that best reflects your attitude and beliefs, 5 to the meme that next best reflects your attitude and beliefs, 4 to the meme that next best reflects your attitude and beliefs, and so on until you have assigned a number to all six memes within each category. When you have completed this task, follow the directions in the rating guide to summarize your responses.

Attitude

____ A. Many suspect that a student from a high poverty school with a 4.0 GPA and a perfect score on the SAT has received a scholarship from an Ivy League School due to their[2] socioeconomic status.

____ B. Black students have the same opportunities and access to attend college as their white peers.

____ C. Students who wear dreadlocks as a hairstyle are a distraction in the classroom.

____ D. It should be required for students to remove hair accessories that are associated with their culture, tribe, sexuality, or religion.

____ E. All students who live in the United States deserve a quality public education, even those students whose parents are undocumented immigrants.

____ F. All faculty and staff within a school setting have equal ability to transfer knowledge to students in regards to life, culture, character, and/or academic content.

[1] The meme is a unit of cultural transmission or a unit of imitation; a sociobiology concept introduced by Richard Dawkins in *The Selfish Gene* (1976). Examples of memes are: tunes, ideas, catch-phrases, and implicit/explicit processes.
[2] The singular pronouns: "their" or "they" are used as gender-neutral pronouns.
Authored and Intellectually Designed by Dwayne Ray Cormier, last updated 4/02/2018.

Teaching Practice

☐ A. A novice teacher in a school where the majority of the students are African-American and Latino uses hip-hop as a way to make science relevant in the student's social and cultural context.

☐ B. An algebra teacher who teaches in a school where the majority of the students are on free and reduced lunch requires that each student buy a specific graphing calculator for Algebra, which retails for over 100 dollars.

☐ C. A teacher created a seating chart that placed 'unteachable students' in the back of the classroom, all of whom were male: 2 Latinos and 6 African Americans. In the same seating chart, her 'good students,' all white, were seated in preferential seating.

☐ D. A teacher puts together a petition to request a textbook company to remove the narrative about the enslavement of Africans in the United States in their history textbook to accommodate teachers' discomfort with discussing this sensitive topic.

☐ E. A teacher in a Title 1 school (high percentage of children from low-income families) checks homework for completeness rather than correctness as a strategy to improve student efficacy.

☐ F. There is an increase of LGBTQIA+ students reporting that they are being harassed both verbally and physically in United States public schools. A group of students and teachers are researching the best practices to implement and create a supportive environment for these students to voice their concerns in their school.

Authored and Intellectually Designed by Dwayne Ray Cormier, last updated 4/02/2018.

The Rating Guide for the Cultural Proficiency Continuum Q-Sort: Memes in Majority-Minority US Public Schools

You have completed sorting the memes within the CPCQ; go back and revisit each category. Write the number that you have assigned to each meme within each of the five categories to the right of the corresponding letter—A, B, C, D, E, F—in the spaces provided below in the rating guide. Ideally, your final results in each row would read 1, 2, 3, 4, 5, 6, but because Cultural Proficiency is a fluid phenomenon these numbers may not align in numerical order. The final step in your analysis is to locate the culturally proficient interactions, which are 2 or more points higher or lower than the ideal number by each letter. For example, if a row reads 2, 1, **5**, 4, 6, **3**, you would circle the numbers 5 and 3. Each number you circle in each row represents an opportunity for inquiry and dialogue for that particular culturally proficient behavior. **Remember, this is not a judgment, but rather an opportunity for you to make inquiries and have a dialogue about the sociocultural interactions that take place within majority-minority US Prek-12 schools.**

	Cultural Destructiveness	Cultural Incapacity	Cultural Blindness	Cultural Pre-Competence	Cultural Competence	Cultural Proficiency
Attitude	D. ☐	C. ☐	B. ☐	A. ☐	F. ☐	E. ☐
Empathy	E. ☐	A. ☐	F. ☐	D. ☐	B. ☐	C. ☐
Policy	F. ☐	E. ☐	B. ☐	C. ☐	D. ☐	A. ☐
Professionalism	E. ☐	A. ☐	B. ☐	D. ☐	C. ☐	F. ☐
Teaching Practice	D. ☐	C. ☐	B. ☐	E. ☐	A. ☐	F. ☐

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Making Sense of Your Current Attitudes and Beliefs

The graphics below will help you understand the implications for the memes that you circled in the rating guide above. Most likely, you have sorted a majority of the memes within the CPCQ in a manner that indicates you have a reasonable understanding of culturally proficient interactions in majority-minority US public schools. However, it is rare for an individual to have a comprehensive understanding of every culturally proficient interaction that takes place in majority-minority public schools. Therefore, your engagement with the CPCQ most likely has highlighted opportunities for you to make inquiries and engage in dialogue regarding culturally proficient interactions on more than one level within the Cultural Proficiency Continuum.

The Cultural Proficiency Continuum[3]	Definition
Cultural Destructiveness See the difference; stomp it out. (most negative end of the continuum)	When individuals or policies seek to eliminate all vestiges of others culture in educational and/or social contexts (Lindsey, Robins, & Terrell, 2009).
Cultural Incapacity See the difference; make it wrong.	"Trivializing and stereotyping other cultures; seeking to make the cultures of others appear [incongruent with and] inferior to the dominant [or host] culture [within educational and/or social context]" (Lindsey, 2009, pp. 6-7).
Cultural Blindness See the difference; dismiss it.	"Not noticing or acknowledging the culture of others and ignoring the [diverse] experiences of cultures within [educational and/or social context]; treating everyone in the system the same way without recognizing the needs that require differentiated [approaches]" (Lindsey, Robins, & Terrell, 2009, pp. 6-7).

[3] All components of the Cultural Proficiency Continuum Q-Sort are adapted from Lindsey, Robins, & Terrell (2009), *Cultural proficiency: A manual for school leaders* (2009, p. 58).

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Cultural Pre-Competence See the difference; recognize what you don't know.	The awareness/ability to identify when an individual/institution does not know how to effectively engage families, students, and teachers in a culturally diverse educational and/or social context (Lindsey, Robins, & Terrell, 2009).
Cultural Competence See the difference; understand the difference that difference makes. (positive end of the continuum; denotes interpersonal and contextual mastery)	The practical/institutional alignment of an individual's personal values and behaviors which are in agreement with educational policies and practices that honors cultures that are new, different, and/or a minority. Such an environment displays healthy and productive interactions that denote solidarity in the educational context. However, this level of the *Cultural Proficiency Continuum* may or may not be limited to educational context (Lindsey, Robins, & Terrell, 2009).
Cultural Proficiency See the differences; respond positively and affirmingly. (positive end of the continuum; denotes extrapersonal and varying contextual mastery)	Espouses a vision that educational and social spaces are agents of social change and a model of a just democracy. These individual/institutions learn, teach, research, advocate, and champion for members of diverse and minoritized cultural groups. This level of the Cultural *Proficiency Continuum* is displayed and espoused in a variety of social constructions and contexts: educational, gender, professional, race, religious, and sexuality (Lindsey, Robins, & Terrell, 2009).

Reactive >>>>>>>>>>>>>>>>>>>>>>>>Tolerance			Proactive>>>>>>>>>>>>>>>>>>>>>Transformation		
Cultural Destructiveness	Cultural Incapacity	Cultural Blindness	Cultural Pre-Competence	Cultural Competence	Cultural Proficiency
Unhealthy Behaviors			Healthy Behaviors		

Appendix B Description of Each Artifact within the Cultural Proficiency Continuum Dialogic Protocol

Artifacts within the Cultural Proficiency Continuum Dialogic Protocol	*Artifact Description/Utility*
Pre- CPCDP-Survey	Collects participants' demographic information and prior knowledge concerning majority-minority student populations and various asset-based pedagogies
The Cultural Proficiency Continuum Q-Sort	Systematically studies participants' subjectivities concerning students from diverse racial and ethnic backgrounds and U.S. majority-minority PreK-12 schooling contexts
The Post-CPCQ Semi-Structured Interview Protocol	Gives participants the space to rationalize and make meaning of their warranting sorts, which were sorted two values from their predetermined ordinal value (1-6)
The Post-CPCQ Rubric	A tool judges/raters use to assign a level of Cultural Proficiency (Cultural Destructiveness; 1 – Cultural Proficiency; 6) to participants' reactions to their warranting sorts
Post-CPCDP Survey	Collects information regarding participants' perceptions of the CPCDP together with their desire to increase their cultural competence
The CPCDP Implementation Protocol	A list of procedures facilitators use to implement the CPCDP