Designing and Using Clinical Simulations to Prepare Teachers for Culturally Responsive Teaching

Ву

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Dissertation

Submitted to the Faculty of the

Graduate School of Vanderbilt University

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

in

Learning, Teaching, and Diversity

May, 2016

Nashville, Tennessee

Approved:

Ilana S. Horn, Ph.D. Paul Cobb, Ph.D. Barbara Stengel, Ph.D. Arna Banerjee, M.D. Copyright © 2016 by Elizabeth A. Self All Rights Reserved This dissertation is dedicated to my children, Oliver, Emmeline, and Zola.

May you have teachers who see you in all your beauty and wisdom

and give you the ability to see it in others.

And to my husband, Wesley, who sees me for who I am.

ACKNOWLEDGEMENTS

This work would not have been possible without the financial support of the Bonsal Applied Education Research Award, which funded this cycle of the clinical simulations research, and the Center for Experiential Learning and Assessment at Vanderbilt University Medical Center. Thank you to Dr. Arna Banerjee, Laura Skaug, and Alan Johnstone for your contributions to this work. And thank you to the young men who, for the purposes of this study, became Darius Miller. Hasan, Wesley, and Denzel, I appreciate you.

I am especially grateful to those who supported me through my doctoral studies and dissertation work. To Rich Milner, who gave me my start in the program, and to Lani Horn, who helped me through my milestones to the end. Lani, your patience, perseverance, and intellectual contributions have made this dissertation what it is. To Paul Cobb and the members of my research group, who taught me that design-based research was a thing and how to do it. And to Barb Stengel, who said "yes" over and over again when I asked "could I?" and reminded me that, in spite of the potential dangers, it will be fine.

I want to recognize those who gave me reason to begin my doctoral studies – the faculty, staff, and students at Young Women's Leadership Charter School in Chicago, IL. And those who gave me the support to continue on – including Ben Dotger, Britnie Delinger Kane, and Grace Chen, who have collaborated with me in different ways to consider the potential of clinical simulations in teacher education. And Monica, who helped me live the questions and free myself to who I may become.

Finally, I would like to acknowledge my family. My husband, Dr. Wesley Self, who, on the evening of January 3, 2009, in Lincoln Park, listened to me talk about how I'd like to eventually get my doctorate in education. Thank you for wanting this for me from the

beginning. And my children, Oliver, Emmeline, and Zola, who have waited patiently for me to "be all done on the computer." Mommy can play now.

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CHAPTER I

INTRODUCTION

Since the United States began disaggregating student achievement data based on race, ethnicity, socioeconomic status, and gender, it has been clear that not all students in the U.S. are performing at the same level. Whether framed as an achievement gap, an opportunity gap (Milner, 2010), or an educational debt (Ladson-Billings, 2006), this failure to meet the academic needs of students from historically and contemporarily marginalized groups has been a primary concern of efforts in both K12 schools and in teacher education. Such students are often (mis)labeled as "at risk," but are most commonly at risk for not receiving the kind of education that builds on their personal and cultural strengths, also called culturally responsive or culturally relevant teaching.

In the following chapters, I use the term *culturally responsive* to refer to the knowledge, beliefs, and skills that research has shown as necessary for teachers to be successful with culturally and linguistically diverse students (Gay, 2010; Howard & Aleman, 2008; Ladson-Billings, 1995; Milner, 2010; Villegas & Lucas, 2002). However, the term *culturally responsive* is but one of a number of conceptually similar but technically distinct terms used to refer to a dynamic and synergistic relationship between students' lives inside and outside of school. Gay (2010) defined culturally responsive teaching as "using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them" (p. 31). It means, in short, teaching "to and through" the students' cultures such that cultural difference becomes an asset rather than a deficit. Cultural responsiveness is multidimensional in that it encompasses curriculum, assessment, instructional techniques,

and classroom management. It is contextual and situational; responsiveness is determined based on what is appropriate in the instructional context (Irvine, 2003).

Once educational researchers gave a name to culturally responsive teaching, teacher educators began to focus on how to prepare teachers for this work. Many scholars focused on what could happen in traditional teacher education programs. They developed courses (Causey, Thomas, & Armento, 2000; Cho & DeCastro-Ambrosetti, 2005; Finney & Orr, 1995; Weisman & Garza, 2002) and programs (Ladson-Billings, 2001; Sleeter, 2000; Sleeter & Milner, 2011) that ranged from highly to not at all effective. Other scholars focused on what could happen in fieldwork settings, through observation and student teaching (Bennett, 2013; Fry & McKinney, 1997; McKinney, Haberman, Stafford-Johnson, & Robinson, 2008; Whipp, 2003). Still others began to consider how programs might select the kinds of teachers that were most likely to be culturally responsive (Haberman, 1996; Sleeter & Milner, 2011). Research on all of these approaches commonly revealed the need for a better understanding of what culturally responsive teaching looks like in different contexts and the need for effective approaches in teacher education that can link the university setting with community based learning (Sleeter, 2001; Villegas & Lucas, 2002).

This dissertation looks at one instructional approach that holds promise in preparing culturally responsive teachers. Clinical simulations for culturally responsive teaching, which are modeled after standardized patient encounters for cultural competence in medical education, use actors to portray the role of students, parents, and coworkers in common problems of practice, but with a focus on issues of culture in such interactions.

Broadly, this dissertation responds to the research question, *How can clinical simulations be*

designed and used to prepare preservice teachers for culturally responsive teaching? Each of the three chapters in the dissertation responds in some way to this larger question.

In Chapter II, I present a set of meta-principles to guide teacher educators in their design and use of clinical simulations for culturally responsive teaching. I derive these design principles in part from the medical literature on standardized patient encounters for cultural competence but also from a comparison of the relational work of doctors and teachers. By learning from a similar profession while recognizing important differences in the work of that profession, I argue that clinical simulations are a promising approach to preparing culturally responsive teachers. These design principles provide a starting place for teacher educators who are beginning to use clinical simulations for culturally responsive teaching and augment existing literature on clinical simulations for general problems of practice. I then look in Chapters III and IV at how these design principles were used in the Darius Miller simulation, which focused specifically on cultural issues related to race.

In Chapter III, I present a retrospective analysis of preservice teacher learning in the Darius Miller simulation. This analysis examines what preservice teachers said they learned from the simulation, all in terms of "being more aware," and categorizes that learning thematically as either self-aware, racially aware, or critically aware. I argue that while teachers can develop cultural responsiveness through their participation in clinical simulations, what they learn varies, especially with respect to the teachers' own cultural identity development. This group-level analysis maps the terrain of what kind of learning clinical simulations can support and considers how this learning must be further

developed. I then look more closely in Chapter III at the learning of three teachers in one of these groups.

In Chapter IV, I present a comparative-case analysis of three teachers' learning trajectories in the Darius Miller simulation. To follow their development, I trace how each of the three teachers framed the problem over the course of the simulation cycle and at the end of the semester, pointing to the importance of different parts of the pedagogy in supporting different kinds of learning.

These three papers, in their totality, are compelling evidence for using clinical simulations in preservice teacher education to prepare teachers for culturally responsive teaching. In addition, they serve as some of the first iterations of this work from which to further refine their design and use in order to guide other teacher educators.

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CHAPTER II

JUST WHAT THE DOCTORS ORDERED: WHAT MEDICAL EDUCATION CAN TEACH US
ABOUT DESIGNING AND USING CLINICAL SIMULATIONS FOR CULTURALLY RESPONSIVE

Introduction

TEACHING

Clinical simulations are emerging as a potential "signature pedagogy" in teacher education, with only a few years of educational research to guide teacher educators in their design and use (Dotger, 2011, 2013, 2015; Dotger & Smith, 2009). In contrast, medical educators have used standardized patient encounters (SPEs), from which clinical simulations were adapted, for more than fifty years. Moreover, while existing literature in teacher education has provided some guidance for designing and using clinical simulations for common problems of practice, it does not yet focus on using simulations to prepare teachers to respond to cultural and linguistic diversity or issues of equity in the K12 classroom. Medical education, however, has been designing and using SPEs for at least twenty years to prepare doctors be culturally competent and have "difficult conversations" in response to issues of diversity and equity in healthcare settings (Altshuler & Kachur, 2001; Robins, White, Alexander, Gruppen, & Grum, 2001; Zabar et al., 2006). Research on these encounters has resulted in a set of core principles that guide the effective design and use of SPEs as part of an overall cultural competence curriculum in medicine. In order for clinical simulations to be effective in preparing culturally responsive teachers, teacher educators must retain many of the core principles that guide their use in medicine while recognizing the differences in the work of teachers and doctors.

In this paper, I compare and contrast the relational work of teachers and doctors to respond to two questions. First, *What can teacher educators learn from medical educators about how to effectively design and use clinical simulations for culturally responsive teaching?* Second, *How are differences in the relational work of teachers and doctors relevant to the design and use of clinical simulations?* As findings, I submit six design principles to guide teacher educators in this work – three derived from the medical literature on standardized patient encounters for cultural competence, and three derived from the differences in the relational work of doctors and teachers. These design principles provide compelling evidence for using clinical simulations in preservice teacher education to address the challenges of preparing teachers for culturally responsive teaching. In the next section, I compare and contrast the relational work of teachers and doctors and then identify the challenges of preparing culturally responsive teachers.

The Relational Work of Teachers and Doctors

The work of teachers and doctors has similarities, as evidenced by the frequent reference to doctors in the sociology of teaching literature in the last fifteen years (Darling-Hammond, 2006; Grossman, 2008; Hargreaves, 2000; Ingersoll & Merrill, 2011; Mehta, 2013). Teachers and doctors are both considered to be among the "caring professions" (Abbott & Meerabeau, 1998) that have as a goal "human improvement" (Cohen, 2005). As such, teachers and doctors are dependent on their students and patients, respectively, for their success. As Metz (1993) wrote, "It is nearly impossible for teachers to be effective without at least passive acquiescence from students" (p. 108). The same can be said of doctors and their patients, who must, at a minimum, consent to treatment and may need to

adhere to long-term treatment plans to become well. As a result, both teachers and doctors must engage and motivate their clients to be successful.

Teachers and doctors also deal with the challenge of partial expertise. That is, while professionals in these fields need special expertise to do their work, it is insufficient by itself. Cohen (2005) best summed it up when he wrote, "Expertise is essential to practice, but also is essentially inadequate" (p. 281). Teachers must learn from their students in order to teach them, just as doctors must elicit information from their patients in order to treat them. Because of this, relational capacity is an essential element in the work of teachers and doctors. Moreover, because both education and healthcare have a history of underserving particular populations, students and patients from marginalized communities may be more reticent to trust professionals in these fields. When caring for these individuals especially, teachers and doctors must therefore be responsive to the cultural backgrounds of those whom they serve in order to develop trusting relationships.

Although similar, the relational work of doctors and teachers is not exactly the same. As Cuban (2013) pointed out in his comparison of reform efforts in education and medicine, the "helping professions share *similar* predicaments" (p. 97, emphasis added). For example, teachers' and doctors' success relies, in part, on the trust of those in their care. But trusting relationships in education and medicine begin and develop differently. Students and parents often mistrust teachers when they first meet them because they do not necessarily respect their professional judgment, whereas patients may more readily trust their doctors because they see them as having reliable professional judgment. In addition, teachers usually develop trusting relationships with their students over longer periods of time than doctors do with their patients. Most teachers see their students at

least five hours per week for eight or nine months in a row, whereas doctors see their patients either regularly (for inpatients) or sporadically (for outpatients) for short periods of time, alongside other healthcare providers. These differences in the relational work of teachers and doctors have meaningful consequences for the design and use of clinical simulations in teaching. Therefore, while it is useful to compare the relational work of teachers and doctors, teacher educators need to recognize these differences and account for them when designing clinical simulations for culturally responsive teaching. In particular, it is important to consider whether an approach from medical education like simulations would address the challenges teacher educators commonly encounter in preparing culturally responsive teachers.

Challenges of Preparing Culturally Responsive Teachers

Over the last decade, teacher educators have focused on preparing teachers to be responsive to an increasingly diverse student population, but in do so, they have faced a variety of challenges. These challenges include the theory-practice gap in preparing culturally responsive teachers, resistance among teachers to learning about culturally responsive teaching, and the limited empirical research on how to effectively prepare culturally responsive teachers. In this section and throughout the paper, I refer to preparing teachers broadly, to include preservice and inservice teachers, both novice and veteran, though the needs and resources of each particular group would affect the design and use of any approach to address these challenges. However, the majority of the research on preparing culturally responsive teachers comes out of preservice licensure programs in college and university settings.

The theory-practice gap in preparing culturally responsive teachers. The biggest challenge in preparing culturally responsive teachers has been developing teachers' conceptual understanding of culturally responsive teaching along with their ability to apply it in a particular context. In her 2006 chapter entitled "Yes, but how do we do it?", Gloria Ladson-Billings wrote, "Even if we could tell you how to do it, I would not want us to tell you how to do it" (p. 39). Her point was that when teacher educators give teachers specific practices to respond to a particular context, teachers may do just that, "regardless of the students in the classroom, their ages, their abilities, and their need for whatever it is [she] proposed" (p. 39). The contextual and situational nature of culturally responsive teaching makes it especially important that teachers recognize the particulars of the context and then respond from what Ladson-Billings calls "an ethical position" in teaching for social justice (p. 40). Bartolome (1994) echoed similar concerns about a "one-size fits all" approach to teaching. Morrison, Robbins, and Rose (2008), in their efforts to operationalize culturally responsive teaching, likewise noted that many of their specific examples were from culturally homogenous classes of students, such that the practices they presented could not necessarily be used responsively with a different student population or in a more diverse classroom settings. These critics share a concern that teacher preparation should not be about a "set of instructional moves" but rather helping teachers "explor[e] the complexities of teaching and nuanced intellectual work that undergirds pedagogical practices" (Ladson-Billings, 2006, p. 29).

The other side of this challenge, though, is that teachers do need a clearer understanding of what to *do* to be culturally responsive. More than twenty years ago, Villegas (1991) remarked that the lack of specific prescriptions presents a major challenge

to educators and teacher educators, and many teachers come away from their preparation either feeling overwhelmed and unprepared – or overconfident and unprepared. While scholars like Villegas likewise have concerns about over-prescriptiveness, they also see the potential dangers in under-attending to practical application. But instead of focusing on "what to do," most teacher educators have focused on establishing beliefs (Cabello & Burstein, 1995), attitudes, and mindsets (Milner, 2010) characteristic of successful educators in diverse settings. Recently, Cochran-Smith et al. (2015) found that three quarters of the studies on content, structure, and pedagogies to prepare teachers for diversity and equity focused on beliefs. This focus on beliefs, attitudes, and mindsets, however, may "inadvertently transmit the message of the teacher as savior and charismatic maverick without exploring the complexities of teaching and nuanced intellectual work that undergirds pedagogical practices" (Ladson-Billings, 2006, p. 29). As a consequence, teachers vary considerably in how they understand and apply the theory behind culturally responsive teaching (Young, 2010).

Resistance among teachers to learning about culturally responsive teaching. Another challenge for teacher educators is resistance among teachers to learning about culturally responsive teaching. When some teachers are asked to consider issues of privilege and power with regard to social issues, teacher educators report being met with resistance in the form of silence, anger, and guilt (Garrett & Segall, 2013). While those most resistant are often part of the privileged group with regard to a particular social issue (ie., White teachers and race, cisgendered people and gender), I refer to teachers in general because resistance is not limited to just those teachers. Teachers may resist learning about about culturally responsive teaching for several reasons.

First, some teachers do not see culturally responsiveness as part of their work as teachers. These teachers may have a banking concept of the work of teaching, in which "the teacher teaches and the student are taught," and thus there is no need to consider students' culture in order to teach them (Freire, 2009, p. 59). Such teachers bring a colorblind – or, more broadly, a culture blind – lens to their students and schools such that they are unwilling to acknowledge that cultural issues like race, gender, and socioeconomic status impact anyone in the United States (Bonilla-Silva, 2002; Garrett & Segall, 2013; Milner & Self, 2012). These teachers are therefore unable to recognize the home-school divide that may exist for students from marginalized communities that makes culturally responsive teaching necessary. Colorblind teachers may also believe in the myth of meritocracy, that if students just work "hard enough" they can be successful (Milner, 2010). This perspective can be seen, for example, in many of the "no-excuses" charter schools in the U.S., which primarily educate Black and Brown, low-income students (Lack, 2009). Ultimately, these teachers see culturally responsive teaching as something other than, in addition to, and separate from the everyday work of teaching, and they therefore resist learning about it.

In addition, teachers who are culturally aware may nonetheless see students and their families through a deficit thinking model. Deficit thinking models have roots in genetic difference, cognitive difference, and cultural difference (Valencia & Solórzano, 1997). Contemporary deficit thinking models seek to explain educational disparities through the "lack" of something – for example, a lack of words in low-income homes (Hart & Risley, 1995) or a lack of parental involvement among Latino parents (Sowell, 1981). Because teachers with deficit thinking models see students and their families as lacking something necessary for success, teachers hold them, rather than themselves, responsible

for bridging the home-school divide. Culturally responsive teaching helps teachers move from a deficit thinking model to funds of knowledge approach, looking for ways to build new knowledge on students' existing lived experiences to connect students' home and school experiences (Moll, Amanti, Neff, & Gonzalez, 1992). Deficit thinking models often live in "commonsense" assumptions about teaching, which are made apparent when teachers move from the general to specific. Gay and Kirkland (2003) found that when "discussions move beyond general awareness toward specific instructional actions that challenge prevailing conventions, resistance is increasingly apparent" (p. 184).

Finally, some teachers, especially teachers of color and others from marginalized communities, may resist learning about culturally responsive teaching for different reasons. First and foremost, teachers from marginalized groups may be concerned that teacher educators are not prepared to protect them from what Applebaum (2003) refers to as "words that wound" (p. 155). By this, she means not just "offensive" but "assaultive speech" that inflicts injury on teachers from marginalized groups by "evok[ing] in them all of the millions of cultural lessons regarding [their] inferiority that [they] have so painstakingly repressed" (Lawrence, 1993, p. 74, as cited in Applebaum, 2007, p. 155). These teachers may feel that culturally responsive teaching is important but fear that they will be psychologically assaulted in service of their fellow teachers' learning. In addition, teachers who identify with marginalized communities may reason that because they understand power and privilege from the perspective of someone who has been oppressed in society, they already have the knowledge and skill to respond to the needs of culturally and linguistically diverse students and families. However, this attitude stems from a monolithic view of particular cultural groups and collapses dynamic and intersectional

identities to yet another singular "oppressed" group. Finally, in some situations, as a result of living in a racist, sexist, and classist society, these teachers may believe the dominant narratives about their own or other marginalized communities and see students from those communities through the same deficit thinking models as other teachers. Tatum (1992) reported finding that her students of color often did not have a full understanding of the impact of race on education in the U.S., and this may be especially true for teachers who were themselves academically successful in the educational settings they plan to teach in. While teachers of color and others from marginalized communities may resist for different reasons than their White and privileged peers, they also need and deserve to learn about culturally responsive teaching.

Limited empirical research in teacher education. A final challenge for teacher educators is that they lack empirical research on how to prepare culturally responsive teachers. There have been some studies on the effectiveness of courses (Causey, Thomas, & Armento, 2000; Cho & DeCastro-Ambrosetti, 2005; Finney & Orr, 1995; Weisman & Garza, 2002) and programs (Ladson-Billings, 2001; Sleeter, 2000, 2001; Sleeter & Milner, 2011) to prepare culturally responsive teachers. However, these studies have provided little documented evidence to guide the practices of teacher education programs. While Cochran-Smith, Davis, and Fries (2004) reported that there is significant research on how experienced teachers work successfully with diverse groups of students and on preservice teachers' attitudes, beliefs, and developing knowledge about diversity, they noted that there are significantly fewer studies on the practices of preservice or beginning teachers in the classroom. Hollins and Guzman (2005) likewise noted that while we know a great deal about effective teaching practices for diverse students, we know much less about how

effective teachers acquired the skills, knowledge, and dispositions needed for success. Sleeter's (2001) review of 80 studies of effects of various preservice teacher education strategies (recruiting and selecting students, cross-cultural immersion experiences, multicultural education coursework, program restructuring) revealed a variety of strategies that teacher educators have used, but very little of the research focuses on which strategies prepare strong teachers. Thus, while some researchers place significant responsibility on teacher education and teacher educators for failing to prepare teachers to meet the needs of diverse student population, few are conducting the research that would help such programs and educators to do their work more effectively. Because of the lack of empirical research in teacher education to guide them, some teacher educators have looked for approaches in other fields.

Previous Efforts to Learn from Other Professions

Teacher educators have previously looked at professional practice in other fields in search of possible solutions to challenges like these in teacher education (Grossman et al., 2009; L. Shulman, 2005). In the 1990s, case-based learning, adapted from the case method in law school, enjoyed considerable popularity in teacher education (J. H. Shulman, 2002; L. S. Shulman, 1992). Some case-based learning materials specifically looked at issues of diversity and equity (J. H. Shulman, 1996; J. H. Shulman & Mesa-Bains, 1990). With the case method, teacher educators sought to close the theory-practice gap by providing teachers with practice-based scenarios in teaching. Case-based learning led to an adaptation of problem-based learning from business school in the form of video cases and other artifacts to provide teachers with a practice-based learning experience (Ball & Cohen, 1999; Lampert, 2001). More recently, with the greater emphasis on clinical practice, teacher

educators have begun designing and using clinical simulations, which merge aspects of case-based learning, problem-based learning, and experiential learning. According to Dotger (2015), at least five teacher education programs in the U.S. have begun using this pedagogy to prepare teachers for the interactional aspects of teaching, some with a sociocultural perspective, but none with a particular emphasis on cultural responsiveness. While research on clinical simulations is still limited, current findings suggest that clinical simulations hold promise in preparing teachers for uncertainty, providing an opportunity to act with limited knowledge, and developing a teacher identity and specific dispositions (Dotger, 2015; Kane, 2015). As such, clinical simulations appear to be a promising approach to address the challenges of preparing culturally responsive teachers.

Clinical Simulations as a Promising Approach to Preparing Teachers to be Culturally Responsive

Clinical simulations offer a promising approach to address some of the challenges in teacher education to prepare culturally responsive teachers and provide an opportunity for additional research. Medical educators have used SPEs for more than fifty years to develop relational capacity in doctors and more recently have been designed to prepare doctors to care for ever more diverse pool of patients. These encounters provide doctors with common patient interactions – such as taking a medical history or delivering bad news – in an environment that is low-stakes for the doctor and low-risk for the standardized patient (Barrows, 1993). In SPEs, actors are coached to portray a specific illness in a standardized way. Clinical simulations in teacher education likewise use actors to portray the role of students, parents, and coworkers. Simulations in teacher education prepare teachers for common problems of practice, such as talking to a student about misbehavior, conferencing

with a parent about a student's possible learning difficulty, or meeting with a coworker to talk about students. Because they use actors, simulations in teacher education minimize potential harm to students and families from marginalized communities. In addition, they allow teacher educators to provide consistent, corrective feedback to teachers in a low-stakes environment. While educators can use an array of other traditional methods to assess doctors' and teachers' expertise, SPEs and clinical simulations provide a rare opportunity outside of actual clinical settings to observe, assess, and develop relational capacity.

Clinical simulations provide an opportunity for teachers to develop their relational capacity along with a conceptual understanding of culturally responsive teaching. Thus, given these similarities in the work of teachers and doctors and the history of cross-professional pedagogies in teacher education, it seems reasonable to look at the design principles that have guided the design and use of SPEs for cultural competence in medical education. In the next section of this paper, I ask what teacher educators can learn from medical educators about how to effectively design and use clinical simulations for culturally responsive teaching. In response, I identify three design principles from SPEs for cultural competence that can guide teacher educators.

Design Principles from the Medical Literature

Clinical simulations, like SPEs, are designed learning environments. Sandoval (2014) argued that designed learning environments embody conjectures about learning and instruction and that the empirical study of them can allow for those conjectures to be refined. Each detail of a simulation – the physical appearance of the actor, including body language; the verbal cues and responses provided to the actors; the details provided to

participants beforehand and those left out – represents a conjecture about how to help participants reach a specified learning objective. In this section, I will present a set of three principles about how to design and use clinical simulations for culturally responsive teaching. I refer to them as design principles because they are high-level conjectures (Sandoval, 2014) or meta-principles (Kali, 2006) that result from my analysis of the medical education literature on designing and using SPEs to prepare doctors for cultural competence. From this point forward in the paper, for purposes of concision, I will refer to clinical simulations for culturally responsive teaching simply as SIMs. I will differentiate when referring to clinical simulations for common problems of practice.

For my first analysis, I asked, What can teacher educators learn from medical educators about how to effectively design and use SIMs? To answer this question, I reviewed the existing literature on SPEs for cultural competence. I selected both scholarly articles from PubMed that included general descriptions of SPEs for cultural competence as well as peer-reviewed educational materials from MedEd PORTAL that specified objectives related to cultural competence. I looked for patterns in the design of the SPEs, then categorized them under big meta-principles, and finally connected each to the relevant part of the simulation cycle. I then looked at how these design principles differed from those in the existing literature on clinical simulations in teacher education.

In this section, I identify three core principles related to the simulation encounter, cycle, and context in the design and use of SPEs to prepare doctors to be culturally competent (see Table 1). Here, *simulation encounter* refers to the particular scenario being simulated. Medical educators often refer to this as the case, but I use the term encounter to refer to the written case materials as well as the actual interaction. When referring only to

written materials provided to the teachers to prepare for the encounter, I note that. Simulation cycle refers to a cycle of instructional tasks (for example, reading and responding to the written materials beforehand, participating in a group debrief after), of which the encounter is but one, that are necessary to support teachers' learning from the simulation (see Figure 1). I call it a cycle because these instructional tasks are typically repeated for each simulation encounter, wherein the debrief from one simulation informs how teachers read and respond to the written materials in the next simulation. Simulation context refers to the educational setting in which the encounter is embedded (ie. the course or particular teacher preparation program). Together, these parts comprise a clinical simulation to support particular kinds of teacher learning.

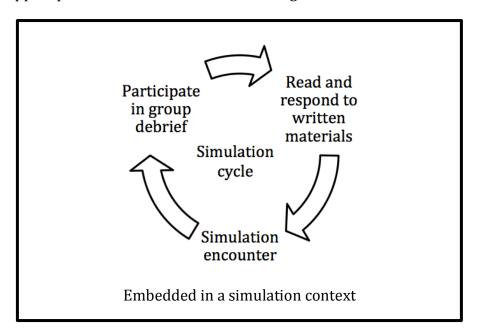


Figure 1. Parts of a clinical simulation. Clinical simulations writ large are comprised of the encounter, which is one part of a cycle of instructional tasks, all of which are embedded in a particular educational context. The parts of the simulations work together shape teachers' opportunities to learn from the simulation.

For each design principle, I begin by briefly explaining how it builds on existing research on designing and using clinical simulations for common problems of practice. I

then provide evidence of how it has been applied to design SPEs for cultural competence in medical education and explain how these principles may guide the design and use of SIMs as a promising approach to address the challenges of preparing culturally responsive teachers.

Table 1

Design Principles to Guide Teacher Educators' Design and Use of SIMs Derived from SPEs for Cultural Competence

Design principle	What it looks like in education
Be specific (in the simulation encounter).	Situate the needs and resources of a specific
	cultural group in a common problem of
	practice.
Make sense (in the simulation cycle).	Support teachers' sensemaking by helping
	them uncover and explore their feelings,
	assumptions, and actions in the encounter.
Look at the big picture (in the simulation	Use SIMs for formative assessment as part
context).	of a comprehensive cultural responsiveness
	curriculum.

Design Principle #1: Be Specific (in the Simulation Encounter)

Teacher educators typically begin designing clinical simulations by developing an encounter based on the kind of learning they want to support. Some of the only published encounters in teacher education come from Dotger (2013), and they focus on common problems of practice. In this set of encounters, Dotger noted that he did not specify much of students' and parents' cultural backgrounds, although socioeconomic status and disability are notably present. SIMs share many design principles with those published encounters, in that they are set in common problems of practice, but they are more specific because they situate the needs and resources of a particular cultural group within the problem of practice.

How this is applied in medical education. SPEs to develop cultural competence tend to situate a culturally specific healthcare situation within a common clinical situation. For example, Aeder et al. (2007) described twelve cases used in an objective structured clinical exam (OSCE) focused on cultural competence, including requesting informed consent on a pediatric patient for blood transfusion with Jehovah's witnesses, discussing suspicions of child abuse with an Orthodox Jewish family, and requesting consent for an autopsy of a child from a Pakistani family. In each of these cases, the pediatrician was doing something that is common in their work – requesting parental consent to treat a minor, investigating a case of possible child abuse, requesting consent for an autopsy. But each of the situations necessitated some cross-cultural clinical skill – the knowledge and skill to identify health practices and beliefs that are important in a specific local community, or an attitude that acknowledges their own biases in these situations and demonstrates respect for the patient's cultural and health beliefs - identified by the American Association of Medical Colleges (AAMC) as necessary for cultural competence (2005). When medical educators contextualize common clinical scenarios within a particular cultural group, they remind doctors that cultural competence is a necessary part of their work within the "hard" or "real" science of medicine rather than as a "soft science," which can lead to complacency (Kai, Spencer, Wilkes, & Gill, 1999; Shapiro, Lie, Gutierrez, & Zhuang, 2006). This reminder often comes in summative, cross-disciplinary OSCEs because doctors are less likely to come prepared to respond to culturally-specific scenarios than when participating in an encounter that is explicitly part of the cultural competence curriculum (Lewis, Lamdan, Wald, & Curtis, 2006).

SPEs for cultural competence generally draw on specific knowledge of a cultural group – Jehovah's witnesses, Orthodox Jews, Pakistani families in the examples above – to help doctors learn about larger concepts. For example, Morell, Sharp, and Crandall (2002) described a simulation that focused on the concept of cross-cultural communication in a way that was not limited to verbal communication. The simulation featured a Cherokee Indian woman, "Mrs. Crowe," who had recently located to the city from a nearby reservation and suffered from abnormal menstrual bleeding. In addition to other cultural practices, the authors integrated Cherokee communication patterns "such as avoiding eye contact with the interviewer, offering concise answers to questions without elaboration, varying little intonation when answering questions, and giving long pauses in conversation," cues that led many of the third-year medical students to assume she was depressed (Morell et al., 2002, p. 532). Once provided with culturally-specific information, students viewed Mrs. Crowe differently. The encounter was developed after several failed efforts to convince students of the need to improve their cultural competency. The standardized patients were used in actual ambulatory clinic settings, unbeknownst to the students. The design was an iteration of prior efforts by faculty in the department, through video case-based learning and lecture, to help students become aware of their need to improve their cultural competency, but the SPE provided a firsthand experience in a setting where the medical students' inadequacies could be exposed and then addressed in a safe, supportive environment. Moreover, the medical students could not really make sense of the encounter without specific knowledge of Cherokee communication patterns, which helped the medical students learn the concept of cross-cultural communication. That is, they learned not only the communication patterns of Cherokee patients like Mrs. Crowe, but

developed a better understanding of the concept of cross-cultural communication, both verbal and non-verbal, and how it is relevant to effectively treating a patient.

While culturally specific information could lead to overgeneralization rather than conceptual understanding, medical educators have dealt with these concerns by creating multiple versions of a case. Rosen et al. (2004) described six cases in their article that provided students with opportunities to practice cultural competency skills, and two of the cases had multiple versions. One of these cases was a middle-aged man who presents with exacerbation of chronic asthma. The man does not have a clear understanding of the cause of his asthma, and this leads to inadequate preventative treatment resulting in recurrent exacerbations. The case can be presented as a Bedouin man who sits with other men in the evening and smokes cigarettes and does not want to change his lifestyle for fear of losing his status and masculinity. The case may also be presented as a Bulgarian foreign laborer who is asthmatic but continues working because he is afraid of losing his job. A final version of this case can be presented as a stressed computer programmer who does not want to be labeled an asthmatic and has been using (unsuccessfully) numerous complementary medications. Each of the cases has the same problem of practice – a patient who is having trouble managing a chronic health condition because he does not understand what causes it. But the cultural specifics of each case remind doctors that a "one-size-fitsall" approach may not be effective in treating patients, which supports a conceptual understanding of culturally competent healthcare.

How it can guide teacher educators. SIMs that situate the needs and resources of particular cultural groups in common problems of practice may provide similar opportunities for teachers. Whereas Dotger's encounters focus on Barrow's (1987) tenets

of prevalence, instructional importance, clinical impact, and social impact, SIMs often blur the lines of these tenets. Teachers may at first see them as a common problem of practice (i.e., prevalent) but in fact the design may focus more on social impact. The written materials given to the teacher may help frame the situation as one of cultural impact, but only if the teacher is looking with a "cultural eye," or looking at the situation from the culturally-situated perspective of the student, parent, or coworker (Irvine, 2003). By contextualizing common problems of practice with the particulars of a cultural group, teachers are more likely to recognize the role that culture plays in all facets of their teaching in a way that necessitates culturally responsive teaching. Moreover, they have a firsthand opportunity to recognize the potential dangers in taking a culture blind perspective on teaching. While debriefing is necessary to help teachers notice and reflect on their assumptions, the SIM gives them a compelling reason to do so because they recognize how a culture blind perspective can negatively affect actual students and teachers' relationships with them. Designing SIMs in this way also allows teachers to connect concepts in culturally responsive teaching with specific practices within a clearly defined context, while providing teacher educators with an opportunity to help teachers see how those specific practices might be potentially dangerous with different cultural specifics.

When teacher educators use culturally specific information in encounters, they can then draw on it to connect to larger concepts in culturally responsive teaching. Much of the literature that preceded culturally responsive and relevant pedagogies focused on providing teachers with culturally specific information about particular groups. For example, Boykin was one scholar who sought to provide educators with a "knowledge

base" on African American students in order to help them see the possible discontinuities that may exist between school life and home life (Boykin, 1994; Boykin, Tyler, & Miller, 2005). Cultural theorists have since turned away from this type of culturally specific knowledge in the literature due to overgeneralization; however, such knowledge is helpful when it is specific to a student. Other scholarship has focused on the schooled experiences of many of these subgroups, for example, stereotype threat among African American and female students in STEM classrooms (Steele, 1997), the model minority myth among Asian American students (Wing, 2007), bullying among students with disabilities and LGBTQ students (Robinson & Espelage, 2011; Swearer, Espelage, Vaillancourt, & Hymel, 2010), or identity issues among Muslim American students post 9/11 (Fine & Sirin, 2007). Knowing about these experiences can be especially pertinent in the relational aspects of work with students and their families, and SIMs would provide an opportunity for teachers to see how. For example, teachers could participate in an encounter designed to help them think about bullying. The cultural specifics of the student who is being bullied – for being gay, for wearing a headscarf, for speaking with a lisp – would not just educate teachers on the particular needs and resources of that cultural group but also help teachers understand how their response to the situation would depend at least in part on those specifics. Furthermore, multiple versions of such a case, if used with a group who can then compare and contrast their experiences, would underscore the importance of eliciting and responding to culturally specific knowledge while highlighting the larger concepts in culturally responsive teaching.

Design Principle #2: Make Sense (in the Simulation Cycle)

In addition to encounters, teacher educators using clinical simulations also design a cycle of instructional tasks around the simulation. This cycle may include responding to written materials before the encounter and participating in a group debrief after it (see Figure 2.1). What is included or excluded from the learning cycle determines in part what kinds of opportunities the clinical simulations provide for teachers. Dotger (2013) offers some guidance on debriefing in his published casebook, where he provides questions for a "raw" debrief immediately after the simulation and pre- and post-simulation teacher reflection guides that focus on the teacher's expectations, goals, strengths, areas for improvement, questions and concerns. SIMs, however, may require a particular form of debrief that helps teachers make sense of the simulation in a way that supports change in practice.

How it is applied in medical education. Medical educators have found that a particular model of debrief after simulation encounters supports the kind of learning that leads to change in practice, so it is a vital part of the simulation design. They call this model debriefing with good judgment. The model follows a sensemaking process: the medical educator tries to make sense of what the doctor did in the simulation with a "genuine report of puzzlement" and the medical student likewise tries to make sense of his own actions in the case (Rudolph, Simon, Dufresne, & Raemer, 2006; Rudolph, Simon, Rivard, Dufresne, & Raemer, 2007). The primary foci of the debrief, then, are the meanings and assumptions of both the medical educator and the medical student. Early debriefs were more corrective, and many medical educators used a judgmental "shame-and-blame" approach. Then, as the drawbacks to this became apparent, debriefs then evolved to a non-

judgmental approach. But while the non-judgmental approach removed the shame, it resulted in either softer judgment, sugar-coating errors, or the sense that mistakes were not discussible, which did not support doctors' learning.

In contrast to the "shame-and-blame" and non-judgment approaches, debriefing with good judgment allows the medical educator to identify an important problem and its clinical consequences. Through the process, the educator uncovers the medical student's frame, explores other students' frames, facilitates reframing, and then offers a new action to be used in future similar situations (Rudolph et al., 2006). In this process, frames are comprised of knowledge, feelings, and assumptions that filter, create, and apply meaning to one's perceived reality, which then shapes action. When medical students can uncover their own frames in an encounter, they likewise uncover the assumptions that led them to act in a certain way and can explore how additional knowledge or other assumptions may have led to different actions, and choose from among them in future encounters. Medical students participating in this debriefing model "feel both challenged," which they did not in the non-judgmental approach, "and psychologically safe enough to engage in rigorous reflection," which they could not in the "shame-and-blame" approach (Rudolph et al., 2007, pp. 361-362). This allowed them to make sense of the simulation in a way that supported their learning.

How it can guide teacher educators. Teacher educators can likewise support teachers in making sense of their simulations by debriefing with good judgment. Most notably, this model of debriefing involves teachers thinking about expectations and goals for the simulation and actions during the encounter in a way that surfaces deficit thinking models. For example, if a teacher in a conference with a multilingual parent encourages the parent

to speak more English at home as a means of supporting his struggling reader, the teacher educator can help uncover the knowledge and assumptions behind that recommendation and provide corrective feedback about English language development, supporting struggling readers, and engaging parents as partners. Alternatively, SIMs may help disrupt monolithic notions of particular cultural groups. For example, if a teacher goes into an encounter with the assumption that a recent immigrant parent in the interaction does not speak conversational English, the teacher educator can help uncover the intersectional nature of things like of nationality, socioeconomic status, and language. Moreover, teachers may problematize their own assumptions by exploring other teachers' frames and how the frames shaped their actions and then thinking about what they would do in the future. This way, teachers can makes sense of their own actions in the encounter as a consequence of their knowledge, feelings, and assumptions. Moreover, debriefing with good judgment includes questions that "bring to the surface and clarify the invisible sense-making process, the cognitive frames and the emotions that governed the trainee's actions" (Rudolph et al., 2006, p. 54). By positioning teachers as sense-makers and their emotions as part of the meaning making, teacher educators may minimize some of the defensiveness often seen when talking about issues of cultural diversity and equity with teachers and create an opportunity for learning and change.

Design Principle #3: Look at the Big Picture (in the Simulation Context)

Finally, clinical simulations will not replace all other cultural responsiveness curriculum in teacher education but supplement it. While Dotger (2013) provides no guidance on how to situate certain encounters in a course or program, SIMs must be carefully designed with the overall curriculum to address the theory-practice gap. As such,

teacher educators must look at the big picture in terms of curriculum design when using SIMs. The design of the overall curriculum, of which simulations are just one part, is what ultimately supports teachers' learning.

How it is applied in medical education. SPEs can be an essential part of developing doctors' cultural competence, but they are most useful within a comprehensive cultural competence curriculum. Medical educators make efforts in the larger curriculum to make students aware of their own culture as well as sociocultural influences on health and health care (Green, Betancourt, & Carrillo, 2002; Kai et al., 1999; Wear, 2003), focus on core cultural issues so medical students will know what kinds of cultural beliefs they should explore with patients (Carrillo, Green, & Betancourt, 1999; Rapp, 2006; Tervalon, 2003), and provide cultural immersion and clinical experiences with culturally and linguistically diverse patient populations (Godkin, Ferguson, & Diop, 2002; Godkin & Savageau, 2001). Therefore, medical educators select carefully when to use SPEs rather than other curricular methods. For example, medical educators have often used SPEs to prepare doctors for encounters that are clinically important but not prevalent (ie., disclosing a medical error), while allowing them to encounter other lower-stakes situations that are common in actual healthcare settings.

Within the larger curriculum, medical education has historically used SPEs as a summative assessment, but it has more recently moved towards using encounters formatively when focusing on cultural competence. SPEs for cultural competence often help doctors recognize their bias and assumptions or self-assess their knowledge and skills related to a particular cultural group. When Miller and Green (2007) conducted semi-structured interviews with second-year medical students who had completed a cultural

competence encounter as part of a four-station OSCE, they found that through the encounters, students came to recognize their own narrow assumptions about the patient's non-adherence to medication, moving too quickly to the counseling mode rather than exploring her social and cultural reasons for not taking the medicine. The encounter also served as a self-assessment for medical students who realized they were aware of these assumptions but did not know how to provide culturally competent care in place of their existing deficit model. Eckstrand, Rawn, and Lomis (2012) found that their case of a 40-year-old lesbian woman in for a well-woman exam functioned as a critical incident for students who had not previously thought about how a patient's sexual orientation might be relevant to sexual history taking and counseling. For those who had, it was an opportunity to practice, and for the faculty, it was an opportunity to assess their own curricular efforts around LGBTI healthcare disparities.

How it can guide teacher educators. Teacher education already has a variety of similar approaches that appear to be necessary, but not sufficient, to solving the challenges of preparing culturally responsive teachers. SIMs could contribute to a comprehensive curriculum, but only if they are used intentionally. Using simulations as part of a multifaceted curriculum that includes fieldwork also helps communicate to teachers that cultural responsiveness goes beyond the micro-contexts provided in the simulations.

Research in teacher education needs to specify when, how, and for what learning objectives to use clinical simulation so that they support the larger curricular efforts in a teacher preparation program.

Within a comprehensive cultural responsiveness curriculum, SIMs would likewise better be used as a formative than a summative assessment. Cultural responsiveness in

teacher education is conceived of as more dynamic and contextual and has not been well operationalized (Grossman & McDonald, 2008). Using simulations as a summative assessment suggests to teachers that there is *a* right way to approach a given scenario rather than more or less productive practices and conceptual framings that are responsive within the context of the situation. A simulation in cultural responsiveness could only serve as a meaningful summative assessment if paired with a reflection that situated practices and concepts within the context of the situation. Moreover, cultural responsiveness is multidimensional. It is not effective if only enacted in particular instances like those that can be simulated. By assessing a teacher based solely on a ten-minute simulation, teachers may misconceive responsiveness as limited to such interactions, rather than as a stance that is ongoing in the work of teaching. Because teachers' work is primarily located in interactions beyond that which can be simulated, it is essential that clinical simulations not be a summative assessment for preparedness to enact culturally responsive teaching.

The three design principles identified in this section were derived from the medical literature on SPEs for cultural competence and "difficult conversations." I argue that these principles can guide teacher educators in using clinical simulations to prepare culturally responsive teachers because of the similarities in relational work of teachers and doctors. Moreover, these principles address the challenges of preparing culturally responsive teachers (see Table 2). In addition to the challenges listed, the learning that happens from a simulation, in a course, during a program, and over time and teachings settings as a result of the SIMs provides an opportunity to conduct rigorous research on how teachers acquire the skills to be effective with culturally and linguistically diverse students, addressing the third challenge described in the Introduction.

Table 2

Design Principles and How They Address Challenges of Preparing Culturally Responsive Teachers

Design principle	What it look like in education	How it addresses challenges
Be specific (in the simulation encounter).	Situate the needs and resources of a specific cultural group in a common problem of practice.	 Shows that culturally responsive teaching is a necessary part of the everyday work of teachers Pushes back against culturally blind perspectives Helps teachers connect specific practices in a particular context to larger concepts
Make sense (in the simulation cycle).	Support teachers' sensemaking by helping them uncover and explore their feelings, assumptions, and actions in the encounter.	 Surfaces deficit thinking models Disrupts monolithic notions of particular cultural groups
Look at the big picture (in the simulation context).	Use SIMs for formative assessment as part of a comprehensive cultural responsiveness curriculum.	 Spurs teachers to want to learn about culturally responsive teaching Avoids an overemphasis on teacher practice or an overly simplistic understanding of the theory

SIMs are, however, an adaptation of signature pedagogy, which means they must be changed to fit the context of teacher education. In the next section, I ask how differences in the relational work of teachers and doctors are relevant to the design and use of clinical simulations. I then propose an additional three design principles in response to these differences.

Design Principles from Differences in the Professions

While teacher educators should retain certain aspects of the SPE, clinical simulations in teacher education must account for the differences in the interactional work

of teachers and doctors. In the second part of my analysis, I asked, How are differences in the relational work of teachers and doctors relevant to the design and use of clinical simulations? To answer this question, I conducted a review of sociological and cross-professional literature on the relational aspects of teachers and doctors (Self, 2014). From that literature, I identified major differences in the work that would limit the authenticity of clinical simulations in teacher education as an approximation of practice and considered how clinical simulations might be re-designed from SPEs in a way that addresses that limitation. Here, I submit three design principles derived from important differences in the relational work of teachers and doctors as relevant to clinical simulations (see Table 3). In some instances these differences are not about binary differences (ie. what is done or not done) but more nuanced differences in how doctors and patients relate to one another compared with how teachers develop relationships with students and their parents. In this section, for each design principle, I make a claim about the relational work of teaching and then contrast it with that of doctors.

Table 3

Design Principles to Guide Teacher Educators' Design and Use of SIMs Derived from Differences in the Relational Work of Teachers and Doctors

Design principle	What it looks like in education	
Trust no one (in the simulation encounter).	Create scenarios in which teachers must	
	work to develop or maintain a trusting	
	relationship.	
Think long term (in the simulation cycle).	Provide opportunities in the debrief to think	
	about what would have come before and	
	would follow the interaction that was	
	simulated in the encounter.	
Share a vision (in the simulation context).	Give teachers a vision of what "good"	
	teaching looks like as culturally responsive	
	teachers in this simulation and in today's	
	school broadly.	

Design Principle #4: Trust No One (in the Simulation Encounter)

Teachers, more so than doctors, need to experience mistrust from their students and parents in clinical simulations, especially in interactions with those from marginalized communities.

Trust in the work of teachers. Many students and families begin their relationships with teachers with little trust. This mistrust is the result of the compulsory nature of education in the U.S., the invisibility of expertise in teaching (Ball & Forzani, 2009), and the ability of parents and students to openly questions teachers' professional judgment because of the lack of a shared, technical language (Grossman & McDonald, 2008; Jackson, 1968; Lortie, 1975). Trust can be even harder to gain when teachers do not share the cultural background of their student or parents. When teachers are given opportunities to experience this mistrust, they have an opportunity to look at the situation from the perspective of their students and parents and see the cultural aspects of an interaction they may otherwise have been blind to. Taking this perspective of the student or parent and with larger social issues in mind helps them see why those individuals may begin relationships with teachers with low levels of trust and better learn how to develop them.

Trust in the work of doctors. Unlike many teachers, doctors continue to enjoy high levels of trust from their patients, despite stated concerns of the contrary. The National Opinion Research Council (NORC) General Social Survey has consistently reported doctors as among the highest ranked professionals based on this measure (Nakao & Treas, 1994). Even Americans' waning confidence in the health care system itself has not affected their high level of respect for doctors. A fifty-year retrospective revealed that there has been virtually no change in Americans' perception of doctors' honesty and ethical standards

(Blendon & Benson, 2001). And though some doctors have feared that internet-based professional knowledge (e.g. WebMD) may provide challenges to their authority, the most recent research suggests that "even though the Internet may strengthen people's ability to question health professionals … people who obtain health information on the Internet still need to contact health professionals to make sense of and make use of the information," in a sense reasserting doctors as the ultimate experts (Lee, 2008, p. 461). As a result of high levels of trust, most doctors begin their relationship with patients already afforded respect for their expertise. Rehman, Nietert, Cope, and Kilpatrick (2005) found that just wearing a white coat — a physical embodiment of the public's perception of what a doctor looks like — is associated with patient's trust and confidence in their physician.

Thus, while trust is an important part of the doctor-patient relationship, it often begins with a higher level of trust. SPEs often include scenarios in which doctors may lose their patient's trust, but clinical simulations would better prepare teachers for the work of teaching with mistrust at the onset of the interaction. In doing so, teachers have an opportunity to feel the discomfort that stems from this mistrust and find practices to develop and maintain trust with the student, parent, and larger social context in mind.

Design Principle #5: Think Long Term (in the Simulation Cycle)

Relational work in teaching occurs over longer timescales than in medicine, and it is important that teachers recognize that even while participating in clinical simulations that provide ten- to thirty-minute interactions.

Timescales in teaching. Culturally responsive teachers are learning about their students, families, and communities each day, doing the things necessary to establish trust and develop relationships with them. Teachers usually have that information available to

them going into an encounter like those being simulated. They have some sense of what it is like to share a space and have a conversation with the individual on the other side of simulation in a way that cannot be fully accounted for in written materials. Clinical simulations in teaching that have been published up to this point are often set in the first nine weeks of the school year or in an initial encounter with someone like a coworker for this very reason (Dotger, 2013). Furthermore, teachers will continue to have an ongoing relationships with these individuals following the encounter, seeing these individuals daily or connecting with them periodically about a student they see daily. As a result, written materials should be given to teachers at least a week before a simulation occurs in order to provide participants with time to both pose questions they think are important to their preparation for it of it as well as consider what their relationship with this individual might have looked like, in ways the materials do not address, that will inform how they approach the case. In addition to what comes before the simulation, clinical simulations in teaching may differ in what happens after in the simulation cycle. Teacher educators can help teachers think about steps they might take with their students, families, and coworkers if such a situation were to occur. Teachers can talk about what they think they would have known going in that they did not, given a real life situation, and where that information would have come from, allowing them to think through potential resources for gathering information to inform their relational work. Teacher educators should be careful not to communicate that careful planning can eliminate all cultural conflict or potential missteps, but simply help students see how they might gather information before such a situation arises or how a multidimensional approach to culturally responsive teaching can help them when conflict does inevitably arise. In addition, teacher educators are able to help teachers

set realistic expectations for what working in schools is like, when bureaucratic systems sometimes slow or limit the information available to teachers prior to beginning work. In the same vein, teacher educators should guide students in thinking about how they would follow up on the simulation afterwards, if this were to occur in a real situation. This approach to the debrief provides natural extensions that help reinforce the ongoing nature of culturally responsive teaching. In cases where the teacher has poorly responded in the scenario, teacher educators can coach their teachers through a kind of damage control, especially when they have committed cultural microaggressions or handled a situation in an unproductive way. In doing so, teacher educators and teachers expand the ten-minute simulation to more closely approximate the actual work of teaching, with relationships that develop over a much longer timescale than what can be simulated.

Timescales in medicine. Referencing the longer timescale with teachers is also important because it acknowledges the lower level of authenticity in clinical simulations than in SPEs. Authenticity is necessary in SPEs in medicine in order for physicians to suspend disbelief and engage in the encounter in a way that reflects their usual practice. Physicians with more expertise, for example attending physicians in technical subspecialties, often require more authentic experiences than do novice physicians with less expertise, for example a resident intern in general medicine. Moreover, most SPEs are of an initial interaction between doctor and patient. There are some exceptions. For example, Freer and Zinnerstrom (2001) described one such case of a middle-aged woman with bloody stool. Over the course of six visits, she learns she has colon cancer and receives chemotherapy, the cancer recurs, and she is counseled on end-of-life management and palliative care. Each visit, the medical student is incorporating new knowledge and skills

related to patient's prognosis, but he is also building on prior knowledge of the patient and her cultural background in order to develop a relationship. Nonetheless, the doctor and patient begin their relationship in simulation, not in a hypothetical timescale that came before the simulation encounter.

Thus, because clinical simulations cannot approximate the relational work of teaching as well in terms of the timescale, they do not necessarily require a high level of authenticity, though it is a consideration in case design. In his published cases of common problems of practice, Dotger (2015) writes, "Ultimately, the authenticity factor – how closely a simulation mirrors a scholastic problem of practice – services as the final litmus test for whether or not a simulation is brought to fruition" (p. 216). SIMs often fail the authenticity test, though, because the time and space of the relational work of teaching is asynchronous with the simulation setting. I posit that the litmus test for a SIM is not necessarily authenticity, but representativeness – that is, does the simulation accurately represent the needs and concerns of cultural group in a situation that teachers are likely to encounter in their work. By repeatedly referring teachers to a longer timescale in a representative case – before, during, and after the simulation – teachers have an opportunity to develop practices and concepts related to of culturally responsive teaching with that longer timescale in mind.

Design Principle #6: Share a Vision (in the Simulation Context)

Teaching as a profession is less standardized than medicine, with less consensus on what "good" practice looks like, especially related to culturally responsive teaching. As a result, it is necessary to situate clinical simulations for cultural responsiveness within a cohesive vision of cultural responsiveness so that teachers have a way to develop

professional judgment and reflect on specific practices in context from a pedagogically defensible position. This often means providing teachers with a vision of what a "better" version of a simulation might have looked like in order for them to connect theory and practice in this particular context.

Visions of "good" teaching. "Good" teaching is difficult to define in teaching because it is related to educational outcomes, around which there is little consensus in the United States. Biesta (2007) argued:

Evidence-based education seems to favor a technocratic model in which it is assumed that the only relevant research questions are questions about the effectiveness of educational means and techniques, forgetting, among other things, that what counts as 'effective' crucially depends on judgments about what is educationally desirable...The focus on 'what works' makes it difficult if not impossible to ask the questions of what it should work for and who should have a say in determining the latter. (p. 5)

Hence, the practice of teaching has found it difficult to standardize because there is still a lack of a clear purpose and, moreover, a lack of consensus about what contributes to teachers' "good"-ness or "effectiveness" with any given definition. The lack of consensus also results from teaching as a field that is externally governed, subject to the mandates and imperatives from both local stakeholders – like parents and community members – as well as higher levels of bureaucracy like the federal government. Stakeholders can claim their "right" to place demands, whether small or large, on those providing public education. The result, according to Day, Fernandez, Hauge, and Muller (2000), is that "energies are often focused on simply coping with change and keeping up with new developments, so

inhibiting teachers from creative and risk-taking pedagogic endeavors" (p. 4). In the end, teachers may end up overworked but still deemed ineffective because of their need to respond to constant, changing, sometimes conflicting needs and wants by different stakeholders. SIMs then become opportunities to help teachers put the ideologies of cultural responsiveness in direct contact with the real-world realities of teaching and provide an opportunity, within the larger curriculum, to navigate that tension. Clinical simulations alone cannot do this, as teachers may feel like they are having to defend a policy, for example related to grading, that is not aligned with the ideologies put forth in the university classroom. The larger curriculum becomes a place to understand how these policies came to be and develop a sense of how to make sense of them from the perspective of a responsive teacher. Such a conversation is only possible, however, with a clear vision of what "good" teaching looks like.

"Best practices" in medicine. Doctors, on the other hand, have standards of care to help develop their professional judgment. These standards were established by doctors themselves, as they are self-governed. (This governing body also provides standards for cultural competence, as in the 2005 Cultural Competence Curriculum from AAMC, which serves as a vision of culturally competent care in medical education.) Standards of care have led to the development of "best practices" or "clinical practice guidelines" in practice and legal definitions of "minimally competent care." In addition, standards of care are used by doctors to hold one another accountable in morbidity and mortality conferences, in which doctors learn together from mistakes during the care of patients, and by patients in malpractice suits. While there has been somewhat less consensus in recent years about the goals of healthcare, in a move from morbidity and mortality as the sole focus to one more

broadly on quality of life and patient satisfaction, the general sense among most laypeople outside of the medical field is that if at the end "the patient is returned to health, that is all that matters" (Tapper, 2010, p. 399). Thus, doctors approach SPEs with some sense of what is expected of them based on clinical guidelines and standards of care.

Because there is less standardization in teaching, teachers need a vision of what "good" teaching looks like in the context of a particular clinical simulation. This vision may stem from a programmatic focus (ie. preparing teachers for urban schools), the focus of the course in which the simulation is being used (ie. a social studies literacies course), or even a practice-based focus within a particular course (ie. eliciting student thinking). Without such a focus, teachers do not have a sense of the purpose of the simulation. SIMs therefore need to give teachers a clear vision of what "good" culturally responsive teaching looks like in the larger curriculum in order for them to develop professional judgment that allows them to hold themselves, their coworkers, and the schools and systems in which they teach accountable to it. Moreover, it gives them an opportunity to see how "good" culturally responsive teaching naturally aligns with effective academic instruction (Stengel & Casey, 2013).

Discussion

This set of six design principles provides a starting place from which teacher educators can design and use SIMs in order to address both the challenges of preparing culturally responsive teachers as well as differences in the relational work of teachers and doctors (see Table 4). Many of these principles need further refinement to serve as a practical guide for teacher educators. For example, Design Principle #1 tells teacher educators to *be specific* in the particulars of a cultural group that are situated in the

Meta-Principles to Guide Teacher Educators' Design and Use of SIMs

Table 4

In the SIM	Design principle	What it looks like in education	What it does
Encounter	Be specific.	Situate the needs and resources of a specific cultural group in a common problem of practice.	 Shows that culturally responsive teaching is a necessary part of the everyday work of teachers Pushes back against culturally blind perspectives Helps teachers connect specific practices in a particular context to larger concepts
unter	Trust no one.	Create scenarios in which teachers must work to develop or maintain a trusting relationship.	 Compensates for the differences in the nature of trust building in the relational work of teachers and doctors Underscores the importance of building and maintaining trusting relationships as central to the work of culturally responsive teaching
	Make sense.	Support teachers' sensemaking by helping them uncover and explore their feelings, assumptions, and actions in the encounter.	Surfaces deficit thinking modelsDisrupts monolithic notions of particular cultural groups
Cycle	Think long term.	Provide opportunities in the debrief to think about what would have come before and would follow the interaction that was simulated in the encounter.	 Addresses the differences in timescales in the relational work of teachers and doctors Emphasizes that interactions like the SIM are only one facet of culturally responsive teaching

Context	Co	Look at the big picture.	Use SIMs for formative assessment as part of a comprehensive cultural responsiveness curriculum.	 Spurs teachers to want to learn about culturally responsive teaching Avoids an overemphasis on teacher practice or an overly simplistic understanding of the theory
	ntext	Share a vision.	Give teachers a vision of what "good" teaching looks like as culturally responsive teachers in this simulation and in today's school broadly.	 Makes up for the differences in the level of standardization in the work of teachers and doctors Allows teachers to see how culturally responsive teaching aligns with effective academic instruction

common problem of practice. In the SIMs I have designed and used in my own work, this includes specifying in the Teacher Interaction Protocol (TIP) the sex, age, race, SES, grade, and GPA of a student. I specify by name what local school the student attends so that teachers have the opportunity to learn about the geographic area where the school is located and the demographic makeup of the school if they so choose. In the Standardized Student Interaction Protocol (SSIP), I give the actors not just this information but also the student's feelings about school and this teacher, personal interests, and family. Even if this information does not come up in the interaction, it gives the actor a sense of who this student is in order to portray the role. This level of specificity is important to get at the needs and resources of a particular student. A 15-year-old, Latino student who was born and raised in the U.S. is not the same as a 15-year-old, Latino student who immigrated to the U.S. five weeks ago. A second-generation immigrant student in a mixed-status family is not the same as a second-generation immigrant student whose parents are naturalized citizens. An immigrant student in a town with little ethnic diversity is not the same as an immigrant student in a city with a large refugee community. A 15-year-old 10th-grade student is not the same as a 15-year-old 8th-grade student. All of these differences affect the needs and resources of the student, how he might feel about school and his teachers, and how she might see herself within a classroom, school, or the larger society. When teachers have this information available to them in the TIP, it pushes back against culturally blind perspectives – the notion that "kids are kids" – as well as monolithic notions of particular cultural groups. When situated in a common problem of practice, teachers recognize the need to be responsive not just to a student in order address the larger problem, but also

learn how to be responsive to *this* student in a way that helps them connect specific practices with larger concepts.

Further work with clinical simulations can help refine these meta-principles to better guide teacher educators. For example, how specific does a TIP/SSIP have to be in order to reach certain objectives of a SIM? Can some of the specifics be changed without it becoming essentially a new simulation? Which ones? In which SIMs? Do teachers with different backgrounds or different simulation contexts need more or less specifics in their TIP to support the objectives of a SIM? These questions will ultimately be important to ensure that SIMs address the challenges that teacher educators have in preparing culturally responsive teachers.

Conclusion

In this paper, I have proposed a set of design principles related to the simulation encounter, the cycle, and the context to guide the design and use of SIMs. These design principles were derived in part from the medical literature on SPEs but also from important differences in the relational work of doctors and teachers. By learning from the medical education literature on SPEs for cultural competence, but adapting for the differences in the relational work of doctors and teachers, I argue that clinical simulations are a promising approach to preparing culturally responsive teachers.

Only through further research on clinical simulations through cycles of design and revision will teacher educators learn how simulations can support teachers to be culturally responsive and in what ways. These design principles, however, are a strong starting point from which to begin that work.

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CHAPTER III

"I WILL JUST BE A LOT MORE AWARE": WHAT PRESERVICE TEACHERS CAN LEARN FROM
CLINICAL SIMULATIONS FOR CULTURALLY RESPONSIVE TEACHING

Introduction

Over the last decade, teacher educators have focused on preparing teachers to be responsive to an increasingly diverse student population but have faced a variety of challenges. One such challenge is the lack of consensus about the most effective ways to prepare culturally responsive teachers. Although there have been studies on courses (Causey, Thomas, & Armento, 2000; Cho & DeCastro-Ambrosetti, 2005; Finney & Orr, 1995; Weisman & Garza, 2002) and programs (Ladson-Billings, 2001; Sleeter, 2000, 2001; Sleeter & Milner, 2011), little of the research focuses on which strategies prepare strong teachers. Thus, while we know a great deal about effective teaching practices for diverse students, we still know little about how effective teachers acquire the skills, knowledge, and dispositions needed for success (Hollins & Guzman, 2005). Clinical simulations, modeled on standardized patient encounters from medical education, hold promise as a solution to the challenges faced by teacher educators in preparing culturally responsive teachers. Clinical simulations are a form of enactment in which preservice teachers interact with actors who play the part of a student, parent, or coworker. In clinical simulations for culturally responsive teaching, preservice teachers encounter a common situation in teaching that requires them to see themselves and their students as cultural beings and to situate the interaction in a larger social context. As preservice teachers participate in these simulations, they are provided with opportunities to "explor[e] the complexities of teaching and nuanced intellectual work that undergirds pedagogical practices" that are part of culturally responsive teaching (Ladson-Billings, 2006, p. 29).

Unlike standardized patient encounters in medical education, clinical simulations are relatively new in teacher education, and little is known about the kind of learning they support. Dotger (2010, 2015) has written about the ways in which clinical simulations can be designed and used to support preservice teachers to develop dispositions and shape teacher identity. However, no published literature to date examines whether clinical simulations can be designed and used to support learning related to culturally responsive teaching. This paper seeks to examine what preservice teachers can learn from clinical simulations for culturally responsive teaching and what type of learning the simulation can support for preservice teachers with different starting points with respect to their own cultural identity. In this paper, I ask two questions. First, What can preservice teachers learn from clinical simulations for culturally responsive teaching? Second, How does learning vary among teachers in the same course? I argue that clinical simulations for culturally responsive teaching can support preservice teachers in learning to see themselves and their students as cultural beings within a larger social context, while simultaneously developing practices that are situated within a rich conceptual understanding of culturally responsive teaching. However, what teachers learn varies, especially with respect to their own cultural identity development. Moreover, I find that while teachers may talk about their vision of culturally responsive teaching using similar terms – often as "being more aware" and "asking questions" – the way they explain the usefulness of particular practices reveals where teachers are in terms of their development of their overall conceptions of the pedagogy.

In the first section of this paper, I provide a conceptual framework for how preservice teachers learn culturally responsive teaching and explicate the learning conjectures that shaped my design and use of clinical simulations for this purpose. Then, I provide an overview of the focal simulation for this analysis. Finally, I present my analysis of preservice teachers' learning from this simulation for culturally responsive teaching and consider the implications of the findings for teacher education broadly and the design and use of this tool specifically.

How Preservice Teachers Learn Culturally Responsive Teaching

As a designed learning environment, clinical simulations embody conjectures about learning and instruction. Conjectures about instruction take the form of design conjectures about how to support learning, which "are themselves based on theoretical conjectures of how learning occurs in specific domains" (Sandoval, 2004, p. 215). These latter conjectures together form a hypothetical learning trajectory that can be empirically refined. In this section, I describe a hypothetical trajectory for developing cultural responsiveness in preservice teachers. This initial learning trajectory came from a review of literature on preparing teachers for culturally responsive teaching and related frameworks in the psychological literature for developing cultural and intercultural competence. In this study, therefore, I sought not only to refine the design and use of clinical simulations, but also the hypothetical trajectory for developing preservice teachers' emergent responsiveness. This trajectory includes three components: (1) developing culturally consciousness, (2) becoming cultural competent, and (3) practicing critical reflection (see Table 1 for a summary). The components function not as pieces of a complete whole that are added to piece by piece, but as strands of a braid that strengthen over time individually and that,

when woven together, represent a stronger, more effective approach to teaching than would just one component.

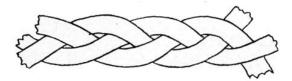


Figure 1. Graphic of a three-strand braid representative of the three components of culturally responsive teaching. When teachers develop and weave together cultural consciousness, cultural competence, and critical reflection, they are able to enact culturaly responsive teaching.

This hypothetical learning trajectory describes the changes necessary for preservice teachers to develop emergent responsiveness. However, while I use the term learning *trajectory*, the term itself obscures the nature of the learning. The terms *trajectory*, or learning *progression* as it is called in science education, both suggest a more linear form of learning than what is likely occurring and "necessarily hide[] the multiplicity of pathways and forms of interaction" that lead to the learning (Lehrer & Schauble, 2015, p. 436). While some preservice teachers become culturally conscious first, then develop cultural competence, and then reflect critically, teachers may develop cultural responsiveness through other interactions of these components. For example, a teacher may reflect critically on an interaction with a student in a way that supports his cultural consciousness in future encounters. In addition, Philip (2011) found that teachers do not necessarily develop cultural responsiveness as a whole but rather "in pieces" that come together over time. A learning trajectory is then "neither a stage theory nor a prescriptive summary of how students *should* think" (Lehrer & Schauble, 2015, p. 435). It is my goal in refining this hypothetical trajectory through the use of clinical simulations to make it useful for the purposes of documenting changes in preservice teachers in licensure programs in order to

plan instruction. Moreover, it is my intent that a further refined version of this hypothetical trajectory, and a learning trajectory of culturally responsive teaching writ large across preand in-service teaching, may serve as a "form of trading zone, in which professional pursuing different but overlapping goals may orient their efforts toward enhancing the development of student thinking" (Lehrer & Schauble, p. 436).

Three Components of Culturally Responsive Teaching and How Teachers Apply Them

Table 1

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Components	How teachers apply them
Cultural consciousness	Teacher views herself, her students, and society through a cultural lens and is mindful of assumptions that shape those views
Cultural competence	Teacher recognizes what he does not know but needs to in order to effectively teach his students, particularly related to the contexts in which he teaches and in which his students live, and ability to elicit it
Critical reflection	Teacher evaluates a situation and her own teaching through a cultural lens

Developing cultural consciousness. One component of developing cultural responsiveness is becoming culturally conscious. I use the term *cultural consciousness* to refer to teachers' awareness of how they view their students and society and the cultural lenses that shape those views. Other scholars refer to similar concepts with different terms. Villegas and Lucas (2002) called it sociocultural consciousness, Irvine (2003) referred to it as seeing with a "cultural eye," and Ladson-Billings (1995) wrote about it in terms of sociopolitical and critical consciousness. I use the term *cultural consciousness* because it emphasizes the awareness of culture in one's own life, those of one's students, and in the work of teaching.

Teachers who are becoming culturally conscious are becoming aware of their own culture and those of their students. As scholars have repeatedly documented (Cochran-

Smith, 1995; Lewis, 2001; Matias, 2013; Milner & Self, 2012), there remain some preservice and in-service teachers, usually White, who claim that "culture plays no role in their classrooms, and they are impervious to difference" (Ullucci & Battey, 2011, p. 1196). Milner (2010) referred to these as colorblind and context-neutral mindsets with clear instructional consequences in the form of an "opportunity gap" for culturally and linguistically diverse students. These "colorblind" teachers may be unable to see culture in their own lives because it has become normalized and seems invisible. Teachers may also claim colorblind or race neutral positions because they see them as progressive mindsets, not because they are truly unaware of the diversity of cultural backgrounds in their classrooms. These teachers are unable to recognize the ways in which cultural differences matter, especially in educational settings. Various frameworks for developing cultural competence or intercultural sensitivity describe early stages as ones in which individuals like these deny or minimize the role of culture (Bennett, 1986), such that they are "unconsciously incompetent" (Howell, 1982). In later stages, individuals recognize, for example, that "colorblindness would devalue the experiences and realities of students of color by denying that race preferences and racism exist" (Brown-Jeffy & Cooper, 2011, p. 73). Thus, this awareness is connected to the recognition of cultural bias and prejudice at both the individual and systemic levels.

In addition to becoming aware of their own and their students' cultures, culturally conscious teachers recognize their own assumptions, biases, and prejudices. Part of learning to teach is coming to see one's own assumptions about "good" teaching. Many researchers have documented the role that Lortie's (1975) "apprenticeship of observation" plays in teachers' intuitive views of what it is to be a teacher and in the conservatism in the

profession that results from it (Grossman, 1991; Hargreaves & Shirley, 2009; John, 1996). They note that teachers have deeply held beliefs about teaching and learning that can serve as barriers when they confront the realities of the work. But when preservice teachers become aware of these assumptions about teaching, they can see that nothing in teaching is "common sense" but rather is the result of particular theories of learning, which often are culturally situated. In order to develop cultural responsiveness, therefore, teachers must question their commonsensical assumptions not just about "good" teaching, but about how our society works. Colorblind mindsets are often related to other assumptions about U.S. society, for example a belief in meritocracy and individualism (Ullucci & Battey, 2011). The recognition that culture matters in perpetuating inequities in the education system is what led Ladson-Billings (1995) to use the term *sociopolitical* or *critical consciousness*. A teacher who is culturally conscious not only "sees" culture but has a commitment to act as an agent of change within that system once he recognizes it as inequitable (Villegas & Lucas, 2002). In making this commitment, teachers develop a vision of teaching that necessitates culturally responsive pedagogy.

Finally, teachers with cultural consciousness are aware of the diversity of cultural backgrounds in the classroom and see responding to it as a necessary part of "good" teaching. In this way, teachers' cultural consciousness is deeply related to professional judgment. By professional judgment, I mean "doing the right thing at the right time for the right reasons with the right people" (Dottin, 2009, p. 84). Broadly speaking, professional judgment prepares teachers "to dwell within the rough ground of experience, to appreciate its complexity and deep interpretability and to respond ethically" (Phelan, 2001, p. 53). For preservice teachers who are becoming more responsive, however, this involves moving

away from thinking in terms of "right" and "wrong" as a binary and instead thinking in terms of what is, in Foucault's (1983) words, potentially useful or potentially dangerous, in a given context. Teachers may become adept at proposing thoughtful responses to common problems of practice based on a strong theoretical and knowledge base, but they may not have thought through the potential dangers of a given approach based on a specific context or how they will respond when something unforeseen arises. For example, many teachers give assignments early in the school year to learn about their students in ways that connect to their discipline – say, a social studies teacher having students complete a timeline of their life to connect to timelines in history. It is a form of drawing on students' lived experiences to build new knowledge. For students with traumatic pasts, though, such an assignment can actually further disengage students rather than help them relate to the content. Thus, culturally responsive teachers must become vigilant to the possibilities that exist, both positive and negative, for the approach they have chosen. They learn what is the "right thing" and which are the "right reasons" when they are able to see how their students' identities shape what is potentially useful and potentially dangerous. This can be informed simply by the interpersonal relationship between a teacher and student – knowing who will settle down and re-focus by being called out for talking during class and who will get angry and storm out – but may also be layered by issues of culture. Cultural consciousness allows teachers to see their students in a more nuanced way that, when paired with culturally specific knowledge about the student, can help them interact and respond in ways that are supportive and affirming.

Insofar as it is an awareness, cultural consciousness is perpetual. Teachers cannot simply account for their assumptions at the beginning of their career and then suppose

they are aware of them. Instead, teachers must continually "check themselves" for the lenses through which they view a particular situation in order to continually question the assumptions that are shaping their perspective, particularly when their view is not shared by others with whom they are interacting. Only then can teachers remain responsive to the dynamic nature of student identities, their learning, and their own personal and professional growth. Cultural consciousness, therefore, is more of a stance that culture is always at play in teaching and learning and therefore something that one must remain perpetually aware of.

Becoming culturally competent. When teachers are aware of the cultural lenses they bring to their students and society, they are then able to assess what culturally specific information would be helpful to see a situation from the viewpoint of a cultural other. I use the term *cultural competence* to refer to teachers' recognition of what they do not know but need to in order to effectively teach their students, particularly related to the contexts in which they teach and in which their students live, and ability to elicit it. When teachers are culturally competent, they recognize what knowledge they need but may not have about their students, families, and community, make plans to acquire it, incorporate it appropriately into their instruction (Moll, Amanti, Neff, & Gonzalez, 1992), and use it to both anticipate and respond to cultural demands in their work.

Developing cultural competence is predicated on the notion that expertise in teaching is inadequate (Cohen, 2011). The concept of partial expertise is a key to cultural competence because it makes it both necessary for teachers to constantly reevaluate what they know about their students and determine what is relevant to a given interaction. Much as cultural consciousness is perpetual, so, too, are responsive teachers always further

developing their cultural competence. Culturally specific knowledge that is relevant to an interaction is not static, and the information is not the same for each student, even in a particular cultural group, or in any given interaction. Teachers therefore do not become culturally competent by knowing culturally specific information for the students they teach, but rather by recognizing what they need to know and repeatedly seeking it out. Ladson-Billings and Tate (1995) noted that exceptional teachers of African-American students saw themselves and their teaching as "always in the process of becoming" (p. 478). Cultural competence, therefore, makes it possible for teachers to develop responsiveness with each new group of students who come into their classroom, even if they have never before worked with the cultures and language represented therein.

Teachers develop cultural competence by regularly engaging with their students in ways that help teachers learn about students' lived experiences and culturally situated perspectives, which reinforces particular concepts that stem from the "unnatural" ways of being in teaching. In comparing "natural" ways of being in the world with the "unnatural" work of teaching, Ball and Forzani (2009) provided as an example, "Few adults seek to learn about others' experiences and perspectives as systematically as teachers must" (p. 499). Villegas and Lucas (2002) encouraged teachers to learn about their students' experiences outside of school, how their past learning experiences shaped their views of school and school knowledge, and students experiences outside of school with subject-specific domains. Culturally competent teachers are not just seeking out this information to "get to know" their students, but rather to prepare themselves to respond to who their students are, both in and out of the classroom, in their planning, instruction, and classroom management. This means learning both the challenges that specific groups may face as a

result of how they are positioned in U.S. society as well as learning about possible "funds of knowledge" on which to build new knowledge (Moll et al., 1992).

What cultural competence provides to teachers are the alternative lenses they might bring to a situation. Cultural competence includes the culturally specific knowledge that may be relevant in a given interaction, which was the focus of much early scholarship on the role of culture in teaching and learning. For example, Boykin was one scholar who sought to provide educators with a "knowledge base" on African American students in order to help them see the possible discontinuities that may exist between school life and home life (Boykin, 1994; Boykin, Tyler, & Miller, 2005). Cultural theorists have since turned away from this type of culturally specific knowledge in the literature due to overgeneralization; however, such knowledge is helpful when it is specific to a student. Other scholarship has focused on the schooled experiences of many of these subgroups, for example, stereotype threat among African American and female students in STEM classrooms (Steele, 1997), the model minority myth among Asian American students (Wing, 2007), bullying among students with disabilities and LGBTQ students (Robinson & Espelage, 2011; Swearer, Espelage, Vaillancourt, & Hymel, 2010), or identity issues among Muslim American students after 9/11 (Fine & Sirin, 2007). Knowing about these experiences can be especially pertinent in interactions with students and their families so that teachers can bring these alternative lenses to the encounter. Teachers who are culturally competent know what kind of information is most important for them in interactions with students and, as a result, seek it out specific to their students, both in the classroom as well as with families and in the community.

Practicing critical reflection. Finally, when teachers are culturally aware and seek culturally relevant information about their students, they are better able to critically reflect on their teaching and interactions with their students. I use the term *critical reflection* to refer to teachers' abilities to evaluate a situation and their own teaching through a cultural lens.

To develop professional judgment, preservice teachers learn in settings where they can practice the work of teaching with opportunities for critical reflection. When preservice teachers first enter the classroom, they tend to focus on themselves during the lesson, whether they covered the material or completed the lesson they had planned. When university supervisors or mentor teachers are present, they are able to refocus teachers on their practice in ways that help them begin to see the lesson from the students' perspectives so that the teacher can reflect in way that supports student learning. Teachers can consider their actions not just in a binary of "right" and "wrong," but as a choice that has consequences for students learning, which helps them develop professional judgment across scenarios, not just in the ones they have experienced. Mary Kennedy (2016) has recently argued that the role of teacher education is to not to offer preservice teachers solutions to common problems of practice, but to help them "analyze [persistent] problems and to evaluate alternative courses of action for how well they address these problems" in a particular context (p. 6). When teachers critically reflect not just on their actions but the alternatives as well, they can begin to understand how their stance towards students and their work affects all parts of their teaching.

Similarly, culturally responsive teachers must develop supports for critical reflection, or looking at practice within the moral, political, and ethical contexts of teaching.

Howard (2003) argued, "Critical reflection should include an examination of how race, culture, and social class shape students' thinking, learning, and various understandings of the world" (p. 197). Much as teachers must learn to see their own lenses, so too must they see their students' lenses and use them to reflect back on their own teaching. When teachers have support to reflect critically on their own practice, they learn not only the tools for this reflection in their future practice but come to recognize when their teaching is not going "well" from a critical perspective in the moment and anticipate the potential for it when planning. As a result, critical reflection supports the perpetual work of cultural consciousness, by learning to be aware of things that might have made the teaching more responsive, and further development of cultural competence, by recognizing what knowledge might have made improved an interaction.

In sum, I have drawn on existing literature on preparing teachers for culturally responsive teaching to formulate these three components of culturally responsive teaching. When preservice teachers view their students and themselves as cultural beings, recognize the cultural knowledge necessary to teacher them and seek to acquire it, and assess their own teaching through a sociocultural perspective, teachers have a stance that allows them to enact culturally responsive teaching once in the classroom. While teachers cannot fully develop as culturally responsive without the particulars of the classroom, I argue that teachers can develop a level of responsiveness before they enter those settings that may reduce harm to those populations already underserved in our schools and classrooms. Therefore, these components were present the design conjectures that shaped my use of clinical simulations for culturally responsive teaching in this teaching experiment. In the next section, I describe the simulation and how these components were operationalized in

aspects of the design (see Table 2 for a summary). When talking about the design of the simulation, I refer to the *encounter*, *cycle*, or *context* when necessary to specify. When talking about the sum of the parts (ie., the encounter, the instructional tasks in the cycle, related readings in the course context), I simply refer to the *simulation*.

The Darius Miller Simulation as a Clinical Simulation for Culturally Responsive Teaching

The Darius Miller simulation was the first of three simulations preservice teachers participated in as part of a larger study. The encounter was designed as a common situation in teaching – responding to a classroom outburst – but underscored the importance of attending to race at an individual, schoolwide, and societal level. I chose to analyze preservice teacher learning about culturally responsive teaching in the Darius Miller simulation because it was the most frequently referenced in both end-of-course interviews and the six-month follow-up survey. In the end-of-course interviews, most teachers either directly or indirectly referenced the Darius Miller simulation when responding to questions about what they had learned from the experience. In the sixmonth follow-up survey, of the 18 teachers who completed it, 17 said they had thought about the Darius Miller simulation since the end of the course and 12 said they thought about it more often than the other two simulations they had participated in as part of the course. Moreover, the Darius Miller simulation speaks to issues of race and racism that are persistently ignored by many preservice teachers, who resist learning about them because they are seen as an historical issue or one that is not as pressing in the face of other current social issues (Shelton & Barnes, 2016).

Description of the Simulation Encounter

In this encounter, preservice teachers interacted with an actor who portrayed a fifteen-year-old Black male student in a 10th-grade honors class at Stratford High School, a Nashville-area high school with a student population that is 70% Black. According to the written materials provided to teachers before the encounter, called the Teacher Interaction Protocol (TIP), Darius is creative, hardworking, and very social, but he is often talking when he is not supposed to be in class. The TIP elaborates further, "Darius is not the only student who talks when he is not supposed to, but it seems like you hear his voice more often and louder than anyone else." Prior to the encounter, based on the TIP, the teacher has initiated a meeting with Darius because he had walked out of class after the teacher called him out for talking when he was not supposed to be. In the simulation encounter, the teachers learned that Darius felt he was being singled out as a Black male. Darius told them, "I know I'm talking sometimes when I'm not supposed to be, but so are other kids and you don't call them out like you do me. Why you always gotta call out the Black kid?" If teachers prompted the actor for more information about why he was feeling singled out, they learned that Darius had experienced other similar situations at the school. Teachers who did not seek to additional information heard little else from him except for his first disclosure of feeling singled out as a Black male. Actors were trained to push teachers back to the concern about feeling singled out if teachers focused too much on his behavior but to eventually give up resignedly and close themselves off both physically and verbally from further interaction.

Description of the Simulation Cycle

Preservice teachers also completed a series of assignments as part of the course that served as a simulation cycle around this and other simulation encounters (see Figure 2). One week prior to the encounter, teachers received the TIP and pre-reading questions, which they responded to in writing. On the day of the simulation encounter, the teachers interacted with the actor and then immediately video recorded a "raw debrief" about the interaction and how they felt. In the week following the interaction, teachers received rereading questions that they responded to in writing after watching the video recording of their encounter. During this week, some participants also debriefed informally with classmates or in small groups. One week after the simulation encounter, the preservice teachers participated in a whole class debrief of the encounter that I structured in response to what I had observed in the video recordings of the simulation encounter and raw debriefs. In small groups, the teachers shared with each other their individual experiences in the encounter. Then, each group received a sheet with a list of anonymized comments made by teachers in that group. The teachers read each comment aloud and then talked about what Darius would have heard. Finally, the whole class talked about common patterns in how teachers interacted during the encounter and discussed possible approaches to the Darius Miller simulation.

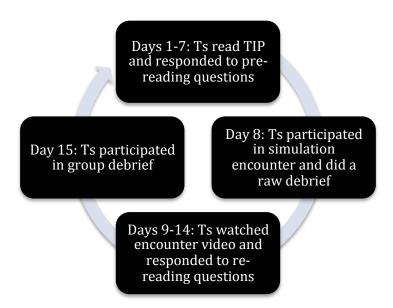


Figure 2. Description of the simulation cycle for the Darius Miller simulation. In the first week, teachers first read and responded to the TIP, then participated in the simulation encounter and did a "raw" debrief. In the second week, teachers watched their encounter videos and responded to re-reading questions individually, then participated in a group debrief.

Design Choices in the Simulation Cycle

I made a variety of design choices that related to components of culturally responsive teaching (see Table 2 for a summary). I designed the Teacher Interaction Protocol in such a way that teachers might notice certain aspects in order to prepare them for Darius' disclosure in the encounter and cause them to seek his perspective. A culturally responsive teacher would have recognized the possibility for Darius to feel singled out as a Black male in the class, especially since all but one of the participants were White teachers. A teacher who had already developed some cultural awareness would likely have noted the possibility of race being part of the simulation in the pre-reading questions. Teachers learn in the TIP that Darius is Black, and while Stratford High School is a predominantly Black school, honors classes in general very often are not. Background information about Darius in the TIP emphasized that Darius had always been previously receptive to the teacher's

efforts to mitigate his talking, so that him walking out of class would clearly be unusual behavior for him. I also carefully chose language in the TIP to clarify what is fact ("Darius is often talking when he is not supposed to be") and what is the teacher's perception ("You hear Darius's voice above the others as he talks to a student next to him"). Ultimately, I wanted to design an interaction in which all teachers had to respond to the student's perspective, but only those teachers who prompted him further would learn the full context for his anomalous behavior. Teachers who did not have the cultural awareness to anticipate the possibility of race layering the interaction could still have shown competence by seeking additional information with clarifying and probing questions.

How the Design of the Encounter Related to Components of Culturally Responsive Teaching

Table 2

Related to	Design choice
Cultural consciousness	 Darius is a Black student in a predominantly Black local school with a (for all but one of the participants) White teacher. Darius is in an honors class, which often does not match the racial demographics of the school in that students from marginalized communities are underrepresented.
Cultural competence	 Darius is an American student in a school system that is known for its overrepresentation of Black males in the disciplinary system. Darius has had other situations at school recently that make him feel like he is being racially targeted, but he does not share those things unless he is probed by the teacher.
Critical reflection	Darius repeatedly pushes the teacher back to his feelings of being racially targeted.

In order for teachers be culturally responsive in this interaction, they needed to affirm Darius' disclosure of a racialized perspective, prompt for further information, and have the sociocultural consciousness to situate his perspective within that of a Black male in U.S. society and the contemporary social issues related to race and its intersection with

gender. I likewise wanted to create a situation where the teachers would have to focus on the student's perspective on the situation rather than his behavioral compliance. In order to reach a productive end to the interaction, teachers needed to look at whether the interaction went "well" from the student's perspective rather their own.

Methods

My primary questions for this analysis was, What can preservice teachers learn from clinical simulations for culturally responsive teaching? I also asked, How does learning vary among teachers in the same course? To that end, I examined preservice teacher learning using a constant comparative method to identify themes and analyze findings from interviews, surveys, and artifacts (Glaser & Strauss, 1967).

Participants and Context

A group of 33 preservice teachers (see Table 5) participated in the Darius Miller simulation. These preservice teachers were enrolled in a secondary licensure program at a private university in the southeastern United States. Three of the participants had taught full-time prior to licensure, two of those three in another country. All of the preservice teachers were enrolled in other coursework specific to their licensure area, but eight of them were in their second semester of the licensure program and had taken a classroom management course that served as a brief introduction to culturally responsive teaching. All but one of the teachers self-identified as White, and three-quarters self-identified as female.

The context for the simulation was a social foundations course in which preservice teachers explored the interaction between contemporary social problems and various philosophies in relation to educational theory, policy, and practice. The course met once a

week during the semester, for a total of 15 class sessions. Preservice teachers participated in a series of three simulations during the semester-long course, of which the Darius Miller simulation was the first in the fifth week of the semester.

Data Collection

The data collected in this study create a record of teachers' assumptions, feelings, and actions related to the encounter through the simulation cycle and at the end of the course. Primary data sources included 23 end-of-course interviews and 18 six-month follow-up surveys. For my analysis. I included the fourteen students who completed both the end-of-course interview and six-month follow-up survey plus the nine students who completed the interview but not the follow-up survey. I did not include those participants who completed only the follow-up survey as it was not sufficiently open-ended to code for teacher learning. Secondary data sources included artifacts from multiple points throughout the learning cycle. These included: 1) written responses to pre-reading questions about the written materials prior to the simulation encounter, 2) video recordings of the simulation encounter, 3) video recordings of participants' immediate responses to questions about the simulation encounter, 4) written response to re-reading questions completed within one week of the simulation encounter, and 5) audio recordings of the group debrief one week after the simulation encounter. These artifacts were available for all participants because they were completed as required course assignments. Together, these data supported an analysis of what teachers learned from the simulation and how that learning varied.

Data Analysis

My analysis seeks to look at what preservice teachers can learn from clinical simulations for culturally responsive teaching and how that learning varies with respect to their starting points. To address these research questions, I first characterized differences in what preservice teachers had learned from the simulation at the end of the learning cycle based on end-of-course interviews and six-month follow-up surveys. I then looked at multiple data points from throughout the learning cycles to analyze the variability among the groups of teachers.

I began by open coding (Strauss & Corbin, 1990) the end-of-course interviews and the follow-up surveys for statements about what preservice teachers learned. I selectively transcribed chunks of talk in the end-of-course interviews that referenced the Darius Miller simulation either explicitly (ie. "in the first simulation," "in the Darius simulation") or implicitly (ie. related to race). Most of the relevant chunks of talk were in response to questions about what the teachers learned from the simulation and what they would do differently in their classrooms as a result of it. I also coded open responses in the follow-up survey that referenced the Darius Miller simulation. I then thematically characterized the statements about teacher learning and formed them into three groups, returning to the full text of the interviews and surveys to iteratively refine categories (Charmaz, 2006). To address concerns of credibility, I used both data triangulation across participants and methodological triangulation with individual participants (Denzin & Lincoln, 1994).

Within each of the three groups, I then analyzed artifacts to better understand why learning varied among the groups. This process led to a focus on teachers' own cultural identity development, which became the focus of my secondary analysis. In some instances,

I refer to biographical information from other artifacts in the course that provided information about those specified teachers in order to make a case for representativeness. For the purposes of this analysis, I attend solely to what teachers learned, not the trajectory that led to it, which I explore elsewhere in other analyses (see Chapter 4).

Findings

In my analysis, I found that preservice teachers varied in what they learned about culturally responsive teaching in ways that seem related to their own starting points related to racial identity development. Each of the groups talked about "being more aware" after the simulation, but their awareness focused on different things. The first group of teachers became *self-aware*. The five teachers in this group learned to see themselves as cultural beings and were only beginning to think about how that shaped their interaction with someone from a different cultural background. These teachers primarily focused on themselves and what to say so as not to seem culturally insensitive. The second and largest group of teachers became more racially aware. The fifteen teachers in this group learned to see the student as a cultural being and began to think about how that shaped their interaction with him. They showed greater awareness of the role of culture in interaction -their own and the student's. In addition, these teachers focused less on what to say and more on what to ask; their focus was on the student rather than themselves in order to fully understand the situation from the student's perspective. The third group of teachers became *critically aware*. The three teachers in this group learned to see themselves and the student but were also beginning to put these cultural identities in a larger social context. These teachers focused on power and privilege from a critical perspective. For each group, I begin by characterizing the three groups with respect to teachers' learning (see Table 3).

Then, I analyze why the learning varied among the groups of teachers. For narrative simplicity, however, I report these findings in reverse order, first describing the group in terms of the cultural identity development, then characterizing their learning.

Participant Demographics by Group

Table 3

Group	Pseudonym	Race	Sex	Program
1	Andrew	White	M	Social studies
	Ashley	White	F	English
	Courtney	White	F	Science
	Katie	White	F	Social studies
	Sarah	White	F	Math
	Amanda	White	F	Music
	Emma	White	F	English
	Gabrielle	White	F	Math
	Huan	Asian	F	ELL
	James	White	M	Science
	Jimmy	White	M	Science
	Kelsey	White	F	English
2	Kylie	White	F	English
	Lisa	White	F	Science
	Luke	White	M	Social studies
	Megan	White	F	Social studies
	Miranda	White	F	English
	Robin	White	F	Science
	Ryan	White	M	Science
	Tess	White	F	Music
	Charles	White	M	English
3	Evelyn	White	F	Social studies
	Michael	White	M	Math

Group 1: Self-Aware

Five of the 23 preservice teachers showed evidence that they were learning to see themselves in a cultural context. In talking about what they had learned from the simulation, their focus was on themselves as teachers and how not to be seen as racially insensitive by a student.

Description of the group. In terms of their own cultural development, this group of teachers was the least developed in their sense of themselves both as racial beings as well as teachers. Teachers' descriptions of their own childhood and adolescence and the racial demographics of their neighborhoods and schools support the possibility that the teachers in this group were in early stages of their own racial identity development (Helms, 1990). Katie talked about how the simulation had provided her with a lot of information about dealing with "difficult situations." She said in her end-of-course interview, "I grew up in an all-White community, so that's something I hadn't really encountered before." Other teachers mentioned never having had a conversation with a student or parent before and finding just that part of the simulation overwhelming. Another teacher in the group was very introverted and had a slight stutter, which was his focus when watching the video recording of his own simulation encounter. These aspects of the teachers' starting points may have made it difficult for them to look past themselves in order to focus on the student in the interaction.

Characterizing the learning. The teachers in this group focused primarily on saying the "right" thing or saying it the "right" way. These teachers seemed to think that the problem in the interaction was the result of Darius not interpreting their words in the way they intended them, and so the solution was to choose their words more carefully. One of the teachers in this group, Sarah, said in her end-of-course interview that in the future "I will just be a lot more aware of my surroundings, of my coworkers, of my students, and how what I do and say reflects on me and how people will interpret my words and actions." Sarah's statement suggests that the problem is the result of those who interpret her words and actions other than how she intended them, and not her actual intent. Her statement

speaks to a kind of cultural sensitivity to others vulnerable feelings rather than responsiveness to the potential impact of her words and actions. Many of the teachers in this group made comments like Sarah's in a way that made no reference to race specifically or culture more generally – that what they had learned was "the importance of what you say and how you say it and how it can be interpreted by other people." Without a cultural context, such learning suggests a very limited understanding culturally responsive teaching. Those that did reference race or culture even implicitly seemed to want to say the "right" thing to avoid causing themselves or others any discomfort. For example, another teacher, Katie, said in her end-of-course interview, "I've really learned to think about the implications that your words mean...I think we want to make things okay and be politically correct and everything like that, but that may not be the right thing to say." Here, trying to "make things okay" or "be politically correct" is the stated goal, even with the recognition that what seems to "make things okay" might not be the "right" thing to say. She said in her end-of-course interview that the simulation left her "really thinking about how [her] words are sounding to [others]."

These teachers did show evidence of understanding the role that culture plays in interactions like the one with Darius, but limited to whether it would be "interpreted" in the way they mean it. While these teachers had identified a practice that could be seen as valuable in culturally responsive teaching – considering how students may be affected by what teachers say – the teachers' thin conceptual understanding of culturally responsive teaching makes it a dangerous practice, one that would allow teachers to avoid the cultural issues at the core of culturally responsive pedagogy rather than causing them to engage directly with them. To Ladson-Billings' (2011) point, I could tell teachers the "right" thing

to say in this situation, but then they would do just that – in every situation – and nothing else, thereby missing the core tenets of culturally responsive teaching.

The teachers in this group did not reflect on Darius as a cultural being or the larger cultural context of the simulation. Some of the teachers acknowledged themselves as racial beings by referencing the role of the teacher-student demographic divide in the interaction, but that was limit of their cultural awareness. For example, Sarah wrote in her six-month follow-up survey, "Whether I am speaking to a minority student about an issue he/she is having or I am talking to a teacher about students, I am now much more conscious of the way I will say things." Others in the group seemed to completely miss the role that race played in the divide between themselves and the student or in the larger cultural context. In fact, one teacher in the group compared her experience (as White woman) with a professor (also a White woman) in another class to Darius' in the simulation. She felt the professor was not really hearing her concerns, just as she had failed to really hear Darius'. What she learned from the Darius simulation was limited to poor communication skills or possibly issues of power in communication, but not cross-cultural communication issue between a White teacher and Black student nor the perspective of Black student living in a racist society.

Group 2: Racially Aware

The largest group, fifteen of the 23 preservice teachers evidenced an emergent understanding of cultural responsive teaching based on re-readings, end-of-course interviews, follow-up surveys. Teachers in this group showed that they had a greater awareness of the role of culture and recognized the partiality of their perspective as a result of the demographic divide. In talking about what they had learned from the

simulation, their focus was on the student in order to fully understand the situation from his perspective.

Description of the group. In terms of starting points, the teachers in this group were both more racially aware of themselves and had a better sense of themselves as teachers or at least professionals. Several of the teachers explicitly mentioned that they saw themselves as racially aware, but they usually talked about seeing their own race. One of the teachers, James, talked both during the simulation cycle and after about having attended a predominantly Black high school in Nashville. The simulation was one of the first times, he said, that he was seen as "just some White guy" rather than a White ally who could be trusted, which was itself a learning experience. Several of the teachers in the group had worked before and had a sense of themselves as a professional in this kind of interaction, though not as a teacher. Many had worked as camp counselors or taught informally as well. One had a mother who was a full-time teacher. In addition, two of the teachers in the group had taught full-time, one in an urban school in the U.S. with AmeriCorps and the other in China where she was a citizen. It is possible that the teachers in this group were more easily able to focus on the student in the simulation because they were more aware of themselves both as racial beings and as professionals or even teachers in such an interaction.

Characterizing the learning. The teachers in this group showed a greater recognition of the salience the student's racial identity, which helped them recognize the partiality of their perspective.

Racial awareness. Several of the students commented on recognizing their own Whiteness once in the room with Darius or talked about how it felt to be called a racist.

Even teachers who considered themselves racially aware were surprised by the racial layer in the simulation. One teacher said that after the interaction:

I just started to think, as a whole, about the dynamic between White teachers and students of color. And how I would consider myself pretty aware and open-minded and I think a lot about those dynamics, but then being thrown into it and seeing actually how I reacted to it and how I didn't handle the situation the right way.

(Luke, end-of-course interview)

For this teacher and some others, part of what they learned was the limits of what they perceived to be their open-mindedness. Another teacher, Miranda, also talked about how the simulation caused her to reflect on her racial awareness. She said she was going to be more thoughtful about how to handle common problems of practice like calling students out but also about how that would be affected by a student's race. She said:

How are you going to handle or address a student who's continuously talking.

Especially if they're Black. And that sounds funny, but just being aware of that.

We're not colorblind. There are race issues in this country. And we want to be sensitive to that. Just that awareness. I wouldn't have thought of it in the same way.

(Miranda, end-of-course interview)

For Miranda and others in this group, it was not simply about saying the right thing but looking at the situation from the perspective of the student as Black male interacting with a White teacher in a racist society. James talked about the larger context of the interaction. He said:

The first thing is, if a student was ever upset or stressed out or anxious, I would consider, try to ask them if I were to talk to them, 'What is going on completely

around you?' not just 'What's happening in this classroom for this hour? (James, endof-course interview)

For these teachers, this shift in perspective meant that they were, in the words of one teacher, "thinking about how [the students] are seeing me instead of how I'm seeing the situation." Likewise, the teachers learned the importance of simply validating a student's perspective. One teacher wrote in her six-month follow-up survey about a similar situation she had experienced in her field placement. She wrote, "In this situation and other it is helpful for me to remember that the students reality is their reality, whether or not I think it should be." The teachers in this group were no longer looking at themselves but at the student, how the student saw the situation, how the student's race was salient, and how the student might view them and their words and actions.

Partiality of perspective. In shifting perspective, the teachers in this group came to recognize the partiality of their own perspective and therefore learned the importance of going into an interaction ready to ask and listen rather than talk. Like James, many teachers in this group talked about learning the importance of asking questions. One teacher said, "I think the biggest takeaway for me is always go in with questions about what you don't know as opposed to assuming you know things, or taking what you know as the full extent of your knowledge" (Tess, end-of-course interview). Put simply, another teacher said she would consider a simulation as having gone "well" based on "them talking more and me talking less." In recognizing the partiality of their own perspective, these teachers likewise learned that being uncomfortable in situations like the one with Darius was necessary in order to fully see his perspective. Emma talked in her end-course-interview about the simulation giving her

the opportunity to be uncomfortable with situations in a profession that I think is full of uncomfortable conversations and situations. And if it becomes comfortable there's probably something wrong, or you're not thinking it through all the way.

The teachers' discomfort was often a result of the uncertainty in the situation, in the form of Darius' disclosure and the additional information teachers received if they probed.

Emma said later in her interview:

I learned that I don't have as much control over things as a teacher that I thought I did...The simulations point out to you how many other things are going on that you can't control, you can't predict for a lot of the times...I think the simulations showed you all the other things that are going on that affect your classroom. Because the teachers were uncomfortable with the uncertainty in the situation, many of them did a lot of talking in an attempt to control the situation.

After the simulation, many of the teachers, including Miranda, recognized that they had talked because they wanted to defend themselves against Darius' claims of racism. Miranda said in her end-of-course interview:

I think I learned how to wait before giving a response or jumping to a conclusion and that a little bit of silent time is okay as you think about the best way to handle what you're talking about. It's better to choose your words wisely and really hear what they're saying and address what they see as the problem instead of covering yourself and just talking over the issue to protect yourself.

Furthermore, in recognizing the partiality of their own perspective and the uncertainty in the work of teaching, teachers in this group learned the importance of considering other possibilities than the ones that are readily apparent. One teacher wrote in his six-month survey:

In dealing with situations with students...I know I may have no clue what they are thinking or feeling or going through. In general, I am much more likely not to jump to any conclusions...Rather I am more inclined to talk and discuss things in an attempt to better understand where people are coming from...[I]f a student is 'feeling sick' that could be because they are actually physically ill, or they were bullied earlier, maybe they just want space...I now have more of a dialogue with students to try and make sure they know I am there if they want to talk about anything or need help. (Jimmy)

By recognizing the importance of the student's perspective within the cultural context of the interaction, teachers in this group were able to identify relevant practices – asking questions, being uncomfortable, sitting silently, considering alternative explanations – that are evidence of emergent cultural responsiveness. Without a focus on the students' perspective or an awareness of the cultural context, these practices do not necessarily constitute culturally responsive teaching. But with them, these teachers showed evidence of learning in terms of belief and disposition in way that connects to practice.

Group 3: Critically Aware

The smallest group, three of the 23 preservice teachers, evidenced a deep conceptual understanding of culturally responsive teaching. In talking about what they had learned from the simulation, these teachers focused on power and privilege from a critical perspective.

Description of the group. In terms of starting points, this group of teachers was the most professionally experienced and had a varied set of life experiences that may have led them to think about education from a critical perspective. Charles, at 36 years old, was the oldest teacher in the course. Prior to the teacher licensure program, he had spent several years teaching English abroad. Evelyn was one of two students who chose to meet with me individually after the Darius simulation. During that meeting, Evelyn shared with me that, prior to the teacher licensure program, she had worked as a research assistant in a program at major university. While there, her office experienced significant racial turmoil that led to several employees quitting or being fired. All of the remaining employees were then required to participate in some form of cultural sensitivity training, which had left Evelyn feeling vulnerable and confused about what had happened in her office. Finally, Michael had experienced a non-traditional education. He was homeschooled and did not earn a high school diploma or equivalency degree, then attended community college en route to a small university where he changed his major several times. Prior to the teacher licensure program, he had worked as a freelance writer and in a local community center that serves low-income students of color. Michael lived in an especially diverse area of the city and interacted regularly with his Middle Eastern neighbors. Because of his lack of traditional schooling, Michael said he did not have an image of what the interactions were supposed to look like; his apprenticeship of observation (Lortie, 1975) was vastly different than that of his classmates. In addition, because Michael was used to working with younger students, he found the forthrightness of the actor in the simulation interaction a lot easier than he expected, in contrast to most of his classmates. He said, "For me it felt almost a little too much of the ideal. Where it's like, 'Oh, he actually wants to talk and give his personal feelings of how he's really feeling. That's great. I can work with that.'"

For these three teachers, because they came into the simulation experience with better developed identities as racialized beings and teachers, they were able to focus on critiquing the assumptions and limitations of culturally responsive teaching because of the power dynamics present in it.

Characterizing the learning. The teachers in this group, in taking a critical perspective on their simulation experience, recognized the assumptions and limitations of culturally responsive teaching. Michael talked repeatedly in his end-of-course interview about the power dynamic that existed between him and the student and how the physical space that such an interaction happens in can reinforce the power differential to a point where no responsiveness can really occur. He said:

The classroom is considered yours where you are the authority figure...there's going to be a lot of times where you have to put yourself out of that place to really have any meaningful dialogue. So I guess that's a big takeaway for me, to always have that in mind. If I want to really have a good dialogue with some people about certain things I'm going to have to get out of, not just my comfort zone, but almost more where I'm going to be viewed as that's my space, and you have to come into my space and tell me, but I'm going to go into their space and letting, saying I'm leaving myself open and this is your space so you tell me how you're feeling and that's going to bring more honest dialogue. (Michael, end-of-course interview)

Evelyn likewise recognized the limitations of perspective-taking as part of culturally responsive teaching. She wrote in her follow-up survey:

As I approach the upcoming year at [a middle school], where I will be a white [sic] teacher in a predominately African American school, I have reflected again and again on the important [sic] of listening for what students are REALLY saying instead of filtering their information through my own assumptions about whatever situation arises. As I humbly seek to understand the pain of situations like the Charleston shootings...it has been a tangible example that there is no way for me to truly understand and feel/experience a situation from the perspective of a minority.

Whereas students in the second group recognized the partiality of their perspective and learned to ask questions in order to understand the student's perspective, Evelyn recognized that such a practice was always somewhat limited. She learned that she could never truly empathize with the student in such a situation because she could not ever fully understand his perspective. While that would not stop her from asking questions and listening to the student, she recognized the limits of her ability to ever fully respond to a student whose perspective she did not share. In the same way, Evelyn evidenced a high level of cultural competence when she said in her end-of-course interview:

I learned a lot about what I don't know. I did learn, too, that it's okay to go into a situation and not know exactly how it's going to go and exactly what your plan is going to because probably that's not going to be entirely helpful. You might miss something totally with this superset plan. At the same time, there is a certain amount of preparation that could be helpful.

Evelyn's comments suggest that she recognizes the importance of preparing for these kinds of interactions while being open to a variety of possible outcomes. Evelyn's comments

about what she learned from the simulation consistently showed a level of nuance like that which Ladson-Billings (2006) and others have called for.

The teachers in this group took a critical perspective on their interaction with Darius. While they pointed to some of the same things as the second group, their learning evidenced a greater level of complexity. Whereas the second group thought about what to ask, Michael thought about the conditions under which the entire conversation is taking place in order to support meaningful dialogue. Whereas the second group wanted to understand the student's perspective, Evelyn learned her own limitations in understanding a student's perspective. For these teachers, the simulations nuanced the work of culturally responsive teaching and the interactions in which it happens.

Discussion and Implications

The teachers in all three of these groups talked about what they learned in terms of becoming more aware (see Table 4 for a summary). However, the three groups situated their awareness differently in terms of specific practices that resulted from that awareness and their overall conceptual understanding of culturally responsive teaching. The Self-Aware group became more aware that their words and actions may impact others, often as a result of how they were positioned as White teachers interacting with a Black student. In terms of the learning trajectory, these teachers developed some cultural consciousness, but their understanding of cultural competence and critical reflection was limited to a frame of whether they would be seen as having done the "right" or "wrong" thing. The Racially Aware group also became more aware of the impact of their words, most notably the effect of silencing another's perspective. As a result, these teachers talked about asking more questions in situations like the one with Darius, while remaining thoughtful about how

Exemplary Evidence from Teacher Groups

Table 4

Teacher group	Exemplary evidence			
Self-aware	 "I will just be a lot more aware of my surroundings, of my coworkers, of my students, and how what I do and say reflects on me and how people will interpret my words and actions." (Sarah, end-of-course interview) "Really thinking about how your words are sounding to them." (Katie, end-of-course interview) "Whether I am speaking to a minority student about an issue he/she is having or I am talking to a teacher about students, I am now much more conscious of the way I will say things." (Sarah, six-month survey) 			
Racially aware	 "How are you going to handle or address a student who's continuously talking. Especially if they're Black. And that sounds funny, but just being aware of that. We're not colorblind." (Miranda, end-of-course interview) "I think the biggest takeaway for me is always go in with questions about what you don't know as opposed to assuming you know things, or taking what you know as the full extent of your knowledge." (Tess, end-of-course interview) "In dealing with situations with studentsI know I may have no clue what they are thinking or feeling or going through. In general, I am much more likely not to jump to any conclusions." (Jimmy, six-month survey) 			
Critically aware	 "There's going to be a lot of times where you have to put yourself out of that place [where you are the authority figure] to really have any meaningful dialogue." (<i>Michael, end-of-course interview</i>) "It's okay to go into a situation and not know exactly how it's going to gobecause probably that's not going to be entirely helpful. You might miss somethingAt the same time, there is a certain amount of preparation that could be helpful." (<i>Evelyn, end-of-course interview</i>) "There is no way for me to truly understand and feel/experience a situation from the perspective of a minority." (<i>Evelyn, six-month survey</i>) 			

their racial positioning would impact the interaction. This group also evidenced development in terms of not just their cultural consciousness but also their cultural competence, through a recognition of their own partial expertise. The Critically Aware

group similarly became more aware of the role of culture in the interaction but complicated potential practices by pointing out the limitations of any of them as a result of the larger racialized context. This group showed evidence of critical reflection as they considered their words and actions from multiple perspectives, including a larger societal one. While each group felt they had learned from the simulation and saw it as a powerful tool, the learning that resulted from it varied, likely as a result of their starting points in terms of their own cultural identity development.

Limitations of the Study

A major limitation of this study is the overrepresentation of White teachers, particularly in a clinical simulation for culturally responsive teaching focused on race. The findings from this study are insufficient to speak to what *all* preservice teachers can learn from clinical simulations, particularly in simulations in which the preservice teacher shares the cultural background of the teacher, and how learning may vary depending on the cultural background of those teachers. This scenario has been explored elsewhere in the study in other courses but is not the focus of this analysis.

Implications of the Study

The findings from this analysis have implications for teacher education, especially for learning related to culturally responsive teaching. The three categories of learning serve as a caution against preparing teachers for culturally responsive teaching through a set of practices alone. While it would seem more straightforward to provide preservice teachers with a set of practices – be aware of race, consider the implications of your words and actions on others, go in with questions – and allow them to use them, those practices can do more harm than good if not coupled with a deep conceptual understanding of culturally

responsive teaching. At the same time, teacher educators need to provide preservice with opportunities to put their conceptual understanding into practice as it serves to reveal to teachers the limits of their awareness and humanize the benefits of this kind of teaching and the potential consequences of a cultureblind approach.

More specifically, the findings from this study do much to inform future work with clinical simulations for culturally responsive teaching. This analysis suggests that clinical simulations can support teachers' learning from a variety of starting points. However, that support must be designed in the simulation encounter, cycle, and context, both ahead of time and in response to teachers' evidenced learning at point throughout the simulation cycle. Moreover, teacher educators may find the tool more useful when they have a sense of preservice teachers' starting points with regards to the cultural specifics of a given case. In this way, simulation experiences can be designed in order to meet teachers at various points of where they are in terms of their development as culturally responsive teachers.

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CHAPTER IV

"THE WAY YOU SEE IT IS NOT THE WAY I SEE IT": TRAJECTORIES OF PRESERVICE
TEACHERS' LEARNING IN A CLINICAL SIMULATION FOR CULTURALLY RESPONSIVE
TEACHING

Introduction

When I was in my first year as a Humanities teacher at a charter school in Chicago, I had an incident with a colleague that became a critical incident in my work as a teacher and teacher educator. I, a young, White, female teacher, made a racially insensitive comment about two students and was called out by a more experienced, Black, male teacher about what I had said. In response to his repeated efforts to help me understand my offense, I did everything wrong that White people do in these situations – derailed, tone policed, and finally cried. But over time, I heard his feedback from that day for what it was: an education on White privilege and the dangers of being colorblind. I learned from the experience, grew as an educator, and eventually pursued higher education in order to better prepare preservice teachers so that they and, more importantly, their students could avoid learning this lesson out in the classroom.

My current work with clinical simulations is an effort to provide preservice teachers with support in their own development as culturally responsive teachers. In clinical simulations for culturally responsive teaching, preservice teachers encounter a common teaching situation that requires them to see themselves and their students as cultural beings and to situate the interaction in a larger social context. Teachers encounter the *simulation encounter* as one part of a *simulation cycle*, which is itself situated in broader

context. As a result, many preservice teachers continue to learn from the simulation over time and in response to different instructional supports in the course.

In this paper, I ask, *How do preservice teachers make sense of clinical simulations over time?* In addition, I ask, *What supports help preservice teachers make sense of clinical simulations in ways that make it possible for the simulation to become a critical incident?* I find that teachers with similar demographics and prior experience do not necessarily make sense of the simulation in similar ways and need different supports for their learning.

Moreover, the need for particular supports often does not become evident until after the encounter, in the midst of the simulation cycle, thus calling for responsiveness from teacher educators in terms of design.

In the first section of this paper, I provide a theoretical framework for culturally responsive teaching and how teachers develop it. Then, I describe clinical simulations as a promising approach to preparing teachers to be culturally responsive. I consider how these simulations may become critical incidents for teachers by providing them with common situations in teaching in which their expectations about what will happen are unmet. Then, I provide an overview of the focal simulation for this analysis and the design of the simulation cycle. Finally, I present a comparative-case analysis of three preservice teachers' trajectories of learning from this simulation for culturally responsive teaching and consider the implications of the findings for teacher education broadly and the design and use of this tool specifically.

Culturally Responsive Teaching and its Challenges in Teacher Education

Culturally responsive teaching refers to teaching that is sensitive to the needs, interests, and abilities of students both as individuals and as members of specific cultural

groups. Scholars have contested both the term *culturally responsive* and its meaning over the years but generally agree on its importance and the difficulty of preparing preservice teachers to enact it in their classrooms. In this section, I explain how I conceptualize culturally responsive teaching and how teachers develop culturally responsive teaching.

Culturally Responsive Teaching

In this paper, I use the term *culturally responsive* to refer to the knowledge, beliefs, and skills that research has shown as necessary for teachers to be successful with culturally and linguistically diverse students (Gay, 2010; Howard & Aleman, 2008; Ladson-Billings, 1995; Milner, 2010; Villegas & Lucas, 2002). However, the term *culturally responsive* is but one of a number of conceptually similar but technically distinct terms used to refer to a dynamic and synergistic relationship between students' lives inside and outside of school. Gay (2010) defined culturally responsive teaching as "using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them" (p. 31). It means, in short, teaching "to and through" the students' cultures such that cultural difference becomes an asset rather than a deficit. Cultural responsiveness is multidimensional in that it encompasses curriculum, assessment, instructional techniques, and classroom management. It is contextual and situational; responsiveness is determined based on what is appropriate in the instructional context (Irvine, 2003).

How Teachers Learn Culturally Responsive Teaching

I argue elsewhere that teachers develop an emergent level of culturally responsive teaching by: (1) developing cultural consciousness, (2) becoming culturally competent, and (3) practicing critical reflection (see Chapter III). I use the term *cultural consciousness* to

refer to teachers' awareness of how they view their students and society and the cultural lenses that shape those views. Other scholars refer to similar concepts with different terms. For example, Villegas and Lucas (2002) called it sociocultural consciousness; Irvine (2003) referred to it as seeing with a "cultural eye;" and Ladson-Billings (1995) wrote about it in terms of sociopolitical and critical consciousness. I use the term *cultural consciousness* because it emphasizes the awareness of culture in one's own life, those of one's students, and in the work of teaching. Teachers who are becoming culturally conscious are becoming aware of their own culture and those of their students. In addition, culturally conscious teachers recognize their own assumptions, biases, and prejudices. Finally, teachers with cultural consciousness are aware of the diversity of cultural backgrounds in the classroom and see responding to it as a necessary part of "good" teaching. I use the term *cultural* competence to refer to teachers' recognition of what they do not know but need to in order to effectively teach their students, particularly related to the contexts in which they teach and in which their students live. Developing cultural competence is predicated on the notion that expertise in teaching is inadequate (Cohen, 2011). The concept of partial expertise is a key to cultural competence because it makes it necessary for teachers to constantly reevaluate what they know about their students and determine what is relevant to a given interaction. What cultural competence provides to teachers are the alternative lenses they might bring to a situation. Cultural competence includes the culturally specific knowledge that may be relevant in a given interaction, which teachers gain by regularly interacting with their students. Finally, I use the term critical reflection to refer to teachers' abilities to evaluate a situation and their own teaching through a cultural lens. To develop professional judgment, preservice teachers learn in settings in which they can practice the

work of teaching with opportunities for critical reflection. When teachers have support to reflect critically on their own practice, they learn not only the tools for this reflection in their future practice but come to recognize when their teaching is not going "well" from a critical perspective in the moment and anticipate the potential for it when planning.

I consider an emergent level of culturally responsive teaching to be the point at which teachers view their students and themselves as cultural beings, recognize the cultural knowledge necessary to teach their students and regularly seek to acquire it, and assess their own teaching through a sociocultural perspective. While teachers cannot fully develop as culturally responsive without the particulars of the classroom, I have found in previous analysis that teachers can develop a level of responsiveness before they enter those settings that may reduce harm to those populations already underserved in our schools and classrooms (see Chapter III). Furthermore, teachers who are culturally conscious and critically reflective will have the lenses and tools necessary to recognize when they need further support to meet the needs of a particular student or group of learners, which speaks to their cultural competence. This hypothetical learning trajectory, however, is based on a review of literature on preparing teachers for culturally responsive teaching and related frameworks in the psychological literature for developing cultural and intercultural competence. I seek, in my work, to conduct the kind of research that will iteratively refine this trajectory in order to better understand how teachers develop culturally responsive teaching, while addressing the challenges that exist in that work as a teacher educator. In doing so, this research contributes to a better understanding of how teachers develop culturally responsive teaching, both theoretically and practically.

Clinical Simulations for Culturally Responsive Teaching

My current research explores how clinical simulations can be used as critical incidents with preservice teachers to prepare them to be culturally responsive; thus, the focus of this study was to explore how to design and use clinical simulations in this way. In this section, I explore what a critical incident is and how it can be used to foster cultural consciousness, cultural competence, and critical reflection in preservice teachers.

Clinical Simulations as Critical Incidents

I use the term *critical incident* to refer to a meaningful moment in practice that proved influential to the learners' professional development. Other scholars have used the terms "revelatory" or "significant." My own critical incident as a young teacher in Chicago was revelatory for me in my racial identity development, for example, and became significant in how I viewed my work as a teacher and what I saw as valuable to pursue as an educational researcher. Many professions, especially the caring professions, have used a version of the critical incident report as an instructional tool with future practitioners to focus on assumptions and feelings and as a source of reflection and growth (Branch, 2005; Lee, Eppler, Kendal, & Latty, 2001; Minghella & Benson, 1995). Teaching is one such profession that has used the critical incident report to build reflective practice among preservice teachers (Francis, 1997; Goodell, 2006; Tripp, 1993). Because of the focus on assumptions and feelings, critical incidents have likewise been used in professional education to support learners' cultural competence (Collins & Pieterse, 2007; LaFromboise & Foster, 1992; Morell, Sharp, & Crandall, 2002). In these incidents, learners often report on situations in which their expectations were unmet because of a lack of cultural consciousness.

While previous use of the critical incident report has been primarily limited to narrative reports of experiences professionals had in the course of their practice, my research looks at the potential of simulating critical incidents for preservice teachers in order to reveal their assumptions, biases, and prejudices and use that as a source of reflection and growth. While these incidents often happen in everyday life and work, I attempt to simulate them to move teachers forward in their consciousness and development of competence prior to entering the classroom. In short, I try to put students in situations like the one I as a young teacher in order to spur the kind of learning I experienced as a result of being called out and forced to see my own biases. I seek to develop clinical simulations that serve as critical incidents for other teachers, in which they are "pulled up short" in a way that "break[s] the spell of [their] own fore-meanings," and that contribute to teachers' development of cultural competence (Gadamer, 2011, p. 270). In the next section, I explore what it means to be "pulled up short" in a clinical simulation and its role in critical incidents.

"Pulled Up Short" as a Criterion in Critical Incidents

A key criterion in the design and use of clinical simulations in my work is Gadamer's concept of being "pulled up short." In *Truth and Method*, Gadamer (2011) posited that when expectations are unmet, people are "pulled up short [...] Either it does not yield any meaning at all or its meaning is not compatible with what they had expected" (p. 270). As a result, people attempt to interpret their experience in order to make sense of their unmet expectations. This hermeneutical process can be uncomfortable. Kerdeman (2003) called it painful and wrote:

When we are pulled up short, events we neither want nor foresee and to which we may believe we are immune interrupt our lives and challenge our self-understanding in ways we cannot imagine in advance of living through them. (p. 208)

Kerdeman made clear that these are not experiences people usually enjoy – they "neither want nor foresee" these situations coming, they "interrupt" and "challenge" people's lives. My situation with my colleague challenged me in a very real way. I spent a lot of time in the days and weeks that followed trying to make sense of my experience, and in a sense, the incident interrupted my entire life when I began my work as a doctoral student. When I design and use simulations, I seek to provide preservice teachers with similar incidents that interrupt them and take time to make sense of.

Clinical simulations attempt to provide opportunities for preservice teachers to live through these situations before they are in the classroom so that they may come to see themselves and their work as teachers in a new way. Teaching has often been seen as a profession that must be learned "on the job" such that some parts of teaching cannot be learned until teachers are in the classroom and "living through" challenging situations. When they are able to live through these situations in the form of a simulation, preservice teachers come to recognize the kinds of situations they will face in the classroom and the limitations of their knowledge and skills and are able to foresee how they might productively manage such a situation once in the classroom.

Gadamer (2011) primarily considered interpretation as it relates to art, but his larger proposition was that for individuals to reach "the truth," they must understand their own experience. He wrote, "Something becomes an 'experience' not only insofar as it is

experienced, but insofar as its being experienced makes a special impression that gives it lasting importance," which happens through interpretation (Gadamer, 2011, p. 53). Ultimately, clinical simulations for culturally responsive teaching help teachers recognize that their truth is the result of their own lived experiences, which shapes how they see students and make sense of interactions with them. Critical incidents do not just happen. They are created or "produced by the way we look at a situation" (Tripp, 1993, p. 8). The simulations provide teachers with an opportunity to re-interpret some of those interactions by causing teachers to recognize how their own biases, prejudices, and social positions shaped their expectations for the encounter.

Gadamer presented other ideas about interpreting experience that are relevant in thinking about what makes an incident critical, especially for culturally responsive teachers. Specifically, he considered the role of historically effected consciousness and horizons, which speak to how teachers' interpretations of a situation unfold over various timescales. Understanding, Gadamer (2011) claimed, is always an effect of an individual's history; one must recognize how the events in his or her own life have affected one's impression of it. In doing so, that individual is said to have an "historically effected consciousness" (Gadamer, 2011, p. 301). In addition, "each experience has implicit horizons of before and after" that limit or expand what can be seen, and these horizons are continually being formed (Gadamer, 2011, p. 237). Thus, critical incidents in which teachers are pulled up short are potentially meaningful to support preservice teachers in their early development of cultural responsiveness. In Figure 1, I attempt to represent how being pulled up short can affect a teacher's horizons and, when that leads to reflection and growth, become a critical incident.

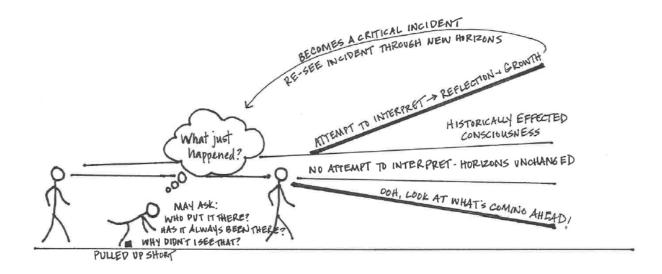


Figure 1. A representation of Gadamer's concept of being pulled up short and how it affects an individual's horizons. When an individual is pulled up short, she may try to make sense of the experience. When that process of interpretation leads to reflection and growth, the incident, in looking back on it, becomes a critical incident. However, if the individual does not try to make sense of the experience, her horizons remain unchanged and the incident does not become a critical incident. This representation does not reveal the cycle of interpretation that is part of Gadamer's hermeneutical process. If the representation were to continue on over time, additional moments of being pulled up short may continue to further affect an individual's horizons, and the initial incident may be interpreted in still new ways or become critical incidents that support different kinds of growth.

Therefore, teachers who are developing cultural responsiveness can only interpret the significance of an incident if they have the necessary cultural lens. Clinical simulations provide a learning environment in which teacher educators can support preservice teachers to that end even after the incident is complete. In the next section, I examine how teacher educators can use clinical simulations for culturally responsive teaching as potential critical incidents in preservice teachers development.

Critical Incidents to Foster Cultural Responsiveness

Clinical simulations as critical incidents may be especially helpful in the early stages of developing cultural responsiveness in moving teachers from "unconscious

incompetence" to "conscious incompetence" through reflection on their assumptions, biases, and prejudices (Howell, 1982). Furthermore, the low-stakes, nature of clinical simulations can help teachers develop from stages of ethnocentrism (denial, defense, minimization) to stages of ethnorelatavism (acceptance, adaption, integration) (Bennett, 1986). The critical incident can then motivate openness to growth that supports greater levels of competence (i.e., "conscious competence") and higher levels of development. But how can teacher educators get teachers to reflect on their assumptions or see their own biases or prejudices? For many teachers, early stages of development in understanding culturally responsive teaching is simply being able to see an incident from a cultural perspective, in order to develop their cultural consciousness. Once they can do that, they experience "shifting salience" as they recognize that what is seen as "commonsense within particular historical, cultural, and social contexts" is not "natural, inevitable, universal, [or] ahistorical" (Philip, 2011, p. 302). I argue that teachers who have lived experiences in authentic contexts in which they are "pulled up short" are able to see those lenses in a way that supports cultural consciousness.

While critical incidents are commonly used retrospectively in professional education, I seek to use clinical simulations as prospective critical incidents to help foster preservice teachers' understanding of key concepts in cultural responsiveness by providing them with multiple situations through the simulations. Each situation has a different set of particulars – whether it is a middle or high school, a meeting with a student, parent, or coworker, called by the teacher or someone else – that pushes teachers to think about what is means to be culturally responsive both broadly and specifically in the context of the simulation. One of the greatest challenges in teacher education is that "teaching occurs in

particulars – particular students interacting with particular teachers over particular ideas in particular circumstances" (Ball & Cohen, 1999). But most preservice teachers do not have any particulars for thinking about context, let alone many. Philip (2011) argued for the importance of context and asserted that "learning must occur over time and across many contexts, particular contexts that are initially seen as different by the learner" (p. 327). Like Philip, I contend that teachers come to make sense of concepts in teaching through many contexts, rather than making sense of concepts and then simply applying them in context, especially as it relates to responsiveness. When teachers see what that looks like in multiple contexts – an interaction with a student about a disciplinary issue, a conference with a parent about a students' learning needs, a conversation with a coworker about past students – they come to understand what partial expertise in teaching really means and the consequences of failing to grasp it. Broadly, multiple contexts push back against prescriptiveness when thinking about teaching practices and can, when they provide a wide range of representations, serve as "antidotes to the dangers of overgeneralization" (Shulman, 1992, p. 3).

Designing Clinical Simulations for Culturally Responsive Teaching

The Darius Miller simulation was the first of three clinical simulations for culturally responsive teaching that preservice teachers participated in as part of a larger study. The simulation was designed as a common situation in teaching – responding to a classroom outburst – but required cultural consciousness and competence to interact productively with the student involved in the outburst.

Description of the Simulation

In this simulation, preservice teachers interacted with an actor who portrayed a fifteen-year-old, Black, male student in a 10th-grade honors class at Stratford High School, a Nashville-area high school with a student population that is 70% Black. According to the Teacher Interaction Protocol (TIP), Darius is creative, hardworking, and very social, but he is often talking when he is not supposed to be in class. The TIP elaborates further, "Darius is not the only student who talks when he is not supposed to, but it seems like you hear his voice more often and louder than anyone else." Prior to the interaction, the teacher has initiated a meeting with Darius because he had walked out of class after the teacher called him out for talking when he was not supposed to be. In the simulation encounter, the teachers learned that Darius felt he was being singled out as a Black male. Darius told them, "I know I'm talking sometimes when I'm not supposed to be, but so are other kids and you don't call them out like you do me. Why you always gotta call out the Black kid?" If teachers prompted the actor for more information about why he was feeling singled out, they learned that Darius had experienced other similar situations at the school. Teachers who did not seek to additional information heard little else from him except for his first disclosure of feeling singled out as a Black male. Actors were trained to push teachers back to the concern about feeling singled out if teachers focused too much on his behavior but to eventually give up resignedly and close themselves off both physically and verbally from further interaction.

Design Choices in the Simulation

Design of the simulation encounter. The design of this clinical simulation encounter was informed by literature on standardized patient encounters for cultural competence in

medical education and meta-principles derived from a review of literature about how doctors develop cultural competence (see Table 1 for a summary). I designed the TIP in such a way that teachers might notice certain aspects in order to prepare them for Darius' disclosure in the simulation and cause them to seek his perspective. A culturally responsive teacher would have recognized the possibility for Darius to feel singled out as a Black male in the class, especially since all but one of the participants were White teachers. A teacher who had already developed some cultural awareness would likely have noted the possibility of race being part of the simulation in the pre-reading questions. Teachers learn in the TIP that Darius is Black, and while Stratford High School is a predominantly Black school, honors classes very often are not. Background information about Darius in the TIP emphasized that Darius had always been previously receptive to the teacher's efforts to mitigate his talking, so that him walking out of class would clearly be unusual behavior for him. I also carefully chose language in the TIP to clarify what is fact ("Darius is often talking when he is not supposed to be") and what is the teacher's perception ("You hear Darius's voice above the others as he talks to a student next to him"). Ultimately, I wanted to design an interaction in which all teachers had to respond to the student's perspective, but only those teachers who prompted him further would learn the full context for his anomalous behavior. Teachers who did not have the cultural awareness to anticipate the possibility of race layering the interaction could still have shown competence by seeking additional information with clarifying and probing questions.

How Meta-Principles and Learnina Conjectures Informed the Design of the Darius Miller Simulation

Table 1

	ow Meta-Principles and Learning Conjectures informed the Design of the Darius Miller Simulation					
In the SIM	Meta-Principle	Learning Conjecture	Design Choices			
En	Be specific.	 Teachers learn to recognize the cultural specifics in a situation when they have an opportunity to see the harm that comes from taking a colorblind perspective. 	 Situated in a common classroom management problem Specific to a Black male student in an honors class in a predominantly Black Nashville high school 			
Encounter	Trust no one.	Teachers begin to see culturally responsive teaching as necessary to their work when they realize how trusting relationships are important in common problems of practice.	 Set early in the school year so teachers do not yet have Darius' trust and must respond to his concerns directly to develop and maintain it Layers mistrust of the teacher with similar feelings towards other teachers and the school at large 			
	Make sense.	Teachers move from a binary of "right" and "wrong" to more and less responsive in a particular context when they are able to compare their actions and assumptions with other teachers.	 Elicited teachers' assumptions and feelings before, immediately after, and one week after the encounter Evaluated teachers' words and actions but from Darius' perspective 			
Cycle	Think long term.	Teachers recognize the multifaceted nature of culturally responsive teaching when they are able to look at a bounded situation within the actual timescale of teaching.	 Explored both alternative approaches to SIM as well as what teachers could do next in real life if they had not been responsive to Darius in the SIM Brainstormed ways of eliciting students experiences and perspectives early in the school year, within teachers' disciplines, that would have been helpful in such an interaction 			

Context	Look at the big picture.	Teachers develop both a rich conceptual understanding of culturally responsive teaching and culturally specific knowledge when they see it more as a learning experience, not as an application of what they have already learned.	 First SIM in a series of three that spoke to what it looks like to be culturally responsive in different settings Completed prior to when teachers read about the race and racism in education (eg., Goff et al., 2014; Foster, 1997)
	Share a vision	Teachers can better view particular practices as more or less responsive when they are talked about within a bounded context.	 Gave specific examples of what it would have looked like to be responsive Darius' concerns Solicited ratings from the actors and invited them to be present to speak about the interaction from Darius' perspective

In order for teachers be culturally responsive in this interaction, they needed to affirm Darius' disclosure of a racialized perspective, prompt for further information, and have the sociocultural consciousness to situate his perspective within that of a Black male in U.S. society and the contemporary social issues related to race and its intersection with gender. I likewise wanted to create a situation where the teachers would have to focus on the student's perspective on the situation rather than his behavioral compliance. In order to reach a productive end to the interaction, teachers needed to look at whether the interaction went "well" from the student's perspective rather their own.

Design of the simulation cycle. The design of the simulation cycle was intended to push preservice teachers to make sense of the simulation encounter from Darius' perspective rather than their own. This reframing was intended to support both specific practices – for example, eliciting the student's perspective and providing space for the student to share his concerns – as well as a conceptual understanding of culturally responsive teaching that privileges historically marginalized voices. While some choices about the simulation cycle were made prior to the simulation encounter others were made in response to how I saw teachers make sense of the simulation encounter and whether or not they were pulled up short by the experience. In Figure 2, I show the design cycle as planned prior to the encounter.

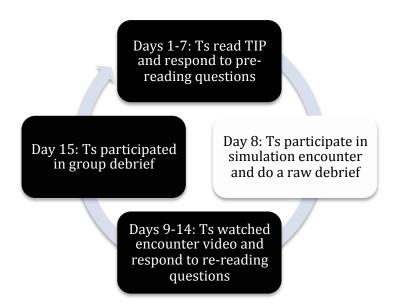


Figure 2. Description of the simulation cycle planned for the Darius Miller simulation. In the first week, teachers first read and responded to the TIP, then participated in the simulation encounter and did a "raw" debrief. In the second week, teachers watched their encounter videos and responded to re-reading questions individually, then participated in a group debrief. I expected most teachers to be pulled up short in the encounter.

Prior to the simulation encounter, I prepared pre-reading, raw debrief, and re-reading questions for students to respond to before and after the simulation encounter. The pre-reading questions asked students to say, in a word or phrase, what they thought the simulation was about, what they thought was going to happen, and how they were going to prepare for the experience. The raw debrief questions, which asked teachers to share what happened in the simulation and how they felt about it, came directly from Dotger's own work with clinical simulations and were a continuation of our design from the first year of the design study. The re-reading questions were also a continuation of the design in the pilot study. The questions asked teachers to say again, in a word or phrase, what they thought the simulation was about now that they had experienced. This was one way for me to see whether teachers had reframed how they were making sense of the simulation. I also asked teachers to identify one decision they had made in the simulation, explain why they

had made it, and tell whether they would change that decision after watching back the video recording of their simulation encounter. My primary design conjecture was that most teachers would be pulled up short by the encounter. I expected that, if teachers were not pulled up short by the simulation encounter, they would be when they watched their own video back several days later and were able to hear their words and evaluate their decisions from Darius's perspective.

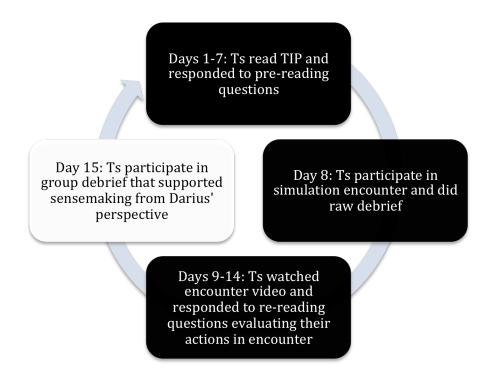


Figure 3. Description of the simulation cycle as enacted for the Darius Miller simulation. In the first week, teachers first read and responded to the TIP, then participated in the simulation encounter and did a "raw" debrief. In the second week, teachers watched their encounter videos and responded to re-reading questions that asked them to evaluate decisions they had made in the encounter. They then participated in a group debrief, structured in response to the re-reading questions, that supported teachers' sensemaking of the encounter from Darius' perspective. In actuality, most teachers were not pulled up short until they participated in some form of group debrief.

Following the simulation encounter, after reading the teachers' re-reading responses, I realized that many teachers were continuing to view the simulation encounter from their own perspective rather than Darius' and made decisions about the group debrief in order to support that shift in perspective. For the group debrief, I took a more structured approach to focus teachers on Darius' framing of the simulation encounter. Teachers began the debrief in small groups to share how they approached the simulation from their own perspective. I conjectured that this would cause teachers to recognize that there were many ways to approach the simulation other than their own, though I realized later that most teachers had, at that point, already informally shared with each other in the week since the simulation encounter. Nonetheless, this round of sharing in class served as a useful tool in grounding the next activity in a shared understanding of the teachers' intentions. Next, I provided each group of preservice teachers with a list of quotations taken directly from their simulation encounter video recordings. The groups did not know when I gave them their lists that each group's had been tailored for the individuals in that group. In this way, I provided teachers a chance to talk about what was on the list in a detached manner if they chose, which I conjectured would reduce defensiveness. I asked the teachers to pass the list around and each read one quotation from the list and then talk about what they thought Darius would have heard. In the actual debrief, I said to the small groups:

I want you to pick one statement on the sheet to read aloud to the group. And we're not here to go "well, that was good" or "that was bad" or anything like that. The conversation is, What do you think was intended? And what do you think Darius heard? *That's our frame for looking at them.* (emphasis added)

This instructional activity seemed to be the most successful at supporting teachers in thinking about the impact of their words rather than their intention and, as a result, pushing them to look at the simulation encounter from Darius' perspective. I then led the teachers in a whole-group discussion about what they had noticed when reading the list of quotations and provided them with an overview of common patterns in the simulation encounter from a more analytical perspective. As became evident in end-of-course interviews and a survey conducted six months after the end of the course, many teachers continued thinking about the Darius simulation well after the group debrief, and many made sense of the simulation encounter through supports other than those I provided, like talking with family, friends, or other current or former teachers. What became most evident in the retrospective analysis of the simulation cycle was that even teachers who reached similar endpoints in terms of their learning had very different trajectories in terms of their sensemaking. These teachers had different entry points into the simulation and benefited from different kinds of supports. In the next section, I explain how I approached my analysis of these issues and what I found in the case of three similar teachers.

Methods

In this paper, I ask the two following questions. First, How do teachers make sense of clinical simulations over time? Second, What supports help preservice teachers make sense of clinical simulations in ways that make it possible for the simulation to become a critical incident? To analyze these questions, I examined how teachers framed the problem in the Darius Miller simulation throughout the simulation cycle and through the course to the end of the semester.

I chose to focus on frames in my analysis because they are related to the lenses

teachers have for seeing students and interpreting their interactions. In order for teachers to be culturally responsive in an individual interaction with a student, they must frame the interaction in a way that takes up the student's perspective. Teachers' frames are directly related to what they notice. I take as noticing that which teachers give salience in a given situation. Schön (1983) wrote, "As [teachers] frame the problem of the situation, they determine the features to which they will attend" (p. 165). In his observations of teachers' noticing, Erickson (2011) found that teachers' noticing was selective and highly instrumental. Erickson found that teachers' interpretations differed along with their pedagogical commitments. Therefore, it is likely that a culturally responsive teacher would notice different aspects of a student interaction and interpret those details differently than a teacher who does not see the cultural demands at play. Moreover, a culturally responsive teacher would give salience to that which the student notices and makes salient in an interaction in order to affirm and validate his perspective.

Frames are a particularly useful tool for analysis because they are related not only to lenses and interpretation but also to action. The term *frame* refers to "the clustered set of standard expectations through which all adults organize, not only their knowledge of the world but their behavior in it" (Barnes, 1992, p. 15). Thus, looking at teachers' framing of the problem allows me to look not just at what they perceive the problem to be but how it shapes their behavior in their interaction with Darius. Teachers' frames lead to a set of expectations about they will find in a given setting.

Table 2

Data Collection and Analysis Plan. Secondary artifacts are shaded in gray. Unless otherwise noted, data is available for all 33 preservice teachers (Ts).

Data source	When collected	Description	Analyzing for	
Written pre-reading questions	Within five days of encounter prior	Ts responded to questions based on their reading of the TIP.	How Ts framed who, what, and where the problem was	
Video recorded simulation encounters	During encounter	Ts participated in the sim.	How Ts framed the problem, how Ts responded to the S's framing of problem, whether and how Ts reframed the conversation with the S based on S's perspective	
Video recorded raw debrief	Immediately after encounter	Ts reflected on what happened in sim and how they felt about it.		
Written re-reading questions	Within five days of encounter after	Ts responded to questions after viewing their own sim video.	How Ts (re)framed the problem, whether they were able to view their performance in the sim from the S perspective	
Audio recorded group debrief	One week after encounter	Ts participated in small-group activity and large-group discussion led by teacher educator.	How Ts responded to their own comments in the sim when framed from the S perspective; whether Ts moved from a focus on their experience in the conversation to the S's	
Other written artifacts from course	Throughout the course, following the simulation cycle	Affinity group notes, course/instructor evaluations	Any of the above	
Audio recorded end- of-course interview (n=23)	End of course, approximately two months after simulation cycle	Ts responded to questions about the sim experience within the context of the course.	How Ts framed what they thought they learned from the DM simulation	
Written six-month follow-up survey (n=18)	Six months after end of course	Ts responded to questions about the sim experiences within the context of their other courses and S teaching.	How Ts framed what they thought thought they learned from the simulations specific to the DM simulation	

When teachers' expectations go unmet – when they are pulled up short – they have an opportunity to reframe the problem in order to make new sense of the situation in a way that shows evidence of learning (Bannister, 2015). In order to look at how teachers made sense of the clinical simulations over time, I followed each teacher's framing of the problem over the course of the simulation cycle and to the end of the semester (see Table 2 for a summary of the data analysis plan). Similarly, to examine how teachers' sensemaking process was supported, I tracked how teachers' framings changed in response to various design choices in the simulation cycle.

Researcher Positionality

In order to address concerns of trustworthiness, I provide a brief description of how I was positioned in the instructional context. I served as a co-instructor in the course in which this study was set. I was part of a team of three instructors in the course, including one faculty member and another doctoral student in the department. The faculty member had previously taught the course and had the clearest vision for the course and how it fit in to the overall program of studies for the preservice teachers. As a result, the preservice teachers in the course as well as the instructors generally deferred to her in guiding the course, although the planning for and instruction in each class session was collaborative. Preservice teachers in the course knew that I was conducting research on the clinical simulations.

In keeping with the tenets of culturally sensitive research and dangers "seen, unseen, and unforeseen" that result from researcher positionality (Milner, 2007), I also provide a brief description of how I positioned myself with respect to the pre-service teachers and the focus of the study. I identify as a White woman, monolingual, in a two-

professional marriage. I was educated in traditional, public K12 schools and elite, private post-secondary institutions. I am the mother of two White children and one Black child, which has resulted in a second-hand "double consciousness" (DuBois, 1903) of the racialized experiences for children of Color that most certainly makes its way into my work as a teacher educator and researcher in teacher education focused on equity and social justice. As an instructor in this course, I positioned myself primarily as a teacher educator but also as a former teacher who lacked the components of cultural responsiveness in my years as a novice teacher but gained them through a series of critical incidents that shaped my present focus. In the course, I often situated the clinical simulations as opportunities to avoid the mistakes I made as a novice teacher. By positioning myself alongside the preservice teachers, I tried to establish rapport that would allow the teachers to be candid in their responses in the debrief, interview, and follow-up survey.

Focal Cases: K, L, and M

I selected Kylie, Lisa, and Miranda for this comparative case analysis because there was enough in common in their learning and encounters to make them comparable while differing in important ways so as to contrast their trajectories. All three of these preservice teachers were White women in their first semester in the masters-level, secondary licensure program, recently graduated with their bachelor's degree, who had not previously worked as full-time teachers in a traditional school setting. All three were placed in the same predominantly Black (72.5%) high school for their fall placements. In addition, the three teachers spent approximately the same amount of time with Darius in the simulation encounter (out of a possible 12 minutes) compared to the class as a whole (see Table 3). In addition, they apportioned their time in the interaction similarly in how

long they talked and how long they let Darius talk. Most importantly, all three of the preservice teachers described what they learned from the Darius simulation in similar ways. In their end-of-course interviews, they showed evidence of having developed a level of cultural responsiveness. However, each of the preservice teachers linked their learning to different points in the simulation cycle. Their artifacts from throughout the process and other data collected for the study suggest that they were pulled up short by different aspects of the design and then supported, in one way or another, to make sense of that experience in order to support their learning. In the next section, I provide narrative descriptions of each preservice teacher's trajectory through the simulation cycle, with particular focus on how the teachers framed the interaction at different points. To strengthen the validity of these findings, I provided an opportunity for each of the teachers in the focal cases to read the narrative description of their trajectory and allowed them to provide feedback in terms of how well the descriptions matched their actual experiences. In addition, I shared all three focal cases with one of the actors for this simulation so that the findings could benefit from an emic perspective in terms of representing Darius' point of view.

Table 3

Duration of Simulation Compared to Whole Class

Teacher	Total Duration	Teacher was talking*	Darius was talking*				
Kylie	10:47	6:46	3:29				
Lisa	11:03	7:32	3:10				
Miranda	9:00	5:53	3:07				
Whole class	Mean = 8:22 (SD=2:44)						

^{*}Total does not add up to total duration because of time neither teacher nor Darius was talking.

Findings

All three of the preservice teachers whose trajectories are described here talked about what they learned from the Darius Miller simulation in similar terms. However, the trajectories of their learning varied in terms of when they were pulled up short and how the simulation cycle supported that learning.

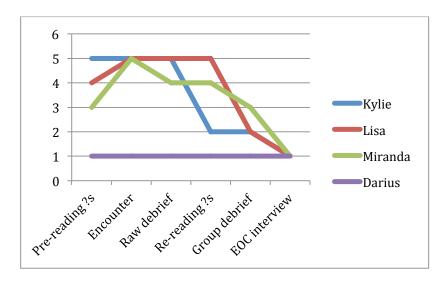


Figure 4. Graphic representation of focal teachers' trajectories of learning. "1" on the Y axis represents a framing of the problem as a result of the teacher's potential racial bias. "5" on the Y axis represents a framing of the problem as a result of Darius talking and general lack of respect. The X axis represents the various data points that were available as evidence of teachers' (re)framings. The shape of each trajectory shows that while some teachers progressed slowly over the course of the simulation cycle towards a framing that was similar to the student's, other began with the student's framing in mind and then moved away from it before moving back towards it.

When re-watching her simulation encounter video, Kylie recognized that her framing of the problem, which focused on the talking in class, was based solely on her own perspective and that she had disregarded Darius' framing because she did not feel comfortable talking about the issue of race. Lisa, who predicted that race would be an issue in the interaction, framed the problem as Darius having misunderstood her calling him out. She did feel comfortable talking about race, but did not realize until the group debrief that

she had done so in a way that likewise disregarded Darius' framing. Miranda, who began her interaction by getting Darius' perspective on the situation, felt conflicted about how to reconcile Darius' framing with her own. It was not until after later simulations that Miranda fully recognized that by rejecting Darius' framing, she was not really hearing him or considering the situation from his point of view. Figure 4 shows a graphic representation of the three teachers' relative trajectories to a common framing.

Kylie: From Respect to Responsiveness

Kylie, a preservice English teacher in the secondary licensure program, showed evidence that she was pulled up short when she watched her simulation encounter video prior to the group debrief. Kylie was then able to reframe the problem in the simulation from one of respect to responsiveness. That is, rather that focusing on whether she felt Darius was being respectful in the classroom, she began to focus on whether Darius felt like she was responding to what he was sharing about his experiences as a Black male student. Figure 5 shows how Kylie reframed the problem over the course of the simulation cycle in terms of who was responsible for solving the problem, what the problem was, and where the problem was located. The space dashes between the numbers, which indicate data points, represent the relative amount of time that passed between points of data collection and are not to scale.

"Respect in the classroom." At the beginning of the simulation cycle, Kylie framed the problem as one of respect. In her pre-reading response, Kylie wrote that she thought the simulation was about "respect in the classroom," namely Darius' lack of respect for her as the teacher. Kylie's pre-reading response focused on getting Darius to recognize that his outburst in class was not respectful. Kylie used the word "respect" or "respectful" five times

in her 476-word response, four times in response to how she would prepare for the simulation. She used the word "inappropriate" four times and "rude" once. Kylie considered the possibility that Darius may be "very frustrated" or even "react in anger" or that the simulation encounter would not go as she envisioned, but she reiterated that regardless of what happened she needed to help Darius understand that he "must respect the adults in his life now and in the future."

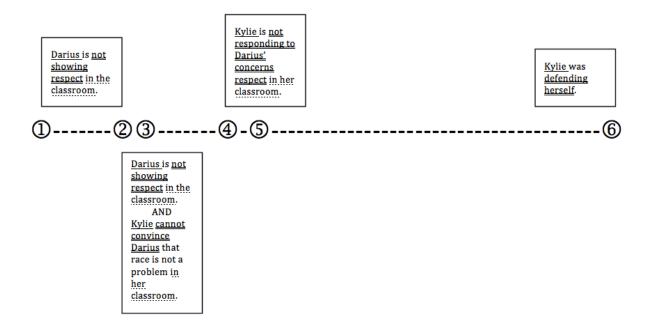


Figure 5. Kylie's reframing of the problem at different points in the simulation cycle. Who Kylie saw as responsible for solving the problem is <u>underlined once</u>. What Kylie saw as the problem is <u>underlined twice</u>. Where Kylie saw the problem as primarily located is <u>underlined with dashes</u>. In her initial framing of the problem in ① the pre-reading questions, Kylie saw the problem as the result of Darius not showing respect to her and his classmates in the classroom. During ② the encounter and in ③ the raw debrief, Kylie maintained this frame but also saw the problem in the interaction as the result of her inability to convince Darius he was not being singled out because of his race. After watching her encounter video, Kylie reframed the problem a final time in ④ her re-reading questions as the result of her own unwillingness to talk about race and, as a result, inability to respond to Darius concerns. She maintained this framing and in ⑥ the end-of-course interview reframed it more broadly as a problem of her defending herself against claims of racist intent.

While Kylie did mention in her pre-reading response the need to listen if Darius chose to share something with her, she did not include in her preparation anything she wanted to ask Darius during the simulation encounter. Because she framed the problem as one of respect, she saw the interaction as an opportunity to address the lack of respect. In her response to how she would prepare for the simulation, Kylie wrote, "I am trying to understand why Darius, a leader and successful student, reacted in such an inappropriate manner." Kylie recognized that Darius' outburst in class was out of character for him, but she made sense of it by assuming that Darius either did not understand that his outburst was "inappropriate" or does not realize the potential consequences for his behavior, mentioning at the end of her response her plans to prepare by looking up the disciplinary actions available to teachers at the high school at which the simulation is set. Ultimately, Kylie gave more salience to Darius' outburst within the context of what she would expect in her future classroom than she gave to other details provided that suggest Darius is a generally respectful student who knows the "appropriate" way to behave in a classroom. Kylie's focus going into the simulation, therefore, was what she needed to "make sure that Darius understands," not what she needed clarity on from him. What Kylie envisioned in the interaction, based on her pre-reading responses, was Darius doing little more than being present and either placidly accepting or angrily rejecting her lecture on respect. Kylie did note that if the situation happened in real life, she would have spoken with Darius' other teachers about any disciplinary issues they had with Darius. Kylie included several questions she would want to ask Darius' other teachers, like "Does Darius consistently have a problem with talking in class?" Kylie's focus on talking to other teachers to learn more

about Darius but not *to* Darius about his perspective reveals that she was framing the experience almost entirely from the teacher perspective, usually her own.

In her simulation encounter, Kylie tried to solve the problem of Darius being disrespectful, by talking out of turn, and to help him understand that she was only singling him out because she saw him as a role model for other students. Throughout the simulation encounter, Kylie sat fairly relaxed in a chair across the table from Darius and made eye contact throughout, often nodding her head, seemingly a sign of active listening. She greeted Darius when she walked into the simulation and thanked him for staying after school. Once they were seated, Kylie said:

So, um, I think we should talk about how you left the class today. Um...first, I would like to apologize if you felt like you were singled out. That's not how I wanted you to feel. But I do expect respect in classroom and the way you left was kind of inappropriate and not very respectful. So...do you have anything to say about that? Kylie attempted to frame the interaction through this comment as collaborative. She apologized for making him feel singled out but seemed to expect an apology from him as well for his "inappropriate" behavior. She then provided him with an opportunity to respond to her apology and framing of the situation. Darius in turn conceded that his actions were "disrespectful" and shared that his frustration had been building up. Kylie continued to probe for more information, but still with a focus on Darius' talking in class. She asked, "Is there a reason why you're having problems not talking in class?" Darius then

made the standardized disclosure in the simulation – he knows he is talking when he is not

supposed to be, but so are other people, and he feels like his called out more often because

he is one of few Black students in the class. In doing so, Darius reframed the problem as one

of racial bias and the role that it plays in classroom discipline specifically. In acknowledging that he was often talking out of turn and even agreeing with the teacher that his outburst was "disrespectful," the actor attempted to redirect the teacher from a focus on the talking in class.

Like many of the teachers in this simulation, Kylie completely avoided taking up Darius' framing of the situation. In her case, Kylie did not overtly dismiss Darius' concerns about being racially targeted but did so implicitly nonetheless. She thanked Darius for sharing his concerns and then reframed the conversation once again. She conceded that Darius may feel singled out, but then told him that she called him out for talking more often than others because she saw him as a leader in the classroom. She told Darius, "You're such a great student leader, such a bright student. And so I think they are looking to you as an example." From there, Kylie turned back to her focus on the talking in class. She told Darius, "I think the main thing is that when someone else is talking, that's not the time to talk." Kylie seemed to think that if Darius simply understood when it is the right time to talk, and made him feel better about being singled out, the conflict that existed between them would be resolved. Kylie continued this focus even after Darius shared that the racial targeting had been happening in other classes, too. Kylie tried to get Darius to think about how he could have handled his outburst in class differently, at one point interrupting his talk to say:

[3:25] Kylie: What is some way you could have handled the situation today differently? Because I think that it's good for you to talk about your concerns with your teachers. So is there a way you could have handled it differently?

[3:39] Darius: I'm not sure. I mean, it's just something like, like I could have sat there and just...<shrugs> just (xx)=

[3:47] Kylie: I think that you should talk to your other teachers. And, but, one thing, you do need to consider when it's the right time to talk and when it's not.

In interrupting him, Kylie openly refused to engage in Darius' framing of the problem from a racialized perspective. She then persisted with her original framing of respect. She said, "So if you do [feel singled out], I want you to come up to me, just not an outburst in class, but come up to me after class, and I want to hear your concerns."

Darius attempted repeatedly to frame the problem as one of racial bias, giving salience to the many times in the past week that he felt targeted as a Black male when in predominantly White classrooms and groups of friends. However, Kylie consistently avoided addressing the issue of race. Instead, she encouraged Darius to talk to other teachers about how he was feeling, without recognizing how poorly the conversation was going for him in this first instance of just such a conversation. She told him "I want to hear your concerns" even as she refused to hear his concerns about being seen, in Darius' words, as "the Black kid who's always complaining" if he were to talk to his other teachers. Just past six minutes in the simulation, again interrupting Darius when it becomes clear he was not going to accept her framing, Kylie once again tried to solve the talking problem and posited it as the primary focus of the interaction.

[5:34] Kylie: I will pay more attention in class. I don't want you to feel like you're singled out, and I do know that other people are talking. So I think that one thing that you can do though is just make sure that you are being respectful and not talking over other people. Because I'll see that, and then I can see the other people

that are talking. Because I definitely don't want you to think that I'm singling you out. That's not what I'm trying to do. Do you feel better about it?

[6:03] Darius: Yeah, I do. It's just one of those things, like, I hear you saying it, that

[6:12] Kylie: Is there something – do you feel the group work is a good time for you to talk? Is there something about the class that could change to help you with the talking? *Because I feel like that's the really big problem.*" (emphasis added)

Kylie's interruption at this point suggests she thought Darius was going to bring up race again, and she wanted to stop him before he did.

the teacher, but, I mean, I don't know, it's just (xx)=

Darius and Kylie continued proffer their own to framings of the problem unsuccessfully for several more minutes. At 8:00 minutes into the simulation, Kylie tried to close the encounter by asking, "So are you good?" When Darius responded that he was still confused about what he had been experiencing and was concerned that it would continue, Kylie turned to a personal experience, relating how her sister was talkative in school and also frequently got called out for it, though adding, "I think that's a different situation from yours." Kylie concluded the simulation with the same frame in which she began, while broadening from just her classroom to the school in general. She told Darius:

When you're doing group work, you should be talking. You should have fun with that. But when the teacher needs your attention, don't talk. And then they won't need to call you out, and then they'll hear the other people talking and call them out. And yeah, I think if you just keep that in mind, it'll get better.

At that point, the two-minute warning is heard, and so Kylie moved to end the simulation by telling Darius that he was free to leave and thanked him again for staying after school. Kylie's simulation encounter was very typical of how many teachers in the class attempted to handle the simulation. Kylie neither affirmed nor directly dismissed Darius' feelings of being racially targeted, but her strong avoidance of the topic implicitly dismissed them just the same. Moreover, because she refused to take up Darius' framing of the situation, neither she nor Darius came to a satisfying conclusion at the end of the encounter.

"I really think I just didn't want to address the issue of race at all." Kylie's sensemaking evolved over the course of the simulation cycle, but her learning seemed to be most supported when she watched her simulation encounter video in order to respond to the re-reading questions. In her raw debrief, Kylie was able to echo Darius' framing of the situation. She said, "He said he feels like he's being singled out because he's Black." Kylie recognized that her response to that disclosure was not affirming to Darius but felt like she did not know what else to say that would be. She said, "I don't think he was reassured by what I was saying...I just kept talking about it because I didn't really know how to approach the subject." Yet Kylie seemed to have been in search of something to say that would have waylaid Darius' feelings rather than affirming them. She said, "I couldn't figure out what I would say to him to make him feel like that's not what was happening." Rather than question whether she really was targeting Darius because of his race, or affirm his right to feel this way, Kylie sought to assure Darius that his version of the situation was not accurate, which she thought would make him feel better. In the end, Kylie seemed to have been distracted by the other events Darius shared. She ended her raw debrief by saying, "I feel like he was fine with the specific situation in my class but I don't know. It would be interesting to see how he felt the rest of the year."

Approximately one week later, in her re-reading response, Kylie showed evidence of having reframed her understanding of the situation to one more closely aligned with Darius', supported by her having watched back her encounter video. Kylie said she felt "pretty good" after the simulation but then

after reviewing my video I realized that I didn't ever address his concerns directly... Immediately after Darius expressed his concern about how his race may be the reason why he is being called out in all of his classes, I chose to address his role as a leader in my classroom rather than assuring him that I am not intentionally calling him out for being different than other students. I thought this would be the most appropriate way to address his concerns, but I really think I just didn't want to address the issue of race at all.

While Kylie recognized that she had been avoiding the race issue, she still saw the desirable approach as being one that would assure Darius that she was not calling him out because he was Black. While she was starting to see the situation from Darius' perspective, she still viewed the solution from her own point of view as a White woman who could "assure" a Black student that she is not racially biased. She did start to realize though, that the talking itself was not at the source of the problem in the simulation. She wrote in her re-reading response, "In the video, I frequently went back to the subject of talking in my class, but this did not seem to be what made Darius upset. He even apologized for talking too much in class."

Kylie's re-reading response suggests that she was "pulled up short" by watching her own video. She was trying to make sense of why neither she nor Darius were able to come to a satisfying conclusion to the simulation, and she recognized that she needed to better address Darius' concerns, though she was still looking at the situation from her own point of view.

"I was defending myself." In her end-of-course interview, Kylie reflected on how the Darius Miller simulation supported her reframing of who should be the focus in her interactions with students. Kylie shared that she had experienced a big change in her impressions of the simulation over time. She said,

I guess I realized, especially after the first one, I walked out and I wasn't that upset about it. I was just like, Oh, it was fine. I mean, I didn't think I handled it perfectly. But then as I thought about it, and especially after we talked about it in class, I felt awful about it.

The class debrief was especially helpful to Kylie in making sense of her experience because she recognized that the simulation had not gone as well for Darius as it had for her, and she was looking for something to help her understand why. Kylie felt her defensiveness in the simulation had kept her from really hearing Darius. She said, "I wanted Darius to not be upset with me or, so I was defending myself. And then I realized after looking at my video that I didn't ever address what he wanted. I didn't let him talk." The class debrief, during which time Kylie said very little, actively reframed the simulation from Darius' perspective.

Kylie described what she learned from the simulation as giving salience to the students' noticing rather than her own. She said, "I realized that I was thinking more about myself than the person in there. And I came out, and I was like, I would never want a student to think that way about me. But then I realized that I was just thinking about myself." Kylie said that at the time, she determined if a simulation went well based on her emotion. If *she* felt okay at the end of the simulation, then it went well in her mind. In the simulation encounter, Kylie made indirect efforts to assure Darius that she was not racist. After watching her encounter video and participating in the class debrief, she realized that such assurances were about defending herself,

not about caring for Darius. In thinking back to the Darius simulation, Kylie described what she learned by saying:

I guess just thinking about how they are seeing me instead of how I am seeing the situation. Because of course I would never intentionally try to single someone out because of their race...But I guess just listening to the student and realizing that even if I'm not intending to do something, it may come across as it. Because I really was trying to defend myself the whole time, and I didn't even realize it until I rewatched it. And I came out, and I was like, that was ridiculous. I was talking in circles, and I don't know why he wouldn't just – I think I spent almost the whole time in there, and I felt like I was finished in like two minutes saying what I had to say. But he kept bringing it up. And then I realized it was because I never really said anything. I think that was kind of embarrassing to see.

Kylie showed a level of emergent responsiveness through her awareness of the role of that race played in this interaction and her ability to reflect on the situation from another person's perspective. Moreover, she showed that, especially from the rewatching and class debrief, she was able to evaluate potential decisions she might make as a teacher based on impact rather than intent.

Lisa: Reframing from Talking to Talking While Black

Lisa, a preservice science teacher in the secondary licensure program, revealed that she was pulled up short in the group debrief when she realized that, although she had addressed race in the simulation encounter, she had not done so in a way validated Darius' perspective as a Black student in a predominantly White class. That is, while Lisa was aware that race might have been an issue from the beginning, she did not see it as salient in

her framing of the problem. As a result of the group debrief, Lisa recognized that while in some situations, including this one, race is central to reaching a productive conclusion to a problem. Figure 6 shows how Lisa reframed the problem over the course of the simulation cycle but even within the encounter. She also briefly saw the problem as teacher-centered, but only in the school outside of her own classroom.

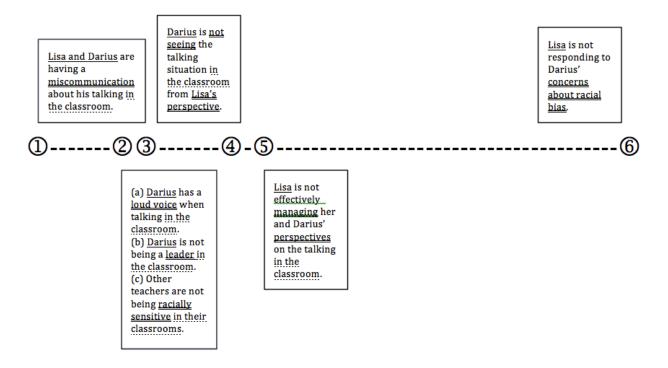


Figure 6. Lisa's reframing of the problem at different points in the simulation cycle. Who Lisa saw as responsible for solving the problem is <u>underlined once</u>. What Lisa saw as the problem is <u>underlined twice</u>. Where Lisa saw the problem as primarily located is <u>underlined with dashes</u>. In her initial framing of the problem in ① the pre-reading questions, Lisa saw the problem as the result of a miscommunication between her and Darius. During ② the encounter, Lisa reframed the problem several times in response to Darius' framing. She consistently saw Darius as responsible for solving the problem in her classroom, but saw how other teachers might be responsible for solving similar problems throughout the school. In ③ the raw debrief, Lisa saw the problem as the result of Darius' inability to see her perspective on his talking in class. During ⑤ the group debrief, Lisa reframed the problem a final time as the result of her own inability to manage her and Darius' competing perspectives on his being called out for talking. She maintained this framing and in ⑥ the end-of-course interview reframed it more broadly as a problem of her responding to Darius' concern about racial bias in the classroom.

"It's not because you're Black; it's because you're loud." In her pre-reading response, Lisa framed the simulation as an opportunity to "practic[e] difficult student/teacher communication." She expected "a student who is frustrated and may have a different view of events...which may be racially charged." Lisa noted that Darius was "a responsible student and role model" who was "creative, thoughtful, and hard-working, with a supportive family." Because of these characteristics, Lisa thought she would be able to come to a "productive conclusion" in the encounter by explaining her reasons for calling Darius out for talking in class and listening to his explanation for walking out of class. Lisa wrote in her pre-reading response that she would have liked to know more about Darius and her relationship with him in order to prepare for the encounter as well as information about the school ("demographics, social groups, big events concurrent with this issue, etc."), so she framed the student/teacher communication issue within a larger view of the student than just that provided in the TIP.

Lisa's framing of the encounter changed repeatedly over the course of the simulation and ended with her trying to get Darius to take up her framing by seeing the situation from her perspective rather than shifting her perspective closer to his framing of the problem. Lisa began her interaction with Darius by giving him an opportunity to share why he left class abruptly. She asked broad question, "What's going on?" During Darius's response to this question, Lisa made eye contact with him and nodded her head as she listened. She gave no obvious reaction to his statement that he felt like he was being singled out because he was Black. Lisa's response to Darius' perspective on the situation, though, was to deny that this was happening. She said, "So, you understand that, from my point of view, it's not because you're a Black student. We have plenty of Black students in the class.

And I love you all as students." Lisa then proceeded to proffer alternative framings to the one Darius offered. First, she denied that race could have played a role in her calling Darius out for talking. This colorblind perspective on the interaction essentially shut down any further response from Darius other than to restate his perspective that race did play a role. Next, she told Darius that his "voice projects a lot more than other students," which "feels disrespectful to me and to your peers." This issue, in a sense, comes from the TIP, which said that, "You hear Darius' voice above the others as he talks to a student next to him," but Lisa's interpretation of this statement is noteworthy. While the statement in the TIP positions the teacher ("you") as the active participant, Lisa repositioned Darius in this role. That is, she did not recognize that what she heard may be a result of what she was listening for – a student who is talkative in class – and placed the entire responsibility on Darius for having a loud voice. In this way, Lisa framed the encounter as one in which Darius was the person responsible for the problem and therefore the only person who can fix the problem. Finally, she said that she saw Darius as a role model who should "uphold a standard" in the classroom so that other students will follow.

In rejecting her own potential bias, positioning Darius as responsible for the problem, and introducing the leadership approach, Lisa gave Darius both great power and responsibility. She gave him the power as an influential peer, but also the responsibility for setting the example. Lisa essentially made Darius responsible for getting other students to be quiet, something she comes back to more than seven minutes later in the encounter when she tells him, "If you hear students around you talking when I'm trying to get them to quiet down...you can tell them to shut up," and then laughs. Lisa's colorblind perspective on the situation resurfaced when she responded to Darius' framing of the problem as one that

is about race. She said, "It's not because you're Black; it's because you're loud." Ironically, Lisa then said, "You've got to think about the other qualities at play here, and there are other variables in the situation." Based on her subsequent remarks, about White and Black students that "are being quiet" or "are talking," Lisa seems to be trying to reframe the interaction on the talking rather than making it about race. In doing so, however, Lisa fails to recognize that one of the other "variables in the situation" is race – hers as a White teacher and his as a Black student, both of which are "at play." In her response to his reframing, Lisa fails to consider that "loud" is a common stereotype of Black students in U.S. that is connected to disciplinary consequences (see Lei, 2003). Darius recognized he was talking when he was not supposed to be, which he stated several times in the interaction ("I know I was talking. That's something I do realize I shouldn't have been doing"), but it was precisely because he was talking while Black that he sees as the source of the problem. Lisa's inability to see the problem from his point of view made it difficult for them to move towards a "productive conclusion" like she hoped.

After Lisa rejected Darius' framing a second time, Darius tried again to present his perspective that he is being called out because he is Black, but he did so in a way that moved the problem from Lisa's classroom to the entire school. In doing so, he made it easier for Lisa to see race as a part of the problem without forcing her take any responsibility for potential bias in her own classroom. When Lisa reframed the problem for the second time as an issue of talking, Darius tried to help her see the situation from his point of view. He said, "I feel that this is not just in your class but also in other situations, and so that's why I came to this conclusion." The Standardized Student Interaction Protocol tells the actors not to mention other parts of the back-story unless teachers ask either

broadly or specifically about other events that contributed to Darius' behavior in leaving class. Here, the actor veered slightly off protocol in his comment about "other situations," which alerted Lisa to ask about those situations. Darius then described two events that happened, one that day in the lunchroom when he was singled out with another Black student for being loud in a group of rowdy football players, and another earlier in the week when he was tokenized as a Black student in a conversation about the police killing of Michael Brown and subsequent protests in Ferguson, Missouri. Whereas Lisa openly rejected the potential of bias in her own class, she quickly embraced the possibility that race was an issue in these situations that Darius described. Lisa first affirmed Darius' perspective on these situations but separated her own classroom from them and herself from the other teachers. She said, "I'm sorry that those things are happening *in your other classes*" (emphasis added). She continued:

That kind of racial interplay [between White teachers and Black students] is hard for some teachers who may have come from different backgrounds and are not able or who maybe are not being as sensitive as they should be. I mean, I think some people are well meaning but don't understand the implications of what they say.

Her comment about teachers not understanding the impact of their words connected back to Lisa's initial framing of this being a problem of miscommunication. Lisa then moved the conversation from those other classrooms back to her own. When she did, she moved closer to Darius' framing the situation. She began to see how, given his experiences in the other classrooms, he would perceive what happened in her classroom. At this point, Lisa had trouble clearly framing the situation aloud because when she started to restate her own framing, she recognized how it sounded to Darius. She said:

I really do try in my class, at least, to make it feel like an environment where, you know, not that race, not that it's race-blind, because that's silly. You know, race exists at our school, and it's definitely an issue. But that, you know, I'm taking into account and I'm trying to look at each student for, understanding their background, where they may be coming from in other classes that may be you feel coming into class that you're already profiled. And I really hope that in my class at least that you don't feel that way.

In her full comments, Lisa speaks for more than two minutes before Darius speaks again, her longest uninterrupted segment of speech at any point in the encounter. She seemed to be finally acknowledging Darius' framing of the situation as being about race, but her final comment suggests that she either did not believe that Darius was really talking about her class or was unwilling to consider the possibility that bias may have played a part in her calling him out. In this segment of speech, Lisa briefly took up Darius' framing, at least within the context of the school and his other classrooms, but then rejected it again within her own classroom.

By the end of the interaction, Lisa recognized that the source of the conflict was their opposing points of view on the situation, but her solution was to try to get Darius to see it from her perspective. When Darius told her in response to her extended speech that he did feel that way in her classroom, Lisa responded, "If you were the teacher in our class, and you heard you, a Black student in the back of the class, talking above everyone else, how would you go about quieting down the class?" Returning to her earlier framing of the problem as really being about talking, Lisa once again gave the responsibility for solving the problem back to Darius, this time not just as a leader but as the teacher. Darius

responded, "The way the situation was, there were multiple students talking. And so it wasn't just the Black student talking. And so I feel like if it was a more general reprimand instead of just me being called out, I would appreciate that better." Lisa said she would be more thoughtful about calling out the whole class but did not let Darius off without any responsibility, asking him to be "more conscious of the level of [his] voice." Darius apologized again for talking, but did not entirely concede to Lisa's framing, restating that, "I just felt like there were other students also talking." Lisa responded with her second longest segment of speech, pushing her perspective of the situation on Darius. She talked about how "it's hard on a day-to-day basis" and that her calling him out was "done out of frustration." Lisa returned to the leadership approach again, asking Darius to set the example as a "role model" who can "work together" with her when she is trying to quiet other students down. With time running out, the actor, based on the SSIP, resigned himself to the teacher's framing and replied to Lisa's final entreaty of "Does that make sense?" with a simple "Yeah." Lisa reasserted her framing once again before concluding the encounter. She said that she would talk to other teachers but that "if we can control anything, it will be in my class first," and she asked Darius to talk to her when he felt frustrated instead of leaving class.

"Getting him thinking about the challenges that I face as a teacher." In the raw debrief, Lisa continued to frame the problem as a difference in how she and Darius were seeing the situation and explained how she tried to get him to see things from her perspective. In doing so, Lisa located the problem as something happening outside her classroom that was affecting the way the student perceived what was happening inside her classroom. She said:

It did seem like there were exterior variables and influences on his feeling this way. And so kind of asking him how he would have done it and how he thinks I should have done it. Kind of getting him thinking about the challenges that I face as a teacher to kind of get people to pay attention and so that understanding that it was actually *not* racially motivated but just motivated by frustration and just trying to get students to listen. (emphasis in the original)

Lisa talked briefly about the situations Darius described in the lunchroom and other classroom and what responsibility she felt in addressing them. She said that "if I was actually working at the school then I would know a little bit more about the history teacher and...if I perceived that to be an actual problem." Here, Lisa considered the possibility that Darius' framing of the other events might also be incorrect. At no point, though, did Lisa move back to Darius' framing of the problem in her own classroom.

In her re-reading, Lisa moved back and forth between her own framing of the situation as being about talking in class and Darius' framing of it being about race. Lisa described the simulation as being about "managing sensitive, racially-influenced experiences." In this response, Lisa recognizes race as central to the interaction. However, it is not clear whether she simply recognized the potentially tenuous nature of a conversation between a White teacher and Black student or realized the role that race played in framing the problem. Lisa focused on race throughout her re-reading responses, but at no point does she recognize the possibility that her own racial bias may be the problem rather than Darius' talking. She explained her reasoning behind having Darius share his perspective first. She said, "I needed to hear his side before I chose a disciplinary approach" and that if she shared her perspective first it "may have made him more

defensive or less likely to explain the sensitive issues he was dealing with outside of my class." Lisa felt she had "let Darius know his feelings were legitimate regardless of the demographic environment," which was true outside of her classroom but not inside it. For her own classroom, Lisa said she would "work on being more aware of how many times I called students out and potentially create a new mechanism for quieting down the class...so no students felt singled out."

"I'm glad that I was called a racist." In the small-group portion of group debrief a week after the simulation encounter, Lisa showed that she was framing the simulation more closely to Darius' point of view. Lisa's group immediately recognized that the statements on the sheets were ones they had made in the simulation encounter, and Lisa then selected one that she thought was concerning – "I'm sorry you *think* that way" (emphasis original). Lisa commented:

To me there's a difference between 'I'm sorry you feel that way' and 'I'm sorry you think that way.' Like a feeling is something that is mutable and emotional and something you can work on together. Thinking seems more constructional. Like something's wrong with the way you think.

Lisa also recognized how hard it must have been for Darius to come and talk to her. She reflected on her own high school experience when she said:

If I felt uncomfortable, I'm going to go talk to a teacher after class. I've done it before. But there are a lot of students who would not feel comfortable, especially if they're feeling already patronized and singled out.

In the large group debrief, Lisa talked about the fact that during the simulation, she saw some aspects of Darius very clearly without recognizing the role that other parts of him played. She said:

I think that I devalued the fact that he is a Black student. I was playing the leadership card, not recognizing that he is not just a leader. He is a very dynamic person...and I was focusing too much on that one aspect of him.

In the end, Lisa seemed to recognize that Darius' framing the problem as being about race as vital to moving towards the "productive conclusion" she talked about in her pre-reading, even though she still had not figured out how to give him a response that would made him feel better. She said:

So how am I going to manage that? And without being like, No, I'm not racist. I wanted to be sensitive toward what the student was thinking. So my approach was to come in and set the ground. Like I was disappointed with what had happened in the class but I wanted to know where he was coming from. I wanted to gauge his view of the situation and why he felt like that was the only solution and then work on that conclusion together so that talking to him about what he would have done and things that I wanted to do in the classroom with the classroom and assure him that I was going to work on it and that I wasn't going to say that it wasn't possible for me to have been racist. But that it's something I will consider and will work on and that we can work together to work on a viable solution.

In her end-of-course interview, Lisa framed the simulation as being primarily about race. She said:

I'm glad that I was called a racist for the first time in a situation where I could get my bearings a little bit. It was really nice, the simulation part of it pushes you -- you can theorize all day long about oh, this is how I would react this situation. But when you're actually thrown into it, and you have to, on the ground, have responses to these people, it comes out of your mouth differently than you intend. And so it was a really valuable practice.

Lisa described how she made sense of the simulation encounter through a process of rewatching her video before and after the group debrief. She talked about how the group debriefs in class allowed her to see how other group members interpreted the situation and rationalized decisions they made. Then, after debriefing the simulation in class, she went back and rewatched her video. "In that week's time where I had been thinking about, I had a vision of what I was like in that room. And then I watched it, and I was like, I was quite bad."

Lisa was among only a very few students who considered that race may play a role in the simulation before the actual encounter. But her trajectory of learning shows that being race conscious is not sufficient for cultural responsiveness. Teachers also need to be competent in talking about race, which requires them to affirm and validate a racialized perspective on the situation, and critically reflective to realize when they do not have the skills to do so. Laura was pulled up short in the group debrief when she realized that she had not given enough salience to Darius' identity as a Black student in a predominantly White class with a White teacher. Once she did so, she saw the simulation as having revealed the need to develop that skill and the opportunity to do so.

Miranda: Reframing from Listening to Hearing

Miranda, a preservice English teacher in the secondary licensure program, showed how later simulation encounters can contribute to teachers' making sense of an earlier one. Miranda, unlike many teachers in her class, asked a series of thoughtful, open-ended questions in her interaction with Darius. She wanted to listen to his thoughts and feelings and thought he would be ready to listen to her. In essence, Miranda thought she could simply reframe Darius' view of the situation while still making him feel heard. In the end, though, Miranda realized that it was not enough to simply say she heard him. She had to actually show that she heard his concerns and then act in accordance. Figure 7 shows Miranda's reframing of the problem at different points in the simulation cycle.

"I'm interested to really listen to him on this matter." In her pre-reading responses, Miranda was already seeing the situation as heavily nuanced and was thinking about how to maintain a balance between meeting Darius' needs and hers as the teacher.

Based on the TIP, Miranda also saw the simulation as primarily about "miscommunication" and how good intentions, both hers and Darius', would not necessarily prevent this from happening. She wrote:

The crux of our problem revolves around a miscommunication. Although I've had good intentions, it's clear that this is not what he heard nor interpreted through my actions and language. He may think I'm out to get him. This is not the case, but I can see how he could think that. I'm interested to really listen to him on this matter.

Miranda realized even before the simulation encounter that her view of the situation and Darius' were likely different and that she needed to hear from him before anything else. She planned to start by asking him about his thoughts and feelings on what happened and

expected that he would be active participant in the conversation, neither angry nor apathetic about the situation. Miranda made much in her pre-reading responses of what she *did* know about Darius – that he has a lot of friends, works well in groups, is a strong leader, and has a supportive parent at home. She recognized the delicate nature of the conversation, that Darius likely "has pretty good communication skills and knows how to work with people" but "at the same time, he is 15 years old," and so could not interact with her as an adult peer.

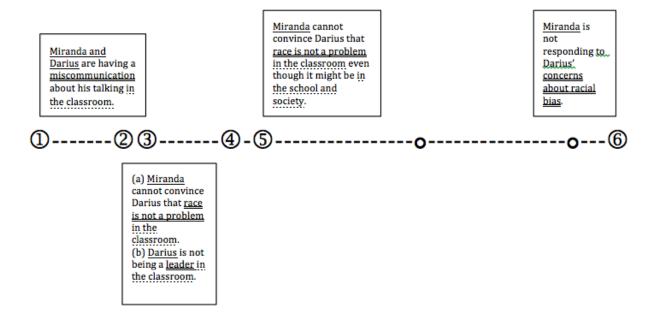


Figure 7. Miranda's reframing of the problem at different points in the simulation cycle. Who Miranda saw as responsible for solving the problem is <u>underlined once</u>. What Miranda saw as the problem is <u>underlined twice</u>. Where Miranda saw the problem as primarily located is <u>underlined with dashes</u>. In her initial framing of the problem in ① the prereading questions, Miranda saw the problem as the result of a miscommunication between her and Darius. During ② the encounter, Miranda reframed the problem twice. First she held herself responsible for convincing Darius that race was not the problem, but when that failed, she made Darius responsible for being a leader in the classroom. During ⑤ the group debrief, Miranda returned to her frame that problem was hers, in that she could not convince Darius that race was not the problem in the classroom, though it might be in other places in the school and in society. She reframed a final time after the subsequent simulations (marked on the timeline as **O**). In ⑥ the end-of-course interview, she saw the problem with Darius as the result of her inability to show that she really heard Darius' concerns about racial bias in the classroom.

Miranda was, even in her pre-reading responses, attempting to frame the situation from Darius' point of view. She wrote, "I'm trying to see myself from Darius' eyes. How does he perceive me?" However, at no point does Miranda bring a racial lens to the situation. She recognized that Darius may be feeling singled out. She wrote that Darius "is obviously frustrated...It seems that he has been holding in these feelings for some time now and that he finally couldn't take it anymore. Perhaps he feels victimized and that I have treated him unfairly." Miranda recognized that Darius may feel victimized, but simply as a student, not a Black student. She realized that he may feel that he had been treated unfairly, but she does not account for how that might feel to him coming from a White female teacher.

In planning for the simulation encounter, Miranda tried to think about how she could empower Darius without ceding too much of her authority as the teacher. She wrote, "I want him to feel free to speak his mind. However, the case still remains that he is talking too much in class." Miranda's framing of the situation included both her and Darius, but she had not yet figured out how to manage both their needs without prioritizing his over hers. Miranda planned to apologize for calling him out at the end of class and for making him feel singled out, but wrote, "I'm not going to apologize at the beginning. I don't want to start out in a weak position where I'm groveling at his feet." Again, Miranda was thoughtful her in pre-reading responses to consider how both she and Darius were positioned in the interaction, but at no point did she reference how race would play into the situation.

In the simulation encounter, Miranda followed much of what she had planned out in her pre-reading responses, but she did not know how to reconcile the framing that Darius brought to the interaction with the one she had of this being a "miscommunication." From the beginning, though, Miranda provided Darius with lots of opportunity to share his

thoughts and feelings. Miranda did start by sharing her perspective with Darius but did so in a way that made it easier for him to speak freely in the interaction. She began by telling Darius explicitly, "I'm not angry in any way, and I just wanted to hear from you." She described what had happened in class from her perspective and then asked an open-ended question to elicit his perspective: "So what do you think about it?" After listening to Darius' disclosure that he felt singled out because he was Black, Miranda followed up with another question: "Is there anything else I've done in these three weeks that's made you think that?" Darius then responded by sharing the incidents in the lunchroom and in another classroom. Nearly two-thirds of Darius' total talk time came in the first three minutes of the interaction, which showed that Miranda really did want to give him a chance to "speak his mind," as she said in her pre-reading response.

Once Miranda gave Darius a chance to share his perspective on the situation, she attempted to reframe his view of it in a way that met her needs as the teacher. While Miranda clearly listened Darius' concerns, she attempted to address them in a way that rejected his framing of the problem. First, Miranda moved the focus from the other incidents Darius mentioned back to her own classroom. She then responded directly to Darius concerns:

I can tell you that it is not because you're Black. That's not why I singled you out. So I want to kind of remove that, that fear or worry or thought. But I also know that that's present, so that's something I want to talk about.

Miranda shared with Darius how she saw him in the classroom – as a student leader who had lots of friends and was in a position to lead the class. She then transitioned from talking

about Darius to talking about her needs as a teacher. She revoiced Darius framing of the situation as part of her transition into the talking. She said:

I have felt that I've heard your voice more than others. And you may see that a different way, and I understand that. And I think that's why I singled you out. And I know that I need to be careful about that. So I apologize that I made you feel that way and that I made you think that because that's on me. I don't want to do that, you know?

Miranda picked up on Darius' point that he felt singled out, but left out his main concern that race was what was causing him to be called out more frequently than other students who were also talking. In this response, she seemed to move closer to Darius' framing of the problem, but without the central issue of race, she returned to her own framing, which was focused entirely on the talking. Miranda spoke with Darius about the talking in class, both why it was not acceptable behavior ("respect") and taking up the leadership approach again. Miranda even drew a comparison between the need to stop talking when the teacher calls for attention to rules about stopping the ball when the clock stops in football. Her points suggest that she was framing the problem in way that assumed Darius either did not understand when it was appropriate to talk in class ("When I start addressing the class as a group, I've got to have eyes on me") or why it was a problem when he continued to do so ("because what I'm saying is gonna to be important for the group"). At this point in the simulation encounter, Miranda had spoken for a continuous 2:40 before she paused. Then, in a move similar to Lisa, she asked Darius to accept her framing of the problem by having him look at the situation from her perspective.

In their final exchange, Darius tried a final time to bring race into the framing of the problem, but Miranda rejected it again. In response to her extended turn at talk, Darius explained to Miranda how he saw the situation, using specific racial descriptors. He told her that he did not have an issue with how she had called him out, but rather that he felt targeted by it. Darius said:

For me, the situation was that...say there was five people talking in class and I was one of them and the rest were White people or something else. I mean, the odds of that is just kind of like, Oh, Darius is being singled out.

Miranda then revoiced Darius' concerns, possibly to show that she heard them: "It made you feel like I was doing that because, truly, because you're Black." But then in quick repeat of the previous seven minutes, she denied that racial bias was part of the problem ("I want you to know that if there is a time that I call you out in the future, or if we have another talk like this, that it's not because you're Black. I'm not picking you out as, okay, Darius is the one Black student in this class so I'm going to call him out") and positioned him again as a leader in the class who was, therefore, responsible for solving the problem of talking in class ("I think the reason I'm doing that is because I see you more as a class leader, and I think I put expectations on you to be a leader in the class, and then tried to get you to do that without ever communicating that to you"). Miranda did say that she understood why Darius saw the situation the way he did. She told him, "I can see, I see how you saw that, and I really do. And I need to be aware of that." But her final comments to him about being a class leader and communicating her needs to him in different ways suggest that she did not really, in the end, accept Darius' framing of the problem.

"I thought we would move past this a lot quicker." In her re-reading questions, Miranda showed that she was still framing the simulation from her perspective even though she could see Darius' point of view as well. Miranda, much as she said in her pre-reading questions, seemed to think that Darius would share his perspective and she would explain the situation to him a way that helped him realize that his framing was not what was really happening. She could not see that Darius' framing of the situation was a result of his reality as a Black male student. Miranda wrote:

He continually brought the discussion back to race. His claim was that I called him out on the basis of his skin color. I thought we would move past this a lot quicker and he would immediately believe that I didn't call him out because he is black.

Miranda wrote in her re-reading that she could have acknowledged to Darius that "unintentional racism" may have affected her calling him out, but she dismissed it because she thought is might "confuse him more" because "the bottom line is that I didn't call him out because of his skin color." So while Miranda could see the situation from Darius' point of view, she could not accept his framing because it was not *her* reality. Hence, her goal in the simulation was to convince Darius that his framing was not *the* reality.

Miranda began to recognize in her re-reading responses that she did need to acknowledge race in her classroom, but she could not figure out how to do that within her framing of the scenario. Miranda said she would make the same decisions again if she were put back in the situation, but that she would "add to it." She said:

I'm not exactly sure what I would add though. I want him to know that I value who he is. I value his culture, personal history, and everything that goes along with it – including being a black [*sic*] student. I want to bring those histories into our

classroom to diversify it and enrich it. But how do I make him see this? I didn't call him out because he is black [sic]. I need to state this, but I also want him to know that he has a uniqueness (just as all students do) that can really benefit our class. Elsewhere in her re-reading responses, Miranda echoed this same inner conflict about how to communicate to Darius that she saw him as a Black student without saying that she called him out because he was Black.

In the group debrief, Miranda continued to see Darius' framing of the problem as being about race as something that could simply be removed from the conversation and replaced with her framing of the situation. When Miranda herself read her (anonymized) comment about removing Darius fear of being singled out for his race she said, "It's addressing that I get that you're Black and it can be a factor in other parts of the school, but hopefully between us we can see that it's not about that." Miranda's small group included another student, Evelyn, whose learning in the simulation cycle went beyond emergent responsiveness to a level that was much more critical. She pressed Miranda and others in the small group to recognize that as White women, they were not going to see the situation the same way as Darius. She pushed them to consider the possibility that they were not going to be able to convince Darius that race was not a part of the problem because as a Black male student who has been repeatedly targeted and tokenized for his race, his framing of the situation was his reality regardless of what the teachers said. Miranda's small group had only a few minutes to think about these ideas together before the class reconvened as a large group.

Even back in the large group, Miranda seemed stuck on the issue of how to recognize that race can be an issue without apologizing for something she thought she had

not done. She connected this issue to the idea of *student will* from class readings by Rancier (1991), that the role of the teacher is to incite the student's will to learn. Miranda recognized that she needed Darius to willingly participate in this process, but she did not know how to incite his will, and so she used the leadership approach to try to do that. She said, "I think subconsciously [the leadership approach] was my trick to be like -- this will be the way [for Darius] to be self-motivated and not talk in class and this is going to work really well." But when Darius did not take up this framing of the situation, Miranda did not know what to do in response, and even in the group debrief, she still felt confused about what to do with Darius' framing. She said in the group debrief, "But that [talking in class] wasn't even the issue. Because that was X. And he's seeing Y, which is...it's because I'm Black. And...I still don't know if I get how to answer that." Miranda felt that if she apologized, it would cause her to lose authority.

"Seeing the world from [someone else's] eyes is one of the most important things you can do." Miranda eventually began to make sense of the Darius simulation as a result of the two additional simulations in the course. The next simulation was a teacher-initiated conference with Maryam Sahil, a Kurdish immigrant parent, in which the teachers talked with Ms. Sahil about her son, Aran, and his reading abilities. Miranda reflected on the fact that in her interaction with Ms. Sahil, she had "ended up dominating and controlling the conversation" (re-reading responses). She wrote in her re-reading, "I spoke too much, was not clear, and did not listen to what Mrs. Sahil had to say. I didn't ask her very deep, intentional questions. I basically forced the school's thoughts upon her."

Miranda recognized that she had basically forced Maryam to accept her own framing of Aran's situation rather than trying to see it from Maryam's perspective. In her simulation

with Darius, Miranda had asked questions that brought out Darius' framing of the situation, but she had then rejected it. In the simulation with Maryam, Miranda did not ask those questions and found that what she did learn from Maryam – that she thought Aran was a good boy and a hard worker – fit easily within the Miranda's framing of the problem she had to begin with. Upon reflection, though, she realized that she never really got to Maryam's perspective and was left feeling like she had not really communicated well with Mrs. Sahil. As a result, Miranda approached the final simulation different than every other student in the course. The final simulation was with Ms. Duncan, a veteran teacher who knew the teacher's students from the previous school year. In that simulation, teachers heard Ms. Duncan's impressions of those students. Miranda spent a significant portion of the simulation just conversing with Ms. Duncan. Whereas most other students immediately shared their class lists with Ms. Duncan and asked for her impressions, Miranda asked deep, probing questions ("Why do you teach? Why do you think that teaching is important? What would be some of the purposes of that for you?") for more than four minutes before she handed over her list at the actor's prompting. Miranda reflected on this choice in her re-reading responses. She wrote:

I decided beforehand that gaining information about my students was secondary to getting to know Ms. Duncan. I knew that I would get to know my students fairly quickly. If I felt like I needed extra help or support later with relating to or working with certain students, I wanted to have a good relationship with Ms. Duncan to fall back on.

In short, Miranda wanted to understand Ms. Duncan's perspective so that she could figure out how to work well with her. She knew that Ms. Duncan's thoughts on the students would

not be useful without also knowing how Ms. Duncan framed her work as a teacher. Miranda saw how her interactions with Darius and Maryam influenced this final simulation. She wrote in her re-reading responses:

The other two simulations *definitely* influenced this one. After missing out on so much with Mrs. Sahil, I realized that getting to know the person and seeing the world from his/her eyes is one of the most important things you can do. I tried to apply this by just getting to know Ms. Duncan. (emphasis in the original)

At the end of the semester, in her end-of-course interview, Miranda recognized that there was "definitely a progression" in how she came to make sense of the simulations. One of her biggest takeaways was what it meant to actually hear someone's perspective. While she gave Darius an opportunity to share his thoughts and feelings, her responses to them showed that she did not accept his framing of the situation. In her end-of-course interview, Miranda said that she had learned to wait before responding to what someone has said:

Cause it's better to choose your words wisely and really hear what they're saying and address what they see as the problem instead of covering yourself and just talking over the issue to protect yourself a little bit.

When pressed about when she felt the need to protect herself, Miranda referenced the Darius simulation and said she had not listened to what he was telling her. When asked how she decided whether a simulation went well, Miranda described how her view of that had changed over the course of the semester. She said:

I guess at the beginning I was thinking, it will be a success if I get my points across and they understand what I'm thinking and how I want this situation to be resolved. So it was kind of resolution, problem-solving, me being heard. And I think towards

the end it kind of shifted to how well did I heard their position, the other person's position and what they're thinking. Listening to them.

By the end of the semester, Miranda had shifted her framing of the simulation from one for telling to one of hearing. She reframed her role as the teacher from one of maintaining her authority to one of positioning the student and parent in way that real collaboration could happen. For Miranda, this progression happened slowly over the course of the semester, and her learning was the result not of one simulation cycle but the sum total of all three cycles in the course.

Discussion

Each of these teachers, Kylie, Lisa, and Miranda, framed the problem in the simulation in different ways and varied in the ways they moved through simulation encounter, yet all three evidenced an emergent level of culturally responsive teaching (see Table 4 for summary). In some way, all three teachers were focused on the issue of Darius talking in class and sought to make Darius responsible for solving that problem. Whereas Lisa considered the role that race may play beforehand, and Miranda tried to address it once in the simulation, Kylie felt uncomfortable doing so and avoided it altogether. Where Miranda asked a number of open-ended questions, Lisa asked one and Kylie asked none, and yet all three responded to Darius' concerns by telling him, explicitly or not, that he simply should not worry about them. Whereas Lisa heard Darius' concerns about what was happening outside of her class and became focused on those issues, to the exclusion of her own classroom, Miranda listened those issues and then ignored them, even as she tried to show Darius that she had heard his concerns.

In the end, none of the teachers engaged Darius' framing of the problem as the result of racial bias on the part of the teacher. Yet over the course of the rest of the simulation cycle, all three realized that this step was necessary for any kind of mutually satisfying conclusion to the encounter. Kylie developed a level of cultural consciousness she did not previously have and talked about how she would "be more conscious of what the other person was saying." Lisa went in aware of the "racially-charged" nature of the simulation and came out with a more competence about how to respond to such a situation. Miranda learned something similar but also developed through other simulations her ability to critically reflect on a situation and see how her simply listening to someone else's perspective is insufficient, especially when a difference in power and privilege exists in the relationship. While all three women showed growth as culturally responsive teachers, it took slightly different forms and resulted from varying types of supports in the simulation cycle and even after it during the course.

Table 4
Summary of Focal Cases in Terms of (Re)framings

Preservice Teacher	Initial framing	Pulled up short	Final framing
Kylie	Darius is not	Watching her video	Kylie is defending
	showing respect in	encounter	herself.
	the classroom.		
Lisa	Lisa and Darius are	In the group debrief	Lisa is not
	having a		responding to
	miscommunication		Darius' concerns
	about his talking in		about racial bias.
	the classroom.		
Miranda	Miranda and Darius	After later	Miranda is not
	are having a	simulations	responding to
	miscommunication		Darius' concerns
	about his talking in		about racial bias.
	the classroom.		

Implications

The findings from this study have implications for both the design and use of clinical simulations specifically and teacher education broadly. Teacher educators who design and use clinical simulations for culturally responsive teaching must consider how to differentiate at multiple levels. First, simulation encounters must provide multiple points of entry for teachers so that all participants have opportunities to learn, albeit different ones depending on teachers' starting points. Teachers who have not previously been aware of the cultural aspects salient in a given encounter may be pulled up short simply by being asked to think about them, as Kylie was. Teachers who have already considered the role that culture plays in the given encounter need a challenging scenario in which they are pushed to consider other aspects at play or are pressed to the limits of the competencies in responding to the situation. For others who are both culturally conscious and competent in the given scenario, the simulation becomes an opportunity to refine the necessary skills and reflect critically on the scenario might play out on a longer teaching timescale. Furthermore, because teachers come in with these different starting points, they may need different kinds of instructional supports to prompt such critical reflection. Those who design these simulations would therefore ideally be familiar with both the participants and the instructional context in which the simulation is being used (ie. the topic of the course).

Within the context of teacher education and research on clinical simulations for culturally responsive teaching, these findings serve as a further reminder of the importance for considering multiple timescales in assessing teachers' learning. For growth to become evident, teacher educators must have a sense of how teachers view their work as teachers and the role of culture in it. Moreover, by assessing teachers' sensemaking of a given

scenario, teacher educators can continue to address misconceptions and provide additional instruction to push teachers' conceptual and practical understandings further, leveraging the simulation encounter for further growth. Finally, teacher educators using simulations cannot assume that learning from the simulations ends at the end of simulation cycle. Whether explicitly attended to or not, simulations may become a point of reference for teachers in future learning, such that they come to develop not only educational concepts, but also how they perceive themselves, their students, and their interactions with each other.

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CHAPTER V

CONCLUSION

This dissertation responds to both the need for more culturally responsive teachers in K12 schools as well as the need for effective approaches to preparing teachers to be culturally responsive. Clinical simulations for culturally responsive teaching offer a promising approach to meet these needs, with significant opportunities for further research that informs not just research and practice in teacher education but also theories of culturally responsive teaching.

In Chapter II, I proposed a set of six design principles derived from both literature in medical education on standardized patient encounters for cultural competence as well as sociological literature on the relational work of doctors and teachers. I argued, based on the medical literature, that clinical simulations for culturally responsive teaching should be specific to a cultural group, help teachers make sense of their assumptions and feelings, and be part of a bigger picture in preparing culturally responsive teachers. I further argued, based on sociological literature, that these simulations should focus on issues of trust, be viewed as a moment in a longer timeline of the work of teaching, and be situated in a clear vision of what it looks like to be responsive in a particular context. These principles speak specifically to how teacher educators can design and use clinical simulation for culturally responsive teaching but also broadly to what it looks like to adapt instructional approaches from other professions.

These principles from medical education were then used to design a clinical simulation in teacher education focused on issues of race, which I explored in Chapters III and IV. In Chapter III, I analyzed what preservice teachers learned from the Darius Miller

simulation through their encounter with a Black male student who felt he was being singled out for talking because of his race. In the categories that emerged, I found that a few teachers became more self-aware, in that they focused on their own cultural identity. This category was important because it showed that the simulation alone is not sufficient to support teachers' development of a rich understanding of culturally responsive teaching and that teacher educators must remain responsive to what their teachers learn in order to provide additional opportunities for moving towards this goal. In the second and largest category, I found that teachers became more racially aware – that is, they became aware of how important it is to attend to a student's cultural identity – and developed some cultural competence related to practices specific to this particular encounter. These teachers showed a level of emergent responsiveness that, with continued support, can prepare them to enact culturally responsive teaching once in the classroom. The third and smallest group became critically aware. Because of their past life experiences and perspectives they brought to the encounter and debrief, they developed a strong conceptual and practical understanding of cultural responsiveness that would not necessarily be possible with all preservice teachers through just one simulation. These findings help map the terrain of what teachers can learn from clinical simulations for culturally responsive teaching and help inform the learning objectives of future simulations.

Finally, in Chapter IV, I tracked the learning of three of the teachers in the second (and largest) group – the racially aware group – Chapter IV. I examined their various learning trajectories to look at where in the simulation cycle the teachers were pulled up short by their experience in a way that caused them to reflect on their own bias and assumptions. While Kylie was able to take the student's perspective on the interaction

when watching her encounter video, Lisa did not reflect on the salience of the student's race until during the simulation debrief. Miranda, interestingly, did not fully make sense of what she had learned in the Darius Miller simulation until after later simulation experiences in the course, which then caused her to reflect back on her interaction with him in a way that supported further growth. The findings from this analysis helped to refine initial design conjectures about the role of the encounter alone and speak to the importance of designing simulation cycles that provide repeated opportunities for teachers to make sense of their encounter experience.

One of the major limitations of this dissertation in supporting the claim that clinical simulations are a promising approach is that it focuses only on one cultural issue, namely race. In addition, because all but one of the preservice teachers in the study were White, interacting with a Black male student, there is no generalizability to other cultural issues in the simulation or situations in which there is greater congruence between the preservice teacher and simulated student. However, the findings from the study do provide a starting points for this to be studied to see if and how what students learn and their trajectories of learning vary based on the cultural issues focused on in the simulation and the cultural congruence of the teacher and simulated student, parent, or coworker. Research conducted on this project since these data were collected has provided opportunities for this kind of study. In addition, future research should focus on how the first set of design principles from medical education can be further refined based on additional research in teacher education. Further research with a larger set of encounters will also provide an opportunity to look at both particular aspects of the simulation, like the role of pre-reading

questions or watching video encounters, as well as how the simulation functions within the larger teacher preparation experience.