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Abstract

The purpose of this study was to explore the effectiveness of providing scaffolded disciplinary writing assignments to develop teacher candidates' multicultural lenses. This study was set in a secondary education program at one mid-Atlantic university. Faculty in this program focused on five dimensions of multicultural education (ME) to better serve teacher candidates within their program through the development of ME-focused disciplinary writing assignments. In required courses within the program, teacher candidates (TCs) completed assignments such as a student shadow experience, infographic, journal, community mapping activity, and practitioner journal article. Qualitative data were collected to explore TCs' understanding of the ME dimensions through reflections and focus group transcripts and provide insight on TCs' understanding of multicultural education and pedagogical strategies, as well as their perceptions of the generated disciplinary writing assignments. The researchers found TCs focused on some dimensions of ME more than others, such as content integration and prejudice reduction. We make recommendations for practice based on these findings.

Keywords: equity pedagogies, multicultural teacher education, secondary teacher preparation

DEVELOPING TEACHER CANDIDATES' MULTICULTURAL LENSES

Introduction

Previous research suggests students in teacher preparation programs should be able to synthesize information from multiple viewpoints (Gibson, 2012), draw conclusions from findings (Alger, 2006), and reflect on and evaluate their own learning (Etscheidt et al., 2012). These elements are particularly important with regard to multicultural education (ME) where these skills are paramount for teacher candidates (TCs) to be successful teachers of diverse student populations (Ambe, 2006). Howard and Rodriguez-Minkoff (2017) stressed that while the work on ME is robust, teacher educators need to continually re-examine their programs and make changes in the field because appreciation and knowledge about diversity is not enough to make a difference where it matters: with our youth. The significance of faculty sensitivity and awareness of multicultural issues and need for professional development have also been well documented (Eifler et al., 2004).

Furthermore, the Council for the Accreditation of Educator Preparation (CAEP, 2013) established diversity as a significant aspect of teacher preparation programs and subscribes to the Interstate New Teacher Assessment and Support Consortium (Council of Chief State School Officers, 2013) standards which address diversity throughout. Despite this, little is known about the pedagogies of teacher educators who teach through a ME lens and how those teaching strategies are perceived by TCs (Ellerbrock et al., 2016; Lowenstein, 2009) across their coursework, beginning in courses that highlight generic instructional approaches such as classroom management and instructional technology to those that are content specific and emphasize their disciplinary roots (Moje, 2008, 2015) such as social studies, science, and mathematics methods courses.

DEVELOPING TEACHER CANDIDATES' MULTICULTURAL LENSES

We consider building coherence in our secondary education program a process (Richmond et al., 2019). Since the early 1990s, ME researchers (Gay, 1997; Gay & Howard, 2000) have explicitly stated that a sole ME course offering was not sufficient for effective ME (Lowenstein, 2009). Teacher educators have reported limited success through targeted, "single-serve" ME courses (i.e., Akiba et al., 2010; Bodur, 2012), and most efforts proven to be impactful have required time and space for educators to reflect at multiple points throughout preparation programs. Moreover, TCs' awareness of these issues evolves as they progress in their programs (Kumar & Hamer, 2012). Efforts to help developing educators find meaningful ways to establish equity pedagogies throughout their teaching philosophy and lesson design require deep understanding of their own cultural norms, others' cultural norms, and even the history of oppression, privilege, and systemic injustices for affected populations based on cultural and demographic membership (Smith, 2009). Therefore, the purpose of this study was to investigate the development of TCs' professional beliefs about multicultural education after their completion of disciplinary writing assignments in the context of a teacher preparation program. The program prioritizes equity pedagogical theory laden practices (i.e., culturally responsive pedagogy [CRP], culturally relevant teaching [CRT], and more recently, culturally sustaining pedagogy [CSP]) as learning outcomes. By illustrating TCs' understanding of multicultural education and pedagogical strategies, as well as their perceptions of the generated disciplinary writing assignments through the analysis of written reflections and focus groups with TCs in four courses within their teacher preparation program, findings from this study will fill the gap in the literature, and provide insights on detailed programmatic and pedagogical practices teacher

educators can use to develop their own and promote TCs' cultural competence (Ellerbrock et al., 2016; Gay, 2014).

Disciplinary Writing

Disciplinary literacy has become a focus of higher education programs working to prepare secondary educators. As defined by Moje (2015), disciplinary literacy includes not just having knowledge and skills in a particular content area, but it also includes being able to apply discourse practices (e.g., speaking, listening, reading, writing) that are routine to that content area. Using this view, programs that prepare secondary educators have a complex task: these graduates must first be knowledgeable in their content area (e.g., social studies, math, science), but as future teachers of these content areas, they must also be able to engage in discourse practices, such as writing, in the ways that experts in each content's home disciplines do. As an additional benefit, Rainey and colleagues (2020) found that by embedding ways to model disciplinary writing and practice in the TCs' academic preparation program, TCs, to varying degrees, exhibited disciplinary literacy teaching in their internships with their secondary students.

However, as noted by Colwell and colleagues (2021), most often programs for pre-service secondary educators do not include instruction on disciplinary literacy. This gap may leave secondary TCs with little knowledge of how to write in the ways that experts in home disciplines do. Likewise, the writing that most secondary TCs are asked to complete during their studies can best be defined as disciplinary expression or academic genre writing (Lim & Polio, 2020), leaving a need for specific multimodal disciplinary writing tasks. Likewise, Lampi and Paulson (2016) pointed out that disciplinary writing is in addition to academic genre writing as

this type of writing is a necessary progression to secondary TCs' development. As such, our study infused disciplinary writing assignments into secondary programmatic coursework.

Teacher Candidates' Beliefs and Attitudes

Although definitions of teachers', and TCs', beliefs exist, these definitions are not used consistently (Fives & Buehl, 2012). For the purposes of the current study, we adopted Pajares's (1992) definition of beliefs, "an individual's judgment of the truth or falsity of a proposition" (p. 316). Beliefs can be implicit or explicit, are relatively stable over time, can be situated or generalized, are related to knowledge, and they exist as individual propositions or larger systems. If a teacher's beliefs are in flux, they may not match their practices; TCs' beliefs may be more inconsistent than their veteran peers (Basturkmen, 2012). We include beliefs in the framework for this study because of their complex but important relationship to practices: beliefs can influence practice, practice can influence beliefs, beliefs may be disconnected from practice, or beliefs can have a reciprocal but complex relationship to practice (Buehl & Beck, 2014). As shown in Kumar and Hamer's (2013) work, TCs' attitudes and beliefs associated with culturally diverse students can be positively shaped through their learning and experiences in teacher preparation programs that have been strategically designed to reduce implicit and explicit bias and prejudice.

Research has demonstrated TCs' abilities to develop an understanding of ME and student diversity through teacher preparation (Castro, 2010; Eifler et al., 2004; Kumar & Hamer, 2012) and to enact this in their classrooms during student teaching to varying degrees (Castro, 2010). Indeed, some research even points to the success of teacher education in fostering such shifts in diverse contexts including ruralities (Anthony-Stevens & Langford, 2020). TCs' prior personal

experiences, beliefs, and identities may mediate their teacher preparation experiences (Cherng &
Davis, 2019). The purpose of the current study was to convey the nuances of TCs' ME attitudes
and beliefs following courses that had been systemically redesigned to focus on ME through
disciplinary writing. Figure 1 outlines how the research team situated the work regarding ME
teacher preparation in the context of our secondary education program, local schools, and
national accreditation. This is in line with calls from the field to support TCs' growth through
reflection (Lin & Lucey, 2010; Sleeter, 2009) and for program coherence to support ME.

[Insert Figure 1 Here]

Dimensions of Multicultural Education

Our study is influenced by Banks' (1993, 2016) five dimensions of ME: (a) content
integration, (b) knowledge construction, (c) prejudice reduction, (d) empowering school culture
and social structure, and (e) equity pedagogy (see Figure 2). The five dimensions are
interconnected, and equitable curriculum, teaching, and learning becomes possible when
students' identities, cultural experiences, and knowledge are prioritized (Banks, 1993, 2016; Gay
& Kirkland, 2003; Ladson-Billings, 1994, 2014; Morrison et al., 2008). Knowledge about
students' identities and cultural experiences is acquired through interacting with them, their
families, and communities, and what is discovered inspires content integration (Morrison et al.,
2008). Acknowledging that ME in teacher education programs is often presented hierarchically
or is absent certain aspects of identity (Gorski & Goodman, 2011), we also aimed to modify the
program's curriculum, explicitly addressing multiple categories of identity and a commitment to
transformation and social action (Banks, 2010; Mensah et al., 2018) so diverse perspectives
would stretch TCs' thinking about education and how they might make changes to their own

beliefs and future practice.

[Insert Figure 2 Here]

Content integration, the most widely adopted dimension of ME, recognizes that the existing curriculum is Eurocentric, fosters acculturation, and fails to recognize the multiple components of students' identities and how they intersect (Banks, 1993, 2013). Similarly, Paris (2017) argued "the curricularization of racism"—ways racism and discrimination seep into curriculum and pedagogy by, for example, excluding how people of color construct knowledge, use language, and contribute to society— disadvantages all learners and should be disrupted (p. 7). Additionally, Valdés (2018) explored cultures through the teaching and learning of language, asserting that "curricularizing language" also encompasses "ideologies of language, class, and identity," along with "discoursal constructions of otherness including race, class, gender, and sexuality" (p. 403). *Content integration* allows for a focus on discipline specific ways of transforming existing curriculum so contributions, perspectives, concepts, and issues that reflect varied experiences around race, ethnicity, language, and gender are intricately interwoven in course materials for the benefit of all students (Banks, 1993, 2013, 2016; Banks & Banks, 1995; Clark, 2002).

Knowledge construction involves teaching students how "knowledge is created" (Banks, 2016, p. 6) across disciplines and how it is influenced by culture. Ways of knowing may also be inspired by components of identity such as race, ethnicity, and gender. Using students' identities and cultural experiences is key in knowledge construction which leans on prior knowledge. Sleeter (2012) maintained practitioners focus on celebrating and learning about cultural groups rather than on more essential matters such as teaching "academic knowledge and skills" (p. 569)

using students' cultural ways of knowing. Teachers with a ME lens affirm students' identities by recognizing and centering their home languages, ways of knowing, and ways of conveying what is known within the context of constructing new knowledge. Similarly, Moje (2015) asserted that disciplinary literacy involves giving students "opportunities … to raise questions about the social and cultural practices and values that shape how knowledge is made and communicated in a discipline" (p. 268) and it is also about teaching for social justice. Teachers and teacher educators would have to know their disciplines well to implement both disciplinary literacy (Hinton & Suh, 2019; Moje, 2008) and ME (Banks, 2016). Based on this, we hoped infusing disciplinary writing assignments would help TCs process and further develop knowledge and use of ME.

Prejudice reduction focuses on how teaching strategies can impact beliefs about marginalized people while an e*mpowering school culture and social structure* seeks to restructure the school so students, regardless of race, religion, ethnicity, gender, or sexuality, are treated justly (Banks 1993, 2013). Teaching from a ME lens requires questioning inequities in schools and working to change school structural and organizational practices that impede student learning. Both of these dimensions were important as we revised elements of the secondary program to help TCs recognize and identify prejudices and power issues embedded in schools and in society.

We used Banks' fifth dimension, *equity pedagogy*, to classify theories such as CRP, CRT, and, more recently, CSP that were developed as a direct challenge to deficit perspectives about poor people and those from underrepresented racial, ethnic, and religious groups (Banks 1993, 2013, 2016, 2018; Banks & Banks, 1995; Howard & Rodriguez-Minkoff, 2017). Banks

(2018) asserts deficit attitudes about students' identities are ingrained in some teachers causing them to engage in demotivational teaching and have low expectations of students, and deficit perspectives also promote an even greater chasm between school, home, and community cultures. CRP and CRT position racial, ethnic, linguistic, religious, and socioeconomic differences as sites of cultural and social capital that are to be leveraged by revising curriculum and teaching practices to help students achieve academically and further develop cultural identity. CRP and CRT also include helping students become culturally competent and learning to interrogate social injustices (Gay & Kirkland, 2003; Gay, 2018; Ladson-Billings, 1994, 1995, 2014). Sleeter (2012) argued equity pedagogies such as CRP and CRT have been marginalized, understood superficially, understudied, and implemented poorly. Due to their importance in our study, we dive deeper into equity pedagogies in the next section.

Equity Pedagogies in Teacher Preparation

CRP, CRT, and CSP, the most often-cited equity pedagogies, are about pursuing academic equity by moving beyond content integration to teaching in ways that affirm students' cultural and ethnic identities and recognize their different ways of knowing, thinking, engaging, and speaking (Banks, 2016; Gay & Kirkland, 2003; Ladson-Billings, 1994, 1995, 2014; Paris, 2012). Equity pedagogies also teach students how to become culturally competent, examine "unequal distributions of power and privilege" (Gay & Kirkland, 2003, p. 180) and develop "sociopolitical consciousness" (Ladson-Billings, 2014, p. 75).

At the heart of these *equity pedagogies*, whether CRP, CRT, or CSP, is that students' culture, identities, and achievement should be at the center of curriculum and practice across content areas and grade levels. Paris (2012) noted that prior equity pedagogies focused on static,

singular, and positive notions of culture and aimed to use and maintain heritage and traditional aspects of culture as students learned White, mainstream communicative practices, culture, and ways of knowing. Further, Paris (2012) suggested current research and practice does not fully support the tenets of CRT which were designed to maintain culture and language and develop critical consciousness, and he questioned whether terms such as "responsive" and "relevant" sufficiently convey equity pedagogies' goals. Thus, Paris (2012) proposed CSP, which recognizes the dynamic nature of race, language, and culture and has several goals, including sustaining students' multilingualism and multiculturalism, focusing on both past heritage cultural ways of knowing and contemporary practices, and interrogating cultural practices. Ladson-Billings (2014) discussed CSP as a "remix" of CRT "that meets the needs of this century's students" (p. 76) and agreed that CRT has been misunderstood, as key tenets were absent from practice: understanding the vital connections between student identity and educational outcomes, cultural competence, and social consciousness.

While dimensions of ME have a long, rich history; have been advocated for in national standards; and have been adopted by teacher preparation programs, there continues to be gaps in understanding and implementation (Abacioglu et al., 2020; Ladson-Billings, 2014; Morrison et al., 2008; Paris, 2012; Shannon-Baker, 2018; Sleeter, 2012) and teacher preparation programs have largely been unsuccessful at preparing teachers to teach diverse students. We were curious to know how our disciplinary writing assignments implemented across our teacher preparation program help TCs understand the dimensions of ME, including adopting equity pedagogies, further developing beliefs about ME, and striving for self and student transformation and social action within local school contexts and within the national accreditation context (see Figure 1).

We acknowledge that both university faculty and TCs' prior knowledge and experiences influence the ways in which they view their own cultural identity and the cultures of others. We also contend that ME and related disciplinary writing assignments throughout TCs' secondary education program influence TCs' beliefs about cultural diversity.

Research Questions

The overarching question guiding this research study was: How do our TCs conceptualize ME following completion of disciplinary writing assignments with a ME focus? To fully examine this question, two sub-questions were explored in this paper: 1) How do the disciplinary writing assignments reflect the five dimensions of ME? and 2) What are TCs' professed beliefs about the dimensions of ME following completion of disciplinary writing assignments?

Materials and Methods

We chose an intrinsic case study design (Stake, 1995) for this investigation. This type of case study design is employed to, "learn about that particular case. We have an intrinsic interest in that case" (Stake, 1995, p. 3). Specifically, we were interested in learning about our own practices as teacher educators and how our students responded to these practices through the medium of disciplinary writing assignments. Moreover, case study was the design best suited to answer the *how* questions we were interested in regarding our program (Yin, 2009).

Context

This intrinsic case study (Stake, 1995) began in the fall of 2018 in a minority serving, public university in the southeastern United States when the authors of this manuscript, five teacher education faculty, collaborated to improve their secondary education program by increasing their own understanding of multiculturalism and equity pedagogies. This is an

important aspect to consider because our teacher preparation program is designed to spread equity pedagogies across the programmatic curriculum in various instructors' courses in lieu of offering a single ME course.

Table 1 provides a summary disclosing the ways in which our research team identifies. The diversity of the research team is unique since only 46% of faculty in higher education are female, with only 2% identifying as Black, 5% identifying as Asian and Pacific Islander, and 38% as White female (National Center for Educational Statistics [NCES], 2017). This team shared a commitment to the values of ME and equity pedagogies and wanted to deepen their own growth in this area as teacher educators. This is in line with calls from the field for teacher educators to examine their own beliefs and practices as they relate to issues of social justice (e.g., Conklin & Hughes, 2016). To accomplish this goal, the research team began by reading scholarship in this area over the course of about six months including Paris and Alim's (2017) edited volume on CSP. We discussed each reading as a group and explicitly connected what we read to our personal beliefs and practices as teacher educators. We also reflected individually in writing on our positionality and practices which is in line with the literature on culturally responsive practices (e.g., Weinstein et al., 2003).

[Insert Table 1 Here]

The process of designing the disciplinary writing assignments began with five secondary education faculty revising assignments already used within their courses as part of an internal university grant on improving disciplinary writing assignments (Table 2). Revisions included many updates such as the addition of roles, authentic tasks, format of expression, scaffolding, and criterion-referenced rubrics based on equity pedagogies in the literature although we made

sure the revisions still reflected the distinct disciplinary boundaries drawn across the courses (Lampi & Paulson, 2016; Lim & Polio, 2020). Next, the secondary education faculty came together to revise the assignments to include aspects of ME such as content integration, knowledge construction, and equity pedagogy. The five education faculty members peer reviewed each other's work. Next, internal (i.e., within the university's College of Education & College of Arts & Letters) and external (i.e., nationally renowned experts within other institutions of higher education) multicultural and disciplinary writing experts participated in a group discussion and reviewed the draft writing assignments. The internal and external experts had expertise in either writing pedagogy and/or ME research. Finally, assignments were critiqued by three TCs who had previously taken the secondary education courses (see Table 2 for revisions).

[Insert Table 2 Here]

The K-12 student populations within the local school divisions in which many of our TCs intern or receive job opportunities are diverse with regard to race and ethnicity, language, socioeconomic status, urbanicity/rurality, and military connections. The local school districts are predominantly Black (57.9%) whereas the TCs are predominantly White (67.8%). From 2014-2018, 780 out of 1,294 total graduates from the college of education in which this study was conducted (approximately 60%), accepted employment in one of the seven local school divisions.

Participants

This study included consenting undergraduate and graduate TCs enrolled in one section of the following courses during the spring 2019 semester: classroom management and discipline,

instructional technology, secondary social studies methods, or secondary science/math methods. Each of these courses had a field experience component during the semester of study, including practica and on-site courses, with the exception of instructional technology. Although the focus of the study is a secondary educator preparation program, due to the structure of the programmatic pathway, the core courses that were not subject area specific (i.e., not methods courses) included a subset of TCs who were seeking K-12 or PK-6 licensure. The majority of consenting participants ($n = 43$) were majoring in secondary education.

Data Collection

Qualitative data were collected via course based disciplinary writing assignments provided to students, student written reflections, and five student focus groups. TCs in each of the courses were provided with the final revised version of their course's disciplinary writing assignment to complete as part of their regular course assignments. During the spring 2019 semester, TCs completed a reflection consisting of seven open-ended items (see Appendix A). TCs also participated in one of five semi-structured focus group interviews which lasted, on average, 33 minutes. These focus group interviews were held with 4-6 participants from their respective courses and TCs shared their thoughts on seven additional open-ended items (see Appendix A). A different project researcher, not the TCs' current course instructor, led each focus group. Focus groups were transcribed verbatim and averaged 12 pages of text.

Data Analysis

We followed Saldaña's (2009) guidelines for conducting multiple rounds of coding to analyze the disciplinary writing assignments, focus group responses, and reflections. Specifically, members of the research team began by identifying the five dimensions of

multicultural education (see Figure 2). Using the identified theoretical underpinnings, the

research team operationalized the five dimensions of multicultural education and identified the

ways in which each of the dimensions was represented in the data for coding (see Table 3). Next,

the project team coded each of the sources of data into the five dimensions where applicable.

Two members of the research team, the faculty member who taught the course where the data

originated from and another research team member, coded the data independently and then

members met and negotiated codes to 100% agreement.

[Insert Table 3 Here]

There were varying numbers of course participants who provided reflection and/or focus

group data. However, it was important that all consenting TCs' voices were shared as part of this

study, regardless of the low research participation rate in instructional technology ($n = 1$) and a

minimally enrolled classroom management class ($n = 8$), which were both considered

foundational courses. The class size and research participation rate were higher in the methods

courses that were composed of students who were farther along in their programs (e.g., science

and mathematics methods [$n = 10$]; social studies methods [$n = 14$]. The number of codes

identified for either reflection or focus groups ranged by course from 8-51.

Trustworthiness

We used triangulation of methods, analyst triangulation (Patton, 2002), and numbers

(Maxwell, 2013) to ensure the validity and trustworthiness of our interpretations. We used the

five dimensions of ME as part of an a priori coding to evaluate our integration of the construct.

Our goal was not to pinpoint where the students' knowledge came from, but rather where they

were after they took our courses. This knowledge could come from students' prior experiences, or it could have come from other courses. This was beyond the scope of our study.

In the spirit of case study design (Saldaña, 2009), we used multiple methods of data collection: reflections (artifacts) and focus group transcripts. These multiple methods of data collection allowed us to understand a more robust picture of our teacher candidates' perspectives. Our methods of analyst triangulation (Patton, 2002) are described in the preceding section, and allowed us to ensure that we were applying our code book consistently. Finally, Maxwell (2013) wrote that many qualitative studies have an "implicit quantitative component" (p. 128) in that researchers may argue that a phenomenon is rare, typical, etc. We use frequency counts and general frequency measures to relate our results below.

Results

Dimensions of ME Reflected in Disciplinary Writing Assignments

Each disciplinary writing assignment was constructed to meet at least one of the dimensions of multicultural education identified in the theoretical framework. Table 4 illustrates the dimensions of ME most often (%) reflected within the revised ME writing assignments generated by the course instructors, along with exemplar excerpts directly from the assignments that align with the ME dimensions. In the foundational courses (i.e., classroom management, instructional technology), instructors mainly focused on one aspect of ME throughout their disciplinary writing assignment. The classroom management assignment focused students solely on writing about *prejudice reduction*, whereas the instructional technology assignment focused primarily on *content integration*. The assignments in the methods courses took a more comprehensive approach to the dimensions of ME, asking TCs to address ME in a more holistic

approach for 4-5 dimensions of ME. However, the distribution of the 5 dimensions of ME were not equivalent in the methods courses' assignments; the majority of the dimensions in the science/math methods course assignment fell under *equity pedagogies* (54.5%), while for the social studies methods course the majority were under *content integration* (50%).

[Insert Table 4 Here]

Dimensions of ME Shared by TCs Following Completion of Disciplinary Writing Assignments

Even though the disciplinary writing assignments in each course focused on differing dimensions of ME to varying degrees, patterns we identified across the end-of-course reflection and responses to the focus group questions were similar for each of the four courses. Thus, often elements of all five dimensions of ME appeared throughout the data for each course.

Through their reflections and focus groups in all four courses, TCs most often identified *content integration*, followed by *prejudice reduction* from the five dimensions of multicultural education. We elaborate on all five dimensions here with verbatim quotes from our participants. Table 5 provides the percentages of data coded in each dimension for TCs in each course. See Appendix B for exemplar quotes from each course highlighting the dimensions represented.

[Insert Table 5 Here]

In terms of the two most prevalent dimensions shared in the data, content integration and prejudice reduction, there were subtle and nuanced differences across the courses (e.g., what content the assignment aimed to integrate, how and what prejudice[s] was highlighted for reduction). In a reflection from the social studies methods course, the TCs explained how they plan to infuse content integration by "emphasiz[ing] the roles of people of diverse backgrounds

have played in American history" and "discuss[ing] how various cultural groups in America have seen their role in society grow." TC responses were frequently specific to the TCs' identified content area of study, even for those who were enrolled in general secondary education preparation courses. For example, a TC in the classroom management course reflected on ways in which they would integrate ME into their secondary English course content as they "try to get a better understanding of their [students'] backgrounds first," and for emergent multilingual students they suggested asking "what certain words mean in their [first/home] language." Additionally, TC responses tended to be more robust in the methods courses in which they brought in specific examples of how they have interacted with students in their practicum experiences, or how they have adjusted (or intend to adjust) their pedagogical approaches for their students to meet various dimensions of ME. One TC illustrated this when they reflected, "Representation matters, especially in history lessons. When students learn about people who look like them having an influence on history, they feel that they can do the same."

TCs noted that prejudice reduction can be integrated into everyday course content to help promote the message that:

> …it's not only people who look a particular way or who belong to one particular group who have shaped our society and done amazing things. That people of every race, gender, national background, whatever it may be, have contributed to global societies.

A TC in the science/mathematics methods class reflected on the importance of prejudice reduction by first having teachers and students identify their own biases and to "acknowledge and talk about the different cultures they have, as well as their students." She went on to share that in doing so, "students will learn to be more accepting of others' differences such as

socioeconomic statuses, languages, and races." Another TC in the same course reflected about students of different abilities,

> So, for me, my viewpoint on special education learners has definitely changed. What I've learned is that they are able to be taught, they are teachable, and they can learn. They just learn at their own pace, in their own different way. And another thing that I learned is that a lot of them are more disciplined than some of the regular education students, or general education students. Because they know that they have to work harder, maybe, to achieve certain academic goals. So they will start on their assignments earlier, and complete it and turn it in a lot earlier than some of the general education students. And a lot of times their grades are higher just because of that. Even if they ... and the fact that they take initiative to study, compared to some of the general education students. So, it's all about work ethic, and they are able to learn. And you just have to diversify your instructional methods to fit their needs. And I'm just learning more and more on that each day I come into my internship. It's great.

Thus, TCs saw the application of prejudice reduction as relevant to race, gender, nationality, and ability.

The three dimensions that appeared less often in TCs' responses in the courses, if at all, included *knowledge construction*, *empowering school culture and social structure*, and *equity pedagogies*. A TC in the classroom management course shared the way in which they were considering their students' *knowledge construction*, explaining that they "plan to find ways in which [course content] relates to each student by knowing and understanding their background.

Maybe [I'd] have groups present on certain topics from their culture's perspective." Another TC in the social studies methods course said,

> as history teachers … it's easier for us because, I mean, there's so many different events in history that are told from one standpoint, and there might be more limited resources out there, but there are resources on that same topic from different points of view.

This thought was echoed by other social studies TCs who recognized that the narrative of history is composed of a variety of voices rather than one "dominant" lens.

TCs in three of the courses shared ways in which they intend to help students *empower themselves, as well as their school and social structure* by "giv[ing] students a sense of more self-advocacy," "being the change [they] wish [they] had seen in [their] teachers" through positive role modeling, and "uncovering social injustices that's going on within their communities." For one TC in the science/mathematics methods course, this was a personal goal, "I became a teacher because I want to see kids, especially kids of color, to succeed in life."

TCs only mentioned *equity pedagogies* (by name or concept) in the science and mathematics methods course. A TC in this course expressed her adamant belief that "everyone should be trained [in] culturally relevant pedagogy" in order to "go into the teaching profession." She went on to explain that in order for some students to "see the point of it [education]" that "you have to kind of make them want to learn, by incorporating things that they do value, and putting that within your content." Another TC noted that they enjoyed reading the work of Ladson-Billings, while another explained that their internship in an urban school allowed them to practice cultural relevance.

Discussion

DEVELOPING TEACHER CANDIDATES' MULTICULTURAL LENSES

One of the aims of this study was to apply the dimensions of ME as identified by Banks (1993, 2016) to TCs' disciplinary writing assignments, with the goal of helping these TCs further develop their multicultural lenses. Further, the study aligned itself with Pajares's (1992) definition of beliefs as an individual's view of truth, with the additional aim of helping TCs further develop as they engage in thoughtful reflection (see Lin & Lucey, 2010; Sleeter, 2009). LaDuke (2009) found that to help TCs "renegotiate new identities and realities" (p. 44) programs, such as ours, must weave concepts of ME throughout coursework.

The results indicate that most disciplinary writing assignments for the courses in this study did not focus on equity pedagogies and thus, this dimension did not appear as often in the reflections or focus groups. However, in the science and mathematics methods course, this was highlighted often in the assignment and thus, was expressed more frequently in the student data. This implies that the design and structure of disciplinary writing assignments are essential to consider because students concentrate on the aspects of the assignment that are most heavily emphasized. Course instructors throughout teacher preparation programs should make explicit connections to relevant theories and discipline specific language to the pedagogical strategies and assignments used in their own classroom practices. This supports our implication that using disciplinary writing assignments throughout a teacher preparation program to scaffold student learning about the dimensions of ME should be done systematically through program-wide development efforts. Teacher education faculty should be careful to diversify the disciplinary writing assignments to both meet the curricular needs of their course, but also pay attention to ways in which the assignments will spiral in complexity and ME dimensions in order to ensure that TCs are being sufficiently prepared to meet the needs of their diverse secondary classrooms.

DEVELOPING TEACHER CANDIDATES' MULTICULTURAL LENSES

Also, we sought to connect the dimensions of ME and TCs' understanding of it to the secondary education program, local schools, and national accreditation contexts (see Figure 1). We found TCs expressed a more robust understanding of the dimensions of ME as they progressed through the program, which mirrors Kumar and Hamer (2012); however, our results are unique in that they are situated within secondary education. The demographics (e.g., ethnicity, race, gender) of secondary educators who graduate from our study's teacher education program mirrors the demographics of programs nationally. However, the diversity of our graduates does not always mirror that of the students that they find themselves teaching, particularly those in school divisions surrounding our institution. The results from our study show promise of expanding the breadth and depth of TCs' understanding of the five dimensions of ME as students progress through our secondary program. In turn, this will help to support TCs whose racial/ethnic backgrounds do not match their PK-12 students and develop graduates to be more culturally competent educators within their school divisions.

The results indicate TCs identified instructional strategies they witnessed in schools or plan to implement that are important for content integration and prejudice reduction. Previous studies have found that cultural representation in instruction, content, and course materials matters in terms of disrupting "the curricularization of racism" (Paris, 2016, p. 7) helping students construct and express knowledge, and validating and affirming students' cultural backgrounds (Paris, 2016; Puzio et al., 2017; Ullucci, 2011). Additionally, researchers caution that content integration and building on students' assets must be done in thoughtful, meaningful ways influenced by understanding achievement while getting to know students and their families (Puzio et al., 2017). The dimensions of ME have not always translated into practice well with

practitioners focusing mainly on affirming or celebrating diversity rather than on transformation, agency, and social action (Banks, 2013; Ladson-Billings, 1992/2017; Paris, 2016; Puzio et al., 2017; Ullucci, 2011). Our results support this, as very few TCs conceptualized ME in terms of empowering school cultures and school structure as it relates to social justice.

Conclusion

Within the area of secondary education, there are few studies on bridging the gap between ME and disciplinary writing and TCs' understanding of multicultural education. These types of purposefully created assignments can have positive effects on TCs in secondary education programs. TCs were able to reference their experiences and tie these experiences to their feelings or as support of their thoughts about ME. Our research further demonstrated one way in which institutions wishing to be nationally accredited through the Council for the Accreditation of Educator Preparation ([CAEP], 2013) can excel in standard 4 regarding program impact and on the cross-cutting theme of diversity. This standard requires curriculum and evidence centered around diversity and that TCs are given opportunities, experiences, and assessments to learn more about the various components of diversity. Besides providing examples of ME assignments from courses within our secondary education program included in this study, we also provided rich data about how TCs developed their understanding of multicultural education through these assignments.

Ellerbrock and colleagues (2016) and Suh and Hinton (2015) remind us that teacher educators have to continue to develop an understanding of their own identities while simultaneously enhancing their cultural competence as they strive to help TCs do the same. The authors point out that it is difficult for some teacher educators to practice ME for various reasons

and that teacher educators need more professional development. In summary, based on this study, we are highlighting several essential considerations for teacher educators to help infuse ME through disciplinary writing in a teacher preparation program revision:

- Disciplinary writing assignments can be successfully implemented throughout programs in both core and content area courses to scaffold multicultural education opportunities.

- For the greatest buy-in and quality of work, the development of ME disciplinary writing assignments program-wide should be developed in community with the input of ME and literacy experts and stakeholders (e.g., program faculty, former TCs).

- TCs in content area courses expressed varied aspects of ME explicitly linked to their content area. Opportunities should be provided for TCs within these courses to grapple with their own ME beliefs and perceptions, learn more about ME, and reflect on the five dimensions comprising ME.

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Declaration of Interest Statement

We have no conflicts of interest to disclose.

DEVELOPING TEACHER CANDIDATES' MULTICULTURAL LENSES

References

Abacioglu, C. S., Volman, M., & Fischer, A. H. (2020), Teachers' multicultural attitudes and

    perspective taking abilities as factors in culturally responsive teaching. *British Journal of*

    Educational Psychology, *90,* 736-752. https://doi.org/10.1111/bjep.12328

Akiba, M., Cockrell, K. S., Simmons, J. C., Han, S., & Agarwal, G. (2010). Preparing teachers

    for diversity: Examination of teacher certification and program accreditation standards in

    the 50 states and Washington, DC. *Equity & Excellence in Education, 43*, 446-462.

    https://doi.org/10.1080/10665684.2010.510048

Alger, C. (2006). 'What went well, what didn't go so well': Growth of reflection in pre-service

    teachers. *Reflective Practice, 7*(3), 287-301. https://doi.org/10.1080/14623940600837327

Ambe, E. B. (2006). Fostering multicultural appreciation in pre-service teachers through

    multicultural curricular transformation. *Teaching and Teacher Education, 22*(6), 690-

    699. https://doi.org/10.1016/j.tate.2006.03.005

Anthony-Stevens, V., & Langford, S. (2020). "What do you need a course like that

    for?" Conceptualizing diverse ruralities in rural teacher education. *Journal of Teacher*

    Education, *71*(3), 332–344. https://doi.org/10.1177/0022487119861582

Banks, J. A. (1993). Multicultural education: Historical development, dimensions, and practice.

    Review of Research in Education, 19, 3.https://doi.org/10.3102%2F0091732X019001003

Banks, C. A. M. (2010). Communities, families, and educators working together for school

    improvement. In J. A. Banks & C. A. M. Banks (Eds.), *Multicultural Education: Issues*

    and Perspectives, (7th ed. pp. 417-438). John Wiley & Sons.

Banks, J. A. (2013). The construction and historical development of multicultural education, 1962–2012. *Theory Into Practice, 52*(1), 73–82. https://doi.org/10.1080/00405841.2013.795444

Banks, J. A. (2016). *Cultural diversity and education foundations, curriculum, and teaching.* Routledge, Taylor & Francis Group.

Banks, J. A. (2018). Knowledge construction and the education of citizens in diverse societies. In A. Lopes & M. Mattos-Parreira (Eds.), *Challenges in the construction of an inclusive society.* (pp. 11-32). Cambridge Scholars Publishing.

Banks, C. A. M., & Banks, J. A. (1995). Equity pedagogy: An essential component of multicultural education. *Theory into Practice, 34*, 152–158. https://doi.org/10.1080/00405849509543674

Basturkmen, H. (2012). Review of research into the correspondence between language teachers' stated beliefs and practices. *System, 40*(2), 282-295. https://doi.org/10.1016/j.system.2012.05.001

Bodur, Y. (2012). Impact of course and fieldwork on multicultural beliefs and attitudes. *The Educational Forum*, *76*(1), 41–56. https://doi.org/10.1080/00131725.2011.627981

Buehl, M. M., & Beck, J. S. (2014). The relationship between teachers' beliefs and teachers' practices. In H. Fives and M. Gregoire Gill (Eds.), *International Handbook of Research on Teachers' Beliefs* (pp. 66-84). Routledge.

Castro, A. J. (2010). Themes in the research on preservice teachers' views of cultural diversity. *Educational Researcher, 39*(3), 198–210. https://doi.org/10.3102/0013189X10363819

Cherng, H.-Y. S., & Davis, L. A. (2019). Multicultural matters: An investigation of key

assumptions of multicultural education reform in teacher education. *Journal of Teacher Education*, *70*(3), 219–236. https://doi.org/10.1177/0022487117742884

Clark, C. (2002). Effective multicultural curriculum transformation across disciplines. *Multicultural Perspectives, 4*(3), 37-46, https://doi.org/10.1207/S15327892MCP0403_7

Colwell, J., Gregory, K., & Taylor, V. (2021). Examining preservice teachers' perceptions of planning for culturally relevant disciplinary literacy. *Journal of Teacher Education*, *72*(2), 195–208. https://doi.org/10.1177/0022487120913853

Conklin, H. G., & Hughes, H. E. (2016). Practices of compassionate, critical, justice-oriented teacher education. *Journal of Teacher Education, 67*(1), 47-60. https://doi.org/10.1177/0022487115607346

Council for the Accreditation of Educator Preparation. (2013). Council for the Accreditation of Educator Preparation 2013 Standards. http://caepnet.org/standards/introduction

Council of Chief State School Officers. (2013). Interstate New Teacher Assessment and Support Consortium (InTASC) model core teaching standards and learning progressions for teachers 1.0. https://ccsso.org/sites/default/files/2017-12/2013_INTASC_Learning_Progressions_for_Teachers.pdf

Eifler, K. E., Potthoff, D., & Dinsmore, J. (2004). A bucket of eels: A tripartite approach to renewing a teacher education program. *Journal of Teacher Education*, *55*(1), 91–101. https://doi.org/10.1177/0022487103259826

Ellerbrock, C. R., Cruz, B. C., Vásquez, A., & Howes, E. V. (2016). Preparing culturally

responsive teachers: Effective practices in teacher education. *Action in Teacher Education*, *38*(3), 226–239. https://doi.org/10.1080/01626620.2016.1194780

Etscheidt, S., Curran, C. M., & Sawyer, C. M. (2012). Promoting reflection in teacher preparation programs: A multilevel model. *Teacher Education and Special Education, 35*(1), 7-26. https://doi.org/10.1177%2F0888406411420887

Fives, H. & Buehl, M. (2012). Spring cleaning for the "messy" construct of teachers' beliefs: What are they? Which have been examined? What can they tell us? In K. R. Harris, S. Graham & T. Urdan (Eds.), *APA educational psychology handbook* (Vol. 2, pp. 471-499). American Psychological Association.

Gay, G. (1997). Multicultural infusion in teacher education: Foundations and applications. *Peabody Journal of Education, 72*(1), 150-177. https://doi.org/10.1207/s15327930pje7201_8

Gay, G. (2014). Forward. In B. C. Cruz, C. R. Ellerbrock, E. V. Howes, & A. Vásquez (Eds.), *Talking diversity with teachers and teacher educators: Exercises and critical conversations across the curriculum* (pp. ix-xiv). Teachers College Press.

Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press. https://books.google.com/books?id=uD9qDwAAQBAJ

Gay, G., & Howard, T. (2000). Multicultural education for the 21st century. *Teacher Educator, 36*(1), 1-16. https://doi.org/10.1080/08878730009555246

Gay, G. & Kirkland, K. (2003). Developing cultural critical consciousness and self-reflection in preservice teacher education. *Theory into Practice 42*(3), 181-187. https://doi.org/10.1207/s15430421tip4203_3

Gibson, K. M. (2012). Influences on diversity in teacher education: Using literature to promote multiple perspectives and cultural relevance. *International Journal for the Scholarship of Teaching and Learning, 6*(1), 13. https://doi.org/10.20429/ijsotl.2012.060113

Gorski, P. C., & Goodman, R. D. (2011). Is there a "hierarchy of oppression" in U.S. multicultural teacher education coursework? *Action in Teacher Education, 33,* 455-475. https://doi.org/10.1080/01626620.2011.627305

Hinton, K., & Suh, Y. (2019). Foregrounding collaboration in disciplinary literacy: Implications from JAAL, 2008–2017. *Journal of Adolescent & Adult Literacy, 63*(3), 279-287. https://doi.org/10.1002/jaal.986

Howard, T. C., & Rodriguez-Minkoff, A. C. (2017). Culturally relevant pedagogy 20 years later: Progress or pontificating? What have we learned, and where do we go? *Teachers College Record, 119*, 1-32. https://www.tcrecord.org/Content.asp?ContentId=21718

Kumar, R., & Hamer, L. (2012). Preservice teachers' attitudes and beliefs toward student diversity and proposed practices: A sequential design study. *Journal of Teacher Education, 64*(2), 162-177. https://doi.org/10.1177/0022487112466899

Ladson-Billings, G. (1992/2017). Culturally relevant teaching: The key to making multicultural education work. In C. Grant (Ed.), *Research and multicultural education: From the margins to the mainstream*, (pp. 106-121). Routledge.

Ladson-Billings, G. (1994). *Dreamkeepers: Successful teachers of African American children.* Jossey-Bass Publishers.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal, 32*(3), 465-491.

https://doi.org/10.3102/00028312032003465

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a. the remix. *Harvard Educational Review*, *84*(1), 74–84. https://doi.org/10.17763/haer.84.1.p2rj131485484751

LaDuke, A. E. (2009). Resistance and renegotiation: Preservice teacher interactions with and reactions to multicultural education course content. *Multicultural Education, 16*(3), 37-44.

Lampi, J. P., & Paulson, E. J. (2016). Community college faculty and conceptualizations of disciplinary writing. *International Journal of Learning, Teaching and Educational Research, 15*(12), 112-129.

Lim, J., & Polio, C. (2020). Multimodal assignments in higher education: Implications for multimodal writing tasks for L2 writers. *Journal of Second Language Writing, *, 100713. https://doi.org/10.1016/j.jslw.2020.100713

Lin, M., & Lucey, T. A. (2010). Individual and group reflection strategies: What we learned from preservice teachers. *Multicultural Education*, *18*(1), 51–54. https://files.eric.ed.gov/fulltext/EJ916847.pdf

Lowenstein, K. L. (2009). The work of multicultural teacher education: Reconceptualizing white teacher candidates as learners. *Review of Educational Research*, *79*(1), 163–196. https://doi.org/10.3102/0034654308326161

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Sage Publications, Inc.

Mensah, F. M., Brown, J. C., Titu, P., Rozowa, P., Sivaraj, R., & Heydari, R. (2018). Preservice

and inservice teachers' ideas of multiculturalism: Explorations across two science

methods courses in two different contexts. *Journal of Science Teacher Education, 29*(2),

128-147. https://doi.org/10.1080/1046560X.2018.1425820

Moje, E. B. (2008). Foregrounding the disciplines in secondary literacy teaching and learning: A

call for change. *Journal of Adolescent & Adult Literacy, 52*(2), 96-107.

www.jstor.org/stable/20111747

Moje, E. B. (2015). Doing and teaching disciplinary literacy with adolescent learners: A social

and cultural enterprise. *Harvard Educational Review, 85*(2), 254-278.

https://doi.org/10.17763/0017-8055.85.2.254

Morrison, K. A., Robbins, H. H., & Rose, D. G. (2008). Operationalizing culturally relevant

pedagogy: A synthesis of classroom-based research. *Equity and Excellence in Education

41*(4), 433–452. https://doi.org/10.1080/10665680802400006

National Center for Educational Statistics [NCES]. (2019). Status and Trends in the education of

racial and ethnic groups: Indicator 1: Population distribution.

https://nces.ed.gov/programs/raceindicators/indicator_RAA.asp.

Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct.

Review of Educational Research, 62(3), 307-332.

https://doi.org/10.3102/00346543062003307

Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and

practice. *Educational Researcher, 41*(3), 93–97.

https://doi.org/10.3102%2F0013189X12441244

Paris, D. (2016). On educating culturally sustaining teachers Django Paris Michigan State University. *Teaching Works*, 1–15.

https://www.teachingworks.org/images/files/TeachingWorks_Paris.pdf

Paris, D. (2017). On culturally sustaining teachers. Equity by design: Midwest & Plains Equity Assistance Center (MAP EAC).

http://glec.education.iupui.edu/Images/Briefs/DParis_onculturallysustainingteachers.pdf

Paris, D., & Alim, H. S. (Eds.). (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world.* Teachers College Press.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Sage Pub., Inc.

Puzio, K., Newcomer, S., Pratt, K., McNeely, K., Jacobs, M., & Hooker, S. (2017). Creative failures in culturally sustaining pedagogy. *Language Arts*, *94*(4), 223-233.

Rainey, E. C., Maher, B. L., & Moje, E. B. (2020). Learning disciplinary literacy teaching: An examination of preservice teachers' literacy teaching in secondary subject area classrooms. *Teaching and Teacher Education*, *94*, 103-123.

https://doi.org/10.1016/j.tate.2020.103123

Richmond, G., Bartell, T., Carter Andrews, D. J., & Neville, M. L. (2019). Reexamining coherence in teacher education. *Journal of Teacher Education*, *70*(3), 188–191.

https://doi.org/10.1177/0022487119838230

Saldaña, J. (2009). *The coding manual for qualitative researchers.* SAGE Publications, Ltd.

Shannon-Baker, P. (2018). A multicultural education praxis: Integrating past and present, living theories, and practice. *International Journal of Multicultural Education*, *20*(1), 48–66.

https://doi.org/10.18251/ijme.v20i1.1518

Sleeter, C. E. (2009). Developing teacher epistemological sophistication about multicultural

    curriculum: A case study. *Action in teacher education, 31*(1), 3-13.

    https://doi.org/10.1080/01626620.2009.10463506

Sleeter, C. E. (2012). Confronting the marginalization of culturally responsive pedagogy. *Urban*

    Education, *47*(3), 562–584. https://doi.org/10.1177/0042085911431472

Smith, E. B. (2009). Approaches to multicultural education in preservice teacher education:

    Philosophical frameworks and models for teaching. *Multicultural Education*, *16*(3), 45–

    50. https://files.eric.ed.gov/fulltext/EJ847145.pdf

Stake, R. E. (1995). *The art of case study research.* SAGE Publications.

Suh, Y., & Hinton, K. (2015). Mirroring Ourselves: Teacher Educators of Color Reading

    Multicultural Texts. *Issues in Teacher Education*, *24*(2), 23–42.

    https://digitalcommons.odu.edu/teachinglearning_fac_pubs/82

Ullucci, K. (2011). Culturally relevant teaching: Lessons from elementary classrooms. *Action in*

    Teacher Education, *33*(4), 389-405. https://doi.org/10.1080/01626620.2011.620528

Valdés, G. (2018). Analyzing the curricularization of language in two-way immersion education:

    Restating two cautionary notes. *Bilingual Research Journal*, *41*(4), 388–412.

    https://doi.org/10.1080/15235882.2018.1539886

Weinstein, C., Curran, M., & Tomlinson-Clarke, S. (2003). Culturally responsive classroom

    management: Awareness into action. *Theory Into Practice, 42*(4), 269-276.

    https://doi.org/10.1207/s15430421tip4204_2

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). SAGE Publications, Ltd.

DEVELOPING TEACHER CANDIDATES' MULTICULTURAL LENSES

Tables

Table 1

Research Team Self-Identification of Aspects of Diversity

Academic Position*	Gender	Race/ Ethnicity	Sexuality	Language	Nationality	Ability
Assistant Professor	Female (cisgender)	White	Heterosexual	Monolingual	Natural Born Citizen	Non-disabled
Assistant Professor	Female (cisgender)	White	Heterosexual	Monolingual	Natural Born Citizen	Non-disabled
Professor	Female	Black	Heterosexual	Monolingual	Natural Born Citizen	Non-disabled
Senior Lecturer	Female (cisgender)	White	Heterosexual	Monolingual	Natural Born Citizen	Non-disabled
Associate Professor	Female	Asian	Heterosexual	Bilingual	Korean-Born Permanent Resident	Non-disabled

Note. *= at time of study.

Table 2

Disciplinary Writing Assignment Summaries by Course

Course	Original Writing Assignment	Revised Multiculturally-Focused Disciplinary Writing Assignment Summary
Classroom Management (U)	Simulated Lesson: *TCs would complete a mini-lesson in the Mursion Lab, watch the video, and write a reflection.*	Student Shadow: *TCs read and watched videos about asset approaches with students and wrote a blog reflecting on these readings. They then shadowed a student for hours and blogged about the experience afterward.*
Instructional Technology (U)	Infographic on Digital Citizenship: *TCs created online posters on digital citizenship.*	Infographic on Relevant Digital Citizenship Topic for Students with Multilingual Parent Letter: *TCs created online posters on a chosen digital citizenship topic for their group of students and wrote a parent letter in two different languages using online translation tools.*
Science & Mathematics Methods (Secondary) (G)	Traditional 5E Lesson Plan & Practicum Reflection: *TCs prepared traditional lesson plans without explicit foci on equity pedagogies embedded within. Additionally, TCs reflected on their practicum experience without specific questions crafted to expose student identities and observed inequities in classrooms.*	Science/Mathematics Practitioner's Journal Article for Publication: *TCs prepared, revised, & taught, an original 5E lesson plan through the lens of equity pedagogy. TCs then transformed these lessons into practitioner manuscripts through relevant scaffolded writing assignments throughout the semester. (e.g., survey of potential journals, ME practicum blogs, article peer reviews).*
Social Studies Methods	Personal Teaching Video Reflection:	Community Mapping Project:

(Secondary) (U/G)	*TCs designed one social studies lesson with their clinical faculty member, taught and videotaped their lesson. The video recording was shared with their classmates and the instructor for feedback.*	*TCs visited one of the local places in the school community and produced a presentation that maps out the make-up of the school community in terms of race, ethnicity and local culture.*

Note. U = undergraduate; G = graduate.

Table 3

Ways in which Coding was Operationalized from Theoretical Underpinnings, including ways in

which the Dimensions were Observed in the Data

ME Dimensions	Dimensions Operationalized	Dimensions Represented
Content Integration	Including content, examples, and materials from diverse cultural and ethnic groups into the curricula	Text can be general or content specific curriculum/class integration; representation of diverse cultures in books, posters; pedagogical strategies that builds relationships and trust among/between students and teacher
Knowledge Construction	Teaching students how "knowledge is created" (Banks, 2016, p. 6) across disciplines and how it is influenced by culture/identity (e.g., race, ethnicity, age, gender).	This should reflect how culture is reflected in a content area. For example, history is typically taught from a Eurocentric perspective, rather than acknowledging multiple voices and narratives. Students must indicate how learners (including themselves) build their understanding through their own cultural lens.
Prejudice Reduction	Focuses on how teaching strategies can impact beliefs about marginalized people	Keyword include: respect, acceptance, tolerance, empathy, awareness
Empowering School Culture and Social Structure	Seeks to restructure the school so students, regardless of race, religion, ethnicity, gender, or sexuality, are treated justly (Banks 1993, 2013).	Challenging structures in one's school/community/society, taking action on a social justice issue
Equity Pedagogies	Refers to teaching practices that include CRP, CRT, and/or CSP	Must mention by CRP, CRT, or CSP by name; and/or foundational researchers/authors in the fields (e.g., Ladson-Billings, Gay, Paris, etc.)

Table 4

Exemplar Assignment Excerpts for the Dimensions of Multicultural Education by Course, with

Percentages

Dimensions of Multicultural Education (%)	Course Assignment: Classroom Management (4 Codes for Dimensions of ME Identified)
Prejudice Reduction (100.0%)	Consider how you have seen middle school students positioned by society at large or even schools by teachers or administrators. How have they been described? What do people assume about them? What kinds of activities do they engage in and how are these perceived by adults? The purpose of this assignment is to walk with a middle school student in order to better understand who they are as people, rather than seeing them through the eyes of adults.

Dimensions of Multicultural Education (%)	Course Assignment: Instructional Technology (2 Codes for Dimensions of ME Identified)
Knowledge Construction (100.0%)	Audience: The infographic is for your students and their parents. This is quite a diverse group. You should make sure your language, images, and videos are appropriate and ones that your diverse students can culturally relate to. You should also consider how language is used and what types of languages other than English may be spoken at home. Resources that can be translated, such as a YouTube video, may be best.

Dimensions of Multicultural Education (%)	Course Assignment: Secondary Science/Math Methods (11 Codes for Dimensions of ME Identified)
Content Integration (18.2%)	What have you learned about teaching diverse (e.g., racial, ethnic, linguistic…) students? How did teachers make the exploration of the experiences of marginalized people central to the curriculum?
Prejudice Reduction (9.1%)	What are you learning about youth culture? Which youth cultural practices might be critiqued? For example, are there practices that might marginalize others? Reproduce exclusion?

Empowering School Culture and Social Structure (18.2%)	What do you believe is the purpose of schooling and how do racial, ethnic, linguistically diverse students fit into that purpose?
Equity Pedagogies (54.5%)	You will prepare, present, and revise an original 5E lesson plan through the lens of culturally sustaining pedagogy (CSP). The lesson should include content relevant to national standards and address the importance of CSP. It should also focus on social justice issues within your discipline, if possible.
Dimensions of Multicultural Education (%)	**Course Assignment: Secondary Social Studies Methods** (16 Codes for Dimensions of ME Identified)
Content Integration (50.0%)	Compelling Question: Is it possible to use the school community as learning resources in designing and teaching lesson plans that still meet SOL requirements?
Knowledge Construction (12.5%)	What is the history of the school's location? Whose stories are told in historical markers and signs? Whose stories are silenced?
Prejudice Reduction (18.8%)	What have you learned about teaching diverse (e.g., racial, ethnic, linguistic…) students?
Empowering School Culture & Social Structure (12.5%)	How will you apply knowledge of students' socio-geography (i.e., the communities they are from) to your future practice? Briefly discuss how you can use cultural practices and the history of communities to positively influence the lives of students in your teaching practices.
Equity Pedagogies (6.3%)	How did the teacher address culturally relevant content?

DEVELOPING TEACHER CANDIDATES' MULTICULTURAL LENSES

Table 5

Percentage of Data Represented by Each Dimension of Multicultural Education by Course

Course	CI (%)	KC (%)	PR (%)	ESC & SS (%)	EP (%)
Classroom Management (*n* = 8)	51.5	12.1	33.3	3.0	0.0
Instructional Technology (*n* = 1)	87.5	0.0	12.5	0.0	0.0
Science & Mathematics Methods (*n* = 10)	41.5	2.4	29.3	12.2	14.6
Social Studies Methods (*n* =14)	56.9	15.7	25.5	2.0	0.0

Note. CI = Content Integration; KC = Knowledge Construction; PR = Prejudice Reduction; ESC & SS = Empowering School Culture & Social Structure; EP = Equity Pedagogies.

Appendices

Appendix A

TCs' Reflection Items and Focus Group Instruments

Reflection Items	Focus Group Items
You get your first teaching job in your preferred grade level teaching the content that you love. You meet your students on the first day of school and they are a diverse group of kids. Students disclose that they identify as African American, Latino, Southeast Asian, and White. They come from a variety of socioeconomic backgrounds and you know that some receive both free breakfast and free lunch. You also have several students who are new to the country and who are still learning English. What do you do in the first weeks of school to ensure that you (a) build relationships with these students and (b) meet their needs as learners? Please be as specific to your grade level and area of content (if applicable: e.g., English, mathematics, science social studies, art, dance) as possible.	What courses have you taken related to teaching at [institution name]? Which one was your favorite? Why?
What is your definition of multicultural education?	What is "multicultural education" to you? How would you define "multicultural education?"
How have you implemented, or how do you plan to implement, practices of multicultural education in your own classroom as a teacher? If you don't plan to use multicultural education practices in your classroom, explain why.	What have you learned about multicultural education this semester in [your course]?
How have you seen your instructors implement multicultural education, if at all?	What did you think of the disciplinary writing assignment? What did it help you learn, if anything?
How have you seen teachers—in elementary, middle, or high school—implement multicultural education practices, if at all?	Have your views on teaching diverse learners changed this semester? Why or why not? If so, what do you think changed your mind? [For further probing: For

	example, your instructor, assignments, readings, etc.]
Do you think multicultural education is important? Why or why not?	Is there anything else you feel like you need to know, or experiences you need to have, in order to be a successful multicultural educator? Please explain your thoughts.
Have you read about multicultural education? If so, what have you read?	What else would you like to tell us about multicultural education or the disciplinary writing assignment(s) you have completed in [your course]?

Appendix B

Exemplar Quotes for the Dimensions of Multicultural Education by Course, with Percentages

Dimensions of Multicultural Education (%)	Course: Classroom Management
Content Integration (51.5%)	As a secondary English teacher, it would be very important for me to help them in any way I can. I would make sure to have patience with them and try to get a better understanding of their background first in order to help them start moving into English. I'd ask them what certain words mean in their language and I'd also make sure to get in touch with their parents or the school counselor to make sure I know everything I need to know about the students. *(Reflection)*
Knowledge Construction (12.1%)	I plan to find ways in which it relates to each student by knowing and understanding their background. Maybe have groups present on certain topics from their culture perspective. *(Reflection)*
Prejudice Reduction (33.3%)	I think that multicultural education is important because it teaches appreciation and acceptance. It is also a way of broadening the perspective of students that are only familiar with one culture. *(Reflection)*
Empowering School Culture and Social Structure (3%)	I think in here [course] we've talked about appealing to students' cultural backgrounds as a management strategy, as a way to make students feel included and valued, and their perspectives are important; [... it] is a really big way to give students a sense of more self-advocacy. *(Focus Group)*
Dimensions of Multicultural Education (%)	Course: Instructional Technology
Content Integration (87.5%)	I think just being able to really differentiate your instruction to reach students from all sorts of backgrounds, like different ethnicities, or even your students are going to have different experiences in general. *(Focus Group)*
Prejudice Reduction (12.5%)	I think just being more mindful of images I include, and the language I use, to be more culturally sensitive. We even had to do ... use a QR code in it. So, I linked my infographic to a video, and I made sure that the video had the closed captioning, so people could look at that. But it's just little things, like the images I use, just making sure that I'm

mindful of these things that I might have overlooked before taking this class. *(Focus Group)*

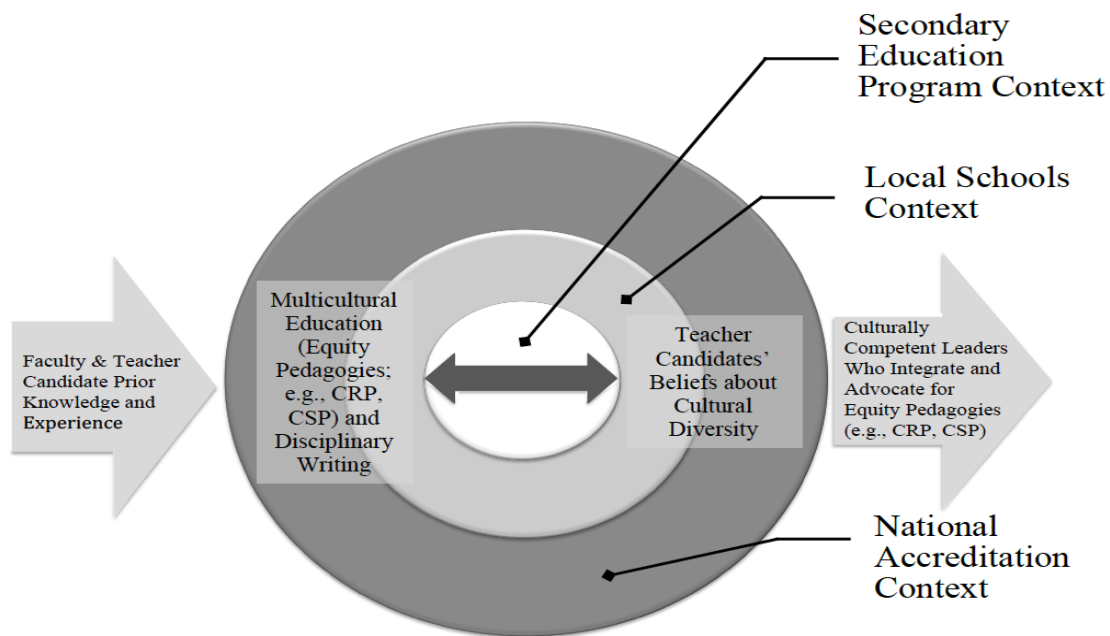| Dimensions of Multicultural Education (%)	Course: Secondary Science and Mathematics Methods
Content Integration (41.5%)	Since I am studying to be a science teacher, there are tons of ways to incorporate cultural differences into the material. For instance, when we talk about ecosystems, we can bring up information about different countries and their ecosystems, things of that nature. *(Reflection)*
Knowledge Construction (2.4%)	It allows students to feel represented and relate and interact with the material in a deeper manner. *(Reflection)*
Prejudice Reduction (29.3%)	Multicultural education is very pivotal. Students and teachers belong to different cultures and teachers should always acknowledge and talk about the different cultures they have as well as their students. If the teacher did not do this, students would not know or be aware of how everyone in the world is a part of different cultures. I believe if teachers do this in class, students will learn to be more accepting of others' differences such as socioeconomic statuses, languages, and races. *(Reflection)*
Empowering School Culture and Social Structure (12.2%)	Just to have a talk, and just see, like, what's going on in their communities. And also, you can use it to uncover social injustices that's going on within their communities as well, and they can realize that certain social aspects ... where they can make something like they're an active citizen within their community. They're realizing what's going on socially, things that they might ... can change, or possibly work to change eventually. *(Focus Group)*
Equity Pedagogies (14.6%)	Okay, so I would say that I feel like everyone should be trained on ... with culturally relevant pedagogy. They should definitely understand that you kind of have to ... especially, the younger age groups, like middle school, and even high school as well. A lot of times they don't value their education, they don't see the point of it. So, you've to kind of make them want to learn, and by incorporating things that they do value, and putting that within your content. So, I feel like any culturally relevant course that we've taken, which so far there's been a few, I feel like they should all definitely be requirements for anybody who's thinking, to go into the teaching profession. *(Focus Group)*

Dimensions of Multicultural Education (%)	Course: Secondary Social Studies Methods
Content Integration (56.9%)	By emphasizing the roles people of diverse backgrounds have played in American history. Additionally, my goal is to discuss how various cultural groups in America have seen their role in society grow and change in the lead up to the present day. *(Reflection)*
Knowledge Construction (15.7%)	I think multicultural education is taking in ... thinking about other people's backgrounds as in where they come from genetically, or who their parents are, where they live, their race, their socioeconomic status, anything that defines who they are as a person. And for a multicultural education, I think it's learning about people's backgrounds and what makes them, and what we can learn about that person, and how we can provide education, and help them learn, based off of their different culture. *(Reflection)*
Prejudice Reduction (25.5%)	And to me also the importance is that they come out of a K through 12 education knowing that it's not only people who look a particular way or who belong to one particular group who have shaped our society and done amazing things. That people of every race, gender, national background, whatever it may be, have contributed to global societies. *(Focus Group)*
Empowering School Culture and Social Structure (2%)	I feel that teaching allows me to have a direct, positive impact on future generations. I was inspired by both the excellent teachers I had, and the teachers I felt could have done a better job. It's my goal to be the change I wish I had seen in my teachers when I was in high school. *(Reflection)*

DEVELOPING TEACHER CANDIDATES' MULTICULTURAL LENSES

Figure 1

ME Teacher Preparation in the Context of our Secondary Education Program, Local Schools,
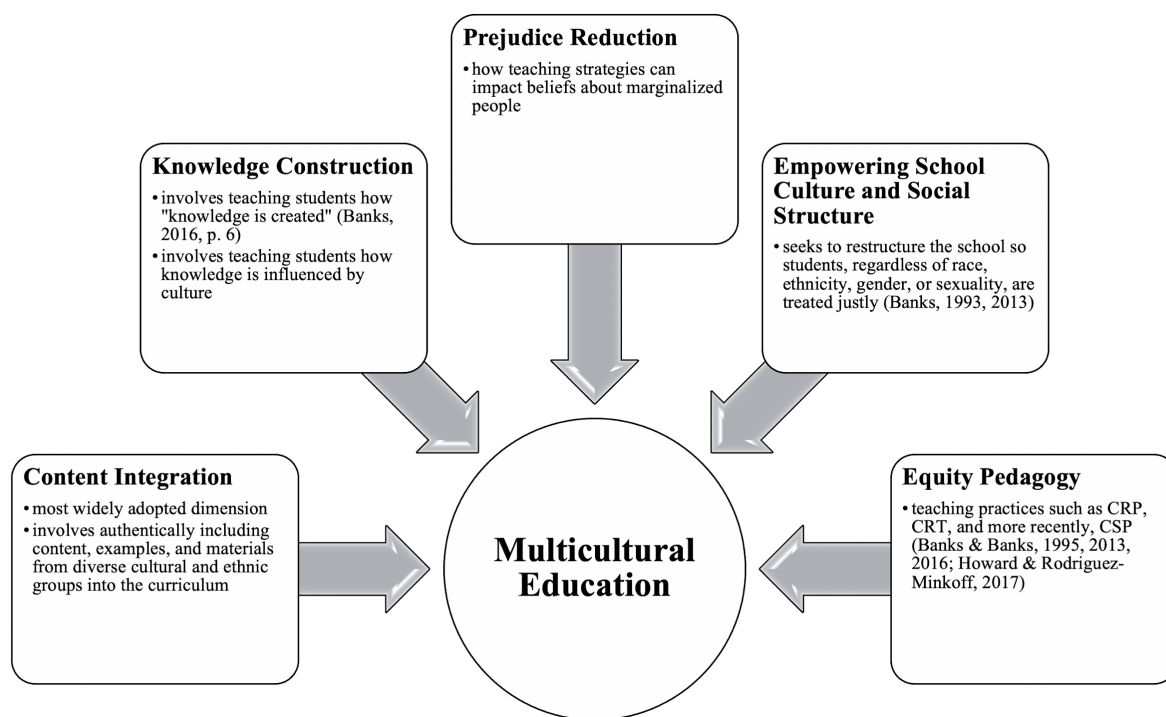
and National Accreditation

Figure 2

Dimensions of Multicultural Education (Banks, 1993, 2016)

Prejudice Reduction
- how teaching strategies can impact beliefs about marginalized people

Knowledge Construction
- involves teaching students how "knowledge is created" (Banks, 2016, p. 6)
- involves teaching students how knowledge is influenced by culture

Empowering School Culture and Social Structure
- seeks to restructure the school so students, regardless of race, ethnicity, gender, or sexuality, are treated justly (Banks, 1993, 2013)

Content Integration
- most widely adopted dimension
- involves authentically including content, examples, and materials from diverse cultural and ethnic groups into the curriculum

Multicultural Education

Equity Pedagogy
- teaching practices such as CRP, CRT, and more recently, CSP (Banks & Banks, 1995, 2013, 2016; Howard & Rodriguez-Minkoff, 2017)

DEVELOPING TEACHER CANDIDATES' MULTICULTURAL LENSES

Figure Captions

Figure 1: ME Teacher Preparation in the Context of our Secondary Education Program, Local

Schools, and National Accreditation

Figure 2: Dimensions of Multicultural Education (Banks, 1993, 2016)