SOCIAL JUSTICE IN TEACHER EDUCATION: EQUITY, DIVERSITY, INCLUSION

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SOCIAL JUSTICE IN TEACHER EDUCATION: EQUITY, DIVERSITY, INCLUSION

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Editorial: Social justice in teacher education: Equity, diversity, inclusion

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Editorial on the Research Topic

Social justice in teacher education: Equity, diversity, inclusion

This Research Topic, which addresses persisting issues of equity and social justice in teacher education practice, assumes greater importance in light of the COVID-19 pandemic crisis holding implications for post pandemic practice. The pandemic has layered systemic barriers in teacher education such as race, class, ethnicity, gender, sexual identity, and inclusion with new complexities brought on by the sudden shift to remote online teaching and the concomitantly sharpened digital inequities. The articles in the eBook speak to these concerns of equity from diverse contextual, conceptual and methodological vantage points. The subsections weave a framework indicating the various angles from which these issues are examined to question assumptions and reveal new possibilities for change.

Equity and social justice in teacher education practice: New possibilities

Stetsenko lays a powerful conceptual foundation for such new possibilities by exposing the "residue of passivity" found in the dominant sociocultural perspectives that obstructs the realization of teachers' activist agentive and "formative" role. Her notion of "radical transformative agency" provides a nuanced understanding of the agentive role of teachers, that speaks to their inner (moral) sense of accountability taking them beyond status quo practices and continuance of social inequities.

Ratnam's work embodies the transformative agentive stance in practical terms through an exemplar that conveys the message clearly to teachers and teacher educators. By presenting the case of an equity-oriented pedagogy and unpacking its meaning, the study stirs up the conceptual thinking necessary to breathe meaning into systemic changes in pre-service teacher education. Her dialogic approach reflects new orientations toward post qualitative work.

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Are teacher educators and student teachers ill-equipped to address complexities relating to race and gender issues?

Davis uses a mixed-method approach to illuminate the need for critical awareness given especially a reduction of critical spaces in favor of pedagogical approaches. Recommendations from this study reaffirm the urgency for training, (re-)centralization, and on-going professional development.

Goode et al. report a state-wide "Computer Science for All" initiative that aims to make this segregated discipline more inclusive in terms of both race and gender. The study goes beyond technical and pedagogical supports to teachers to engage with systemic reworking of normative and political forces that are part of the fabric of schools.

Coleman-King et al. offer narratives from the perspective of Black women professors in an Urban Teacher Preparation Program at a historically White Institution to illustrate how allyship can be birthed and what roles, responsibilities, and risks are inherent in allyship development and work. They address contentions that allies may face in creating and sustaining inclusive spaces and practices.

How can science education be made more accessible to socioeconomically disadvantaged students?

Dotson et al. introduce a novel evidence-based peer-led and co-learning model, IGNITE, to empower marginalized rural communities globally with STEM design thinking. By establishing partnership with local communities this program is potentially both scalable and sustainable in addressing disparities.

Khan and Van Wynsberghe make a case for Community Service Learning (CSL) experiences for preservice science teachers in the advancement of sensitivity, equity and diversity in classrooms. Various CSL models are explored and benefits, including teaching and assessment strategies, are presented as they relate to science teaching and teacher education.

How do educators grasp the elusive goals of equity, inclusivity and social justice?

Chan's narrative inquiry examines how ideas of equity and social justice may play out for a high school teacher in the implementation of her English curriculum. She considers ways in which examples of equity and social justice from interactions

between students and teachers, and among students, reveal further complexities of how these issues might be understood and addressed in a school context.

Ross et al. also use narrative inquiry to examine the persisting problem of teacher retention related to schools working for equity. Posing the question, "what do beginning teachers need in order to tell stories of staying?", they find that the concept of the "best-loved self" seems promising in helping teachers to construct their sense of identity.

Bukko and Liu illuminate how empirical findings from a teaching-coaching-reflection simulation learning experience promote equity consciousness, equity literacy, and transformative learning in a teacher education literacy-based methods course. The chapter calls for educators to go beyond teaching the lesson plan to center their programs on equity knowledge and development as a critical aspect of teacher preparation.

Schlein et al. discuss educators' experiences of curricular interaction in higher education using narrative inquiry. Their engagement with students in socially just and equitable curriculum leads to reflections on mentoring as an outgrowth of teaching that might serve to sustain curriculum negotiation from an equity and social justice vantage.

Using emergent discourse of teacher candidates, Whiting and Cutri examine ways in which teacher candidates grapple with, articulate, and explain their personal privilege. Their findings reveal three distinct but related articulations of the Discourse of Individualism, viz., ideology of meritocracy, ideology of luck and of systemic inequality opening the door for conversations to better understand and enact professional obligations.

Placed in the context of COVID-19 pandemic, the work by Parker and Conversano captures the effects of the pandemic on existing systemic barriers and accessibility in schools. They use a narrative inquiry 3R framework to illuminate intensely lived and storied experiences of educators' teaching during the pandemic. Recommendations for eradicating barriers are presented as a youth strategy, and call for a post-pandemic new normal on teacher education and its relation to poverty, equity, diversity, and inclusion.

Looking ahead

Together, these articles lay bare equity, diversity and inclusion topics as the gateway for reconceptualising a lived curriculum and practice for social justice in school systems. The unique contribution of the eBook lies in the forward thrust it makes in the field of Teacher Education by advancing thinking on:

• the link between awareness and change in practice, and how self-reflexivity mediates in making this connection;

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- "diversity" as an indispensable dialogical tool in teaching to equity and social justice and not, as is commonly seen, a problem to be addressed;
- ways of setting up a dialectic between theory and practice to overcome the persisting divide between the two in teacher education.

The pandemic has ushered a sense of urgency forcing us to look anew at barriers to social justice and equity in education in light of greater dependence on digital resources that are unevenly distributed. Complexities associated with climate change which exposes the fragility of humans on earth add new dimensions to issues of inequality. This eBook points to the need for more research to address the seminal existential question of how schooling can prepare students to create a more equitable planet while dissolving barriers to race, socioeconomics, gender, and climate change.

Author contributions

TR wrote the editorial with inputs from DP and EC. All have edited, reviewed the submission approving it for publication, and led the underlying Research Topic.

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Conflict of interest

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Teacher Candidates' Responses to Examining Personal Privilege: Nuanced Understandings of the Discourse of Individualism in Critical Multicultural Education

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Building on scholarship that establishes the Discourse of Individualism as a typical response to critical multicultural education, this study examines emergent discourses from 175 teacher candidates in their explanations of personal privilege. Open codes were applied to end-of-semester written responses from pre-service teachers asking them to explain the unearned privileges in their lives. Data was coded with attention to ideologies and meaning making. Analysis reveals three ways that teacher candidates' articulate and explain their personal privilege: (1) articulations of personal achievement relying on an ideology of meritocracy (n = 12); (2) articulation of inheritance that references an ideology of luck (n = 118); and (3) articulations of systemic inequality that begins to evidence more critical ideologies (n = 45). These three distinct, yet related, articulations of the Discourse of Individualism extend previous research by documenting the nuanced manner in which students grapple with privilege. Our finding documenting articulations of inheritance represents a discursive space in which students consider the reality of social position and structural inequity in society and open the door for conversations of ways to understand and enact professional obligations to those who are "not lucky." This finding has practical and theoretical implications for teacher educators and extends previous conceptualizations of the Discourse of Individualism.

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INTRODUCTION

Critical multicultural education seeks to prepare teachers to dismantle inequitable structures in their own classrooms and more productively attend to inequity in their interactions with children and parents, other educators, and society at large (Gorski, 2009; DiAngelo and Sensoy, 2010; Sensoy and DiAngelo, 2017). One way to encourage students to see their social positionality and larger connections to the institutional and societal structures is to ask them to identify and examine their own privilege. A body of empirical work in teacher education examines aspects of privilege particularly in terms of deepening understanding, shifting discourses, and enlisting commitment to creating more equitable educational environments (Dunlap et al., 2007; Case and Cole, 2013; Flynn, 2015). Scholars have identified discourses and ideologies that students draw on when they grapple with critical multicultural education as they prepare to teach

(Van Dijk, 1992; DiAngelo and Sensoy, 2009; DiAngelo, 2010; Coates, 2013). For example, Robin DiAngelo variously describes how the discourses of universality (DiAngelo, 2006) discourses of opinion (with DiAngelo and Sensoy, 2009), of individualism (DiAngelo and Sensoy, 2010), and of White silence (DiAngelo, 2012) all function as "discursive projects of resistance" (2009, p. 443) in social justice-oriented classrooms.

These dominant discourses that all emphasize individualism interfere with teacher candidates' ability to embrace understandings of systemic privilege that emerge in critical multicultural education (DiAngelo and Sensoy, 2009; Gorski, 2009, 2012; DiAngelo, 2010, 2012; Flynn, 2015). The emphasis on individuals as autonomous from the socio-historical forces that shape opportunity reinforces a meritocratic perspective and reduces the visibility of structural inequality, or privilege, in personal experiences. The present study builds on scholarship examining the Discourses of Individualism and asks: How do pre-service teachers in a critical multicultural education course articulate a Discourse of Individualism to explain privilege in their own lives?

CONCEPTUAL FRAMEWORK

Privilege can be defined as "unearned social group advantages" (Case, 2013: p. 2). Scholars note how crucial it is that teachers be taught explicitly about privilege (Weisman and Garza, 2002; Gay and Kirkland, 2003; Dunlap et al., 2007). For example, racism is often thought of as "individual acts of meanness" (McIntosh, 1988, p. 192) instead of patterned, systemic institutional forces that shape our opportunities and social positions. Therefore, a crucial component of critical multicultural education is for students to examine privilege at the structural level (Sleeter and Grant, 2006; Gorski, 2009; Howard, 2009).

Engaging teacher candidates in considering social difference and inequality challenges dominant culture ideologies, including meritocracy, individualism, and the ideal of democracy (DiAngelo and Sensoy, 2009; DiAngelo, 2010; McIntosh, 2013), and is an emotionally laden task (Kelchtermans, 2009; Zembylas, 2010; Case, 2013; Whiting and Cutri, 2015). Research documents that some students actively and passively resist the content of multicultural education and discussions of privilege (Weisman and Garza, 2002; Dunlap et al., 2007; Mueller and O'Connor, 2007; Case, 2013; Case and Cole, 2013). For example, Gay and Kirkland (2003) discuss "maneuvers" that pre-service teachers use to avoid reflecting on privilege or the development of critical consciousness, including diversion away from the topic, focusing on the individual instead of broad inequality, and pleading ignorance (also Case, 2013; Wise and Case, 2013; Sensoy and DiAngelo, 2014, 2017).

The Discourse of Individualism is one prevalent discourse identified as a response to a critical multicultural education content (DiAngelo, 2010). One way that students enact the discourse of individualism in multicultural classrooms is through a discourse of opinion as "a rhetorical device used to resist the call for positionality and to counter claims of inequality" (DiAngelo and Sensoy, 2009: p. 447). In other words, teacher

candidates can resist simply by conceptualizing content as opinion rather than socially real. Together the Discourse of Individualism including a discourse of opinion, are used to ease the internal tensions experienced by students as they grapple with critical multicultural education content that challenges dominant ideologies about power by asking students to consider the influence of social position.

Discourses contain and reveal embedded ideologies as "ways of thinking and behaving within a given society which make the ways of society seem "natural" or unquestioned to it's members" (DiAngelo, 2010: p. 3). These discourses and ideologies can be used to make oppressive social systems seem natural or desirable or even invisible. As DiAngelo (2010) explains,

The Discourse of Individualism is a claim that we all act independently from one another and that we all have the same possibility of achievement and are unmarked by social positions, such as race, class, and gender (Bonilla-Silva, 2006)... Because it obscures how social positioning impacts opportunity, the Discourse of Individualism is a dominant discourse that functions ideologically to reinforce and reproduce relations of unequal power (p. 4).

An insistence on individualism leads to the masking of social inequalities and our complicitness in the systems of oppression. In her work, DiAngelo (2010) presents eight dynamics of racism within the Discourse of Individualism. These include; the denial of white privilege and the significance of race, denial of the accumulation of wealth over generations, the denial of sociohistorical context, denial of persistent historical patterns of inequalities, denial of collective socialization on influence of mass media on hegemonic ideologies, reproduction of the myth of meritocracy and the myth of color blindness, portrayal of universal human individuality as a mythical norm, and finally it makes collective action difficult.

More empirical work is needed that examines how teacher candidates position themselves in a Discourse of Individualism in their explanations of their privilege. A more nuanced examination of how a Discourse of Individualism is enacted and articulated in the context of critical multicultural teacher education about social privilege is warranted. As we further interrogate the Discourse of Individualism to uncover and better understand student grappling, we can help name, articulate, and critique such discursive moves in ways that position teacher candidates to be prepared and responsive to their future students.

METHODS

In our 14-weeks required course we explicitly teach our students to identify their personal unearned privileges by introducing them to constructs, such as the myth of meritocracy, social reproduction, attributional errors, discrimination, and the reality of oppression, among other important multicultural concepts (Sensoy and DiAngelo, 2017). We are challenged to create spaces where students can examine their own positionalities "while simultaneously challenging the mainstream discourses that students invoke in the classroom" (DiAngelo

and Sensoy, 2009: p. 451) to avoid the discomfort of critical social justice work. Students are asked to examine their own social positions and privileges and critique the social structures that continue to constrain access to resources and opportunities. We assign coursework and assessments designed to ascertain how students grapple with learning of structured institutional inequality.

Setting and Participants

This study occurred at a private Christian university in the intermountain region of the United States. The Institutional Review Board for Human Subjects (IRB) which considers the ethical implications and procedures of research at our institution approved the study with the stipulation that data be safeguarded for confidentiality and then destroyed after 5 years. After explaining the study purposes and implications, students who were willing to participate in the study signed written consent forms and retained an information sheet indicating that they could withdraw at any time without penalty. Data was analyzed after the course was completed and thus student grades and other outcomes were not impacted by this research process.

The participants were taught by the authors of this paper and all participated in a common curriculum. This curriculum explicitly highlights the concepts of privilege and discrimination as being inherently connected in our social world. We assert that possessing social privileges comes with larger moral obligations to those who do not enjoy those privileges and requires students to grapple with the context of material privilege in their own lives. Assignments are designed to move from careful and critical examination of the self to larger consideration in the community (Allen and Rossatto, 2009), and then critical examinations of larger societal ramifications of privileges and challenges related to race, class, gender, sexuality, immigration, and language.

Our sample included 175 pre-service teachers enrolled in a required multicultural education class. Responses from 77 elementary and 98 secondary pre-service teachers were collected across three semesters. Most students were between the ages of 19 and 25 but there were at least six "non-traditional" students returning to school after significant time away from university to complete their undergraduate degrees. Available demographic data from the larger school population indicate that our sample population comes largely from the dominant White, English speaking, middle class, and Christian population in the United States. Official school statistics boast students from all 50 states. While this is so, only 14% of the undergraduate population identify themselves as a member of any racial minority group. Additionally, almost 99% of students are Christian from a single denomination (School Statistics, 2016). These demographics closely match the majority of pre-service teachers in traditional teacher preparation programs in the US (Quiocho and Rios, 2000; Ladson-Billings, 2005; Platt, 2013). In our analysis, we seek to avoid a reductionistic portrayal of majority culture teacher candidates by acknowledging the nuances in each positionality and the possibilities for all students to work as allies in various contexts (Lowenstein, 2009; Gorski, 2012; Case, 2013).

Data and Analysis

Data came from responses to a short essay question on a final assignment. The question specifically asks students to draw on their learning in critical multicultural education and use a personal experience to illustrate structural privilege by identifying "at least one important personal privilege that you did not 'earn' or merit for yourselves and then reflect on and analyze the impact of this in your life." We consider teacher candidates' responses as articulations of conceptional negotiations between an ideology of individuality and critical multicultural ideologies as they explain their own privileges. As previously presented in our theoretical framework, we are building on work in critical multicultural teacher education that describes discursive moves to resist critical multicultural content which seeks to implicate all people in the social structures of privilege (DiAngelo and Sensoy, 2009; DiAngelo, 2010, 2012).

We used open coding to identify patterns of responses used by pre-service teachers as they describe their social privileges (Miles and Huberman, 1994; Saldaña, 2009). Our recursive process began as both authors analyzed a small sample of data separately, then discussed emerging patterns of teacher candidates' approaches to their own unearned social privileges. Working independently, we analyzed the larger sample, meeting periodically to examine particular samples to confirm our interpretations of data remained congruent with each other. Throughout this process, we sought contradictory and negative evidence of our themes. Once we completed the analysis, we reviewed our data against our patterns and themes to make certain that our data provided clear evidence of our themes (Strauss, 1987; Saldaña, 2009).

Building on our previous analysis of types of privileges articulated by teacher candidates (Whiting and Cutri, 2015), we noted articulations of student stance toward their privileges. We specifically looked for ways that students articulated thoughts within a Discourse of Individualism (DiAngelo, 2010) including the specific opinion discourse identified by DiAngelo and Sensoy (2009) and additional emerging variations of individuality. We identified the stance of students in their written response texts about their personal privilege to determine if elements of the Discourse of Individualism were being used (Johnstone, 2008). We focused on positioning toward others because we recognize that "positionality is a foundation of this type of analysis" (DiAngelo and Sensoy, 2009, p. 456). We then analyzed the nuances of how these articulations made sense of the privilege within the Discourse of Individualism.

Our first pass of the data identified familiar variants of the Discourse of Individualism in critical multicultural education (DiAngelo and Sensoy, 2009; DiAngelo, 2010, 2018). Our second pass through the data looked for new and emerging articulations not previously acknowledged in the literature on individuality discourse in critical multicultural education. We identified the emerging articulations that reflected the ways students position themselves toward their own privilege and the ways that students explain their experiences using a Discourse of Individualism (see DiAngelo, 2010).

FINDINGS AND DISCUSSIONS

We identified three specific categories of articulations within the Discourse of Individualism in students' responses that are characterized by specific ideologies that facilitate a Discourse of Individualism. First, student responses (n=12) show outright resistance to the reality of unearned privilege. This approach draws on the ideology of meritocracy and personal achievement. Second, student responses (n=118) articulate privilege as an inheritance which relies on an ideology of luck. Finally, we see student responses (n=45) that begin to acknowledge privilege as being a part of systemically structured inequality that relies on critical multicultural ideologies.

Personal Achievement and Meritocracy

Seven responses emphasized personal characteristics, such as "I dress well," or "I am smart." Although these short responses are hard to analyze for our question, they may reflect a form of resistance, or "not-learning" (Kohl, 1995), of the concepts of privilege and systemic inequality as we presented them. Overall, these responses have a strong emphasis on individual positionality and reflect a denial of privilege as systemic.

An additional five student responses demonstrated articulations of personal achievement to express an active resistance to structured privilege. These critiques exposed a commitment to a rigid ideology of meritocracy. One student wrote about their father's experience to argue that work alone is responsible for inequitable social status and privileges in society. This student references a Discourse of Individualism and ideology of meritocracy explicitly in this segment.

"I believe that it wasn't by chance that we lived in Southern California, my dad didn't have a house given to him, or let alone a job. I believe it is because my dad made a goal for himself, and achieved the goal. This is a perfect example of meritocracy. My dad worked hard and he became what he wanted to be. It all has to do with one person's goal to achieve anything. I know that as we have learned about all these terms, that people who come from different cultures, ethnicities (sic.), those who are immigrants, I honestly believe that if they put their mind to something, despite what others tell them, that they can achieve great things in their lives."

It is easy to notice the assertions about hard work, lack of being "given" a house or a job. Also, we note the assertion that if others would just do what this student's father did, set goals and work hard they could reach the same outcome—good job and nice house in Southern California.

Other responses displayed more nuanced grappling with having unearned privilege. For example, a Hispanic American student, and one of only two students from racial minorities in our sample, commented:

"This is a hard question for me, because I feel that everything that I have in my immediate life is something that I have worked for. After long analyzing and thought, freedom is one privilege in my life that I have not had to work for and has simply been given

to me that has in turn allowed me to work for everything else in my life."

This response shows the challenges in this task and the teacher candidate could only identify the abstract concept of "freedom." This response also suggests that for students in marginalized positions, acknowledging their locations of privilege can be especially difficult as achievements are often hard won relative to those more privileged. The struggle to identify privilege occurs in a context of an individual and interpersonal focus that is ingrained in dominant discourses related to individual achievement.

Interestingly, these students openly challenged the stated goals and curricular assertions of the course and the instructors in this final assessment. It appears that they were holding onto beliefs about individual identity and achievement that are based in the Discourse of Individualism and ideology of meritocracy. Although a small number of the overall responses, we consider that these responses may articulate ideas that others were perhaps reluctant to express in the context of a course assignment.

Inheritance and Luck

The vast majority of student responses attributed personal privileges to inheritance and luck in some way. In fact, 118 responses out of the 175 responses analyzed were included in this category. The critical multicultural education curriculum of the course challenges students to think about privilege systemically and to critique the ideology of meritocracy. These responses show students grappling with the institutional level but with a continued reliance on individualistic explanations.

Some responses show teacher candidates working through tensions between the acknowledgment of social position and inheritance and their own sense of their individual work and achievement.

"As we have studied I have realized how hard it is to start from nothing. My privilege has been the result of the economic sacrifice of my family, though not rich, we have had plenty to take care of ourselves."

This response also reveals a pattern of qualifying inherited privilege. For example, the teacher candidate argues that parent income was a result of the hard work or "economic sacrifice," coupled with a qualification that the family had vast economic resources. An implication of this response is the idea that privilege is contextualized in an ideology of personal achievement which works to present any privileged positioning as a "deserved" privilege. Similarly, student responses sometimes revealed a related pattern of downplaying privileges connected to articulations of inheritance evident here in the qualification "though not rich." These patterns permitted students to begin recognizing inequality without completely letting go of the fallacy of meritocracy so deeply embedded in dominant discourses of individuality.

Some student articulations of inheritance began to acknowledge implications of social inequality in terms of historical and institutionalized practices toward certain groups

in this country. However, such responses fall short of an acknowledgment of the social structures that perpetuate or reinforce these inequalities. For example, responses that acknowledged race as a privilege tacitly but not explicitly conceded that there is a system of racism, which differentially benefits some over others in terms of status and opportunities. However, many of these teacher candidates did not elaborate on the institutional aspects of this privilege, instead emphasizing personal and passive inheritance and the ideology of luck, or unspecified forces outside of personal control, as illustrated in the following quote.

"I am white. I didn't choose to be white, nor did I certainly earn it in any way. I am just the way I came. because I am a white person I have had many opportunities that I might not otherwise received."

This student has begun to acknowledge the role of race as a privilege in this society by labeling it, but this remains relatively preliminary and individual. While the response began to connect the experience to the course definition of privilege, this connection is slim and incomplete. It references course requirements and ideas but does not draw on the ideologies or critical concepts presented in the course to elaborate understanding of why or how race functions as a privilege, the role of intersectionality, or providing any critique for the system of privilege.

Similarly, teacher candidates began to name and acknowledge privileges inherited from families and the idea of advantage without a disavowing an individualistic orientation or ideology. One student provided a typical response:

"I have grown up enjoying the privilege of being born into an educated household where a strong emphasis was placed on school... because I was born into the culture of power, I already have many advantages over my peers who were not born with this distinction."

Although this student drew on and used course concepts to demonstrate recognition of social privilege and positionality, this response did not acknowledge how privilege is also systematically structured in society. This example illustrates an emerging articulation of inheritance, used to acknowledge individual privilege while holding on to dominant culture ideals within a Discourse of Individualism. It also allowed the respondent to avoid a critical perspective that names elements of systemic inequality.

A few responses explicitly named the ideal of meritocracy as taught in the course as they grappled with their own personal privilege. Responses contended that although teacher candidates may have once relied on this ideology to see and understand their world, they are now embracing new perspectives. These responses demonstrated potential critical social justice orientations by implicitly referencing the ideas of inheritance to challenge the meritocracy myth. For example:

"As a younger kid, I felt that I really earned these chances, that others who didn't do the activities I did were just lazy. I realize now that I basically inherited these opportunities—no matter how much work ethic I had, I wouldn't have had these chances if my parents hadn't been wealthy enough to afford them for me. This reminds me of an error of the meritocracy myth—some people believe that you work hard enough, you can have anything you want, you can be anything you want. This just isn't true. My parents' income played a large part in my successes in life. This is a resource that others don't have at their disposal, and it's not because they deserve it less than I did. Some things are just luck. I was lucky enough to be born to a wealthy family, and that aided me in gaining all sorts of cultural capital that I wouldn't have had access to otherwise."

This response used concepts specifically identifying social position as a child of wealthy parents that has opened up access to "chances," "successes," and "cultural capital" to grapple with how social outcomes are connected to how we make sense of what one "deserves," entitlements, and introduces an ideology of justice. However, once again, the response stopped short of acknowledging the social structures related to this inherited position of privilege, but instead attributed this to luck. The articulations of luck and inheritance, remain grounded in an individual level of thought and focuses attention on interpersonal outcomes rather than larger social justice implications.

Although students are contending with social inheritance and the rejection of meritocracy as a simple fact, their articulations of privilege revealed their resistance to and struggle with acknowledging much complicity in the overall social structure. One response articulated a teacher candidate's learning. This student began to situate their own life experience in a larger context but remained non-committal on the location of power within these forces.

"What this has taught me is that although we may have many choices and experiences that can put us ahead (or behind) in life, a lot of how our life turns out comes from generations before you which you cannot control."

Articulations of inheritance in such examples show that students are situating themselves as passive heirs. This allows them to recognize their privilege, be grateful and yet still remain shielded from their complicity in continuing advantaged positioning within a structured social system of privilege.

Student reconciliations of their own experiences using the concepts of inheritance and luck show emerging thinking about social position and the implications of privilege. These responses highlight the difficulty inherent in positioning ourselves as active participant's complicitness in the propagation of the system of social privilege. Teacher candidates' responses fell short of situating social privilege as structured in society and they continued to rely on dominant discourses that focus attention to privilege in individualistic positioning. Nevertheless, because our course asks students to fundamentally reexamine who they are in their world, these responses indicate potentially significant shifts

for teacher candidates begin to challenge ideas of meritocracy and acknowledge their own privilege relative to others in society.

Acknowledgment of Systemic Inequality

The third analytic theme includes 45 examples of student responses articulating privilege in the context of a broader social structure from which they benefited. Although mostly nascent and emerging, these responses elaborated more specifically about how systemic structured inequality impacted personal experiences. These responses were different than other responses because they showed some reasoning about the social structures explicitly and they began to draw upon an ideology related to social justice.

One example shows a teacher candidate acknowledging race as a privilege and the ways social categories came together for her benefit.

"I think that the fact that I am a white female has given me privilege I did not earn. I grew up in a poor home as the youngest of 9 children. I think being poor should have been a restriction on my education or future, but no teacher treated me poor because I am white."

This response shows student effort to examine how race, gender, and economic status may intersect. Although we do not know the details of her experience, she appears to be asserting that in her opinion her white privilege was more influential than her social class (or gender) referring to the organization of social privilege outside her experiences in societal structures. She demonstrated an understanding of how privileges can be weighted differently in certain social settings and the institutional forces that are relevant to understanding privilege.

A few students connected their privileges to intersecting and reinforcing social structures taken for granted when in positions of privilege. For example, one teacher candidate linked access to quality health care with a sense of security that led to other social opportunities and privileges.

"All throughout my childhood and adolescence, I have had access to good healthcare... because I had good healthcare I never thought much about my health. I engaged in dangerous activities- skating, rock climbing and football because I was not worried about breaking an arm or leg... because I inherited health insurance from parents, I have never had to consider the cost of treatment. I have never had to worry about not getting the treatment that I needed because I didn't have the money to buy it."

Although this teacher candidate drew on concepts of inheritance explicitly, in contrast to peer responses, it is without emphasizing the individual level. Instead, by acknowledging positionality in the system of accessing health privilege structured through insurance programs in the US, connections are made between inherited privilege and various other ways privilege is enacted and structured outside an individual personal situation.

Structured inequality is experienced in myriad, overlapping, categories and levels of privilege, intersecting in complex ways. One response articulated a process of exploring personal

experiences through the class and learning about how privilege is a part of a larger system of inequality.

"I didn't see my privilege as a speaker of English or as a white person or as a member of the middle class. All of these things allowed me the privilege of believing in the myth of meritocracy. It seemed obvious to me that, since I worked hard and succeeded, others could do the same thing. But this belief itself is a privilege—a privilege of those successful in the system. This sort of naïve idealism put me in a place where I didn't even see my own privilege because I lived under the false impression that I earned everything I received."

This teacher candidate demonstrated a more critical stance with a recognition that even the belief systems available to make meaning were impacted by positionality in a system of privilege.

This analysis demonstrates three different ways that teacher candidates articulate and justify privilege. These show a range of reliance on individual explanations in contrast to more institutional explanations of privilege in critical social justice discourses. A few student responses actively resisted any critical concept of privilege with articulations based in the ideology of meritocracy. Some teacher candidates articulated that acknowledged systemic structured inequality in which they placed themselves as beneficiaries. However, the majority of the participants in this study articulated a hybrid of these where privileged social positions are acknowledged, but then described as an inheritance from their parents, or luck outside of personal control where students could remain unimplicated in the societal structures of privilege.

CONCLUSIONS AND IMPLICATIONS

In order to meet the critical multicultural education curricular goals of confronting the systemic and structured aspects of privilege, teacher candidates must be exposed to new critical discourses and be taught to identify the discourses that they rely on for making meaning in their lives. Building on work that establishes the Discourse of Individualism as a typical response to critical multicultural education (DiAngelo and Sensoy, 2009; DiAngelo, 2010, 2018), this study provides additional nuanced understandings of the Discourse of Individualism.

Empirical evidence from this study extends our understanding of the Discourse of Individualism by documenting additional nuances in how students grapple with privilege. These include articulations of active resistance to privilege via an ideology of meritocracy, a passive acceptance of privilege via an ideology of luck, and a more critical stance acknowledging inequitable institutional structures via an emerging ideology of social justice.

Articulations of inheritance emerge as a passive response that is a sort of middle ground between active resistance to the realities of socially structured inequality and a full active acknowledgment of complicit participation in socially constructed inequality that typifies a critical social justice approach. The tendency to speak about passively acquiring privileges in terms of inheritances or luck suggest a strong inclination to hedge or qualify social privilege through positioning oneself into a passive recipient role.

This passive stance allows one to deflect direct responsibility in the inequitable structures and forces that shape these inheritances. Yet, when teacher candidates employ the concept of inheritance, they often demonstrate indirect recognition of systemic inequality and other complexities.

We assert that recognizing student grappling through articulations of inheritance that emerges in our study is important because, in addition to representing the largest response from students, it has practical and theoretical implications for teacher educators. The ideology of inheritance or luck, though inadequate as an explanation for social inequity, allows for the reality of social position and structural inequity and opens the door for conversations of ways to understand and enact professional obligations to those who are "not lucky." This could be a place of imagining for teacher candidates to engage with intellectually and emotionally challenging content as critical social justice ideologies are introduced. More empirical work can explore how entering into this messy middle ground can be a fruitful place for teacher educators to support student learning and facilitate further consideration of critical multicultural discourses that acknowledge privilege as being a part of systemically structured inequality and more critical ideologies.

Identifying a reliance on concepts of inheritance which passively positions students in inequality as one possible response to critical multicultural education curriculum contributes additional theoretical understanding of the Discourse of Individualism. This further theoretical consideration of the Discourse of Individualism will hopefully open and inform a conversation about how teacher educators can support teacher candidates in moving from individualistic understandings of privilege to more systemic ones.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this manuscript will be made available by the authors, without undue reservation, to any qualified researcher. Please note that the raw data are destroyed after 5 years because of stipulations in the IRB to protect participant privacy.

ETHICS STATEMENT

The study was reviewed and approved by the Institutional Review Board of Brigham Young University. Written informed consent was obtained from all participants.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

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Narrative Reconsiderations of Teaching as Negotiated Curriculum for Social Justice and Equity

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Curriculum is negotiated in intricate ways through various forms of interactions between teachers and students, among students, or via acts of mentoring. Attending to the details of the experiences and interactions of such negotiations within the construct of narrative deliberation may prove to be illuminating in terms of understanding top-down and bottom-up influences on teaching and learning. In this article, we discuss the findings of a narrative inquiry into Education professors' experiences of these forms of curricular interaction in higher education. We underscore socially just and equitable curriculum development through engagement with teacher education students. We further reflect on mentoring as an outgrowth of teaching that might serve to sustain curriculum negotiation from an equity and social justice vantage.

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INTRODUCTION

Curriculum embeds and is embedded in context. Curriculum is further negotiated in intricate ways through various forms of interactions between teachers and students, among students, or via acts of mentoring. Attending to the details of the experiences and interactions of such negotiations within the construct of narrative deliberation may prove to be illuminating in terms of understanding top-down and bottom-up influences on teaching and learning.

We undertake this vantage that curriculum is negotiated in intricate ways through interactions between teachers and students. We root our work on issues of social justice and equity in curriculum and mentoring within particular experiences (Schwab, 1969) that enable us to shift between curriculum landscapes that centralize theories and those that explore students' and teachers' experiences of diversity (Clandinin et al., 2006). Our perspective joins together theories of culturally sensitive teaching (Ladson-Billings, 1992, 2001; Ladson-Billings and Brown, 2008) with a contextualized and fluid perspective on social justice and equity in curriculum (He et al., 2013).

In this article, we discuss the findings of a narrative inquiry into Education professors' experiences of curricular interaction in higher education to shed light on some of the ways that a curriculum is negotiated. We underscore socially just and equitable curriculum development through engagement with teacher education students. We further reflect on mentoring as an outgrowth of teaching that might serve to sustain curriculum negotiation from an equity and social justice vantage.

BACKGROUND

This is a narrative inquiry that has been conducted in the context of the United States, where there are differences in educational policies and curriculum standards from state to state. The specific locale for curriculum engagement and inquiry of this study is pertinent for two specific reasons: the racial and ethnic narratives of our urban and university communities and the urban mission orientation of our professional environment. Kansas City has been noted as a persistently segregated city that is marked by pre K–12 schools with student populations that are comprised largely of children of color. Efforts to forcefully desegregate the schools surrounding the university have resulted in large population shifts, whereby White families have often moved to the suburbs or sought private schooling options (Gotham, 2002). Our study is rooted within this contextual environment, with its specific history of White privilege and the underrepresentation and oppression of African American students as outlined above.

Our institution is situated in the inner city, and it has adopted an urban–serving mission. The most recent available geographic diversity data highlight that the university is largely seen as an institute of higher education that serves the two states of Missouri and Kansas that straddle the local catchment area. A total of 40% of students identified as "international, mixed race, or a member of a minority group (UMKC, 2019). In comparison K-12 student demographics for Kansas City Public Schools (KCPS) are: 57% Black, 28% Hispanic, 9% White, and 6% Other (Kansas City Public Schools, 2019).

The faculty and staff members at the School of Education have been involved in a variety of endeavors to be of service to the urban community. These activities include course and program curriculum redesign to enhance a culturally responsive perspective, the strengthening of ties with nearby schools, and participating in ongoing discussion regarding interpretations of educator preparation and development with an urban focus. The School of Education supports a nearby child development center, and it also runs an Institute for Urban Education, community counseling and assessment services, and an urban education research center. The faculty at the School of Education mirrors the student demographics of the university at large, which is not ethnically and racially aligned with the students in local pre K-12 schools

Working within this context has brought to the forefront questions for us regarding equity and social justice as we shape and experience the curriculum alongside students as situated within these possible contextual and cultural tensions. These curricular complexities, which we will discuss from the vantage of our data below, seemed to stem from differences between the racial composition of faculty members and teacher education students in relation to students in the local K-12 schools. Another nuance of these professional challenges is possible divergent experiences of faculty and students concerning diversity and/or differences in understanding of the need for social justice and equity across curricular interactions.

THEORETICAL FRAMEWORK

Curriculum research that is contextualized and experiential formed the basis for our thinking about this inquiry. This included attending to literature that centralizes teachers and their experiences within the curriculum. Moreover, we amalgamated a focus on particular and individual conceptions and experiences of diversity in curricular engagement within this study. Therefore, we reviewed literature on culturally focused experiential research that undertakes a narrative stance on inquiry into various curricular experiences pertaining to diversity and/or multicultural education.

Contextual and Experiential Curriculum

We began with a contextual outlook on curriculum-making and curriculum inquiry in response to Schwab's (1969, 1983) recommendation for curriculum work that closely relates to and stems from the world of practice. Importantly, Schwab (1962) argued that all curriculum thought and curriculum work necessarily accounts for the commonplaces of the teacher, the student, the subject matter, and the milieu. Taken together, these commonplaces form what he referred to as the particular in curriculum.

Schwab's theory of the curricular commonplaces established for us a rationale for examining instances of curriculum as they are experienced among specific teachers and students and while interacting with directed learning materials and activities. Dewey (1938) reinforced for us a perspective on connections between learning and experience. We thus examined a body of curriculum research that highlights school and classroom experiences (Schubert and Ayers, 1992; Ross, 2004). This turn to the exploration of the details of education as experience and "life in classrooms" was further supported by Jackson (1990), who claimed that attention to mundane details of teacher-student interactions were important, and Schubert (Schubert, 2008b) asserted that otherwise a sense of taken-for-grantedness might become rooted in teachers' practices and students' "experienced curriculum."

Jackson (1990) highlighted how when aspects of life in classrooms are not seen, power structures and struggles can occur. If left unchecked, these may result in what he coined as a "hidden curriculum." We attended to possible moments of taken-for-grantedness within our study to shed light on possible, if unintended, messages of power, and inequity that might underscore our own teaching. This aided us in drawing attention to the potential establishment of a hidden curriculum, which could have lasting negative consequences, especially among students of color and those in urban areas.

We also consulted with literature on curriculum and teacher agency as a foundation for informing our own work. Connelly and Clandinin (1988) highlighted the teacher as the prime curriculum maker, and we undertook a perspective in our work of the centralization of teachers to planning and enacting the curriculum (Craig and Ross, 2008). Schlein and Schwartz's (2015) work further considered the "teacher as curriculum" as a paradigm for curriculum research and practice. Importantly, this work underlines how teachers directly steer the curriculum while engaging with students about learning materials. We therefore incorporated into this study the consideration of our own experiences alongside those of our students and then reflected together on each other's experiences in the classroom with our

students to add layered meaning to our stances as teachers in relation to our students (Greene, 1973).

Culturally Focused Experiential Research

Greene (1995, 2017) reminded us of the need to move back and forth between casting the lens on our students and classrooms, and stepping back to understand broader theories and trends. Consequently, theories of multicultural education (Gay, 1995; Banks and McGee Banks, 2004) and urban education (Kincheloe et al., 2007) were significant to our thinking about our exploration of curriculum. Additionally, our efforts at shaping and examining the curriculum were guided by the concept of culturally relevant teaching and learning (Ladson-Billings, 1992, 2001; Ladson-Billings and Brown, 2008). These theories were important for underpinning our understanding of some of the tensions that may exist in diverse schools and some of the suggested ways to best educate teachers to support learning among students of color. Knowledge of these theories helped us in approaching the literature base on culturally focused experiential research.

We explored this body of research while also attending specifically to works that cast a lens on the particular by studying life in urban classrooms (Gussin Paley, 2000; Schultz, 2008) in attending to the specific context of our inquiry. Narrative-oriented inquiries into some of the complexities of language learning and/or of immigration and settlement (Cisneros, 1984; Igoa, 1995; Carger, 1996; He, 2002; Eng, 2008; Schlein, 2018) were influential for our own work. Narrative inquiries into multicultural education and educational issues of diversity (Phillion, 2002; Clandinin et al., 2006; Schlein and Chan, 2006; Chan, 2007, 2009; Chan and Schlein, 2010) were also highly important for grounding our study from thematic and methodological stances.

We outlined above some of the narrative and experientially based literature that supports this study. Our research embeds and is embedded in the discourse of diversity in education that is represented within this set of literature. We also acknowledge in our work research that highlights the great value of attending to students' experiential narratives (Chan, 2007; He et al., 2008; Ross and Chan, 2008). We therefore included in our investigative efforts students' voiced experiences of equity and social justice within teaching and/or mentoring curricular interactions to add a multi-faceted dimension to the study that accounts for the prime curriculum stakeholders of teachers and students. We also included within our study close attention to experiences of curricular tensions (Giroux, 1992).

METHODS

Within our inquiry, we attempted to make sense of our experiences of curriculum engagement while attempting to incorporate a vision of educational equity and social justice. Specifically, we shed light on our interactions with our students via transformative class discussions. We further included consideration of the capacity of mentoring to serve as an outgrowth of teaching. In particular, we reflected on how mentoring may be useful for making sense of difficult classroom

discussions and for bringing clarity to professional practice that is aimed at equity and social justice. It was intended through our investigative activities that we collected data while also focusing on mentoring and growth.

Researcher Positioning

This article reflects research that was conducted by two university professors in consultation with one advanced doctoral student. Candace and Dianne teach pre-service teachers, inservice educators, and educational leaders who are enrolled in undergraduate and graduate programs in a mid-sized School of Education that is located in Kansas City, Missouri. Candace teaches courses in the Division of Teacher Education and Curriculum Studies. During the impetus of this writing, Dianne was teaching with the Division of Educational Leadership, Policy, and Foundations. Charles is an Interdisciplinary Ph.D. student in the disciplines of Curriculum and Instruction and Educational Leadership and Policy Foundations.

Dianne was assigned to be a professional mentor for Candace when she joined the faculty as a new Assistant Professor. Candace is a White educator from Canada, who has experienced teaching English in Japan. She moved to the United States for her position in curriculum studies at our institution. Dianne describes herself as a southern Black woman who was recruited to teach curriculum theory, curriculum development, and social foundations of education as a faculty member at our School of Education. From the outset, it was within a mentoring capacity that we began to meet formally for mentorship appointments. Over time and via mentoring conversations where Dianne guided Candace on her developing practices, we came to recognize that we were joined in a commitment to social justice and equity in education. We also came to see that our conversations were valuable places of professional growth, not only for Candace as she learned how to live as a new Assistant Professor, but for Dianne as well, who gained new perspectives on teaching through our discussions to contribute to her many years of practice at our institution.

We anticipated that participating in reflections with each other would bring up memories of classroom interactions with students in our courses or our responses to students' written course work. In Candace's classes that are under discussion in this paper, her students completed several reflective reading responses, an annotated bibliography, and a final research report. In Dianne's class under discussion in this paper, her students' written work was comprised of journaling activities and reflective essays related to race, class, and gender. Each of our courses were seemingly enrolled by a majority of students who are White, which is consistent with the racial composition of the student population on our campus (UMKC, 2019).

The overarching themes of our inquiry arose out of our fertile conversations, and we identified our research questions as areas within which we desired to learn more. As a result, we attended to particular classroom interactions to seek out challenges and possibilities for our own professional development and to uncover ways in which our teaching might impact students in terms of curriculum negotiation that is rooted in social justice and equity. We wondered about how to focus on educational

issues of equity and social justice in meaningful and impactful ways within a historically segregated urban setting. Moreover, as we began to inquire into our practices, we further deliberated over some of the potential challenges that seemed to be presented in our curriculum work.

Charles was invited to join Candace and Dianne on this research text. He is one of Candace's mentees who had expressed an interest in understanding the intersections of diversity, social justice, teaching, and mentoring. Charles is an African American male who has expressed concern about educational mentorship among African American males.

Research Questions

Our study was guided by several broad questions: what are students' experiences with curricula that are aimed at multicultural and urban education? As teacher educators, how do our own experiential narratives position us on the landscapes of teaching and research? What are some of the challenges and possibilities of curriculum engagement in urban settings?

While our research questions outlined for us the major strands of our investigative efforts, our work was further delineated by the following set of inquiry objectives. In particular, we set out to collect stories of teaching and learning experiences stemming from a curricular perspective of equity and social justice. We also aimed to examine the relationship between intentions, goals, and outcomes in our curricular endeavors.

Research Design

Our work follows the narrative inquiry framework for research as outlined by Clandinin and Connelly (2000). This qualitative method for conducting an inquiry aided us in examining in detail our experiences of curriculum. Moreover, our study is shaped by their concept of collecting "stories of experience" (Connelly and Clandinin, 1991; Smith, 1999) as data, as we explored our own experiences and those of our students in relation to the curriculum. We aimed within our study to maintain a "state of wakefulness" (Clandinin and Connelly, 2000). A wakeful theoretical approach to collecting curriculum data honed our investigative vision to be well-aligned with our classroom lives and those of our students. In this way, we pushed ourselves to be wakeful to moments of potential tension in our curricular interactions. We also challenged ourselves to be wakeful to possibilities for recovering meaning from those storied tensions and to identify possible new re-tellings of our stories of practice.

Data Collection and Analysis

Efforts at data collection among Dianne and Candace were founded on the notion of engaging in teacher-teacher conversations (Yonemura, 1982). We initially established a research foundation through focused faculty mentoring discussions together. We were further guided by the notion of employing letters in narrative inquiry work (Ciuffetelli Parker, 2011). We reflected on our experiences and possible themes within our experiences via email exchanges as a means of carrying on a storied textual dialogue.

Dianne and Candace met at either of our offices for reflective conversations over a period of 3 months. This amounted to

three 60-min face-to-face meetings for data collection. During each face-to-face meeting, Candace began by sharing experiences that she had undergone in recent classes, and in turn, we both discussed some of our current and/or past experiences with curriculum planning and implementation with a specific focus on issues related to culture and diversity. We then explored each other's experiences, with a narrowed focus on potential tensions that we have encountered with our teaching in direct connection with issues of social justice and equity. Following our reflective conversations, Candace wrote brief notes about the contents of our discussions and our ongoing reflections about our conversations.

At the end of the face-to-face meetings, Candace reviewed the notes that she had compiled based upon our in-person discussions. She then scripted an autobiographical response piece that was a re-telling of one of her teaching experiences that had been discussed during one of our in-person meetings. She emailed the written work to Dianne, who replied to the original piece with an email of further questions and comments. Candace replied to some of the comments, and following a further email from Dianne, Candace revised her story and sent it to Dianne. Dianne then reviewed the final version of that story, and in response to it she crafted an autobiographical response piece about her own experiences. We engaged in several email exchanges where we discussed possible new readings of both of our stories once they were paired together. Dianne then revised her initial story in response to Candace's comments and sent that experiential story back to Candace. In response to the new story, Candace created an autobiographical response piece that highlighted another experience of curricular engagement.

In addition, we understood our investigative efforts of curriculum negotiation related to social justice and equity to occur as relational with our students. We looked to the work of Clandinin et al. (2006) as an example of how lives of diversity are shaped between teachers, students, and researchers through and with the curriculum. As such, following our teacher-teacher conversations and the teasing out of narrative themes, we each asked former graduate students for permission to review and reflect on samples of their work. The collected samples of student work served to provide documentation of our students' viewpoints on their growth in relation to the urban curriculum within which they were immersed in our courses. It also was aimed at providing teacher education students with voicing in education (Cook-Sather, 2006), and especially within research, which can be especially hierarchical and separated from the world of practice (Savage, 2003). We reviewed the student written work for narrative themes, and it was also seen as a useful means for articulating some of our poignant experiences of teacher education, equity, and social justice in relation to the narrative themes that we had identified during our reflective conversations. The themes generated from this study were: primacy of context in curriculum negotiations; different kinds of representation; incremental and negotiated transformation; and experiences of curriculum negotiation generate new experiences of curriculum.

We understand our stories that we outline below as preliminary findings of our study, since they were initially created following reflection of our face-to-face discussions and review of our notes. Moreover, the stories were honed in consultation with each other via reflective email exchanges. At the end of one academic semester, we then reviewed our notes and autobiographical response pieces for narrative themes. We see the narrative themes that we identified as the major investigative findings generated from our interactions. We further see these themes as touchstones for us to deliberate over as we continue to engage in our practices, interact with each other within our mentoring relationship, and develop professionally overall.

Narrative Reconstructions and Memory in Curricular Research

Importantly, although much of our focus was on narrative reconstructions of recent curriculum negotiations of social justice and equity, we also incorporated into our reflections earlier memories of curricular engagement. We included these earlier stories of teaching experiences in acknowledgment of the value of resonance in telling teaching stories (Conle, 1996). This approach is useful for following the paths and mapping the contours of narrative teaching threads back and forth. Nevertheless, we recognize that attending to past stories necessitates the reliance on memories of teaching and learning. At the same time, we recognize that teachers' accounts of teaching are often constructions of past experiences (Ben-Peretz, 1995). Shagoury Hubbard and Miller Power (2003) specifically recommend documenting memorable words on paper during classes. Then, teacher-researchers are meant to use the memorable words to jog their memories of curricular interactions for the purpose of a fuller reconstruction of events. This method is suggested in consideration of the rapid pace and general hectic nature of life in classrooms. However, we have further considered how memories of teaching experiences might be subject to modification for the purpose of shaping positive constructions. We made efforts to reflect on potential self-deception (Crites, 1979) within our narrative descriptions throughout our discussions, written work, and email exchanges. Nevertheless, we assert that all narrative accounts are interpretive constructions of previous experiences. There is thus a necessary tension that we acknowledge throughout our research methods and the findings of our study.

Ethical Considerations

This study was successfully approved with the status of Exemption for ethical review following a protocol submission to the Institutional Review Board of our university. All planned details of the study were logged within the submitted research protocol, including drafts of the Consent Letter. We replaced the names of any individuals or identifying features with pseudonyms within this inquiry. Written informed consent letters were obtained from participants for the purposes of research participation and publication. Furthermore, one author stored all data on a password-protected computer, password-protected memory sticks, and on a password-protected external hard drive. Only Candace and Dianne had access to the raw data.

RESULTS

In this section, we discuss some of our experiences with curriculum negotiation that are focused on social justice and equity with students in graduate level teacher education courses. We focus on our stories of classroom experiences and reflective responses that resonate from those curricular interactions as preliminary themes from our study. The response story below intermingles the written and verbal discourses that we engaged in along our research journey. The response story is focused on a tension that Candace experienced in one of her classes that considers issues of equity and social justice in education. The written response story below is a meaningful reconstruction of meaning of the original story following our discussion and reflection. After the story, a discussion of some of our reflective engagement is highlighted.

When I began to teach a research practicum course at the start of my professorial career, I desired to shape the curriculum in alignment with a focus on social justice and equity in education. This course is a culminating experience for students who are enrolled in two different graduate programs, and some students in other programs also take this course for research guidance and practice. The thematic concentration on social justice and equity was fashioned following my own curricular point of view alongside the urban-serving mission of our school of education, where students are prepared to support all students toward educational success.

The course included four guiding texts. I employed two different books on methods for undertaking teacher research. I also added two texts that were narratives of researching teaching practices in diverse classroom settings. My intention with adding these narrative-based research texts was to display examples for students of what research into curriculum negotiations might look like under the broad umbrella of diversity. One of these books was Igoa's (1995) "The inner world of the immigrant child." The second narrative research book that I included on the course syllabus was "Kwanzaa and Me: A teacher's story" (Gussin Paley, 1995). This book provides an account of a teacher's investigation into representation in her classroom. The author relates her experiences as a White teacher attempting to understand how best to teach her African-American students in an inner-city school. I had selected this book due to its status as an exemplar of classroom-based research and its detailed description of research methods and findings that are rooted in practice that I had deemed to be easy to understand and emulate. I also selected this book because it concentrated on issues of educational equity and racial and social representation in class. I thought it was particularly important that it was written from the vantage of a highly experienced White educator who was trying to learn about how to expand the curriculum in relation to the needs of students in her increasingly culturally and racially diverse classroom. I had thought that this book would be a relevant text that many of my own students might identify with, learn from, and use as an example to undertake their own research and teaching practices about diversity in education.

On the day when we were to begin discussing our reflections on "Kwanzaa and Me: A teacher's story" (Gussin Paley, 1995), I began the lesson by asking my students what they had thought of the book. I was met with a deafening silence and blinking eyes. I breathed a sigh of relief when one student, Adam, raised

his hand and stated that he had loved the book. After that, the students began to engage in a vigorous dialogue about how to include historically underrepresented students' experiences in the classroom. Some students questioned Gussin Paley's motives for inquiring into ways to teach African American students, and one student expressed his own concerns with teaching students in urban classrooms in the future due to his stated limited knowledge of backgrounds other than his own.

After class, one student told me that he had thought that 'I must have been some crazy White girl, trying to talk about teaching African American children.' He stated that after the class was over, he could see that talking about this topic had caused a shift in the classroom. He mentioned to me that during the break, everybody seemed to be very lively, and he said that he felt as though a lot of barriers had been taken down among the students. As he left the room, he said, 'You did something good here. People are talking with each other. Really talking.' Walking out the door of the classroom, I wondered why I felt so awful.

Reflecting on this classroom situation with Dianne enabled Candace to see that she had included content in her lesson that had a focus on diversity with a lens of educational social justice and equity. She had further provided the space for dialogic interaction among her students as a means of modeling this as a curricular tool for her students to use in their own classrooms. Nevertheless, Dianne and Candace considered the ways in which Candace might have failed to take into account the context of our classroom discussion and the contextual framing of representation in the class.

Candace came to see through her email dialogues with Dianne that it was possible that her students might have read the classroom situation from the vantage of distrust or unease. Dianne suggested to Candace that she was not only a White teacher, but that she had identified herself as an immigrant from Canada, who at the time had been a relative newcomer to U.S. discussions of race and culture. Candace had further shared with her class her orientation toward multicultural education and socially just teaching through narratives of her teaching experiences and her own research program into lived educational experiences of diversity and intercultural teaching and learning, which she used as a model for the students to consult with as they prepared their own research projects. Reconstructing her experiential narrative, we could see that it is possible that the classroom conversation only advanced when Adam offered a positive opinion about the book. Adam, who is African American, may have provided agency to the dialogue. In other words, in volunteering to talk about the book, he constructed an acceptable context for negotiating the curriculum.

In our email letters to each other we became further struck by the different layers of context that seemed to play a role in this lived curricular scenario. We noted how Candace had entered the situation with a perspective of diversity and urban education that had been shaped in another country and setting of diversity. However, we discussed how this curricular vantage did not necessarily translate to the local context. Instead, she became cognizant of the need to understand and take into account the particular context of her current teaching and learning endeavors. Kansas City has a long history of racial divide and

tension. As Candace continued to practice in this setting and engage in discussions with students and colleagues over time, she learned about resources on this topic and came to a fuller understanding about the persistent efforts to desegregate the local urban schools (Caruthers, 2005; Caruthers et al., 2016).

In the following narrative, Dianne articulates her reconstruction of a remembered story of her interactions with students. The written response story was constructed following the re-telling of Candace's narrative above, and after targeted reflections on that narrative related to issues of equity and social justice in teaching and teacher education. Dianne's constructed experiential narrative took place within the setting of a seminar style undergraduate course with ~ 25 students.

Diversity and the Storied Self

I teach a social foundations course with an emphasis in cultural diversity and American education. The curriculum provides opportunities for students (and me) to grapple with the historical implications of race, class, gender, sexual orientation, disability, language, and religion on educational attainment in the United States. Narratives and/or stories are important for us to claim our own historical *self* and to move into a realm of knowing others' *selves*. My notion is to create one story which connects to other stories (Smith, 1999; Gay, 2000). This approach to teaching my classes leads me to a story about a white male student in the class.

Barry (pseudonym) is a gangly 6'4" white male who wanted to teach in a Catholic school because he was educated in Catholic schools. He reminded his peers and me that he is a devout believer in God and the doctrine of the Catholic Church, each class period. During the last class meeting, Barry announced the following:

Every time I see Blacks on television, I know they are crooks. I hate homosexuals and AIDS is their punishment. I hate women because all they want is power. I think there should be prayer in schools. There I said it.

I remember that the other students looked at me for a critical response. However, I resolved to ponder Barry's narrative and try to understand his *self*. Before I could engage Barry about his story, his peers *tackled* his story with some hostility. A part of me felt relieved that the students were so passionate about their stories; not resonating with Barry's.

Sharing this lived scenario of curriculum—making in context via email discussions, we reflected on how Gay offers that "Narratives encompass both the modes of thought and texts of discourse that give shape to the realities they convey... The telling of one story is the genesis of yet other stories" (Gay, 2000, pp. 2–3). This quotation then steered our deliberation over Dianne's story in centering narratives as highly important in curricular negotiation. We reflected on how placing narratives at the forefront of understanding cultural differences and similarities might be crucial to transforming the ways in which we practice the craft of teaching and learning.

Via our email conversations, Dianne noted in an email how her narrative of curricular interaction with her student highlighted what she referred to as "the transformative intellectual in me" (Giroux, 1983). Dianne further realized during the course of our oral and written teacher conversations how

her storied experience might indicate potential contradictions at work in her own curricular beliefs. She stated in our email correspondence that:

Gay is correct, 'The telling of one story is the genesis of yet other stories' (2000, p.3). During my interaction with Barry, I responded by eventually reminding all of the students and myself, in the heatedly charged moment, that Barry's story is his *self*. This further connected with Hook's (1994) assertion that each of us grows and develops through story; mind, body, and spirit.

This idea was further grounded in the final re-telling of Dianne's story following our email discussion. Dianne added the following as a conclusion to her written response story:

About five years after my encounter with Barry, I received a card from him. He thanked me for listening to him, during the heatedly charged moment, of his revelations. Barry also thanked me for helping him to reflect on his *self* and he stated that he had had an epiphany. He was a new teacher, in a Catholic school; and, he knew the importance of diversity and the storied *self*.

In response to Dianne's re-telling of her story of curriculum negotiation for equity and social justice, Candace constructed a written response story of a tension in her teaching that resonated from Dianne's final story version. In the narrative below, we showcase the final written response story of Candace's experience of curricular negotiation that includes our reflections.

In another course that is focused on studying curriculum theory, I assigned a reading for class discussion dealing with heteronormativity in the curriculum (Thornton, 2009). The text itself does not deal directly with issues of sexuality. That day, I was surprised to acknowledge new tensions among the students as barriers were drawn on religious grounds.

A few students commented that they had felt as though their religious views as Christians could not align with a discussion about the curricular representation of people who identify as members of the LGBTQ community. Richard (pseudonym) told his fellow classmates that if he had turned his back on his gay students and shut them down for being themselves, he would have lost them from the start of the academic year. Shirley (pseudonym) agreed, and argued that it was irresponsible for teachers to not accept students for who they were, since this could cause irreparable damage to the students' emotional and academic well-being. Samantha (pseudonym) countered that she desired to teach in the future in a religious school, and so she saw no further need to discuss the issue. Shirley warned her about the necessity of exploring students' needs instead of one's own needs. Then, I reminded my students to allow all opinions to be heard so that we could discuss the various angles on this topic.

Our deliberations over this story also incorporated Candace's resonating reflections on a student's reflective assignment that was based on the assigned reading. Candace related to Dianne that she had been surprised to see a response piece based on that reading. Students were given a choice in terms of which readings to base their reflective assignments on throughout the semester. Few students selected that reading. One student, who had remained in silence throughout the lesson, submitted her assignment following the class discussion. Candace then engaged in several email exchanges with the student about her assignment.

Our inquiry took place in a subsequent semester. However, after Dianne discussed her story of practice, Candace contacted her own student to request permission to share the assignment with Dianne, since she was Candace's teaching mentor. The student also provided us with a consent letter to make use of her work in this research text. The following is an excerpt of that student's reading response, which contributes another layer of complexity to this story.

I am honest to say I realize I yet have some guarded areas when dealing with homosexuality be it gay or lesbian participants. I was raised in a Christian home and these topics were always tabled before anyone could expound on the issue. The bottom line is homosexuality is just wrong, no room for discussion, in my house. It wasn't the notion, of needing to hate these individuals, but I guess since it was never addressed, how would one know how to deal with those whom had chosen this as their way of life. It wasn't this reading alone, but a compilation of reading and studying over time, which has helped me to be able to at least respect the person's wishes.

When reading this article I just so happened to be watching Roots, by Alex Haley and some profound things happened in parallel to my reading. There was a scene where the son of a slave owner didn't agree with what his father was doing. He was discussing with his mother, the fact that the slaves weren't animals, they were human beings. His mother in contrast had no reference point, she had embraced the idea that the slaves were animals, so it was quite appropriate for the slaves to act as donkeys and horses and be fed like pigs from a trough instead of a table. His mother's ability to see the slaves as human beings was simply nonexistent. In comparison to my own upbringing, I neither liked nor disliked gays nor lesbians, but I also simply had no reference point to care about their rights either. I had no connection or reference point... As a future educator I wish to incorporate a parallel between the oppression of racism to exploit its silent grip through homophobia practices. This does not mean I would no longer be a Christian, this simply means, love embraces every aspect. I am command to love my neighbor and to do good and not evil. I would hope not to hide behind what is a "hidden curriculum" in education, and continue to allow the pangs of hatred to grow from ignorance. It has always cost more to not know something that it cost to know a thing.

Telling and re-telling this story of heteronormativity in the curriculum with Dianne shed light on new perceptions of this curricular interaction. Candace then began to critically unpack her stance in the classroom, as she inquired further into ways to support her students to dismantle heteronormativity in their own classrooms. In turn, she began to reconstruct and re-tell her initial story of teaching in a research practicum course that we related above. After Candace's initially negative experience with using a text that highlights a White teacher's efforts to inquire into ways of improving her support of diverse students, Candace had decided that she needed to change course texts until she had unpacked the scenario and learned more about her context. At the time, she had selected "Girls and boys: Superheroes in the doll corner" (Gussin Paley, 2014) as what she had initially perceived to be a more neutral narrative-based research text that focuses on a teacher's research into ways that girls and boys learn and play together in a kindergarten. Our email exchanges led to a recovery of meaning of Candace's curricular interactions that showcased how her curriculum decisions for the research course were not neutral at all. Instead, Candace had seemingly shifted the focus with a text that became highlighted for her as increasingly problematic due to the limited and limiting gender narrative that was presented in that book. Candace subsequently removed that text from the course, and she has instead decided to learn more about how to negotiate difficult conversations with students to sustain curricular negotiations that are more inclusive and that model social justice and equity in teaching (Caruthers, 2006).

As we pursued our inquiry and our construction of this research text based upon our investigative findings, potential new narrative threads and new questions emerged from our work. These threads and questions centered around the notion of mentoring as an extension of social justice and equity in teaching and learning. In particular, reviewer comments pushed us to consider more fully the role of mentoring in curricular negotiation related to equity and social justice. We identified further investigative puzzles during the writing of this research text that highlighted areas for extended exploration in relation to the reviewer comments. We thus looked inward to unpack the impact of our mentoring relationship together regarding our professional development with respect to equity and social justice in teaching.

The reviewer pushed us to reflect on the dynamics of our own mentoring relationship among a Black mentor and a White mentee. The reviewer specifically challenged us that it would:

Be appropriate to create space to discuss the dynamics of the mentor-mentee relationships (e.g. mentor as a Black woman professor with a mentee as a White professor, ...) that in itself seems to have interesting implications for the theme of equity (race, power dynamics), both between the authors and the authors and their students.

Our discussion here is meant to be understood as adjacent to our inquiry. We engaged in puzzling over mentoring as an extension of teaching during the course of constructing this research text while also keeping an eye toward the social justice and equity underpinnings of our mentoring interactions.

Although we had identified significant racial tensions in our local setting of Kansas City and Kansas City schools at the start of this paper, we had not considered the ways in which race might have played a role in our engagement as co-investigators or as mentor and mentee. We wondered about whether this was an oversight or whether we had unknowingly structured framing boundaries between the realms of teaching and mentoring.

Across the course of our data collection we did not unpack the dynamics of race within our mentoring relationship, during the writing of this research text we were able to uncover some of our interactions that might intersect issues of race and mentoring. For example, on a few occasions Dianne had pointed out some of the historical racial tensions within our School of Education that had led to the creation of a Culture and Climate Team. Candace found this to be highly useful information in guiding her teaching. In turn, Candace had experienced heightened tension when she had read an early draft of the guidelines for a new mentoring program at our School of Education that specifically stated that mentees should retain the right to select the race of their mentors. Candace recognized the value of receiving guidance from Dianne, and she felt that our work pushed our transformative boundaries because we brought different perspectives to our mentoring table. We puzzled over whether Candace had also come to see mentoring, teaching, and research as intermingled and as connected with social justice and equity. She considered her vantage that such a professional perspective might then not be consistent with segregated mentoring relationships.

Thus, as we engaged in reflecting on our own mentoring relationship, we additionally looked outward to explore our mentoring of students as an extension of our teaching. For this purpose, we contacted a graduate student to include student voicing of their experiences of mentoring related to our teaching engagement. We wondered how our investigative findings and our research puzzles about our own mentoring relationship might be symmetrically related to a students' own voiced experiences of curricular mentoring interactions that have led to both moments of tension of socially just and equitable schooling and scholarly growth.

We acknowledge here that the very act of mentoring might be seen as a form of banking pedagogy (Freire, 1970). We further note that within mentoring relationships there is often a hierarchical and paternalistic stance, which must be modified as an issue of social justice and equity (Coff and Lampert, 2019). Due to this fact, we included Candace's student mentee, Charles, in this research text. Following a review of an earlier draft of this research text and conversations about teaching, mentoring, and social justice, Charles emailed an original written response work to Candace with permission to share it with Dianne. We used that written work as a base for further email dialogue with Charles, where we shared thoughts and questions. Charles then completed a final draft of his original response story.

In the following narrative excerpts of Charles' final draft of his original response story, we highlight some of Charles' thoughts about his own educational journey. His story is of much worth for unpacking elements of both teaching and mentoring. We further anticipated that including him in our discussion of mentoring and teaching would prove to be illuminating for posing new questions about curriculum negotiations of social justice and equity that might lead to new lines of research and possibly to new ways of engaging in practice in the areas of teaching and teacher education. He began his consideration of mentoring and teaching within a social justice and equity lens by defining his perspective on mentoring. Charles wrote:

Mentor derives from the literature of ancient Greece. In Homer's *The Odyssey*, Odysseus is a long way from home fighting a battle. The goddess Athena, disguised as a man, supervised, guided, advised, and protected Telemachus (Odysseus's son).

Significantly, Charles outlines how he intertwines the concept of mentoring with that of both protection and battle. We further reflected on Charles' story in relation to our previous research and mentoring discussions. In particular, we noted how impactful it seemed to be for Charles that his teachers had ignored his educational upheaval and shifts in his schooling experiences which were central to him as a student. In this way, it seemed as though they ignored a socially just and equitable path to his education:

I am a 59-year-old Black man. I was born in in the era of a social upheaval (1960) and the Civil Rights Movement. I was a very outgoing, fun-loving child. I never had any difficulties and did very well in my academics. I got along well with the schoolmates I interacted with and had no disciplinary problems. However, The Ninth Circuit Court of Appeals ordered The Clark Court School District to develop a mandatory desegregation plan. Therefore, what particular all-White schools did was visit all-Black schools in advance of the ruling and pick those students who would be used as test subjects to see how this would affect the white students, white parents, white teachers, and their white community.

That school year was very strange for me. I often was the first student to finish assignments. It was always a competition for me. I always wanted to be finished first, and to be the best. I often had the answer to questions the teacher would ask, but my raised hand was so far back or it was hidden by the hands of others. One time I remember being so excited about answering a question about Abraham Lincoln that I sprang out of my chair to give the correct answer. I was severely scolded and sent to the principal's office. During that time, paddling in school for misbehaving was permitted, and so I faced the paddle for my learning engagement. (Charles' written response excerpt)

Charles' outlined to us his negative experiences with school bussing. He further explored how his teachers had failed to see him as a bright and energetic student. In response to this, Charles stated that he felt that he wanted to become invisible in school. It is also possible that he encountered a curriculum in school that was not inclusive and equitable, as he was left to feel like an outsider during his education:

That experienced helped me to decide what education and school meant. I hated school as a result, and I simply went through the motions. Even in higher education, my rule was to do just enough to get by, and to make sure not to cause any trouble by keeping my mouth shut. This is a lesson that I had learned when I had been placed in a desegregated school as a test subject, and it followed me all through my adulthood. I made sure that I never caused any trouble, I worked hard, and I raised my family. I believed this was my place, and society had enforced my position in the world upon me. (Charles' written response excerpt)

Charles' story also highlights very well unexpected issues of representation. He noted that he had never had a teacher who was a mentor, which further showed that his teachers did not seem to see him in his schooling. Yet, when Candace told him that his voice was of value within an educational setting, Charles noted that he was met with a form of curricular representation that was inclusive of a diversity of voices:

I recently attended a day-long educator professional development conference on trauma resilience and education that was given by a national leader on this topic. The guest speaker asked the masses to identify the one teacher who had made a difference in our lives

and to pause and think in silence about that mentor and how the mentor had impacted us in different ways throughout our lives. Following the silent thinking period, the audience was asked to share some of our mentor experiences and our general thoughts on mentoring in terms of the themes of trauma and resilience. One by one, attendees at the conference spoke up about their elementary, junior high school, or high school teachers and how they had made a difference in their schooling and in their lives. They also discussed how these mentors were teachers who had further led them to the field of education.

During this activity, I became overcome with anxiety. I felt like I was going to faint, and I was shaking as though I were in the epicenter of an earthquake. Thinking about my past schooling experiences, I came to see quite clearly that there was not one person that I could remember from my distant past who had served as a strong and positive mentor for me. In fact, there was not one teacher whose name I could remember. I quickly realized that I could not even bring to mind the faces or names of any of my K-12 school teachers.

This exercise at the conference brought this to light, and the result was that I felt so embarrassed. I had an innate awareness that my lack of an educational and life direction mentor was not my fault, and yet I turned inward in confronting this situation from the stance of shame. Nevertheless, I recognized that I was also so grateful that now that I am a doctoral candidate in graduate school, I finally have a mentor who guides me, advises me, provides me with opportunities to learn and grow, and who gives me an example of how to live out an academic professional life.

With this recognition, I decided to stand up and address the crowd. I related my story to the audience members, stating that the only mentor in my life was Dr. Candace Schlein, my Doctoral Supervisory Committee Chair. During the lunch break later that day, I stood with my lunch in my hand as person after person lined up and approached me with questions about my experiences and comments of admiration and support.

I had initially met Dr. Schlein taking one of her curriculum courses before I had officially entered the doctoral program. During class discussions and through comments on my assignments, she repeatedly said words to me that no other instructor in my life had ever said: 'You have something special. You have a story to tell. I believe in you!' Those words had never been spoken to me before in a school setting, despite my perseverance in acquiring an advanced education. (Charles' written response excerpt)

Charles further related how he focuses on this story of representation and voicing to tell other African American students that they are of value. In these acts, he is negotiating a curriculum with and for these students through their interactions:

... when I visit underserved schools. The children mob me when I come back to the schools. It is almost as if I am a movie star or a professional athlete. However, this admiration is about knowledge and compassion. I am bombarded with questions and concerns. The students want to learn, understand, and make sense of it all. They want advice about schooling, and they sometimes do not know how to ask. They want someone who understands what their world is like. They want what Dr. Schlein exhibited with me: intent, purpose, spirit, and passion. I tell them, "You have

something special. You have a story to tell. I believe in you!" (Charles' written response excerpt)

Charles highlighted in his narrative of experiences how he had not received an educational mentor prior to negotiating the curriculum alongside Candace in her classes. He considered his own experiences in relation to greater trends in society:

My narrative is not told without an understanding of its great deal of irony. I had both parents in my home. This is something of a rarity in African American communities today. In fact, my parents divorced when I was five-years-old, and my stepparents were just as loving. Yes, I have two sets of parents in my life. However, I did not have a mentor for education. I had a father and a stepfather; two Black, hardworking, honest men. Nevertheless, I did not have a mentor for career orientation. Their life was about survival in a world of unacceptance and inequality. Their job was to raise me and to keep me safe with the tools and knowledge that they owned. I am sure they too probably had questions, concerns, and nightmares. I hope that they also had dreams and aspirations.

A mentor is someone who leads you to lead yourself. Dr. Schlein is my goddess Athena. My father(s), although great men, were in a battle far away. They grew up and then raised me during the turbulent racial times of the Civil Rights Movement and the period of school desegregation. They could not mentor me about something with which they had no idea or experience. My mentor is neither Black nor a man. The importance and complexity of this statement cannot be ignored. The fragmentation of the Black man in education is well-documented and a travesty. However, the irony here is that my direction, support, and growth comes from a non-black, non-male mentor. Athena has disguised herself as a Black man and supervised, guided, advised, and she has sometimes even protected me. Athena, or Dr. Schlein, has encouraged me to seek out the truth with intent, purpose, spirit, and passion.... The key here is it concerns a people who are behind in almost every facet of life, especially education, and especially in urban centers like Kansas City with its extensive history of school segregation and related inequitable and socially unjust schooling circumstances surrounding urban schools with predominantly African American students. (Charles' written response excerpt)

We noted how it is further possible that as Dianne and Candace learned about the generative qualities of curricular stories, such understandings might have transferred to Candace's interactions with Charles. While Charles was not a student in the specific classes that Candace had discussed in her narratives above, he did take those same courses in later years. In turn, Candace's story of teaching and learning continues to be positively impacted via her mentoring of Charles. He recently wrote her the following message in an email:

Subject: Thank you

Dr Schlein

I woke up this morning and wanted you to know how much of an inspiration you are to me... I would be here if it wasn't for you.

Well, back to school

Thank you with all my heart,

Charles Oakley

"Everything Changes with Education"

"Education Explains Everything"

This email message, as contextualized in Charles' story, is an exemplification of the culmination of Candace's efforts with teaching for social justice and equity. The quotation under Charles' signature in the email message further leaves us with hope regarding the potential for personal and societal betterment through and with education. It is not our intention here to draw findings that provide conclusive insights about the nature of mentoring or serving as a mentee. Instead, we engage in this discussion of mentoring to allow further investigative wonders to be planted.

Moreover, in response to our discussions with Charles about the meaning of mentoring based on his initial reflections on the educational mentoring relationship that Charles had outlined, he responded in an email with the following secondary response piece:

The mentoring relationship between Dr. Schlein and I is complex and layered, whereby my own experience of educational mentoring mirrors a historical and common pattern concerning African American males and the education system. Namely, there is a paucity of African American teachers, and especially African American male teachers (Allensworth et al., 2009; Pachter and Coll, 2009; Pringle et al., 2010). As well, most teachers in the United States are White, middle class females, whose background and world experiences inform the development of their psychological models about race, power, and privilege in society (Caruthers and Friend, 2016). Moreover, there is a well-documented gap in educational achievement among African American students, which is especially salient among African American male students.

The most pressing question resulting from this curricular landscape then becomes how an African American male can have a mentor in education, when it is a discipline that has so few African American (male) professionals? It has been my experience that any caring educators are needed to engage in gap-filling in terms of helping students to grasp the needed tools for educational success. This gap-filling enables me to be empowered to then serve as an educational mentor to other young Black (male) students.

We envision that new lines of inquiry generating from our study and our related narrative research puzzles might pick up on the narrative theme that was uncovered across Charles' narratives to include qualitative explorations of race in mentoring. Other avenues for study might involve the intersections of voicing, gender, and race in teaching and mentoring. Differences between mentoring relationships among colleagues and those between students and teachers might also be a good place for future inquiry. It is our hope that this article and potential research stemming from this article generates ongoing discussion, dialogue, debate, and above all, curricular negotiations that are socially just and equitable so that all students will know that teachers believe in them and recognize that they have powerful perspectives.

DISCUSSION

We discussed above how our construction of narrative re-tellings of our curricular negotiations stand as preliminary research findings of our inquiry. In this section, we highlight the narrative themes that we uncovered from among these stories. These themed findings are important for underscoring the implications of our inquiry for equity and social justice in teaching and teacher education.

The Primacy of Context in Curriculum Negotiations

The first narrative that we introduced above was about Candace's encounter in the classroom on utilizing the book "Kwanzaa and Me: A teacher's story" (Gussin Paley, 1995) in her research class. This story highlights for us a narrative thread from among our findings of the primacy of context in curriculum negotiations, and especially those concerning educational equity and social justice. We came to see through Candace's experiences how a negotiated curriculum needs to acknowledge contextual factors in order to engage in truly transformative learning experiences. A re-telling of the initial silence in the class highlighted how it might have been related to some of the historical and persisting tensions of race and schooling that have coursed through local schools and society.

Different Kinds of Curricular Representation

Within Candace's reconstructed story, we also recognized that one student had stated that by openly discussing the tensions that are extant in local schooling situations, he felt that he was enabled to have the courage to pursue research into educational diversity: "...one student expressed his own concerns with teaching students in urban classrooms in the future due to his stated limited knowledge of backgrounds other than his own." (excerpt from Candace's response story). This narrative displays a second narrative thread that we teased apart within our study of different kinds of curricular representation. Candace's lived scenario particularly raises questions about ways to collaborate with students on a curriculum that is representative of all students' backgrounds when some students do not wish to be represented, which might have been expressed with the initial silence of the students. At the same time, the student who was happy to have the door opened to this discussion might indicate how there may be positive resonating consequences in course materials about teachers who are pursuing research and teaching into social justice and equity in their practices.

Working with students to shape curriculum that is geared toward equity and social justice might require both encounters with novel ideas as well as the formation of new foundations on which to live out curriculum experiences. This curriculum experience thus presents nuanced tensions at the site of curriculum–building negotiations. It may also point out the potential need to connect the existing social and personal cultures and contexts in the curriculum as a move to shape socially just and equitable learning experiences.

Experiences of Curriculum Negotiation Generate New Experiences of Curriculum

Dianne's narrative of using storytelling in her undergraduate and graduate courses led us to consider Gay's assertion that "The

telling of one story is the genesis of yet other stories" (2000, p. 3). We thought about this notion regarding our work together and also in direct connection to Dianne's interactions with her White student. This led us to identify the possible narrative thread that experiences of curriculum negotiation generate new experiences of curriculum. This notion is important for teaching and teacher education related to equity and social justice, since it reinforces the concepts of growth and transformation. Significantly, this theme reflects that growth and transformation across curricular negotiations of social justice and equity occur among both teachers and students.

Incremental and Negotiated Transformation

The story discussed directly above further displays the narrative thread of incremental and negotiated transformation, whereby Dianne's student was exposed to the seeds of new ideas that took root after extended time, reflection, and curricular practice. This theme was also underlined with Candace's story of heteronormativity in the classroom. In particular, her student, Patricia, wrote about her own learning curve about how to position her sense of equity and social justice in her professional life as a curriculum worker. Candace had wondered about why Patricia had not contributed her ideas to the class discussion, as Patricia had remained silent during our lesson that day. It seems as though her journey as a socially just and equitable teacher was building, but at the time of the class discussion, she was seemingly only comfortable with sharing her shifting perspective with her instructor. We considered how this was perhaps due to a fear of meeting with criticism from her peers about her newly growing professional stance.

Mentoring as an Extension of Social Justice and Equity in Teaching and Learning

Discussion with Charles about his experiences of mentoring and teaching has resulted in us bringing forward] several questions regarding teaching and learning as mentorship in alignment with equity and social justice. These lines of query include: what are the boundaries of teaching and mentoring? What makes a teacher become a mentor? What does it mean that Candace, who is a White female teacher, currently serves as a mentor for Charles, who is an African American male doctoral student? How does this situation follow or dismantle potential racial narratives of dominance or subjugation of knowledge in education and research? How might a narrative turn in teaching and in research allow new paths for student voicing as the foundation for equitable and socially just classrooms? We encourage readers to receive these questions as a call for further research that focuses on establishing teaching as mentoring students under the umbrella of social justice and equity.

Educational Significance

In this article, we highlighted nuanced and layered experiences of teaching and learning that focus on social justice and equity. We uncovered from among our narrative data the following narrative themes: primacy of context in curriculum negotiations; different kinds of representation; incremental and negotiated transformation; and experiences of curriculum negotiation generate new experiences of curriculum. Through discussion of the themes as findings of our study, we shed light on potential tensions and nuanced understanding of the curriculum that is lived out in classrooms in association with social justice and equity considerations. These themes may be of much relevance for guiding the practices of teachers and teacher educators.

Furthermore, attending to the tensions of social justice and equity at the boundaries of our curriculum-building endeavors revealed how representation loomed large in our work. Interacting with our students aided us to see that students seemingly variously responded to and resisted efforts at being represented in the curriculum, and they reacted similarly when issues of representation challenged their worldviews. We see such challenges as possibilities for the negotiation of context and culture in the curriculum. Such curricular interactions might further indicate nuanced areas for understanding the development of social justice and equity in teaching and in teacher education.

This work focuses on narrative reconsiderations of negotiating curriculum for equity and social justice that builds on Schubert's (2008a) notion that curriculum theorists should approach the curriculum in terms of both particular cultures as well as a via a prevailing world culture. We displayed above our efforts to shape a curriculum that acknowledges inward, "particular" experiences and interactions of our students (Schwab, 1973, 1983) concerning their cultures, as well as incorporating broader, outward perspectives on culture of an educational outlook toward social justice and equity in our professional environment. We argue that such tensions and changes across context shape educative experiences. Moreover, we see the need for a refined vision for curriculum workers, where classrooms might be positioned as potential arenas for the intermingling of different or differing perspectives on race and class (Caruthers, 2006),

contributes to the pragmatic body of literature on curriculum and teaching that associates theory with practice (Schubert and Ayers, 1992; Connelly and Clandinin, 1996; Clandinin et al., 2006). There is a paucity of practical curriculum studies that add to the complexity of the theory of curriculum with respect to social justice and equity. Our work provides a nuanced exploration of culture and context in curriculum inquiry. Our study further serves as a contribution to equity and social justice in teacher education from an experiential standpoint. Importantly, this work might also inform and offer first–hand accounts of other

educators and teacher educators, which can be included as a part

ethnicity (Chan, 2003), language (Schlein and Chan, 2012),

sexual orientation and heteronormativity (Thornton, 2009), and

gender identification and inclusivity (Gender Spectrum, 2019),

so that we may move away from a "silenced dialogue"

(Delpit, 1988) and toward stories that give space for unpacking

"dangerous memories" (Caruthers and Smith, 2006) to shape

transforming and transformative classrooms with students as

discussion of lived curricular scenarios. Consequently, this piece

Within this article, we explored the curriculum through

DATA AVAILABILITY STATEMENT

of curricular negotiation in other classrooms.

All datasets for this study are included in the article.

ETHICS STATEMENT

curriculum negotiation.

This study has an approved declaration of Exempt research from our university's institutional Review Board.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

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Radical-Transformative Agency: Continuities and Contrasts With Relational Agency and Implications for Education

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The recent scholarship on agency is mostly centered around a relational (also known as situative, contextual, distributed, and ecological) approach that draws attention to agency being situated in context and contingent on sociocultural interactivities and contextual dynamics. My central argument is that there is a residue of passivity in these conceptions. Illustrative of this are the works by Bietsa and colleagues which I analyse to reveal conceptual flaws that need to be addressed. To overcome these flaws, it is important to reconstrue no less than the very basic premises about human development, context/reality, and teaching-learning to foreground a more radical view of agency conducive to combatting inequalities and injustices in education. In the alternative approach, termed the Transformative Activist Stance, human development is posited to be not only fully immersed in the world and its contextual dynamics but, more critically, realized by each individual's agentive contributions to communal practices, whereby these practices are changed as a whole every time a person acts as an active member of community. The emphasis is on the nexus of people changing the world and being changed in this very process of them changing the world-as two poles of one and the same, bi-directional and recursive, co-constitution of people and the world in a simultaneous self- and world-realization. People never merely react or respond to what exists but agentively act in co-realizing both the world and themselves. Agency in this account is accorded with a formative role in the processes of co-realizing both human development, the overall sociohistorical dynamics, and the world itself. Importantly, agency development is contingent on access to cultural tools that need to be provided by society and agentively taken up by each individual. There are starkly contrasting sociopolitical conjectures and implications geared to the issues of inequalities and injustices in education. The notion of a radical-transformative agency is deployed in order to expose and overcome ideologies of passive adaptation to, and acquiescence with, the existing order of things and the world as it presumably "is."

Keywords: sociopolitical, ecological, activism, Biesta, Vygotsky, cultural-historical activity theory

INTRODUCTION

Agency is a topic that has been, for decades, vigorously contested and debated across social sciences including in psychology and education (for a recent review of the field, see Eteläpelto et al., 2013). It has recently made inroads into sociocultural and cultural-historical activity theories and at this point, there is a surge of interest in how to understand agency within these perspectives (see e.g., Edwards, 2005; Sannino et al., 2016; Kumpulainen et al., 2018). It is great to see the rallying of interest and efforts to tackle this important issue, the relevance of which is especially obvious today, in the context of a global sociopolitical and economic-structural crisis of the late-stage predatory capitalism and associated inequalities and injustices in education. In many works, dominant continues to be the relational (also known as situative, contextual, distributed, and ecological) approach which draws attention to agency being situated in context and contingent on sociocultural interactivities and dynamics. This is in line with what is considered to be the most important achievement of recent years—the focus on learning and human development being embedded in social contexts and practices. Indeed, for example, Sawyer states in his introduction to The Cambridge Handbook of the Learning Sciences (Sawyer, 2007) that the most influential achievement

by a group of interrelated approaches including the sociocultural, situative, and distributed cognition approaches... [consisted in] the observation that all intelligent behavior was realized in a complex environment filled with tools and machines, but also a deeply social environment with collaborators and partners. ... This research revealed that outside of formal schooling, almost all *learning occurs in a complex social environment*, and learning is hard to understand if one thinks of it as a mental process occurring within the head of an isolated learner. (p. 9; emphasis added)

This group of interrelated approaches indeed provides many insights into the nature of human development and learning including agency. However, in my works through the past years (e.g., Stetsenko and Arievitch, 1997, 2004; Stetsenko, 1999, 2005, 2008, 2012), I have attempted to draw attention to the need to overcome significant limitations within relational approaches to agency that today dominate its discussions. My central argument has been that there is a residue of passivity in all major conceptions of development and agency and that in order to overcome this residue, it is important to reconstrue no less than the very basic premises about human development. These premises include ideas about how we are and how we can be in the world, what constitutes humanness, what is reality and, most critically, what could be a humane and just society in which this humanness is possible, along and together with sets of closely and non-coincidentally related values and commitments. What is needed, in other worlds, in order to address agency and its role in human development, is a philosophically grounded revision, indeed an overhaul, of the major assumptions about human development, mind, the nature of knowledge and, ultimately, reality itself-away from assumptions of passivity, accommodation, quietism, and adaptation to the status quo.

In this paper, I present the core outlines of an approach to agency that is based in a transformative worldview—an overall framework to conceptualize human development as a process that is relational yet also extending beyond relationality with its ethos of passive adaptation to what exists (for an extended discussion, see Stetsenko, 2016). In the transformative worldview, reality is reconceived as that which is being constantly transformed and realized (literally made real) by people themselves—and, importantly, by people not as isolated, autonomous entities but as agentive actors or active agents of social practices. At the same time, human development is posited to be not only fully immersed in collaborative practices but, more to the point, co-constituted by each individual's active contributions to these practices, whereby the dynamics of what exists is changed as a whole every time a person acts. The emphasis is thus on the nexus of people changing the world and being changed in this very process of them changing the world—as two poles of one and the same, bi-directional, and recursive co-constitution of people and the world in a process of a simultaneous self- and world-realization. This approach implies that people never merely react, nor respond, to what exists but agentively act in co-creating both the world and themselves beyond "the givenness" of the present. Agency in this account is accorded with a central, formative (or constitutive) role in the processes of human development, the overall sociohistorical dynamics, and the very materiality of the world. In addition and quite critically, the development of agency is contingent on access to cultural tools and resources that afford it, an access that needs to be provided by society and also agentively taken up by each individual. Therefore, discussions of agency are immediately related to how societies afford of stifle agency and thus, to fundamental issues of social equality and justice.

One critical point to be articulated in this paper is that human beings cannot be considered as existing separately and autonomously not only from other people but also from reality as if they could merely react to what is simply "out there," somehow given in advance and existing in the form of a presumably fixed and stable status quo, for us to merely answer to the challenges and problems that the world somehow posits (or presents) for us. This point is not explicitly addressed in relational and ecological accounts of agency which typically stay (implicitly or explicitly) with the premise that people merely react to the world. My proposal is that it is time to move past ecological and relational approaches in their emphasis on reactive/responsive modes of agency-while preserving their important insightsand toward more explicitly political and activist accounts of agency that challenge the status quo and that are urgently needed today in our world in the state of a profound crisis and turmoil. Along the way, it is critical to consider how we are not merely "in" the world but are ourselves the world because we are directly implicated in its dynamics as its co-creators. This seemingly simple premise is actually quite generative and will be explored in its implications for education. This approach is contrastively illustrated by a careful analysis of the ecological approach to agency offered in influential works by Gert Biesta and his colleagues to reveal the gaps that need to be addressed.

The step needed today, in my view, is to dialectically expand relationality through the notion that human development is an activist project that is not only imbued with dialogism, ethics, and interrelatedness but also, and more critically, is grounded in collaborative, purposeful, and answerable contributions (deeds) by agentive actors of social practices and thus, ineluctably colored by visions of and commitments to particular projects of social transformation.

THE RELATIONAL-ECOLOGICAL APPROACH TO AGENCY: WORKS BY GERT BIESTA AND COLLEAGUES

One line of works on agency that is clearly relational and directly engaged with issues of education, deserves some scrutiny for its interesting and important developments as well as its gaps, namely, the prolific writings by Gert Biesta and his colleagues (e.g., Biesta and Tedder, 2006, 2007; Biesta et al., 2015; Priestley et al., 2015). This line of work argues against the separation of humans from their world and instead, pays attention to the role of interactivity (interaction and relation) in the genesis of agency and insists on agency being about not something that people have but something that they do. In this approach, "rather than seeing agency as residing in individuals as a property or capacity, the ecological view of agency sees agency as an emergent phenomenon of the ecological conditions through which it is enacted" (Priestley et al., 2015, p. 22). That is, agency is taken to denote "a 'quality' of the engagement of actors with temporal-relational contexts-for-action, not a quality of the actors themselves" (Biesta and Tedder, 2007, p. 136). Therefore, "this concept of agency highlights that actors always act by means of their environment rather than simply in an environment" (Biesta and Tedder, 2007, p. 137). Thus, "the achievement of agency always results from the interplay of individual efforts, available resources and contextual and structural 'factors' as they come together in particular and, in a sense, always unique situations" (Biesta and Tedder, 2007).

While agreeing, in general, with these points and their overall orientation away from the focus on isolated individuals, especially with it placing emphasis on the interactive and situated character of agency, I also think it is important to note the following. In this account the core notion is that agency is about the capacity of actors to shape their responses (responsiveness) to problematic situations that they are presented with in their lives and contexts. In this emphasis, these authors build upon the influential paper by Emirbayer and Mische (1998), where agency is related to

the temporally constructed engagement by actors of different structural environments – the temporal-relational contexts of action – which, through the interplay of habit, imagination, and judgement, both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations. (p. 970; emphasis added)

In an agreement with this position, Biesta and Tedder (2007) associate agency, right from the start and very centrally

throughout their work, with responsiveness to the world while locating agency "in the ability to shape our responsiveness to ...contexts" (p. 133; emphasis added). While also focusing on "the dynamic interplay of iterative, projective and practicalevaluative dimensions, which takes into consideration how this interplay varies within different contexts-for-action" (Biesta and Tedder, 2007), the authors accord responsiveness to the world with a truly central, formative role in conceptualizing agency. In this vein, Biesta and Tedder specifically emphasize that "the achievement of agency is inextricably linked with the ways in which people are 'in control' of their responses" (2007, p. 138; emphasis added). In further explicating their position (Biesta and Tedder, 2007), the authors draw attention to the point that Emirbayer and Mische "do not simply equate agency with the ways in which we respond to events in our life but ... highlight the importance of 'the capacity of actors to critically shape their own responsiveness to problematic situations' [(Emirbayer and Mische, 1998), p. 971, emph. added (by Biesta and Tedder)]."

The responsiveness to context as an ability to respond to the challenges it poses is foregrounded throughout this whole approach, with the authors bringing it up again and again. This is the case when they are writing about one of their participant's "responsiveness to the particular problems" (Biesta and Tedder, 2007, p. 143; emphasis added), her being "responsive to the opportunities that have arisen for her during her life" so that she

displays a level of control over the ways she can *respond to* the problematic situations she encounters. Marie finds herself in situations where new opportunities arise and *responds* intuitively and such intuition is firmly grounded in her earlier experiences though always constrained within the context of her material and cultural capital (Biesta and Tedder, 2007, pp. 143–144; emphasis added).

This and the other participant that the authors write about are understood to "respond to the situations they encounter in their life" (Biesta and Tedder, 2007, p. 144; emphasis added) and, in addition, "their ability to shape their own responsiveness to the problems and issues they encounter in their lives" is also noted (Biesta and Tedder, 2007; emphasis added). The authors state that "[i]n both cases there is evidence that they [the two participants] are aware and, to a certain extent, in control of the ways in which they respond to and deal with the issues and problems they encounter" (Biesta and Tedder, 2007, emphasis added). The same emphasis is evident in the authors further arguing "that agency is not simply concerned with the ways in which we engage with our contexts-for-action but rather has to do with the capacity to shape our responsiveness to the situations we encounter in our lives" (Biesta and Tedder, 2007, p. 146; emphasis added). The same connotation comes up yet again in the formulation that "individual actors can reframe the composition of their agentic orientations so as to change their responsiveness to particular problematic situations" (Biesta and Tedder, 2007, p. 147; emphasis added).

Finally, in summing up their approach, Biesta and Tedder (2007) connect their position on agency to a larger structural process that they see as being currently focal in our societies,

namely that "under current societal conditions, individuals are increasingly 'forced' to take control of their lives. The approach presented in this paper at least indicates one kind of learning that could support individuals' attempts to achieve agency under such conditions" (Biesta and Tedder, 2007, p. 147; emphasis added). This larger framing reveals important features of the authors' overall approach, including in its political-ideological dimensions. I will return to this point after first addressing the core assumptions of Biesta and his colleagues' account of agency.

Note how the formulation of agency as a capacity to shape our *responses* to problematic situations immediately, though tacitly, erects a wall between the person and the world, all the formulations in favor of ecological situativity of agency notwithstanding. To see this requires a close reading of the authors' argumentation and the extended quotes above are meant to serve this purpose. Looking closely at these formulations, one can note that when agency is posited to be about shaping *responses* to problematic situations, then it inevitably follows that the world first presents problematic situations and only *then*, in "the second act" that follows, people shape their responses to these situations.

Indeed, a response is quite obviously always something that follows previous events or inputs—it is a reaction to antecedent conditions, that is, a reaction to something that *precedes* it. Given this, if we operate with the notion of response and responsivity, then what the world (or context) presents to us—as problems and challenges, or as opportunities and chances etc.—is inevitably understood to be temporarily and conceptually *separated*, as antecedent conditions, from our responses. That is, in this case, our responses merely follow with what is first given (or presented to us) and our role is only to act after the fact of being presented with the situation. Ironically, one can hear echoes of the old and tried behavioristic notions of the infamous "stimulus-response" formula in this account.

It is fairly certain that Biesta and his colleagues would vehemently reject any allegiance with behaviorism and my claim is not that they fall for all things behavioristic. After all, behaviorism was (and continues to be, as it is still alive and well today) a programmatic attempt to reduce all human behavior to essentially mechanistic, algebraic interactions between stimuli and responses. This influential school developed its own exotic language to describe mechanistically understood interactions such as reinforcement, habit strength, inhibition, behavioral oscillation, response evocation, response tendencies, and inhibitions. Behaviorism is infamous for its avowedly mechanistic, anti-mentalist, and anti-subjective orientation that reduces all diversity of human life to forms and formulas described as empirical laws. Its main classic assumption was (as expressed by Hull, 1943, p. v) that "all behavior, individual and social, moral and immoral, normal and psychopathic, is generated from the same primary laws; that the differences in the objective behavioral manifestations are due to the differing conditions under which habits are set up and function" (emphasis added). None of these specific assumptions apply to the works of Biesta and his colleagues.

Yet in my view, certain echoes of behaviorism, related to the posited overall passivity of human beings, are tacitly reverberating in Biesta's and many (if not all) other relational and ecological approaches, including even in Marxism (for details, see Stetsenko, 2019b). This is by virtue of these approaches understanding the world as something that is "given" and as such, as posing problems to (for) us, irrespective of our own participation in and contribution to how the world is and what it can or cannot pose or present to us, in the first place! It is not that the assumption about such participation and contribution is explicitly refuted. Yet the problem with relational approaches, to be very specific, is that they do posit (more or less explicitly) that the world can present something to us, for example as a problematic situation, without and outside of, or prior to, our engagement with it. This is about presenting things to us as a process which is, temporally and substantively, relatively independent from (albeit somehow coordinated with) what we ourselves are doing and struggling for. In this take on agency and humans' place in the world that serves as the grounding for conceptualizing agency, the process of the world presenting problematic situations to humans apparently happens by itself, irrespective of who it is for whom the situation might be or not be problematic, of who the person is, and what this person is doing, struggling against, hoping for, and aspiring to.

Similarly, if the assumption is that individuals attempt to achieve agency *under given conditions* (as mentioned several times in Biesta and Tedder, 2007), then the world and its conditions are presumed to exist "as is," as something that is given, established, and fixed—a static realm that is above (and beyond) human beings themselves since we act *under* its conditions. This is again indicative of a position that people are relatively passive at least as regards our limited scope of agency and ability to act, since we are presumably not involved in how the conditions "under" which we act are set in place before we ourselves get a chance to act on them.

It is not my intent to undermine the work of Biesta and colleagues who are, to reiterate, quite prolific and also probing deeply into many important issues and problems in education and beyond. Precisely because their work is strong and influential, I am drawing attention to the conceptual flaws in their approach specifically to agency in order to get across how complex and non-trivial the task to theorize agency, in ways that do not separate people from the world and thus portray them as ultimately inevitably powerless, actually is (for further elaboration, see Stetsenko, in press). It is one thing to take up notions such as about agency being situated and ecological, about its inherent interactivity, its embedding in context and other similar (and quite important) points, yet it is quite another thing to fully draw implications and groundings for an approach that resolutely breaks with all the tacit passive, mechanistic (including behavioristic) assumptions, biases, and deeply ingrained premises that still posit human beings as essentially autonomous, isolated, and separated from the world as is the case under the overall view that people merely react to the world.

On a related point, I believe it is no coincidence that Biesta and his colleagues' approach to agency, although couched in

politically and ethically neutral terms, is actually associated with a particular type of politics and ideology. As mentioned at the beginning of this section, Biesta and Tedder (2006, 2007) connect their position on agency to a larger structural process that they see as being currently focal in our societies, pointing out that "under current societal conditions, individuals are increasingly 'forced' to take control of their lives." (p. 147). What kind of societal conditions force individuals to take control of their lives? Biesta and Tedder (2007) address this question quite briefly in referencing, among others, Anthony Giddens (the author of the so called *Third Way* doctrine that unsuccessfully attempted to invent a palatable version of capitalism). Their answer is that

the erosion of traditions and normative frameworks has resulted in a situation in which life has shifted from something that is pre-structured and given to something that has become a task for the modern individual... For Giddens "high" or "late" modernity – the current phase of modernization – is characterized by an *intensification of uncertainty*... This suggests that agency becomes even more necessary, yet at the same time it also becomes increasingly difficult to achieve. ... [U]nder the condition of "liquid modernity", there is a yawning gap between the right of self-assertion and the opportunities for actually controlling "the social settings which render such self-assertion feasible" (Bauman, 2000, p. 38). According to Bauman this is particularly due to the demise of the public sphere... (Bauman, 2000, pp. 133–134)

What remains unspecified in this position is why this kind of erosion happened and what it is all about, in more concrete terms than in the above presentation. For example, what exactly is characteristic of the "post-traditional" society with its "liquid modernity"-such as in terms of specific socioeconomic and political processes involved in these changes? That these processes and conditions have to do with the latestage capitalism, marked by the development of corporatism, laissez-faire economics and globalization, is never mentioned in this description, except for a vague reference to "the demise of the public sphere," as is quite typical of neoliberal approaches that eschew structural and political analysis. This type of discourse, which is focused on the notion of "freedom" to take control of one's life through self-regulation, is a well-known mantra of neoliberalism, indeed one of its staples. It actually diverts attention away from increasing exploitation, hegemony, inequality, and racism entailed by the sociopolitical dynamics of the late-stage, predatory capitalism. These dynamics in fact strip people of their agency and instead, provide only meager options via illusionary mechanisms such as self-control, mindfulness, "positive psychology" and other individualistic pseudo-solutions.

A more politically oriented, non-neutral engagement with these issues would suggest an emphasis on dramatic, even tragic, dynamics and devastating effects of late-stage capitalism on human lives and society. These dynamics include class, racial, and sexual oppression and exploitation, with capitalism failing the common good by diminishing social security, shrinking employment opportunities that could provide living wages and stable jobs, causing the erosion of democracy, channeling world's resources into the power of a privileged few, and leading to the overall demise of societies. This is on top of

a devastating immigration crisis that is reaching the scale of a humanitarian catastrophe and, last but certainly not least, an ecological apocalypse. As has been stated again and again by various authors, "the normal concomitant of free markets is not stable democratic government. It is the volatile politics of economic insecurity ... democracy and the free market are competitors rather than partners" (Gray, 1998, p. 213). It is this type of the late-stage predatory capitalism that is in the mode of enforced creation not only of markets but also of the individuals who are now increasingly responsible for their welfare and are "free" from socioeconomic supports and thus, de facto impoverished and insecure (cf. Teo, 2018). Importantly, these are also conditions that led to western capitalist societies becoming increasingly stratified by race and social class, with grave implications especially for non-dominant groups (e.g., Langer-Osuna and Nasir, 2016). As Marx predicted, capitalism is presently creating colossally increasing wealth surrounded by disastrously increasing poverty while aiming at marketization of all of society and all of life, including education, in disregard of equality, well-being, and ultimately its own survival.

These topics are barely addressed by Biesta and Tedder (2007) and instead, they conclude their paper with an optimistic statement that "The approach presented in this paper at least indicates one kind of learning that could support individuals' attempts to achieve agency under such conditions" (p. 147; emphasis added). Rather than politically neutral, this is a clear expression of an ideology of passive adaptation to, and acquiescence with, the status quo—the existing order of things and the world as it "is," under which we are supposed to live without much hope for radical changes. This position de facto obviates the need for a careful consideration of and a staunch resistance to catastrophic effects and expressions of the capitalist status quo. This ideology is ultimately, and at best, about encouraging and supporting merely individual "agency" disconnected from social struggles and collective fights for better conditions of life-a severely curtailed form of agency (if this term is applicable at all) that actually stands for passivity in the face of daunting socioeconomic and political dynamics.

In concluding this discussion, the point to emphasize is that much work remains to be done in order to conceptualize agency more in line not only with the relational-ecological but also, deeply dialectical—and importantly, critical-dialectical, or radical-transformative, that is, politically and ideologically non-neutral—premises. The next section presents steps in this direction though, of course, no final answer is thereby presumed since no such answer is possible for an issue like agency that demands close attention to ever-shifting, and now rapidly unfolding with unprecedented force, political and socioeconomic dynamics.

AGENCY IN THE TRANSFORMATIVE WORLDVIEW

An alternative approach to agency—one that fully takes relational and ecological insights into account, yet also moves beyond them to include critical and reflexive dimensions related to

socio-political, historical, ethical, and economic deliberations can start from the core philosophical premises developed in dialectical Marxism and continued in, among other schools of thought, Vygotsky's cultural-historical theory. The broad assumption from this foundation that can be usefully applied to the discussion of agency is that, according to Marx (e.g., Marx, 1978; cf. Marx and Engels, 1978), the social ways through which people collectively act on the world to produce their communal lives constitute a fundamental, determining foundation for all forms of their knowing, being, and doing. Thus, humans are a self-creating species, producing their actual life and society through activities and practices of collective praxis/labor. This notion of transformative collaborative practice (praxis) was advanced in Marxism and taken up in Vygotsky's school (though not consistently elaborated in any sufficient detail) against the naturalistic understanding that only nature affects human beings and that only natural conditions determine their historical development (for details, see Stetsenko, 2016, 2018a).

In further developing this approach within a transformative worldview and onto-epistemology (see Stetsenko, 2013a,b, 2014, 2016; for applications, see Vianna and Stetsenko, 2011; Vianna et al., 2014; Stetsenko and Ho, 2015; Stetsenko, 2017), what is placed at the center stage is a unified process of people collaboratively transforming circumstances of their life and, simultaneously, in this very process, of people being themselves transformed and brought into realization by their own transformative practices. This position puts emphasis on a complex relational and dynamic network of continuous processes of material sociohistorical practices as the nexus of people purposefully changing their world while simultaneously being changed by and in this very process of their own transformational practices. This dynamic, shifting nexus of circular transformative effects is posited as a primary, specifically human relation to the world (which is more than just a neutral relation)—their mode of existence and way of being/becoming.

This move highlights the centrality of agency within a recursive, ever-expanding, dialectical, and transformative coconstitution of both, at once, reality and ourselves that never ends and never leaves anything in place. This process of coconstitution, as a form of meeting the world half-way, in-between ourselves and reality that encompasses both poles, is always on the cusp between what is and what can be, what already exists and what is just now emerging—on the cusp of novelty and creating of what-is-not-yet. In this approach, nothing is settled and set in place, nothing can be taken for granted and presumed to stay still, as somehow already "given," such as the present status quo in our societies. Instead, there are ongoing transformations and transmutations, recursive transitions and back-and-forth interpenetrations—a co-mingling in which everything happens in the meeting, or encounter, of persons and the world that is always transformative of both sides since they are entangled in the flow of mutually co-constitutive and co-realizing changes.

That is, the important nuance of this position is that people are changed neither by the world *per se*, nor even by the world as it has been changed by them (as is presumed in many traditional accounts of Marx and Vygotsky). Rather, the emphasis is on

people being transformed, and de facto realized, *in* and *through* this process of them *themselves* changing the circumstances of their life and their world. People and their world are understood to be coextensive, co-evolving, interanimated, and interdefinable (co-realizing each other) *through* the nexus of collective practices' transformations and as based in the material reality (the "fabric") of these practices. Here we are dealing not with the reality of what is given but instead, of what is taken by us—that is, how we engage, con-*front* and en-*counter* reality—while co-creating, co-authoring and thus co-realizing it with others. The "givenness" of reality (matter) is thus superseded within purposive human activities made up of the ever-changing dynamics of human ongoing transformative efforts and struggles imbued with goals, commitments, and stands.

The social collaborative practices and human development (the two being actually inseparable) unfold within collective dynamics at the nexus of people and the world and as situated in contexts, that is, in some limited sense, "under" given circumstances, albeit importantly, only in transcending these circumstances and while creating new contexts and new circumstances. Therefore, the very status of these circumstances, and thus of the world itself, as something that is "given," is resolutely contested. There are no contexts and circumstances as such, just laying "out there," independently of us and affecting us so that we can only react to their effects after the fact. Instead, these contexts and circumstances are understood to be brought into realization by people in the acts of their own transformative agency (always collective and individual at once) and thus, in the acts of their own self-realization. This realization is co-productive of society, history, human development, and the very fabric of human lives—extending through and connecting all generations within the dynamic flow of collective and communal practices.

A person's actions, and even "mere" presence in the world (which is actually never mere), through them contributing to social collaborative practices, as they always do, inevitably create new situations by changing the totality of existing circumstances in which this person, as well as all others, from now on, have to and can act in new ways-to thus again change these circumstances and conditions in a continuous circuit of ceaseless transformations that constitute the very texture of the process at the intersection of the world and human beings. Therefore, human actions have more direct and more enduring presence than any putatively sturdier, somehow more material and more tangible, things that in fact inevitably always vanish and "melt in the air." It is the practices and activities, composed of human deeds that transform the world that are actually really real (to use Rom Harré's expression) because they are the most consequential phenomena of all—comprising no less than "the fabric" of human reality, society, and development.

For a contrast with the position advocated by Biesta and colleagues, the following premise needs to be emphasized. If we understand ourselves as shaping our responses to problematic situations, then we already, by virtue of this formulation, are taking these situations as "givens," as something that exists independently from and prior to us, for us to merely face them, as they "are," and only consequently tailor our responses to these situations *after* they have been presented to us and have

made an impact upon us. The alternative is to see that not only it is not that we simply "are in the world" and always in the process of answering its problems, tasks, and challenges—as follows from many presently influential relational-ecological paradigms such as Biesta's. Without completely dispelling this connotation, a critical point that can be made in advancing the relational paradigm beyond its current limitations is that we are not simply "in" the world responding to it, by whatever means at our disposal, as if the world was "out there," outside of us and facing us as something prior to our very being and acting.

The alternative is to understand that we are fully integrated into the world as its essential and indispensable "layers" or "energies"—that is, not in a mechanical sense of some independent and separate elements (entities) being put together (assembled or aggregated) by outside forces into some sort of a larger system. The alternative is about understanding ourselves as agentive co-creators of the world, with the latter being constantly and continuously in the making—and not just in any making, as something that is dynamic and changing by itself, but in the making-by-us-ourselves. This is about understanding ourselves as active from the start, through and through, as endowed with an inalienable agency (albeit always in the process of development) that is nonetheless fully of this world, grounded in the very basis of our existence and entailed in the very mode of our living. In this view, agency is foregrounded as formative and constitutive of human life and development, and in a recursive mode, formative and constitutive of the world itself. There is an important distinction in saying that we encounter the world halfway (as in "meeting the universe half-way," see Barad, 2007), at the intersection of the world and ourselves, vs. saying that we act under given conditions and respond to somehow preexisting problems and challenges. In this way, the still powerful spell of behaviorism and associated adaptive-relational modes of thinking, according to which humans merely dwell in the world and respond to (or follow with) its dictates, under its pre-given conditions, are resolutely debunked.

In this emphasis, the TAS suggests that human beings are not antecedent to communal transformative practices that shape them (a premise that is shared with many sociocultural and critical approaches); however, in a move that breaks with the orthodox notions of canonical Marxism (and many sociocultural and relational approaches), the world is posited as not antecedent to these practices either, as if reality was simply "out there," predefined, and definitively organized before people enact and carry it out in their own activist pursuits, struggles, and strivings and thus bring it, and simultaneously themselves, into co-realization.

In this approach, to summarize, agency is conceptualized as a situated and collectively formed ability of people, qua agents of social practices, history, and the world itself—each person as fully a community member who at the same time is acting from a unique position and stance on a given community's predicaments and conflicts—to co-realize the world and themselves while challenging the existing status quo and contributing to social practices of humanity with a particular horizons of possibilities in sight. Importantly, this ability is contingent on the mastery of cultural tools for transformative

action and activism through participating in and contributing to the inherently social, collective processes and practices of human communities.

From the position of the transformative activist stance (TAS), persons are agents not only for whom "things matter" but also who themselves matter in history, culture, and society and, moreover, who come into being as unique individuals through their activist deeds, that is, through and to the extent that they take a stand on matters of social significance and commit to making a difference by contributing to changes in the ongoing social practices. This means that there is no way that we can extract ourselves out of this activist engagement—we can never take a neutral stance of disinterested observers uninvolved in what is going on. A human being who in order to be needs to act in the social world that is constantly changing and, moreover, that is changing through our own deeds, cannot be neutral or uncertain because such acting (unlike reacting or passively dwelling) presupposes knowing what is right or wrong, and which direction one wants and needs to go next, for the benefit of oneself and community practices.

In this sense, agency is an inalienable feature of human knowing-being-doing-though it is not a "given" and instead, it has to do with the socially transformative, practically productive, and collaboratively inventive ways of how human life is organized within the sociohistorical dynamics of human communities. Thus, agency is foundational to human life yet, nonetheless, it has to develop as we develop our capacities for participation in and contribution to community life with the help of collectively invented cultural tools suited for agentive knowing-being-doing. In this account, there is a conceptual space to acknowledge diverse forms of agency and multiplicity of its expressions, contra those approaches that grant agency to only some of its manifestations, specifically the ones that are efficacious within the status quo (as typically described in self-efficacy research, e.g., achieving specific results such social status, solving problems for specific gains or profits etc.) and which require being noticed, approved, and ultimately sanctioned by society and its power holders.

Indeed, forms of agency do not need to be painted with the same brush and it makes sense to take a heterogenous approach to conceptualizing it (cf. Bierria, 2014), including in order to highlight important dimensions of agency and their varying roles in human lives and social dynamics. One scale on which forms of agency can be usefully distinguished, in taking up from Bierria (2014), is that of its insurgent vs. hegemonic modalities. These modalities of agency are situated at the opposite poles defined by social positioning of agents who exercise agency relative to the structures of power and domination. On one pole is a hegemonic agency-the term suggested by Bierria (2014) which typifies exercise of agency by those in power, with a privileged status in society. In case of hegemonic agency (to expand upon Bierria's account), people operate in the interests of the status quo and thus, often act agentively to capitalize on their privileges and status while thwarting or subverting social change and the agency of others, especially those who are marginalized and oppressed. These are not exclusively acts of direct oppression, though this is clearly the most outrageous,

and quite common, form of hegemonic agency today since domination and oppression are prevalent and paramount in our society, constituting daily realities for disenfranchised people, especially people of color, such as in police brutality and workplace discrimination. Yet even "common" acts of daily misrecognition, mislabeling, and misperception of those who are disenfranchised including ethnic minorities, immigrants, and the poor—by ordinary community members who are privileged by color, class or social status, or are in a position of power within particular contexts such as teachers in their classrooms—can also be seen as a hegemonic agency (without claiming equivalency across gradations within this agency). Examples of such agency include teachers' differential treatment of learners based in racial stereotypes (which is quite common, see Tenenbaum and Ruck, 2007), including prejudicial mislabeling of students as incapable of learning based on achievement testing that is inherently biased and fundamentally inadequate to capture anything meaningful about students' potential for learning. Moreover, I believe that the utterly common, everyday actions by the privileged who follow with the normativity and rules of established societal canons—such as being "at peace" with inequalities, discrimination, and oppression and not challenging them—can also be considered to belong to hegemonic agency. This includes, as regards educational settings such as academia, channeling, rather than resisting, "dominant ideologies and representations that normalize/rationalize war, state violence, White supremacy, capitalism, and injustice, even and especially within the psychological canon" (Fine, 2018, p. 431).

On the other pole of agency modalities is an *insurgent agency*—again, the term introduced by Bierria (2014) and powerfully illustrated in her work. As she writes, insurgent agency pertains to

resistant acts employed by disenfranchised agents that are not necessarily designed to transform or transcend oppression, but instead manipulate and maneuver those conditions to achieve ends that are structured as unachievable. These acts have the potential to corrode elements of structural domination while still operating within the violent constraints of power... [Insurgent agency] temporarily destabilizes, circumnavigates, or manipulates those conditions in order to reach specific ends. (Bierria, 2014, p. 140)

What the term *radical-transformative agency* highlights in addition, as I suggest, is that the ultimate forms of insurgent agency are specifically about overcoming accommodation of, or adaptation and acquiescence to, the existing status quo of a neoliberal political framework with its power imbalances, exploitation, oppression, and violence. Radical-transformative agency is not about being able to effect changes that are only narrowly efficient for the goals of taking control of one's life, achieving success and other self-serving, egotistic pursuits centered on individuals, each on their own, fitting in with the present regime of neoliberalism. In other words, this type of agency is not about efficacy and efficiency of individuals taken as autonomous entities. Instead, radical-transformative agency is about struggles against inequality, economic oppression,

racism, and other forms of injustices as these are operating within local communities, including schools, yet also as they inevitably form parts of the overall historically and politically contingent dynamics, in connection to larger contexts of the world-historical struggle. This world-historical struggle, in its present expressions and enactments (as I see it, in sync with many critical scholars) is primarily and centrally against the neoliberal-capitalist socioeconomic and political regime which today is the central challenge and the main historically and politically contingent force that needs to be resisted and struggled against.

Thus, the critical point is that the radical-transformative agency takes place as *a confrontation with the status quo* in its presently dominant (and always historically particular) major contradictions, injustices, and shortfalls that happen to define this status quo at a given historical time and place. These contradictions, injustices, and shortfalls need to be distilled, identified, named, and faced head-on by teachers and students alike, as part of their struggle for a better world coterminous with their own becoming—their becoming agents of history and of the world-in-the-making.

As is clear from the ongoing discussion, the radicaltransformative agency is likely to be carried out by those who are "marginalized, made illegible and spoken-over by the contemporary geopolitics of capitalist coloniality" (to borrow from Motta and Esteves, 2014, p. 1), whereas enfranchised agents who are "shareholders" of the social and institutional power (Bierria, 2014), especially at the higher echelons of power, are likely to resist it (though some might potentially join the struggle). This type, or modality, of agency does not always fully depend on explicit social affirmation, or an immediate social uptake, and is not necessarily contingent on its effects in terms of a directly "measurable" impact on the world—as argued also by Bierria (2014) in her astute analysis of various agency modalities. As Bierria suggests, "there is a key social dimension to agency that is vulnerable to being corrupted by oppression" (p. 135), such as when there is no social uptake and validation of actions and their effects out in the world. Bierria, in addition, suggests that the disenfranchised actors might be able to achieve agency with the backup of an alternative public, such as social movements. I would add to this account that the actions of disenfranchised often de facto challenge the status quo and thus, serve as radical and insurgent forms of agency that subvert oppressive powers. This happens, for example, when students drop out of school, effectively undermining the workings of the educational system, as if shedding light (often at a great cost to themselves) on how dysfunctional and oppressive this system actually is (cf. Fine, 1991). There are numerous examples of research that highlight "moment-to-moment opportunities as a form of day-to-day activism," such as teaching for raising consciousness, in a struggle to change whitestream urban schools as a part of being a Chicana/o Activist (Urrieta, 2007); supporting students' agency within "cracks and crawl spaces in existing social structures" (Carlone et al., 2015), and documenting how agency can accrue over time, as small events serving to be playhouses for larger social forces that disrupt oppression in the classroom (Varelas et al., 2015; cf. Gutiérrez and Calabrese Barton, 2015).

RADICAL-TRANSFORMATIVE AGENCY: IMPLICATIONS FOR TEACHING-LEARNING

The proposal in this paper is to focus on the process of people transformatively engaging and thus co-realizing the world-inthe-making and themselves through unique—though always co-coordinated, social, and collective through and throughcontributions to this world's dynamic and ever-changing interactivity. This process is posited at the core of human development, societal processes and the world materiality itself, as suggested herein in line with an expanded Marxist-Vygotskian approach. By implication, this same process can be posited also at the core of teaching-learning processes understood as intrinsic to the world's overall dynamics. This is because these processes cannot be thought of as somehow self-standing and withdrawn from the world and its overall dynamics and interactivities. Schools are direct mirrors of our society—a living embodiment of its dynamics in all of its strengths and weaknesses, including most critically its inequalities and injustices. Indeed, as has been noted before, there are only fluid boundaries or a "flux of boundaries" (cf. Greene, 1974) between schools and societies. That is, because teaching-learning is an immediate and inherent part of the overall dynamics and processes of human life and society, its core determinations are not distinct from these overall dynamics. If we look closely enough, with relevant conceptualanalytical tools, we might see both the social-political dynamics and those of the human being/becoming in every act of teachinglearning, including every classroom interaction and every aspect of schooling.

In this light, the teaching-learning process—like all processes of social and human dynamics—is about the teachers' and learners' struggle for becoming (always collective and individual at once, that is, "collectividual," see Stetsenko, 2013a), for mattering, through transformatively engaging the world via unique and authorial contributions to its ever-changing dynamics. This is about strivings and struggles for an agentive participation in and, most critically, contribution to community practices, and thus to the world-in-the-making of a profoundly activist nature. As such, teaching-learning is an arena of human struggle and activist striving that is immanently and inherently infused, at its core, with ethics and politics on the one hand, and with emotions, passions, feeling, values, fears, pain, hopes, and interests—on the other (cf. Stetsenko, 2010, 2016).

This position implies that teaching-learning always needs to connect to, and be grounded within, the process of learners and teachers developing *their own* projects of participating and mattering in community practices, via envisioning their possible futures and their selves to be a certain way, making commitments to this way, and working on bringing these commitments into realization. Each act of teaching-learning, in this light, is a complex, contested, and non-neutral endeavor loaded with human significance and personal meaning, including dimensions such as emotions and passions. In this endeavor, much is at stake and it itself is at stake in many ways and in many aspects of life well-beyond the immediate context within the classroom

walls. The teachers' and learners' goals and strivings toward the future, how they imagine the horizon of possibilities and what they struggle for, in fact color and shape the teaching-learning dynamics in the present. While being deeply personal, these processes are not about some idiosyncratic, personalized quests confined to isolated individuals and defined in terms of putatively solo dynamics separated from the larger world. Instead, teaching-learning and knowing are inextricably parts and parcels in the dynamic processes of an active and agentive, indeed activist, striving for one's authenticity, co-authorship, and place in the shared world of communal practices.

Although acknowledging the value of all participants in the teaching-learning process developing their own, unique ways of contributing to community practices, this process is at the same time and ultimately always about developing "a shared consciousness of oppression, leading to a shared sense of knowledge, and a shared commitment to...finding [a] path to liberation" (Jackson, 1997, p. 464). Note that the notion of individually unique contribution to collective-communal practices overcomes the outdated separation of and the harmful rift between individual and social dimensions of sociocultural dynamics.

From this position, agency is paramount to teaching-learning if the latter is understood to be about meaningful, active, and passionate knowing-being-doing by people as actors of history and agents of the world-in-the-making. There is no place in this process for passive transmission of knowledge, faithful memorization to the test, dispassionate information processing, "neutral" data crunching, and other types of purely cognitive and essentially neutral, and thus a-personal and a-meaningful, activities. As has been stated by many scholars, teaching-learning entails developing social identities associated with community practices and discourses (Lave and Wenger, 1991). In pushing this thinking further, I suggest we need to consider that in order to teach and learn in meaningful and lasting ways, we need to draw connections to pursuits of meaningful and activist goals, agendas, and projects grounded in visions and imaginations of a sought-after future that, in case of radicaltransformative agency, presuppose challenging and changing the status quo. It is these pursuits and activist struggles that come to enact teaching-learning in profoundly meaningful and deeply personal and, therefore, lasting and socially significant ways; they are the overarching process within which meaningful and transformative teaching-learning is uniquely possible. The cornerstone of teaching-learning, in other words, is formed by a commitment to social transformation that uniquely positions learners—and teachers alike—to see what is through the prism of how present situations and conditions came to be and, also, in light of the imagined and sought-after future—of what they believe ought to be. In this, the historicity and situativity of knowledge are ascertained alongside the focus on its ineluctable fusion with an activist stance as an orientation toward the future.

In this approach, teaching-learning, being embedded in and derivative of social practices and struggles of becoming, is most critically premised on and constituted by activities not merely in the "here and now," in the world and its circumstances as

if they were somehow simply "given" (which in fact they never are). Instead, teaching-learning intersects with the future and foregrounds imagination, daring, and movement beyond the status quo. Imagining a different world and ourselves, making a commitment to bringing these about and struggling to achieve them amounts to creating the future in the present—affirming the future-to-come and thus realizing it in the here and now. This is the process of *inventing the future*, rather than merely expecting or anticipating its "automatic" arrival.

The critical constituent of teaching-learning (and all forms of knowing-being-doing), therefore, is about taking stands and staking claims on ongoing events in view of the purposes, goals, commitments, and aspirations for the future. In this sense, the common expression "make up your mind," which typically is taken as an appeal to form an opinion or a point of view in addition to the ongoing cognitive (supposedly disinterested, neutral) processes, can be interpreted instead as a general stipulation that the mind develops while we quite literally make it up. That is, rather than merely "having" (or possessing) minds, we are always in the process of making them up—because the minds are literally "made" in the collaborative practices and pursuits, and also because they are formed and enacted in the process and as the process of taking activist positions and stands. Taking up and carrying out activist stands are truly vital in order to be able to act, to be, and to know—to under-stand. The immediate implication for the process of teaching-learning is that its goal has to do with assisting students in developing their ability to take their own stands and stake their own claims on what is going on in the world and their communities, including their place and role in these processes, while learning to matter, that is, imagine and commit to a future they come to believe is worthy a struggle.

The emphasis on social change and people transcending the status quo through their agentive contributions to social practices implies agency/activism, in the connotation of imagination, novelty and creativity, as the core characteristics of human being-knowing-doing (see Stetsenko, 2019a). This is about bringing new and expansive anti-oppressive practices—such as critical reflection on and citizen participation in communal practices and civic activities, including resistance, social activism, and community-oriented decision making—directly into schooling while enmeshing them with academic matters in the process of teaching-learning.

One example of this strategy can be found in the study of teaching-learning with adolescent boys in a group home (part of the American foster care system; for details on this project, see Vianna, 2009; see also Vianna and Stetsenko, 2011, 2014, 2019). One of the strategies employed in this work was to invite participants to explore the ethical-political dimensions of knowledge in connection with the boys' own thematic universe, thus compelling them to take a stand on social and academic issues in their own lives, their communities, and the society at large. One of the topics for an extended discussion was that of human evolution. This topic was chosen as an opportunity to critically examine erroneous assumptions associated with a reductionist version of evolutionary theory that promotes the fallacious and racist, and quite widespread, view that race-based social inequality is biologically determined (cf. Stetsenko, 2011,

2017, 2018b; Vianna and Stetsenko, 2017). This was a view that some of the boys articulated, apparently taken up from social discourses and practices in their surrounds.

A workshop on evolution, led by Eduardo Vianna as part of a collaborative transformative project that he carried out in the group home (in collaboration with the present author), provided a forum for the boys to discuss their views on such contentious matters as social ranking and presumed inequalities in human potential while confronting outrageous stereotypes about so called "Black inferiority," and whether notions of evolution support or challenge such views. Importantly, students were invited to take a position, or active stance, on the conundrums involved, including by interrogating their own views and possible biases. The strategy was not about imposing some "finalized" knowledge claims as canons that could not be contested. Quite on the contrary, learners were provided with the critical-theoretical tools to explore knowledge and its underlying ethical-political premises and implications so that they themselves could stake a claim and claim a position, however preliminary and evolving, on the key conundrums involved. One of such tools was knowledge that all theories and concepts carry with them specific (typically deeply-seated) ethico-political bases, biases, and implications (see Stetsenko, 2015, 2018a,b). As described in Vianna and Stetsenko (2019), aided by critical-theoretical tools of agency, the boys' views on race relations and institutional practices as intractable and fixed gave way to a desire to better analyze such practices in order to transform them. As the boys developed their activist transformative stance, drastic changes in themselves and their institution started to unfold. These new understandings spurred the boys' commitment to fight racial stereotypes and change their community practices along the lines of solidarity and social justice-with such changes indeed ensuing soon thereafter, with dramatic positive results at both personal and community levels in the institution.

As relates to combatting inequality in education, one important part of achieving this goal, from the position outlined herein, is overcoming the notions of passivity including that of teachers as "conduits of knowledge." An indispensable ingredient for combatting inequality, racism and quietism in our schools has to do with creating spaces where both teachers and learners can rid themselves of expectations to comply with the status quo (in both knowledge and community participation) to instead launch on their own paths and projects of critical explorations into the world and themselves, while committing to their own visions of the future and to finding their own answers as to how to achieve this future. This is about providing conditions and spaces for teachers' and learners' rousing to life their own activist projects and radical-transformative agency, for daring to change the world for the better. Such an approach is not about indoctrination. Instead, it is about teachers and learners together engaging big, complex questions about ourselves and our society including about inequality, social justice, and our role in the world. Such questions include interrogations of, as Gause et al. (2009, p. 49) put it drawing on Anzaldúa and Macy, "What are the tacit agreements that create obscene wealth for a few, while progressively impoverishing the rest of humanity? and What interlocking systems of power causes indenture to us while simultaneously creating an economy that uses the Earth as house and sewer?" At stake, in other words, is education that is about teachers and learners carrying out the hard work to assert themselves in the actualization of their own potential via mattering in the world shared with others.

INSTEAD OF CONCLUSIONS: SOCIOPOLITICAL IMPLICATIONS

The account of radical-transformative agency—premised on the notion of individuals seeking to make contributions to communal practices based in their own commitments to a better future, in challenging and moving beyond the status quo (as conceptualized herein)—is not a universal, timeless proposal that could be set in place and taken for granted "for all times." In fact, it itself is tightly bound up with the present realities of our historical time and place, highly conflictual, turbulent, and in need of radical and even disruptive-insurgent, forms of agency. In my view, researchers' commitments to how these realities can be co-authored and realized by us today (per my interpretation, as relates to the need to combat stark inequalities and injustices of the late-stage capitalism and this system itself) is an important part of theorizing agency. This proposal strives to be congruent with the transformative and revolutionary, indeed rebellious, gist of Vygotsky's project as it initially emerged during the time of the anti-capitalist revolution, even though this gist was not directly articulated by this project's originators (and unfortunately, gradually squashed with the advancing totalitarianism).

Today, in an era of global social strife and record inequality, which concentrates ever-growing wealth and power in the hands of a corrupt ruling class, accompanied by a bleeding immigration crisis and ecological disaster, it is obvious that capitalism is gradually disintegrating into chaos and wars that are wreaking havoc around the globe. Therefore, it is time for an activist and radical-transformative scholarship, especially on the topic of agency, premised on commitments to a chosen socio-political ethos-as argued herein, that of a fundamental equality, solidarity, and infinite potential of all human beings that can all be achieved only in a post-capitalist society. In Kohn (2015) words, "we need to be transparent about our premises and goals [including, centrally, the political ones]. If we don't bring them to the surface and defend them, others will take their place by default" (insert added). As Kohn continues, "show me a school where people blithely announce they do 'whatever works' and I'll show you a place tacitly defined by behaviorism...". Paraphrasing Kohn, I would say—show me a conception of agency that operates with the notion of responding to the world and stays away from

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politics, and I will show you a conceptual terrain tacitly defined by behaviorism and neoliberalism.

As educators and researchers of agency, we need to "dance the dance" and be ourselves agentive in our scholarly pursuits of theorizing and exploring agency. Unless we define our quest for a better future (at least in outlines as attempted herein) and situate our research within such a quest, as part and parcel in the struggle against the status quo defined in concrete political terms, we remain under the spell of behaviorism and other approaches steeped in colonial and racist legacy. The goal, in my view, is to resolutely break with the tacit legitimation of the status quo by these approaches, whereby agency is limited to being just a response which is accommodating what is erroneously perceived as an unalterable, immutable status quo. In further pursuing this approach, the need is to connect to the rich tradition of critical theories of resistance and oppositional consciousness such as Critical Race theories, decolonial approaches, and Liberation philosophy, in the spirit of alliance-building strategies for globalizing resistance from below, as put by Davis (2000). The strategy includes connecting to classical works of not only Marx and Vygotsky but also W. E. B. Du Bois, Frantz Fanon, and to contemporary works by Gloria Anzaldúa, Chela Sandoval, Audre Lorde, and Angela Davis, among many others.

In conclusion I would like to use Angela Davis' words addressed to the readers of Chela Sandoval's book Methodology of the Oppressed (Davis, 2000). As Davis writes (pp. xii-xiii), the book is about "understanding how to effect dissidence within twenty-first century cultural conditions" so as to work toward "creating a place for significant interventions in the social world... as a prolegomenon that critically examines the conditions and possibilities for contemporary radical movements in this era of global capitalism." To this I am humbly adding, in solidarizing with this line of work, that effecting dissidence (including in challenging canons of passivity and behaviorism in psychology and education) de facto also means going beyond our present conditions in creating radical possibilities for social transformation. Indeed, we need all the resources for a solidaristic, radical-transformative agency, including those furnished by activist theories of agency, to push forward in moving past the established canons and social structures that only appear to be intransigent while in fact they are already melting in the air in front of our eyes.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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Computer Science for Equity: Teacher Education, Agency, and Statewide Reform

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This paper reports on a statewide "Computer Science for All" initiative in Oregon that aims to democratize high school computer science and broaden participation in an academic subject that is one of the most segregated disciplines nationwide, in terms of both race and gender. With no statewide policies to support computing instruction, Oregon's legacy of computer science education has been marked by both low participation and by rates of underrepresented students falling well-below the already dismal national rates. The study outlined in this paper focuses on how teacher education can support educators in developing knowledge and agency, and impacting policies and practices that broaden participation in computing. In particular, this research seeks to understand two questions. First, how do teachers experience equity-focused professional development in preparation for teaching an introductory course in computer science? Second, this study queries, how do teachers understand their own agency in influencing policies and practices that broaden participation in their specific schools and classrooms? To answer these questions, this inquiry employed a mixed method approach, drawing from surveys, observations, and interview data of two cohorts of teachers who participated in the Exploring Computer Science professional development program. To show the variety of school contexts and situate computer science education in local and place-based policies and practices, three teacher case studies are presented that illustrate how individual teachers, in diverse geographic and demographic settings, are building inclusive computer science opportunities in their schools. The findings reveal that centering equity-focused teacher professional development supports teachers in formulating the confidence, knowledge and skills that lead to inclusive computer science instruction, computer science content, and equity-centered pedagogy. The findings also highlight how school reform in computer science requires not only technical and pedagogical supports and structures, but also a systemic rethinking and reworking of normative and political forces that are part of the fabric of schools. Based on these findings of teacher knowledge and agency, the paper concludes with a presentation of particular statewide policies and practices that are generative in broadening belief systems and expanding political capacity of computer science education to reach

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INTRODUCTION

In early 2016, President Obama endorsed a decade of federal investment in broadening participation in secondary computer science education and lit a firestorm of new efforts aimed at providing computer science instruction for all students. Despite the federal directive for funding to contribute to this "Computer Science for All" initiative, the constitutional mandate in the United States gives authority to the states to set education policies and practices. While the recent wave of federal support to bring computing knowledge to all students is unprecedented, it is evident that reforming computer science education must be attended to at the state level.

The urgency of expanding computer science education in the United States has been endorsed and supported by a variety of organizations and interest groups. Industry leaders, concerned about the future health of the work-force pipeline and personal economic prosperity, suggest that public investment to support computer science in schools is necessary for the nation's (and individuals') economic health. Cybersecurity experts point to the need for a well-educated citizenry to ensure both personal privacy, and to fill public sector jobs in security which cannot be outsourced abroad. Academic groups highlight the benefits of a "computer science + X" approach—education about how computer science can inform scientific and humanistic endeavors across and within other scholarly disciplines. Additionally, K-12 educators and teachers note that the ethos of creativity and collaboration that can be fostered through computer science instruction has a reinvigorating and empowering impact on teaching and learning in classrooms.

Inequitable Opportunities to Learn Computer Science

Despite the widespread enthusiasm for computer science education for all, it is significant and troubling that computer science suffers from the lowest participation of girls and students of color than any other STEM-related area. These participation patterns continue, and often increase, in higher education and in technology-related professions (U.S. Equal Employment Opportunity Commission, 2016; Zweban and Bizot, 2018). Given the high-status nature of computer science (Apple, 1978), and the tremendous levels of power and influence that lie with those who have stature in this field, computer science education reform must prioritize to address the complex ways that racial and gender inequities operate and are reproduced in this discipline.

Prior research in equity and computer science has illuminated how structural and belief systems collide to create obstacles for many students to learn computing in schools. For instance, an ethnographic study focused on computer science education, across three high schools varying in demographic composition, revealed how learning opportunities, such as course offerings and qualified teachers, differed dramatically both between and within schools (Goode, 2008; Margolis et al., 2017). Additionally, educator beliefs and practices, at the school and classroom level, profoundly impacted students' opportunities to learn computer science through student tracking and enacted pedagogy in the classroom. This collision of structural and belief system biases

in computing education result in significant and persistent participation gaps in computer science courses by students of color and girls (Ashcraft et al., 2017; Scott et al., 2019).

Further, for students of color and low-income students, existing discrepancies in opportunities to learn computer science in school settings are accompanied and compounded by other long-standing educational inequities. Studies have documented how across subject-areas, secondary students in the United States experience staggering disparities in access to high-quality teachers (Darling-Hammond and Berry, 2006), high-quality academic curricular experiences (Lee et al., 1997), and culturally relevant pedagogy (Ladson-Billings, 1995).

The Role of Teachers in Computer Science for All

There has been an ongoing and significant investment in expanding and scaling computer science education as part of the "Computer Science for All" initiative across the United States. Although teacher professional development is frequently considered integral to these efforts, there is scarce research about the specific role of teachers in serving as change agents in broadening participation in computing at their school sites. Little is known about how teachers can support rigorous and inclusive computer science course offerings. Such knowledge is especially necessary in order to best support efforts to diversify high school computer science classrooms in a state with a decentralized, "local control" education system. This study seeks to study how teachers develop and enact agency in terms of equity in computer science education. In particular, this research seeks to understand how teachers experience the equity-focus of professional development in preparation for teaching a high school introductory course in computer science, and how these teachers understand their own capacity in bringing computer science to their specific schools and classrooms and to diverse groups of students. A key part of our investigation is studying how belief systems of educators and policymakers shift as computer science education discourse collectively shifts from "for some" to "for all."

Studying teacher agency in the context of educational reform involves an examination of the actions of individual educators within particular social contexts marked by a set of resources that are culturally, socially, and historically developed (Lasky, 2005). This sociocultural model of teacher agency is mediated by the interaction between the individual and the structures impacting teachers' capability to exercise power, particularly in reform contexts that bring new normative professional tools and expectations. Further, an ecological theory of teacher agency suggests that while teachers as actors have some sort of capacities, their ability to achieve agency relies on the interaction between these capacities and the ecological contingencies of the environment (Biesta and Tedder, 2007). One study of teacher-enacted curriculum reform that examined teacher agency from an ecological perspective found that teacher agency is largely about "repertoires for maneuverer," or the possibilities for different forms of action available for teachers in their particular temporal, material, and social context (Priestley et al., 2012).

This study discovered that the beliefs, values, and attributes that individual teachers mobilize in particular settings are important characteristics of teacher agency. The recommendations from this research emphasized that educational curricular reforms should focus on designing policies that proactively consider teachers' preemptive and anticipated engagement with new educational designs.

Computer Science for Oregon

The study outlined in this paper is part of a larger initiative that supports cohorts of teachers in bringing computer science education to Oregon, a state with a decentralized school system. Through support from the National Science Foundation and collaborations with multiple state policymakers and educators, the "Computer Science for Oregon" initiative is expanding access to inclusive learning experiences, beginning with high school classrooms. At the core of the theory of change for this equity-focused project is teacher education. Teachers not only have the unique and central position to bring active and inclusive pedagogy to introductory courses for all students, but they also hold the capacity, expertise, and agency to illuminate how local and statewide policies and practices can support and sustain social justice approaches to computing education.

To situate the equity context of schools in this study, this paper first provides an historical examination of the legacy of computer science education in Oregon and how these efforts, in the past, have reached only a narrow segment of the student population. Next, we engage in a theoretical discussion of the multiple components of school reform that must be attended to in order to center race and gender equity at the core of computer science school reform. Then, we describe the "Computer Science for Oregon" initiative and the role of teacher education in supporting the statewide goal to democratize computer science education. To examine the efficacy of these reform efforts, we present three case studies to illustrate how teachers, in diverse geographic and demographic settings, are building inclusive computer science opportunities at their schools. Each of these case studies features the teacher's school site context, their particular problems of practice in teaching computer science to a wide diversity of students, and how they have experienced powerful moments of teaching and learning that support the inclusive spirit of "Computer Science for All." After presenting these particular cases, we will discuss how our findings can inform an applied theory of action for "Computer Science for All" statewide efforts focused on a cohesive model of social justice-focused educational reform.

BACKGROUND OF COMPUTER SCIENCE EDUCATION IN OREGON

To provide a comprehensive understanding of the current context of Oregon's computer science education opportunities, policies, and practices, we present an historical inquiry of how computing has been integrated in Oregon schools. Using public education datasets, College Board data, and archival state documents, we examined patterns of course participation by

racial and gender demographics. We also investigated available historical plans and policies. We observe how key events, organizations, and enrollment data have set the stage for the "Computer Science for Oregon" shift toward a focus on a more widespread adoption of computer science education offerings, as well as, on the inclusion and engagement of a diverse student body in the computing field.

Teacher Role and Course Availability

Oregon has a long history teaching computer science in formal (in-school) and informal (out-of-school-time) settings. By 1962, Oregon high school teachers were teaching programming. In 1978 Mr. Robert Jaquiss, a computer teacher at North Salem High School, developed a proposal to achieve "computer literacy for all" (Bennett et al., 1980). That proposal shows problem solving and simulation integrated into the study of social science, chemistry, physics, business, biology, mathematics, and music, and identified separate courses of study for programming, computer science, and computer operations. The Oregon Computer Science Teachers Association (OCSTA) formed in 1987. It has thrived as a partnership between educators and industry to support computer science content in formal and informal settings. Despite this long-standing niche of proponents for computer science education, no district in the state has yet designated computer science as a graduation requirement. Because computer science has historically been on the periphery of the school curriculum, Oregon, like many states, does not have a certification available in the discipline for teachers. In order to teach computer science at the secondary level, teachers who are already certified and hold endorsements in other subjects, often are asked or choose to obtain professional learning in the subject in short-term workshops (often only available during summer break months). Additionally, many computing teachers are former technology professionals who have entered the teaching profession as part of a Career-Technical Education program, circumventing traditional teacher education preparation programs that include teaching methods courses. This uneven pipeline of computing teacher preparation has resulted in a dearth of educators prepared to offer computer science in Oregon high schools. Additionally, there is wide variability of the types of computer science courses that are available across the state. Of the 325 Oregon high schools reporting data to the Oregon Department of Education for the academic year ending 2015, 232 listed some computing or technology course, 66 listed a regular offering coded as programming, and 14 offered Advanced Placement or International Baccalaureate computer science classes.

Course-Taking

With respect to course-taking, the state has suffered from years of low participation in computer science from almost all students, though students of color and girls are notably absent from most of these legacy "for some" courses. Student enrollment data from historic courses, as well as the new Advanced Placement Computer Science Principles course, highlights both the overall, drastically low participation, as well as the homogenous participation in terms of student demographic groups (College

Board, 2018). In 2017–2018, while students participated in taking over 137,000 exams nationwide, only 762 Oregon students participated in one of the two Advanced Placement Computer Science course exams. Of these Oregon students, only 10% of exam-takers were students of color, and just 23% identified as female. Statewide, only one Native American girl, one Black girl, two Native Hawaiian or Pacific Islander girls, and 12 Latina girls participated in one of the two Advanced Placement exams.

Attending to the Participation Gap

It is clear that the computer science education efforts and course offerings in Oregon to date have not been productive in broadening participation in computing in the state. With over 50 years of experimentation, significant demand from parents and persistent appeal for more computer science educated graduates from Oregon's technology industry, educators might wonder why the state failed to implement Jaquiss' vision from 1978 of "Computer Literacy for All." In part, the evidence shows that because the inclusion of computer science has historically been viewed predominantly as an opt-in offering for suburban schools, its enrichment program status has prevented the subject from becoming part of the generally available comprehensive school curriculum (Margolis et al., 2017). Further, Oregon is the only state in the United States that does not have any statewide policies that support K-12 statewide computer science education, such as continued funding, teacher certification, a state plan, state standards, allowing computer science to count for graduation requirements, or a state director that oversees computer science instruction and learning in schools (Code.org, CSTA and ECEP, 2019).

As a state, Oregon is uniquely situated for a "Computer Science for All" movement focused on implementing and sustaining computer science courses in high schools. There is a longstanding legacy of past computer science state investments and active teacher involvement in computer science education. Yet, the pressing equity gaps in computer science education in Oregon show extreme disparities in participation amongst Oregon's students that suggest a new approach for expanding computer science education is needed. For Oregon, this includes addressing not only gender, racial, and social class disparities, but also differences in opportunities to learn along the urban-suburban-rural divide.

Broadening Participation in Computer Science in Oregon

Computer Science for every student, thus, requires a more disruptive implementation approach than simply providing more opportunities for computing education as opt-in enrichment. This necessitates a shift from the historic viewing of computer science as appropriate in some schools, for a handful of students, toward a normative view of computer science as a subject for every student across the state. The thesis of this theory is that such a disruption in the implementation of computer science education is ultimately more sustainable in reaching equitable learning opportunities for students.

The "Computer Science for Oregon" program began in 2017 with goals of diversifying and expanding computer science

learning opportunities for students in urban, suburban, and rural areas across the state. With support from the "Computer Science for All" program at the National Science Foundation, a major part of this initiative focuses on supporting high school teachers in developing the capacity to teach the introductory year-long Exploring Computer Science course at their schools.

The Exploring Computer Science program, with over a decade of research documenting its effectiveness in engaging diverse groups of students in learning about computing, provides a comprehensive and inquiry-based approach to introducing high school students to computer science. Along with instructional lesson plans for teachers to use, that include a comprehensive approach to computing, the Exploring Computer Science program offers an intensive, long-term professional development program. Teachers participating in the professional development program of Exploring Computer Science first attend a week-long summer Institute, then participate in quarterly learning sessions taken while teaching the course during the first year, and then participate in a second weeklong summer Institute. The second summer professional learning experience allows for teachers to reflect on their first year of teaching and continue to grow their knowledge around effective instructional practices.

The core features of the Exploring Computer Science professional development program include introducing teachers to key lessons in the curriculum, incorporating a rehearsal-based approach to learning computing concepts and pedagogy, and centering discussions about racial inequities in computer science education (Goode et al., 2014). Further, this professional development has been shown to foster a vibrant professional learning community of teachers (Ryoo et al., 2015).

To participate in the professional development program, a school's principal signs an agreement to offer the Exploring Computer Science course in the school curriculum and agrees to a school-wide commitment to recruit a wide diversity of students to the course. So far, two cohorts, and a total of 40 teachers, have begun or completed the 2-years Exploring Computer Science professional development program focused on learning introductory computer science concepts, inquirybased teaching methodologies, and strategies for teaching for equity and inclusion. In Oregon, the summer Exploring Computer Science professional development workshop takes place annually in a residential college setting in central Oregon. Subsequent quarterly professional developments are conducted during the school year, in an online setting. This is to ensure ease of participation as teachers in the program come from geographically disparate locations.

THEORETICAL PERSPECTIVES OF SCHOOL REFORM TO ADDRESS EQUITY

This study draws from school reform literature to help examine how teachers can be central to efforts for broadening participation in computing, in the context of a statewide initiative. Given that "Computer Science for All" is part of the ubiquitous democratic "for all" movement in education,

it is useful to examine the scholarship from similar "for all" detracking efforts that have aspired to democratize access to school knowledge.

In his scholarship on education policies and the rhetoric of standards for all in England, Gillborn (2005) argues that by placing race equity at the margins of reform, educational policies retain, and extend race injustice that firmly remains at the center of the reform. Gillborn points out that systematic advantages for White students are based in a form of tacit intentionality of power-holders. He argues that white supremacy is often maintained and reproduced through the taken-forgranted privileging of white interests that often goes unexamined when creating educational policies. Thus, for efforts "for all" to be effective in reaching goals of inclusion and social justice, race equity must be considered at the center of reform strategies and goals.

Because expanding opportunities for computing education beyond enrichment and toward for all students is complex and involves changing the distribution of resources as well as changing the hearts and minds of educators, we employ Oakes' (1992) framework for understanding and changing school dynamics to promote racial, socioeconomic, and gender equity in course-taking. Oakes proposes attending to three dimensions of change that influence the social organization of schools: the technical, normative, and political elements of school reform. Further, given the empirical base highlighting the influence of teacher quality on students' opportunities to learn (Darling-Hammond, 2008), we extend Oakes' theoretical frame to highlight the empirical data suggesting the importance of a fourth dimension: pedagogy (Goode et al., 2018).

Technical

By technical, Oakes refers to the structure of curriculum differentiation—including the curriculum, systems differentiation to determine tracks of students, and the existence of college preparation and non-college preparatory tracks at a school site. As documented in Stuck in the Shallow End (Margolis et al., 2017), course demographics are closely correlated with the relative rigor and prestige of computing courses—low-income students and students of color are often relegated to low-level computer literacy courses, while middle-class students, typically boys, represent the majority of Advanced Placement Computer Science A course-takers. This is reflected in Advanced Placement Computer Science A and Computer Science Principles exam statistics in Oregon and nationwide, which reveal that computer science has the lowest rates of female and marginalized minority participation out of all Advanced Placement STEM-related courses (Martin et al., 2015; College Board, 2018).

Normative

Addressing the *normative* dimension of computer science education reform includes attending to the web of cultural assumptions about what is true and "normal" and what constitutes appropriate action given these belief systems. Computer science is one of the fields most defined by stereotypes and belief systems that undercut the participation of African Americans, Latinx, Native Americans, females, and

other marginalized groups. An important normative perspective in computing education is the concept of "preparatory privilege," a phenomenon in which childhood enrichment experiences and familial social capital are mistaken by educators for "innate" ability and suitability for studying more computing (Margolis et al., 2017). Students without such experiences, including low-income students, students of color, and girls, are then labeled as not being able or suitable for even introductory computer science courses (Goode et al., 2006). Since educators, including counselors and administrators, uphold these normative belief systems at school, district, and state levels, these belief systems both influence and are influenced by policy and practice within a particular state or regional context (Hu et al., 2016).

Political

The political dimension includes how labels, status differences, and the significance of these systems are codified in schooling policies in ways that influence opportunities for academic and occupational attainment. Oakes (1992) notes the political dimension captures the ongoing struggle for individuals and groups to raise their own relative advantage in the distribution of school resources and opportunities through the development of policies that determine who receives fiscal and human resources that sustain quality effective teaching and learning. Considering the political dimension of computer science education also involves tracking which teachers are permitted to teach secondary computer science education and relatedly, how computer science counts—if it counts toward graduation or college admissions, or as a course on a Career-Technical Education pathway, and for which students (Lang et al., 2013; Kaczmarczyk et al., 2014).

Inclusive Pedagogy

Yet, equity is not frequently at the core of professional learning programs for teachers in computer science. A recent study of computer science teachers noted that only 16% of teachers consider themselves very well-prepared to incorporate students' cultural backgrounds into computer science instruction (Gordon and Heck, 2019). Building the professional capacity of teachers is essential so that all students have teachers who are able to incorporate the essential ingredients of an engaging and inclusive pedagogy in computer science courses. Darling-Hammond (2008) has indicated that teacher quality and preparation is the most important school-level influence on student learning, and that highly qualified teachers in core subject areas were inequitably distributed amongst schools. Research on computer science teacher preparation has demonstrated the importance of building the conceptual knowledge, inquiry-based pedagogy, and equitable teaching practices of computing teachers for improving learning experiences for students (Margolis et al., 2014). Further, long-term professional development programs foster the growth of dynamic professional learning communities of teachers instructing the same course, allowing for shared knowledge and in-depth discussion of teaching strategies, student work, and assessment (Ryoo et al., 2015). Peer-coaching programs have shown to be effective in its on-site model of professional support to novice computing teachers as they work toward

developing engaging and inclusive pedagogy for all students (Margolis et al., 2015).

MATERIALS AND METHODS

The mixed method study outlined in this paper focuses on how teachers, with the support of an in-service professional development program and a "for all" attentive curriculum, can influence and drive regional and statewide computer science reform.

Research Questions

This study probes the professional learning experiences of teachers as they begin teaching a high school introductory course in computer science, and how these teachers understand their own agency and capacity in bringing computer science to their specific schools and classrooms and to diverse groups of students. Specifically, we asked:

- 1. How do teachers experience a residential computer science professional development program that infuses equity into the core teacher learning curriculum?
- 2. How do teachers understand their own agency in influencing computer science education policies and enacting educational practices that broaden participation in computing?

Participants

To address these questions, we involved 29 teacher participants attending summer Exploring Computer Science professional development in the research study examining their knowledge and agency around improving access and equity in computer science education. About half of these teachers were first-year Exploring Computer Science teachers who were preparing to teach the course for the first time the following school year, the remainder of teachers were part of the first cohort of teachers who were participating in the professional development for their second year after teaching the course for the first time at their schools. All except for one of the teacher participants noted that they had approached their school administration to seek permission to teach Exploring Computer Science and participate in professional development as part of the "Computer Science for Oregon" initiative.

Data Sources

We collected 25 pre-professional development surveys and 29 post-professional development surveys from participating teachers. Four of the teacher participants did not fill out a presurvey, but did complete the post-survey. There was no attrition of participants during the week of professional development. The reliability and validity of these survey instruments has been established with consistent and theoretically meaningful outcomes across multiple uses of these survey items with participants over the course of many years (Goode et al., 2014; Ryoo et al., 2015). Face validity has been strengthened through the central involvement of educational researchers and experts in computer science education further reviewing these survey items.

To center the first research question in this study about teacher's professional learning experiences, we report only on the

items that measured teachers' growth and dispositions toward equity and inclusion that emerged through their participation in this professional learning workshop. To this end, we focus on a few individual survey items that query teachers' confidence and knowledge around equity and inclusion. Further, openended observations during the course of the week of professional development provided another source of data to triangulate research findings around teacher learning, teacher agency, and broadening participation in computing.

Over the course of the prior school year and during summer professional development, we also collected a series of interview data with eight first-year Exploring Computer Science teachers, both before and after they initially taught Exploring Computer Science. In all, the second-year Exploring Computer Science teachers noted they had taught 640 students in Exploring Computer Science during the 2018-19 school year. All but one of these teachers returned for a second year of Exploring Computer Science professional development. Our data collection focused on capturing teachers' experiences, beliefs, and attitudes about increasing access to computer science instruction in high schools. These interviews were semi-structured and lasted for 30-60 min each. For second-year Exploring Computer Science teachers, we were particularly interested in teachers' implementation of an equity-oriented course within the particular community and school context that teachers work in to capture the diversity of strategies, policies, and practices that these educators perceived to support all students in Oregon. We analyzed these interviews using thematic codes that emerged from examining the technical, political, normative, and pedagogical categories of teaching computer science in schools.

Case Study Analysis

To examine in detail the second research question that queries how teachers advocate for equity-based policies and enact equitable teaching practices to support computer science education at their schools, we compiled case studies of three of these educators. Case studies are used to present the school-site experiences of teachers as this method allows for "an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used" (Yin, 1984, p. 23). That is, school reform is inherently context-dependent, and understanding the interaction between structures, policies, and individual teacher and student experiences requires an examination of policies and practices as enacted in particular sociocultural communities. The data for the three case studies presented in this paper is drawn from multiple sources, including a series of interviews and surveys over the course of 13 months.

In creating case studies, we focused on more in-depth examinations of individual teachers' experiences, using data collected from three of the participants who had recently completed their first year of teaching the Exploring Computer Science course with professional development support. All of these teachers were part of the first cohort of "Computer Science for Oregon" teachers. These three teachers were selected as focal case studies based on their own personal

and professional backgrounds and the range of geography and student demographics in the communities in which they work. We also were purposeful in our sampling to highlight areas typically overlooked in computer science education scholarship. For instance, as rural schools are often underrepresented in education policy, we include two different rural areas as cases to shed additional light on the particular needs and opportunities that might take place outside of urban and suburban schools.

RESULTS

Professional Learning Community Fosters Equitable Teaching Disposition

Our investigation into the first research question, how teachers experienced professional learning in Exploring Computer Science professional development, revealed that teachers found value in this space, specifically in terms of increasing their knowledge of content, pedagogical skills, and equitable approaches to recruiting and retaining diverse students in their introductory computer science classes. Overall, in our analysis of surveys, we found that teachers highly regarded the residential setting and community-focused approach to the professional development, with teachers noting that "collaborating with peers" was extremely valuable, and as one teacher stated, an "important activity for my learning during this week was time spent outside the classroom with other teachers, especially conversations with second-year Exploring Computer Science teachers."

In fact, though teacher isolation is often reported by the nation's computer science teachers, after a week of residential professional development, 96% of teachers reported feeling connected to the computing education community in Oregon and the Exploring Computer Science teacher group. Further, this collegial approach to teacher learning deepened teachers' own understandings of how equity, inquiry-based teaching methodologies, and computer science concepts can be interwoven. One teacher, in reporting about how she had previously struggled with the design of a lesson, reported that she had learned from a peer group of teachers about new strategies for the lesson that would support equity and student engagement, noting, "The method that this group used was really helpful to me. Actually, several lessons worked out that way this year. I got new perspectives and multiple ways to present lessons. I loved having the opportunity to work with my old cohort and the new. It was great energy and a fantastic group dynamic."

In describing their own learning and perspective around equity that emerged during the professional development workshop, teachers suggested that they already had varying degrees of familiarity with the equity issues in computer science, they grew in their thinking and skills. Upon reflection, teachers noted the following technical, normative, and pedagogical ways that their understandings of equity shifted as a result of participating in this professional development. None of the teachers addressed political dimensions in their comments about their growth in thinking about computing and equity,

instead, they focused on technical, normative, and pedagogical considerations when talking about their growth. They noted:

Technical Dimensions Such as Course Availability

- Equity in computer science is a huge issue, especially at the college and professional level. I now have a more holistic view of the barriers preventing certain groups from entering the field and staying in the field. Exploring Computer Science is the class that opens the door for a lot of students that would previously be shut out. We need more comprehensive representation in computer science if the solutions for today's problems are going to be solved in a way that helps everyone and doesn't unintentionally exclude others.
- Creating supports to allow anyone to experience computer science as a potential pathway.
- Computer science at least as an introductory class must be taught to all students.

Normative Dimension Such as Misperceptions and Bias

- I believe teachers have to be more active and promote this class as one for ALL students. Many students will miss out if they feel they are not qualified. Too many opportunities are missed by students to take computer science due to a misunderstanding of the curriculum and preconceived racial/gender biases.
- I feel more strongly than ever that computer science needs to change and become more diverse. This professional development reinforces my commitment.

Pedagogical Dimension

- This training provided some great insight on improving my practice with equity and inquiry.
- I now know that it is possible to create a curriculum that is taught through exposing kids to culture.
- I have a better understanding of what equity looks like as far as classroom instruction and student participation
- It is something that needs to be monitored and thought about each lesson.

Importantly, several teachers noted that while their perspectives haven't shifted because "they were already there" in terms of their consideration of equity, a few noted that they came up with "new ways to buck the trend" and collected new tools to back up their equity thinking and practices. One teacher, as part of the first cohort who was experiencing their second summer in Exploring Computer Science professional development, reflected that the first professional development had the most impact, stating, "Not much change in thinking this year, but I had a huge shift in perspective last year." Yet, most second-year teachers reported how their knowledge and agency around addressing equity issues in their own professional practice had deepened, including their repertoire of inclusive recruitment strategies and pedagogical practices.

Descriptive quantitative measures also demonstrate overall increases in how participating teachers reported their own confidence in their pedagogical knowledge, curricular knowledge, and equitable practices for teaching the course as a result of participating in Exploring Computer Science

TABLE 1 | Teachers' confidence as reported in pre- and post-professional development surveys.

| Confidence | Using inquiry- based strategies | Teaching computer science concepts | Using equitable practices to support student learning |
|---|--|------------------------------------|--|
| Pre-professional development confident or very confident | 79% | 55% | 66% |
| Post-professional development confident or very confident | 90% | 76% | 79% |

professional development. Table 1 compares the rates of participants who noted they felt "confident" or "very confident" in using inquiry-based teaching strategies, teaching computing concepts, and using equitable practices to support student learning. As Table 1 demonstrates, post-professional development reports showed dramatically higher rates of confidence across these three focal areas. Of course, these results might be expected after an intensive learning experience, though when interpreted alongside observations and interview data, these survey results reinforce that teachers reported growth in all three areas of focus, including equity.

Case Studies

To study the second research question about teacher agency and enactment of equitable policies and practices, we offer three cases studies of teachers situated in their own school contexts. In each of these cases, we detail how teachers understand their own agency in influencing computer science education policies and inclusive educational practices that impact their own classrooms, especially in terms of broadening participation in computing.

Riverway High School

Carol has been a teacher at Riverway for 10 years. She holds endorsements in science, general science, biology and intermediate mathematics. Last year, she taught one section of Exploring Computer Science, three sections of science, and one section of a college-preparatory advising course, AVID. Riverway, a high school of under a thousand students, is the most diverse school in the state of Oregon, and an AVID Site of Distinction. Carol explains that most of the students at Riverway "are coming from poverty, they would be first-generation postsecondary students, especially graduating from post-secondary, most parents have low levels of education." Sixty-nine percent of the school's students are from minoritized groups, 45 percent are students of color. Many students are recent immigrants or are children of immigrants. The student body represents over one hundred nationalities, whose flags are proudly on display in the school cafeteria. The school supports a significant number of English Language Learners. Carol describes her teaching style as student-centered. To her it is more important to focus on how she will teach, rather than what she will teach. She focuses on high engagement best practices, collaboration, hands-on, movement, games—loading "creative fun." She spends a lot of time establishing relationships with students.

Carol is a steadfast advocate for the students at Riverview, especially urging the need and importance of introductory computer science courses. She explains: "... as a teacher in a diverse school, I have this [...] understanding of the opportunities for the careers that are available for kids. And right now, the computer industry is expanding at a rate that is unbelievable. And there are jobs, really good, high paying jobs ... if they can build the skills in order to attain them." She further states, "I want people to know that they [the students at Riverview] are all really excited about learning and they are all really excited about their future. ... so, our kids, they have dreams and they have goals, and they want to get there, they just, a lot of them, they don't have that knowledge, and their family know how." She adds, "we need to make sure that we are providing real opportunities to learn computer science, especially in underfunded schools and [...] our kids are ready and they are worth it and they deserve the opportunity." Carol devotes a great deal of her time to encouraging and supporting individual students, ensuring that they succeed in her Exploring Computer Science class.

In the 2018–19 academic year, Riverway introduced Exploring Computer Science as an alternative to a required physical science course. The course fulfilled a science requirement option for freshman. This came as a mandate from the school district's upper administration. As the school's Science faculty was not given an opportunity to weigh in, the rollout of Exploring Computer Science as a physical science alternative was contentious. Because it fulfilled a school requirement, three sections of the course were offered. It saw participation from demographics closely resembling that of the school. Carol reports that the equity-focused pedagogical strategies for teaching computer science she was introduced to during the Exploring Computer Science professional development kept students highly engaged and they enjoyed the class. She was able to see that with an appropriate curriculum and intentional pedagogy all students could be successful in an introductory computer science course.

Despite having a high level of student engagement and being a good fit for the high school district's commitment to equity, Exploring Computer Science has been reclassified as one option for receiving science credit, though not required, for the following academic year. Carol reports that due to it being an elective, the class was poorly advertised and drew smaller enrollment numbers. Although the school saw an increase in Advanced Placement computer science enrollment, which Carol attributes to a successful launch of Exploring Computer Science, the course offerings have been reduced to two smaller sections, diminishing the "for all" momentum built during the prior year. Riverway is an example of political barriers to implementing "Computer Science for All." Even though the school district's administration embraced the "for all" tenet for computer science education, there was a lack of buy-in from the science department faculty, who were impacted by the top-down mandate to count Exploring Computer Science as a science credit alternative. As identified in Priestley et al. (2012), this teacher's efforts were constrained by the "temporal, material, and social context"

created by administrative decisions. When teachers are not empowered to collaborate on situating computer science in a school, the sustainability of well-meaning efforts and hard-earned successes are jeopardized.

Villa High School

Maye has been teaching computer science for over a decade. She immigrated to the United States from the Middle East, where she had earned a Master's degree in computer science. After immigrating, she considered working in the technology industry, but decided to instead focus on raising her children. She entered the teaching profession once her children were older and began her career as a Math teacher. Villa High School, where Maye teaches, is located in a town of 55,000 residents. The school serves about 2,300 students: 30% Latinx, 1% Black, 60% qualify for free and reduced lunch, and many students are English Learners. Maye took over computer science classes at Villa from another teacher and immediately fell in love. The classes which she inherited exclusively focused on programming and game development.

Maye quickly noticed that the students who enrolled in her computer science classes were mostly white boys. She decided to focus on shifting the demographics. To this end, she started introducing computer science to middle school students during Villa's Summer STEM camps, intended to introduce students to high school offerings. She targeted a camp that focused on girls and another that focused on children of migrant workers. Maye developed a 1-day computer science introduction which she states was meant to address misconceptions about the subject being just game programming. She also searched out and adapted an introduction to computer science curriculum. She chose Exploring Computer Science because of its equity and inclusive pedagogy focus. She saw a shift in demographics of students taking the introduction to computer science course but there was also high attrition. She is currently working on a multiple-day introduction that will do 1 day of art, 1 day of storytelling and animation, and 2 days of programming games. Maye is passionate about the need to offer computer science to all students. She states: "because it's problem-solving skills, it's literacy, it's reading and writing and attention to detail [...] computer science is not just programming, it is in every aspect of life."

Over the past several years Maye has developed a computer science Career-Technical Education pathway at Villa which covers introduction to computer science (Exploring Computer Science), programming in Visual Basic, advanced programming in C++, dual-enrollment computer programming courses (students are able to earn high school and Community College credit at the same time), and Advanced Placement Computer Science Principles. Maye reports that students can take computer science even if they are not in the pathway, but most don't. The computer science classes count toward the school's certificate of Career-Technical Education pathway completion or can count as electives. Maye is deeply involved in the leadership of state's Computer Science Teachers Association. She works tirelessly on changing the misconception about computer science. She feels that many students don't really understand what they are going to learn when they sign up for the introduction to computer science class. They think they will just be making video games. They are surprised that there is math, problem-solving, collaboration, writing, doing things with pen and paper and not necessarily on a computer. She has been speaking with other teachers, counselors and administrators to address their misconceptions about the course so that they are able to prepare students for what they will be experiencing in the class.

Maye strongly believes that all students can succeed in a computer science course if they have a clear understanding of the nature of the course and are well-supported. However, she is the only teacher at Villa who teaches computer science. Students who are considering the computer science Career-Technical Education are choosing between fifteen Career-Technical Education pathway offerings. Although Maye supports the computer science for all effort, at Villa, only a small number of students have the opportunity to take computer science. This is an example of the technical and normative dimension of computer science education. As pointed to in Lasky (2005), here, teacher agency is constrained by structural policies of the school. Because at Villa computer science is relegated to a career track, it is predominantly available to students who either self-select the track or are recruited based on beliefs about who can and should do computer science. Rather than providing computer science education for all, Villa remains a school that maintains the normative view that computer science is for some.

Cornerstone High School

Luis began his teaching career in Mexico City, Mexico. He came to teach by invitation from a friend. He was studying for a bachelor's degree in architecture, when a friend who was teaching at a private school in Mexico City asked if he would like to teach. Luis replied that he didn't have any teaching experience, but the friend told him that the school would support him, and he started teaching in a middle school. His first class was computers. He later graduated with a bachelor's degree in Architectural Engineering and a minor in teaching. In the US, his degree from Mexico transferred and he has been teaching math and science. In Mexico, before coming to the US, he was teaching at a high school. He taught in the occupational track, classes focused on architectural engineering and construction. He also taught art classes at the university. During the 2018-19 academic year, Luis and another teacher at Cornerstone each taught a section of Exploring Computer Science for the first time. The course will be offered again next year and both teachers are excited to continue teaching computer science at the school.

Cornerstone High School, where Luis teaches Math, Science, AVID and Exploring Computer Science, is a Spanish-English bilingual public charter school. It is located in a rural town, with about 11,000 residents. The school has a history with the local Latinx community and has a large population of Latinx students. It is a K-12 school and most students have been at the school from an early age. Luis reports that the students at this school have been working at becoming bilingual since elementary school. "Part of the motivation of our principal is to create a culture ... a bilingual culture." There are 64 students in the high school. According to Luis, it is important for students to learn computer science because it is everywhere. In his case, he thinks

that learning computer science opened doors for him and has helped him not only in his career but also in his daily life. Luis sees it as a subject that can open doors for students as it did for him. He states, "[i]f we are trying to help our students to overcome from that economic situation that they are living with, it could open some doors for them ... they could be ready for college." Additionally, he is aware that there are people out there who would enjoy knowing the behind the scenes of computers, how they work, who would not normally have the opportunity to, and "since that's what our school is all about ... we got a lot of girls, high Latinx population, and these are traditionally underserved in the computer industry, why not introduce them and see if this is a thing they would love."

Cornerstone is an example of a sustainable computer science for all approach. Both Luis and his colleague individually approached the school principal and advocated for the need to have an introductory computer science course at the school. His colleague had previously done Hour of Code activities at the high school but they both believed that they needed a more sustained course. Luis also felt that the school needed an engaging and supportive introductory course. Their principal contacted the Oregon Department of Education about available curriculum and was told about the Exploring Computer Science Professional Development program, which focused on supporting Oregon teachers. Luis and the colleague attended the professional development and report that the equity and inclusive strategies they learned helped them provide an introductory experience that resulted in a high level of engagement and success.

The Exploring Computer Science class at Cornerstone is required for all students. Even though some students struggled or took some time to get engaged, Luis reports that they had to keep trying, and were incentivized to complete assignments in order to earn credit and fulfill the requirement. Because there is buy-in about "Computer Science for All" from administration and teachers, both Exploring Computer Science teachers at Cornerstone could focus on using inclusive pedagogy strategies to support their students and shift the normative beliefs of who can do computer science. In this case, teacher agency is best contextualized as in Biesta and Tedder (2007), an alignment between teachers' intentions/actions, school environment, and administration. The momentum at the school is strong enough that Luis's colleague has started looking into adding Advanced Placement Computer Science Principles course as the follow-up course to Exploring Computer Science.

DISCUSSION

These case studies elucidate the key problems of practice and opportunities for critical hope that teachers hold as they teach "Computer Science for All." Though their contexts vary in terms of geography, identity, and student demographics, these teachers collectively shed light on the lived practices of democratizing computer science education. With the curricular, pedagogical, and policy support of the "Computer Science for Oregon" initiative, the teacher professional learning results, alongside the

TABLE 2 | Developing equity-focused practices for computer science school reform.

| Dimensions of school reform for equity | Supportive policies and practices that supports equity and teacher agency in statewide computer science | | |
|--|---|--|--|
| Technical | Adoption of introductory computer science course incorporated into school schedule A common curriculum supports teacher collaboration and can assess inclusive student learning Culturally responsive curricular material supports student learning, especially for historically underrepresented groups Course coded to be available to students across academic "tracks" | | |
| Pedagogical | Professional development that supports inquiry- and equity-oriented instruction Collaboration with other teachers teaching the same course at the same school Collaboration with other teachers outside of school, including other "Computer Science for All" teachers, educators part of Computer Science Teachers Association state network | | |
| Political | Computer science courses counts toward a graduation requirement Teacher support for offering introductory and inclusive computer science courses School-level counselor and teacher faculty support from other disciplines/programs Top-down support from school leadership, including principals Top-down support from school district leadership, including superintendents and school boards | | |
| Normative | Educator beliefs about suitability of computer science course for all students Opportunity to study computer science designed to be available and equitable for all students as part of general education track Sufficient number of teachers assigned by school to support computer science courses for all students at high school | | |

case studies, detail the multiple factors that must be considered and attended to in efforts to democratize computer science.

Drawing from these findings and connecting the narratives of teachers with the theoretical framework on equity-oriented school reform, we have compiled the following set of practices that support a social justice approach to broadening participation in secondary computer science (Table 2). To supplement and apply a racially- and gender-conscious approach to broadening participation in computing, we categorize these findings in terms of the technical, normative, political, and pedagogical dimensions that have been found to support computer science for all students.

The descriptions of teacher agency, in terms of possibilities and constraints, also indicate that policy and teacher education efforts, when connected in meaningful ways, can help sustain the availability of computer science courses and necessary educational resources. With an equity-focused professional development program, we witnessed how teachers can enact agency within their particular educational environment to influence regional and statewide reform efforts to broaden

participation in computing education. The results from this study also highlight that equity must remain at the core of state-wide reform effort, or else efforts will likely raise opportunities for the same overrepresented groups.

The interplay between structures and individual beliefs also suggest that to ensure that computer science education will take hold, and be sustainable, for all students, schools must simultaneously attend to the technical, pedagogical, political, and normative dimensions of "Computer Science for All" efforts. While professional development sessions and statewide initiatives can support the introduction of inclusive and evidence-based curriculum and support professional learning for teachers, attending to the political climate and normative notions of who belongs in computer science is a key strategy for nurturing school-level buy-in for computer science being placed in the core curriculum. These findings underscore that before scaling statewide reform efforts in computing, we must attend to the policies, practices, and belief systems in schools to ensure reform efforts do not just increase the numbers of students enrolling in computing classes, but actually broaden the engagement and participation rates of historically minoritized students.

Finally, we cannot overstate the importance of teachers as social change agents in expanding normative notions about who belongs in computer science classes in twenty-first century high schools. Overwhelmingly, the case studies showcase the tremendous advocacy efforts of computer science teachers in serving as change agents diversifying and democratizing Oregon high school computer science education. The teachers in this study exemplified how broadening participation in computing requires a committed network of educators who enact social justice principles both within their schools and classrooms, and as part of the large computer science teacher community.

CONCLUSION

The research presented in this paper documents how a statewide initiative aiming to provide more equitable access and participation in high school computer science courses supported teacher learning and was generative for school-level

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reform. Though the professional learning for teachers showed a positive impact in preparing teachers to teach computer science and address local policy with equity principles, we discovered key barriers and opportunities at school, district, regional, and state levels impeded and propelled initial efforts for enacting teacher agency at reaching "Computer Science for All" in schools. Still, incremental progress has increased learning opportunities for hundreds of Oregon students. The knowledge gained from this study of state computer science implementation can inform the efforts of other states seeking to identify whole-school support strategies to broaden participation in high school computing.

DATA AVAILABILITY STATEMENT

The datasets generated for this study will not be made publicly available due to confidentiality concerns for participants.

ETHICS STATEMENT

This study involved human participants was reviewed and approved by the University of Oregon Research Compliance Services. The participants provided informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

JG and MS led efforts in data collection and analysis. JHu and JHo contributed to the program design and implementation. All authors were involved in the writing of this paper.

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Design Thinking-Based STEM Learning: Preliminary Results on Achieving Scale and Sustainability Through the IGNITE Model

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Solutions to the most pressing global issues require creative innovators, critical thinkers, and problem-solvers. Yet rural communities globally often lack the resources to provide adequate STEM design-thinking coursework at the primary and secondary school level. Ignite is a novel approach to STEM curricula, providing a framework that addresses this disparity by using design thinking. Students are empowered to understand the sustainable development goals (SDGs) through the development of technological solutions to community or health problems; problems they may relate to or directly experience. Each Ignite curriculum follows a basic formula: (1) students learn a specific set of engineering skills, (2) students work in teams to use the human-centered design process, and (3) they develop a solution to a (SDG) using the engineering skills they learned. Ignite began with just four undergraduate students who participated in a design-thinking biomedical engineering course taught at Duke University. Through evidence-based peer-led co-learning model, 79 additional students from Guatemala and the U.S. have become trainers and have taught more than 1,500 students across 16 schools in Guatemala since 2017 with preliminary data suggesting the program has a positive impact on student perceptions of STEM in the inaugural school where Ignite was launched, Instituto Indigena Nuestra Senora del Socorro (IINSS). Preliminary data suggests that this program is both scalable and sustainable due to its peer-led, student learning model and due to a local partner, FUNDEGUA, who is managing the implementation of Ignite locally in Guatemala.

Keywords: STEM – science technology engineering mathematics, design-thinking methodology, co-learning, LMIC, sustainable development goals – SDG

INTRODUCTION

Access to quality education in STEM is linked to reduced poverty, economic growth, and more resilient democracies; these disciplines play an essential role in addressing many of the Sustainable Development Goals (SDGs). International organizations, such as USAID and UNESCO have moved STEM education to the forefront of their institutional goals as careers in STEM fields are

projected to see exponential growth in the twenty-first century (UNESCO, 2017). Creation of sustainable and scalable programs to address disparities in access to STEM education continues to be a challenge. Programs implemented by international nonprofits and think tanks often lack the resources to scale the number of teachers they can provide to any given program (Elayah, 2016). Additionally, the pedagogical methods used can be inappropriate for the specific context and culture for which they are intended. An example of this is the importation of foreign instructor labor which not only results in limited input by the intended beneficiaries (Waisbord, 2008) and little interest from the target population, but also fails to build local educational workforce capacity. To ensure students benefit sustainably and equitably from programs originally designed by foreign institutions, educators should pivot and focus on building workforce capacity and independence within these communities. To accomplish this, it is essential that educators work with the community and not "for" it. The co-learning framework and peer-led learning are two ways that Ignite aims to improve the sustainability and scalability of STEM coursework in communities where this type of education is absent.

PEDAGOGICAL FRAMEWORK

Critical Pedagogy, also known as co-learning, experimental, cooperative, and/or collaborative learning, is a methodology where students and teachers create a collaborative learning environment. This cultivates a learning atmosphere of empathy and mutual understanding between teacher and student (Mayo, 1995; Freire, 2000). The teacher assumes that he or she will learn just as much from the students as the students learn from the teacher. Students are empowered as experts on the issues they face daily and those issues are used as a launchpad for rich classroom discussion. Co-learning is a form of active, dynamic learning in contrast to traditional, passive teaching formats, such as the standard lecture. Utilizing team-based learning, such as small group discussions and class-wide debates is integral to an active approach to education. Co-learning has been shown to improve critical thinking, enhance communication skills, and improve sociocultural awareness for both teachers and students (Baines et al., 2007). Research indicates that this method significantly increases student performance (Scager et al., 2016). It has been widely used within ESL (English as a Second Language) classrooms and adopted across subjects in undergraduate education programs with success for at least 20 years (Frye, 1999).

Co-learning is becoming more popular in universities and well-funded secondary schools. At one of the highest performing secondary schools in Hong Kong, co-learning is a mandatory part of the school's curriculum. This program places teachers in training within schools that have been identified as having a great

Abbreviations: SDG, Sustainable Development Goals; FUNDEGUA, Fundación Desarrolla Guatemala para la Educación y Salud or Development Foundation of Guatemala for Education and Health; STEM, Science, Technology, Engineering, and Math; PLTL, Peer Led Teacher Learning; SLT, Situated Learner Theory; HCD, Human-centered Design; IINSS, Instituto Indígena Nuestra Señora del Socorro.

need for well-trained educators. This positions new teachers as both co-educators and co-learners, the latter allowing students to learn about a community that may be foreign to them. Teachers are trained to incorporate their students' experiential expertise into lesson plans, allowing students to share their personal experiences and developed understanding of their world. When surveyed, teachers felt more attentive to student needs and test scores significantly improved (Harfitt, 2018).

While co-learning emphasizes mutual respect between teacher and student, peer-led team learning (PLTL) can build local capacity by increasing the educational workforce informally. The "teacher" in PLTL is a student (or peer) who has successfully trained on how to facilitate small group learning on a specific topic (Quitadamo et al., 2009). One research university implemented PLTL in undergraduate science and math courses. They found that under-performing students improved their ability to identify and critically analyze problems and female students improved their test scores more frequently than their male counterparts (Quitadamo et al., 2009). PLTL programs also improve student retention in STEM fields at the undergraduate level, as well as improve student perceptions of STEM careers (Bowling et al., 2015).

A meta-analysis of various PLTL programs revealed that it had a significant positive impact on the lifelong trajectory of student learning (Ruiza-Primo et al., 2011). Another meta-analysis revealed that students with this kind of learning experience had on average, a 16% increase in test scores (Quitadamo et al., 2009). A program called Near-Peer Education, focused on educating secondary level students, improved student engagement in STEM coursework. Students in the program indicated that they were encouraged by the ability to explore topics with young professionals closer to their age, and this effect was enhanced by the relatability of the learning experience (Tenenbaum et al., 2014).

Co-learning and the PLTL methodology are similar in the way they transform learning into a dynamic, active, and collaborative experience. Both focus on placing the learner and their unique experiences at the center of the curriculum, choosing topics and modules based on those experiences. While such methods have been widely implemented at the collegiate level over the last 30 years—with a century of theoretical inquiry supporting this endeavor—they have rarely been implemented at the primary and secondary level. This is a unique opportunity to make high-quality STEM education more accessible to low and middle-income communities. Furthermore, few studies have described the impact of PLTL and co-learning programs on peer educators themselves.

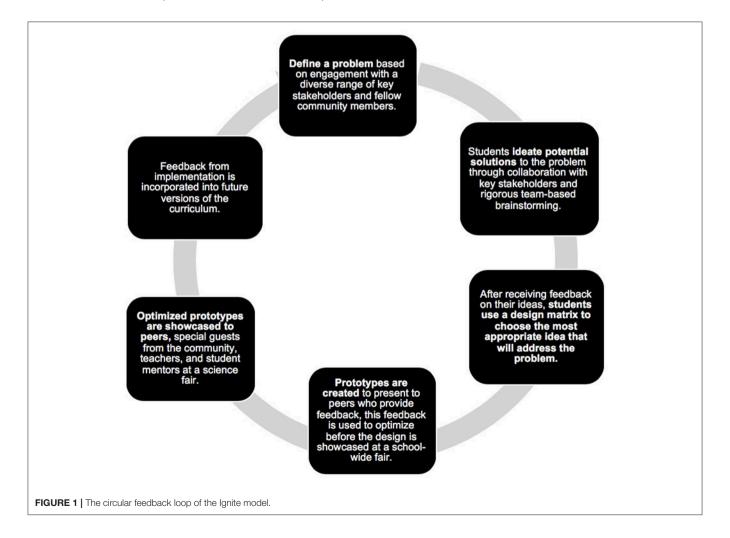
Can we mobilize the demonstrable power of peer-led colearning for elementary, middle and high school students? Can we do this in communities where there is a lack of design thinking-based STEM education? Can we make this innovative program both sustainable and scalable? This is the premise for Ignite, a design thinking-based STEM curriculum focused on the Sustainable Development Goals (SDGs). Ignite relies on peer-to-peer collaborative learning, in which trained student-instructors teach STEM concepts to peers in low-resource communities. This paper evaluates preliminary data on the

impact of this model on trainers and trainees and includes a preliminary assessment of the impact on students in Guatemala from 2017 to 2019.

LEARNING MODEL

Ignite is a design thinking program that focuses on addressing one SDG per module, using STEM concepts. The framework for this model has been published previously (Mueller et al., 2019). The core aspects of the program include: (1) the ability to define a problem based on a community and/or health need that the student can relate to, (2) ability to create solutions to those challenges using technology, and (3) being able to create a virtuous cycle through peer-to-peer instruction and team-based activities. The program structure is based on the concept of human-centered design (HCD) and can be completed in as little as 2 days and as many as 8 weeks depending on frequency of class time and chosen course structure (i.e., afterschool program, monthly workshop, etc.). Ignite was started at Duke University and is now sustained by the FUNDEGUA Foundation in Guatemala (one of Duke's key partner sites). The co-founder of this organization, Gabriela Asturias, participated in a course at Duke University in 2017, which offered an early form of the Ignite curriculum to university students studying global health and/or biomedical engineering. She then worked with three other students to adopt the curriculum for primary and secondary education in her home country, Guatemala. Together they implemented the program for the first time in the summer of 2017. Since then, FUNDEGUA has continuously iterated the curriculum based on feedback from educators and students in participating schools.

Ignite students work through the 5-stages of HCD: (1) empathize, (2) define a problem, (3) ideate and brainstorm solutions, (4) prototype, and (5) field test with feedback (IDEO) (Figure 1). This model is designed to improve critical thinking and creative problem-solving skills, in addition to the engineering skills needed to bring an idea from sketch to prototype. During the "empathize" and "define" phases, students engage directly with their peers to understand local community needs regarding a challenge directly related to the SDGs. Alternatively, the model can leverage student's specific knowledge of their local communities to engage them in STEM activities (co-learning). In the "ideate" and "prototype" phases, students work in teams to brainstorm solutions and to use feedback to iterate on their designs. Students then present a design matrix, describe resource constraints, and receive feedback from peers.



After this presentation, there is typically a short Q&A where panel members, including teachers and business owners from the community, ask questions to give additional feedback. In the "deliver" phase, students present their prototype to the school and special guests, like a science fair. In the past, students have continued their projects beyond the formal conclusion of Ignite and have tested their solutions as well as continued to iterate their prototypes and sold them. The current Ignite curriculum does not include a formal mechanism for field testing, rather, it empowers students to begin this cycle of design. The cycle begins again when former instructors train their former students to become new instructors and trainers for a new cohort of Ignite learners. So far, trainers from Emory University, the University of Michigan, the American School of Guatemala, Universidad de Valle de Guatemala and the NGO Asociación Amigos del Lago de Atitlán have participated as both students and trainers.

The Evolution of the Ignite Model in Guatemala

In the Spring of 2017, Duke University students participated in the course BME 290—Global Women's Health Technologies, which offered the Ignite curriculum. This course required that students work and empathize with an international community to define a community challenge associated with one of the SDGs. The inaugural challenge was energy poverty (SDG #7). This selection was due to the elevated number of low resource communities in Guatemala impacted by a lack of access to lighting at night. Students were tasked with ideating potential solutions, and rapidly prototyping a design with significant feedback from their peers. Following conclusion of the course, three students applied for funding opportunities to develop and implement an Ignite curriculum in Guatemala. Prior to arriving in the field, the curriculum was developed at Duke University. In the summer of 2017, student trainers traveled to Guatemala and taught the curriculum to 79 female students in grades 10 through 12 for 8 weeks at the Instituto Indígena Nuestra Señora del Socorro (IINSS). Additionally, 20 male and female 11th-12th grade students underwent a 1-day workshop at the Instituto Mixto Intercultural Santiago and three female university students participated in another 1-day workshop at the Universidad Francisco Marroquín. Following the summer 2017 initial implementation, FUNDEGUA adopted the curriculum and continued to iterate locally.

In 2018 a follow-up curriculum on water contamination (SDG #6) was developed by another cohort of Duke students. This topic was chosen because IINSS sits on the second largest lake in the country of Guatemala, Lake Atitlán, which is an important source of income for the region, yet heavily polluted. Duke students from the prior summer served as trainers to two new student-trainers for 12 weeks to develop the curriculum with input from FUNDEGUA and IINSS. This involved participation in the BME 290 course and weekly meetings to co-develop the curriculum with the new trainers. In the summer of 2018, the newly trained Dukes students and one Guatemalan trainee-turned-trainer taught the light and water curricula to 79 middle and high-school students from 7th, 8th, 9th, and 11th grade,

35 who participated the year before were taught the water curriculum and 44 new students learned the light curriculum. The trainer from Guatemala who worked with IINSS was taught by the two Duke students. In 2019, two additional Duke trainers taught 41 students from 7th to 9th grade the water curriculum only at IINSS (4-week course).

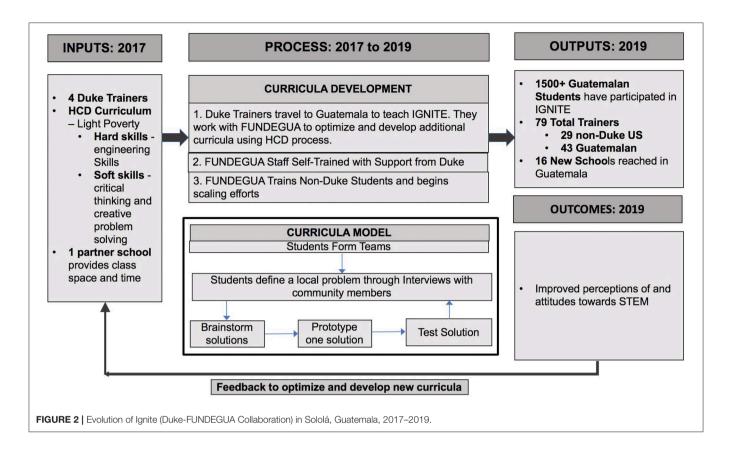
To ensure program sustainability FUNDEGUA had one staff member learn the curriculum independently via online resources in 2018. This staff member independently worked to train students from Emory University (4 students), the University of Michigan (12 students), the Universidad de Valle de Guatemala (13 students), the American School of Guatemala (6 students), and the NGO Asociación Amigos del Lago de Atitlán (22 staff). Concurrently, FUNDEGUA worked with partner schools across Guatemala to optimize the curricula and evaluation metrics based on teacher and student input. Partner schools were chosen through a two-step process. First, a representative from FUNDEGUA interviewed he school principal. Second, they conducted focus groups with teachers and students. The goal of each step was to introduce the Ignite model while assessing school-wide interest and community level buy-in to establish if Ignite would be a good fit.

RESULTS

Ignite in Guatemala began in the Instituto Indígena Nuestra Señora del Socorro (IINSS) in Sololá. An early assessment of impact of Ignite on these students is presented later in the results section. Through the train-the-trainer method, FUNDEGUA has now implemented Ignite in 16 different schools across six municipalities in Guatemala: Barberena, Mixco, San Andrés Semetabaj, San Lucas Tolimán, Antigua Guatemala, and Guatemala City. Two of these schools participated in IGNITE for two consecutive years and one for three. Starting with just four Duke trainers and 79 Guatemalan students in the first cohort in 2017, 76 additional trainers have learned the Ignite curriculum since the first cohort in 2017, and they have collectively reached over 1,500 additional students across Guatemala, the majority of which were female (Figure 2). Overall, the majority of trainers (69) majored in STEM and many studied engineering specifically at the university level (30). All trainers were between the ages of 17 and 23 at the time of Ignite implementation.

Scaling the Program in Guatemala Through the Train-the-Trainer Model

The exact methodology by which instructors were trained evolved organically through 10 different cohorts from 2017 to 2019: eight from Duke University, one FUNDEGUA staff member, 25 from the University of Michigan, four from Emory University, 13 from el Universidad del Valle de Guatemala, six from the American High School of Guatemala and 22 from the non-profit Amigos del Lago. Each Duke cohort trained the following Duke cohorts (2017 taught 2018, and 2018 taught 2019). The Duke cohort from 2017 trained the Guatemalan trainee that participated in the 2018 Duke cohort, as well as the first University of Michigan cohort (2018). The other



trainees were trained by FUNDEGUA staff either in-person or through online video calls or with comprehensive resources for self-study. All training methods were adapted from the activities and readings available to students in BME 290 at Duke University, where Ignite originated. The training model was adjusted for the specific needs and time constraints of each new cohort. Two unique training approaches were used. In the first approach, instructors were trained through in-person workshops hosted by former Ignite instructors with supplemental readings to reinforce the learning objectives. In the second approach, training was conducted online via Skype, supplemental readings, and videos from open-source education platforms. FUNDEGUA reports that 67.1% of all trainers learned through in-person workshops, 31.6% learned through online methods, and 1.3% taught themselves independently. The Duke cohorts learned in-person by enrolling in the BME 290 course and peer-topeer instruction from former Ignite trainers at Duke. The Universidad del Valle de Guatemala, American High School of Guatemala, non-profit Amigos del Lago and Emory University cohorts learned in-person and received supplemental materials to reinforce learning. The University of Michigan cohorts learned through online methods.

To begin iterating a sustainable evaluation strategy of the efficacy of each training method, FUNDEGUA started to implement and gather feedback on a pre- and post-knowledge acquisition test for the cohorts in the Summer of 2019 of the non-profit Amigos del Lago (n=22) and American School of Guatemala (n=6). It is important to note that these

groups completed in-person workshop training and received supplementary material to reinforce learning. FUNDEGUA staff assessed knowledge acquisition in-person during the sessions before moving to the next learning objective. Activities related to the material taught were completed using Google Forms between training sessions. Lastly, a pre- and post-knowledge acquisition test was shared using the Qualtrics platform, to assess acceptability and ease of use. For this test, trainees were asked to solve a series of STEM knowledge, human-centered design and critical thinking problems upon completion of the workshops. The survey also included questions on best practices for important safety measures. The goal of testing an evaluation strategy was to determine the most effective measure to ensure the foundational knowledge and skills were acquired, making sure the trainees were prepared to replicate Ignite. FUNDEGUA staff determined that administering a pre- and post-knowledge acquisition test is important to ensure a baseline is achieved. They also found that including activities after each session is necessary to understand if reinforcement of key foundational topics needs to be delivered before the training is complete.

Impact on Trainers

Anecdotal evidence reported by FUNDEGUA staff suggests that many of the trainers remained involved in some aspect of Ignite after initial implementation. Several indicated that they trained other cohorts of Ignite instructors, with Emory students formalizing their participation through the creation of a university-sponsored Ignite club and University of Michigan

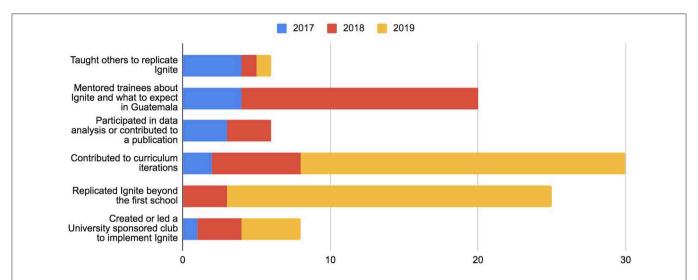


FIGURE 3 | Continued involvement in Ignite beyond initial participation from 2017 to 2019. Some Ignite trainers were involved in Ignite after their first implementation in more than one way, thus the numbers don't reflect the total trainers of Ignite from 2017 to 2019 which was 79.

students making Ignite in Guatemala their annual engineering service-learning activity. The various ways in which trainers stayed involved is summarized in Figure 3. The 2019 cohorts have not been included as mentoring or training other students because the training for 2020 implementation had not started at the time of publication of this paper. Club leads and FUNDEGUA staff have reported on trainer involvement beyond initial implementation, which are summarized in Figure 3. Several students remained involved in research and development, participating in aspects of the program, such as data analysis. Among those who did not remain directly involved in Ignite, at least one trainer indicated that they remained in contact with their students via social media. Some trainers told FUNDEGUA staff that Ignite positively impacted their courses, extracurricular activities, career and/or graduate school choice. Several trainers indicated that Ignite inspired them to pursue coursework in education and/or extracurricular activities. It is interesting to note that Guatemalan trainers were more involved in iterating the curriculum for new contexts, while US trainers remained more involved in mentoring new trainers.

To obtain a more nuanced understanding of the impact of Ignite's training method on instructors, in-depth interviews were conducted with four Ignite trainer representatives, one from each of four different Universities across the U.S. and Guatemala (Duke University, the University of Michigan, Emory University and Universidad del Valle de Guatemala). All interviews were approved through Duke University's International Review Board [IRB#2017-0507], and participants were asked permission to disclose the name of the university which they attend. Participants were asked broad questions related to how they became involved in Ignite, how they were trained, what they most enjoyed, and how it had impacted their life afterwards (see **Appendix 1**). The audio-recordings were transcribed twice by two different researchers and then coded for themes using a Grounded Theory approach, which facilitates the emergence of

patterns in qualitative data analysis (Martin and Turner, 1986). Overlapping themes were discussed between the researchers to decide on the final outcome of the study. It is of importance to note that of the 13 questions asked, only four questions were answered by all participants (**Table 1**).

These four questions revealed the strengths of the Ignite model as detailed in Table 1. First, all trainers faced unexpected challenges in the field that they were able to overcome seemingly from the open-endedness of the Ignite model. Second, most trainers indicated that the freedom to iterate on the curriculum based on student input and feedback from other trainers was a positive aspect of the program. Approximately 40% of trainers modified the Ignite curriculum during their instruction and 15% continued to be engaged in Ignite or a related program. Third, half of the trainers discussed the importance of human-centered design and how they believed it impacted their teaching style and student interest. Finally, trainers stayed involved with Ignite or participated in a similar research project even after they had completed their initial program. In particular, one trainer from Emory stated that he started an Ignite club at his University where they have continued iterating on the curriculum and working with FUNDEGUA closely to send multiple cohorts of students to Guatemala each year.

Impact on Student Perceptions of STEM

Pre- and post- implementation surveys were distributed at IINNS in the 2018 (n=64) and 2019 (n=38) cohorts to understand how participation in Ignite might have shifted student attitudes toward STEM. The surveys were designed using the Knowledge, Attitudes, and Practices (KAP) methodology. Several questions on inclinations to contribute to their communities were included for the benefit of the implementers though they are not included as part of the STEM positivity analysis. The pre- and post- survey distributed was exactly the same and included

TABLE 1 | Emergent themes from in-depth trainer interviews.

| Institution | Duke U | Emory U | Universidad del Valle de Guatemala | University of Michigan |
|---|--|--|---|--|
| Grades taught | 7th-9th, 11th | 7th-9th | 7th-10th | 10th-11th |
| Gender and Intended Major | Female | Male | Female | Male |
| | Global Health | Health Sciences/Pre-med | Engineering | Engineering |
| Did you face any unexpected challenges implementing Ignite curriculum? | The students knew little about adding and subtracting fractions, a huge part of the curriculum. We had to slow the curriculum down | Students wanted to learn more than the curriculum we had, so we improvised by adding new modules, such as one on local plant biology | Our team realized we needed to teach students basic math skills, students who were in 11th grade | Difficult for the school to find class time for us to teach, we modified the curriculum so it would be shorter |
| Did you iterate on the Ignite curriculum while in the field? | Yep, had to add additional classes on fractions | Once the students finished and were bored, we added new classes on different topics like motors | Very little, we adjusted the Spanish to ensure it was appropriate for the context [Guatemala] | Had to add several more teaching sessions to help students with basic math skills to complete Ignite |
| What role do you believe human centered design play in the student engagement and interest in the curriculum? | Students were way more engaged and excited to be able to use their own ideas in the classroom setting through design-thinking | The students seemedlike they had never been given the freedom to explore their own ideas in the way of design-thinking | I wish that this [human centered design] had been taught in my high school, it was cool seeing the students take pride in their ideas | Students felt valued and heard, very cool |
| Did you continue participating in Ignite after initial implementation? | Only in developing evaluation tools and analyzing data | Started a club that is growing really fast at Emory, sending students every summer now | Tried to recruit more students from our university to teach | Started small student group that sends people to teach Ignite each year |

35 questions in total. Questions were broken down by subject area (see Appendix 2). For each subject, students answered questions, such as whether they would take math, science, or engineering and technology classes in the future, whether they would be interested to pursue a career in the subject, and how well they felt they performed in each subject as well as community outreach questions. Data was collected by a Duke Trainer with IRB approval [IRB# 2017-0507] and no personal identifiable information was gathered other than grade level. The 2018 cohort taught 7th, 8th, 9th, and 11th grade students. The 2019 cohort only taught 7th, 8th, and 9th grade students. Only 64 of the 79 students from IINNS who participated in 2018 completed both the pre- and postsurvey, thus the sample size for that year is reported as such. In 2019, 41 students participated, but only 38 students completed the pre- and post- survey in full, thus the sample size for that year is reported as such. The survey responses from 2018 to 2019 were combined for the purposes of this analysis.

Students answered survey questions on a Likert scale with response options: (1) Not at All (2) No (3) Neutral (4) Yes (5) Absolutely. Their responses were quantified into levels of positivity toward STEM, where Not at All = 1, No = 2, Neutral = 3, Yes = 4, and Absolutely = 5. The higher their score, the more positively they felt toward STEM. Their pre-survey responses were compared to their post-survey responses. Their responses were stratified by grade level. For each question in the survey (Math, Science, Engineering and Technology, and Community Contribution), all the scores (1–5) that the students recorded for the questions in a particular section (for instance, Math) were summed and divided by the total number of

observations in the entire section. These results are shown in **Table 2**.

Statistical hypothesis testing and confidence intervals were used to evaluate if the differences in levels of positivity toward STEM before and after implementation was significant. To discern which grade had the greatest shift in attitudes, the results were stratified by grade level. To determine future steps for the program, the results were then evaluated by subject matter (math, science, engineering, and technology). Simulation-based inference methods were conducted, and the null hypothesis was that there would be no difference in the mean level of the student's positivity toward STEM before and after Ignite. The alternative hypothesis was that there is a difference (Table 2).

Including every grade level, the mean level of positivity toward STEM increased by 0.093 points after the implementation of Ignite, with 95% confidence interval of 0.031–0.155, thus showing there was a statistically significant difference as seen in Table 2. Furthermore, when the results were stratified by grade level, students in 11th grade demonstrated the greatest difference in level of positivity toward STEM, on average, with an increase of 0.237 points (95% confidence interval of 0.133-0.340). The other grades did not demonstrate statistically significant differences in mean overall levels of positivity toward STEM. However, when stratified by subject matter, 7th grade students demonstrated a significant increase in levels of positivity toward Engineering and Technology. Furthermore, including all grade levels, students demonstrated a statistically significant increase in mean level of positivity toward Engineering and Technology of 0.137 points (95% confidence interval of 0.049-0.225 points). Lastly, there were small increases in the mean level of positivity toward math and science (see Appendix 3).

TABLE 2 | Shifts in positive attitudes and perceptions of STEM.

| | n | Math | Science | Engineering and technology | Overall |
|------------|-----|-----------------|-----------------|----------------------------|-----------------|
| 7th grade | 16 | -0.199 | -0.151 | 0.293 | 0.023 |
| | | (-0.521, 0.117) | (-0.430, 0.126) | (0.070, 0.514)* | (-0.135, 0.182) |
| 8th grade | 21 | -0.122 | 0.048 | 0.074 | 0.024 |
| | | (-0.451, 0.213) | (-0.225, 0.322) | (-0.141, 0.280) | (-0.136, 0.180) |
| 9th grade | 36 | 0.058 | 0.06 | 0.015 | 0.041 |
| | | (-0.163, 0.273) | (-0.126, 0.241) | (-0.141, 0.169) | (-0.064, 0.145) |
| 11th grade | 29 | 0.338 | 0.153 | 0.23 | 0.237 |
| | | (0.115, 0.565)* | (-0.019, 0.330) | (0.083, 0.378)* | (0.133, 0.340)* |
| All | 102 | 0.067 | 0.05 | 0.137 | 0.093 |
| | | (-0.064, 0.200) | (-0.058, 0.157) | (0.049, 0.225)* | (0.031, 0.155)* |

This table shows the change in attitude of the students who participated in the study. The change in attitude was calculated as the difference in the mean level of positivity between the pre and post surveys. In each cell, we show the estimated difference in mean levels of positivity and the associated 95% confidence interval. Entries in bold and with an (*) denote a significant change in the pre and post positivity scores.

DISCUSSION

Ignite utilizes evidence-based learning methodologies, colearning, and peer-led teacher learning, to make design thinkingbased STEM coursework more appealing. It does so by anchoring these methods within a community-based problem that students face daily or in which students have a perceived interest. The program started with just four Ignite trainers and 79 students taught within one school. There are now 79 Ignite trainers and more than 1,500 students who have participated in the program across 16 schools in Guatemala. The peer-to-peer learning model is essential to scaling Ignite. In addition, peerto-peer learning benefits trainers and students alike in ways that might transform education and career trajectories. Just as the Near-Peer education program indicated that the increase in student scores was partly due to their ability to explore topics with young STEM professionals close to their age group (Tenenbaum et al., 2014). Ignite engages younger teachers who might have a more dynamic impact on students' academic trajectories. Moreover, the empowering nature of Ignite could foster an interest in STEM among students who might have access, but who would not participate otherwise. The high prevalence of university age student involvement could indicate that participating in Ignite is most appealing to students between the ages of 18 and 22, perhaps because students at this age are exploring different career paths and interests. The initial resources needed are minimal, further suggesting the program is sustainable through the peer-to-peer model. Although there were initial start-up costs to send trainers from a foreign university, we have demonstrated that the peer-to-peer training model allows local university and high school students to implement Ignite, making the program sustainable. Further, the significant increases in positive attitudes toward STEM amongst the students trained at IINSS indicate that highly motivated students could act as peer teachers and mentors of Ignite within their schools. This framework could allow for significantly more students to be exposed to design thinking-based STEM coursework than through traditional approaches. Although this study only discusses implementation in Guatemala from 2017 to 2019, Ignite has enormous potential beyond the efforts described. The HCD framework can be applied to any community need if the trainer has or can obtain knowledge of the specific topic at the center of that need.

It is important to note that all 79 trainers volunteered to participate in the Ignite program without compensation. Each cohort funded their own travel and materials cost through grants that all individuals applied for independently, without guidance from the program directors at Duke University. FUNDEGUA has received some compensation in the form of training stipends from select partner schools. The foundation reports that they have only received compensation from schools with the resources and willingness to do so, specifically schools who would like to compensate their team to help them to rapidly modify the curriculum for certain unique contexts. No one who participated received tangible monetary or vocational compensation for training or being trained, and no one paid any amount to receive the course and participants did not receive grades. Thus, it can be inferred that the follow-through seen by both trainers and students after the project ends in relation to the program's ability to empower and inspire action among participants. Additionally, the fact that many trainers remained engaged with Ignite suggests that it had a significant impact on them. This is consistent with other studies showing how peer led education can empower and impact the trainers just as much as the students (Badura et al., 2000). The various disciplines the trainers came from is another potentially important factor in the continued success of the Ignite learning model. This is because interdisciplinary peer-led teams at the undergraduate level have been shown to yield better learning outcomes than teams from a singular discipline, such as biomedical engineering (Carlson et al., 2016). As Figure 3 indicates, Guatemalan trainers remained more involved in iterating and creating new curricula for different contexts, while US trainers focused on mentoring new trainers. This could be attributed to the fact that Guatemalan trainers understand the culture and context of the partner schools in more depth, making it easier for them to identify weaknesses in the curriculum that should be addressed. Moreover, Figure 3 shows that over time more trainers became involved in iterating the curriculum, this points to the replicability of the model. Future studies should explore replicability to determine its significance.

There were stark differences in the composition of trainers who learned the curriculum in-person vs. online. All online trainings were conducted via Skype, open-source educational videos through YouTube, and one-on-one calls. Virtual training always occurred with students from universities across the United States. Trainers who engaged in watching videos, supplemental readings, and Skype calls were able to implement the program alongside those who had been formally trained through in-person workshops. The variety of training methods further suggests the replicability of the program. If trainers can learn the materials and basic concepts of design-thinking through a variety of structured mediums, then the program model is robust enough to provide the structure needed for variegated methods of learning. However, the exact method of training might be significant based on the different contexts in which the curriculum is being taught. One trainer stated that it is best to use in-person training when implementing the program across multiple sites (i.e., public-school system, YMCA, etc.) Whereas, online training may be a more effective learning method for smaller cohorts of trainers who will all be implementing in one project site together. The flexibility of the Ignite model when it comes to training new educators suggests that it could address issues of scaling curriculum to communities facing a disparity in the quality of coursework available to them (Bishop et al., 2010). Further, community centered learning models such as Ignite have been shown to improve teacher performance and are seen as an important factor even within formal modes of teacher education (Broadly et al., 2019). This suggests the Ignite model might also be useful to incorporate as a case study within university educational departments.

The statistically significant difference between the mean level of positivity toward STEM before and after the implementation of Ignite provides evidence of the effectiveness of the program. Stratifying the results by topic attempts to explore what aspects of Ignite shifted attitudes most significantly. Students also reported the number of STEM classes which they had taken on the survey. The mean number of math classes that they had taken before Ignite, across all students, was 4.95, the mean number of science classes was 4.68, but the mean number of technology classes the students reported to have taken before Ignite was only 4.15 and a significantly lower mean of 2.59 engineering classes. It is possible that the increase in STEMpositive scores was due to the novelty of the subjects to the students.

It is to be noted that 11th graders built their projects more autonomously in comparison to other students. This could have contributed to the significant increase in levels of STEM positivity. 7th, 8th, and 9th grade students consulted the trainers about the concepts learned in class more often and also received more help handling materials, such as soldering irons. Although the same curriculum was taught to all grade levels involved, the differential STEM positive reporting could indicate that Ignite is better suited and more effective for older students. A point for further exploration might include an investigation

and analysis of the factors that distinguish different cohorts of Ignite trainers/schools (their results, their teaching styles, their circumstances, etc.).

The fact that questions from the engineering and technology section of the Pre- and post- survey had the greatest increase in positive attitudes toward STEM coursework and careers is reflective of the hands-on nature of the course. Before Ignite, IINSS only had science and math courses, but no engineering and technology courses. Though students whose attitudes shifted might still be reluctant to pursue a STEM career, the empowered attitude that the program fostered could still help to cultivate an environment that is more encouraging for students interested in STEM. Future iterations of the program will ensure that appropriate metrics are developed to evaluate critical-thinking, creative problem solving, and increased engagement with key social issues. It is important to note that the student data analyzed in this study was from IINSS where all of the trainers were from Duke University (n = 4) and one Guatemalan trainer in the 2018 cohort. The degree to which attitudes improved with Guatemalan university trainers compared with foreign trainers has not been evaluated. Gender may also have an impact, a topic that has not been explored to date. Additionally, different training methods (online vs. in-person) could also affect learning outcomes. In order to ensure quality of instruction, standardized methods need to be developed to allow for flexibility in the training strategy used, while maintaining the rigor needed to maintain high standards of instruction.

Two factors seemed to contribute to the success of Ignite. First, having a community hub-FUNDEGUA-on the ground to continue the program, input resources, and remain close to the communities is essential for the success of Ignite and other novel STEM and design thinking programs. The role of an incountry institutional partner for the sustainability of the program cannot be overstated. Without Ignite being implemented into FUNDEGUA's organizational structure, adapting it for the specific Guatemalan context, it would have not been as successful according to both FUNDEGUA staff and the instructor interviews. Duke trainers simply did not have the capacity, contextual knowledge, and resources to optimize the program in this way. Second, the Ignite model was simple enough to be easily adapted for new settings with new community issues. This seems to be critical for making this program replicable. Imposing a standard formulaic curriculum model would most certainly not have worked in rural schools across Guatemala, some facing extreme drought and others, water pollution. Due to the evolving and iterative nature of the Ignite model from 2017 to 2019 (the scope of this study), developing a robust, accurate, and efficient evaluation and monitoring system is challenging. However, the program has solidified its evaluation strategy for all 19 implementing sites in 2020. The data from this larger impact study will be the subject of a future publication.

DATA AVAILABILITY STATEMENT

The datasets generated for this study are available on request to the corresponding author.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Duke University International Review Board. Written informed consent for participation was not provided by the participants' legal guardians/next of kin because: The headmaster (principal) of all participating secondary schools signed a consent waiver for student participation (assent), which was approved through Duke's IRB.

AUTHOR CONTRIBUTIONS

MD, GA, and NR conceived of the presented idea, developed the theory, and verified the analytical methods. VA completed statistical computations with MT's review. IL conducted in-depth

interviews. All authors discussed the results and contributed to the final manuscript.

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A Synthesis of the Research on Community Service Learning in Preservice Science Teacher Education

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Despite recent recommendations urging stronger connections between teacher education programs and their communities, few studies have examined the potential of community service learning (CSL) within science teacher education. The paper aims to: understand how CSL is conceptualized in preservice science teacher education contexts; identify the various ways that CSL is integrated within courses; examine stated outcomes for preservice science teachers, and; explore how research on CSL has been carried out in science teacher education. To better inform science teacher education, the authors embarked upon a research synthesis of relevant articles within preservice science teacher education. Six main findings emerged from the synthesis: (1) different science teacher education programs define CSL similarly, (2) preservice science teachers' engagement with CSL is primarily reported as being beneficial, (3) mixed outcomes are reported in preservice teachers' self-efficacy, confidence, and attitudes toward teaching science, (4) challenges, if reported, tend to be from the perspective of preservice teachers, (5) several common teaching strategies are employed to support the CSL experience, and (6) case study is the most typical research methodology for studying CSL, where the researchers are the instructors of their own CSL courses. These findings are significant for the ongoing development of science teacher knowledge and programmatic directions for the integration of community in science teacher education.

Keywords: community service learning, community engagement, teacher education, science education, teacher education strategies

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INTRODUCTION

This study offers a qualitative synthesis of the research on community service learning (hereinafter referred to as CSL) within preservice science teacher education programs (Minner et al., 2010). In this background section, the authors describe briefly the history of CSL in university and teacher education in general and its entry into preservice science teacher education. Given the list of potential benefits within teacher education literature and for schools, science teacher educators have adopted CSL within teacher education programs. The authors' primary research aims are to inform science teacher education by: addressing how CSL is conceptualized in preservice science teacher education contexts, identifying the various ways that CSL is integrated within courses, examining stated outcomes for preservice science teachers, and exploring how research

on CSL has been carried out in science teacher education. This synthesis on CSL is significant because of the increased attention being paid to promoting more CSL in teacher education (Hildenbrand and Schultz, 2015; Guillen and Zeichner, 2018) and because positive changes to preservice science teacher's education can have a concomitantly high impact on their students' achievement (Darling-Hammond and Post, 2000; Darling-Hammond and Snyder, 2000; Darling-Hammond, 2006). Despite the attention, CSL remains a relatively less explored area of research in science teacher education. Science teacher education in particular is searching for ways to foster STEM teaching and learning. The findings of this research synthesis could point to possible directions for future research on CSL, preservice science teacher education and STEM education.

Of note to this special issue are findings related to preservice science teachers attempting to further their intercultural sensitivities and teaching competencies. Several articles in the synthesis noted a deficit model of the communities they served in preservice science teachers' beliefs about under-socialization, poor language practices, disinterested parents, and underachievement (Bryan and Atwater, 2002; Comber and Kamler, 2004; Gonzalez et al., 2005). Moreover, teachers themselves have concerns that they may merely extract curricular and other local knowledge from the community for their benefit (Handa et al., 2008; Handa and Tippins, 2012) and without reciprocation. CSL experiences for preservice science teachers are not without risks in amplifying the deficit model (Tilley-Lubbs, 2011) but they appear to hold potential for advancing sensitivity, equity, and diversity in the classroom (Baldwin et al., 2007).

BACKGROUND ON CSL

Field experiences, such as observing the work of educators in school classrooms (LaMaster, 2001), are a vital component of teacher education programs as they have been historically viewed as critical bridges between formal teacher education programs and teaching practice (Beeth and Adadan, 2006; Zeichner, 2010, 2011). Specifically, since preservice teachers begin teacher education programs with strong, and sometimes erroneous, beliefs about teaching and learning that they gained by being students for many years (Darling-Hammond, 2006), field experiences have been conceptualized as necessary components of the development and validation of knowledge about teaching (Coffey, 2010). International analyses of trends in the teaching profession report that field experiences are being offered more frequently in teacher education programs and in increasingly varied formats (LaMaster, 2001; Organization for Economic Cooperation Development (OECD), 2005a,b; Purdy and Gibson, 2008; Kennedy and Archambault, 2012; Hamilton and Margot, 2019).

CSL has gained further momentum as a particular approach to the field experience component of professional programs since the 1990s (Bringle and Hatcher, 1996). CSL has been defined as:

A course-based, credit-bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility (Bringle and Hatcher, 2009, p. 38).

As Celio et al. (2011) and Bringle et al. suggest 2012, CSL is an activity that, for higher education, has been associated with further understanding of a discipline. The mechanism for this to occur is scholarly engagement (Boyer, 1997; Bringle and Hatcher, 2000) that, "[L]ink[s] theory and practice, cognitive and affective learning, and colleges with communities" (Butin, 2006, p. 473).

Learning in CSL has also been described as considering the community as a real-world laboratory to test concepts from the discipline (Erickson and Anderson, 1997). When learning occurs in community service, it has been further characterized as a process of transfer from situation to situation, the building of experiences on a continuum, or the problematization of the experience that sponsors further inquiry (Giles and Eyler, 1994).

Campus-wide offerings of CSL in the US have been spurred on with the support of National Community Service Trust Act of 1993 and national organizations and coalitions, such as: Campus Compact, the National Society for Experiential Education, and the National Service-Learning Clearinghouse (NSLC) (http://www.servicelearning.org)¹ (Bringle and Hatcher, 1996). The mobilization of higher education to begin to also offer campus-wide CSL has been in response to, "[G]rowing social and environmental problems in many US communities and with substantial financial support from the US government's Corporation for National Service" (Wade et al., 1999, p. 667). In 2000, university guidelines and rubrics for supporting faculty and community partnerships were being written, signaling the further institutionalization of service learning within higher education (Furco, 2002; Boyle-Baise and McIntyre, 2008). The University of Pennsylvania was among one of the US universities that aimed to build strong connections with communities, by strengthening its partnerships in West Philadelphia and facilitating service learning initiatives among various disciplines (Harkavy and Hartley, 2010). This and other campus initiatives suggest that by 2010, CSL was an instantiated pedagogy for community engagement and learning.

PRESERVICE TEACHER EDUCATION AND CSL

The use of CSL in teacher education has been historically cast as an elective, yet more recently, schools and faculties of education are offering CSL as required component of teacher education (Jagla and Tice, 2019). To distinguish it from a form of charity work with children, efforts are made to conceptualize CSL as, "Learn[ing] and develop[ing] through active participation in thoughtfully organized service experiences that meet actual community needs" (Buchanan et al., 2002, p. 30), and, "[B]lend service activities with the academic curriculum in order to

¹National Service-Learning Clearinghouse. Available online at: www. servicelearning.org (accessed September 01, 2018).

address real community needs while students learn through active engagement" (Anderson and Pickeral, 1998).

Reported purposes for CSL in teacher education are to provide meaningful experiences that support course goals, including: testing educational concepts, theories and practices, preparing for practicum (Coffey and Lavery, 2015), improving children's learning, fostering community engagement (Klehr, 2015; Pitre et al., 2017), and developing awareness, reciprocity and humility in relation to the wider society in which they work and inhabit (Billig, 2000; Swick and Rowls, 2000; Verducci and Pope, 2001; Covitt, 2002; Lund and Lianne, 2015; Barnes, 2017).

CSL in preservice teacher education is often compared with the practicum. According to the literature, CSL is often measured in terms of, "[T]he quality of the service and learning outcomes" (Cone, 2009b, p. 369) between the service provider (i.e., preservice teacher) and the recipient (i.e., community). CSL distinguishes itself from the practicum in terms of these indicators and its aims to present mutual benefits to its partners or stakeholders (i.e., teacher educators, preservice teachers, community groups, parents, and the children they serve) (Furco, 2003; Karayan and Gathercoal, 2005). As we, "[P]repare future educators to better understand and empathize with the needs of the communities in which they will be working" (Coffey, 2010, p. 336), Anderson and Hill (2001) offer that, "[R]eciprocity and mutual respect should characterize [this] collaboration among teacher education programs, p-12 schools, and the community" (p. 76). Donahue et al. (2003), define reciprocity as positioning both the provider of service and the recipient, children or schools, as learners. CSL emphasizes learning from experience, deliberate reflection, group discussions, and class projects (Cone, 2009a; Coffey, 2010). CSL experiences in preservice teacher education are cited as: contributing to the long-term enhancement of the community (Swick, 2001), deepening future teachers' understanding of diversity and the 'other' (Swick and Rowls, 2000; Cooper, 2007; Chang et al., 2011)), developing an understanding of values consonant with education (Swick and Rowls, 2000), increasing awareness, sensitivity and familiarization of social realities within the society (i.e., social gaps, poverty, unemployment) (Yogev and Michaeli, 2011), addressing culture and race among teacher candidates who have little to no experience working in diverse communities (Baldwin et al., 2007; Kim, 2012), forming more complex notions of learners and ways of meaning-making (Ryan and Healy, 2009), and gaining special insights into students' lives outside of formal educational settings (Coffey, 2010).

A RESEARCH SYNTHESIS ON CSL IN PRESERVICE SCIENCE TEACHER EDUCATION

Research syntheses are used in educational research to demonstrate important interactions among relevant issues and factors from an analysis of existing literature and then to draw conclusions and build theories for further research (Minner et al., 2010). Qualitative research syntheses can be defined as, "[S]ystematic efforts of synthesizing qualitative research" (Suri

and Clarke, 2009, p. 401). Within the educational research field, synthesis research has taken the route of, "[S]ynthesizing methodologically diverse research and synthesizing research from critical perspectives" (Suri and Clarke, 2009, p. 401). A main interest in undertaking a qualitative research synthesis for this study was to establish a method for reviewing diverse contributions- many of which were qualitative in nature². Related to this point, research syntheses can involve reviews of literature from a small data set (cf. Nine articles, Major, 2010) to a larger dataset (cf. over 50 articles, Sadler, 2009).

The authors' research synthesis follows Minner's et al. (2010) three-phase approach that involves: (1) search and inclusion, (2) individual study review, and (3) a cross-case comparison and analysis. Phase 1 of the synthesis involved a search of the ERIC database using the EBSCOHost interface. The keywords "service learning" and "preservice" and "science" were searched among articles published between 1999 and 2018. Additionally, the same search terms were also employed within the Google Scholar search engine and the following primary research journals: American Educational Research Journal, Journal of Research in Science Teaching, yielding 46 results. References in each of the identified articles were subsequently checked for related articles. The results identified 22 new articles from the Journal of Science Teacher Education, International Journal of Science Education, Journal of Science Education and Technology, Journal of Teacher Education, Science Education, Teaching and Teacher Education. Thus, a total of 68 articles were analyzed.

In the search and inclusion phase, we followed the methodological considerations for research syntheses, as outlined by Suri and Clarke (2009). These authors suggest the following three principles: "[I]nformed subjectivity and reflexivity, purposefully informed selective inclusivity, and audience-appropriate transparency" (p. 408). It is worth expanding on these three guiding principles of informed reflexivity, inclusivity, and transparency for a quality research synthesis.

Regarding subjectivity and reflexivity, Suri and Clarke (2009) suggest synthesists reveal their motivations for conducting the review and their personal standpoints as researchers so as to better contextualize their interpretations of the findings. The two motivations driving the authors' research here illustrate Suri and Clarke's point. First, the authors' own experience with this approach in a specialized course for preservice science teachers hinted at the value of CSL, thus motivating an analysis of its use as a pedagogy for teacher education (Falkenberg, 2010; Zeichner, 2011). Second, the authors also hoped to employ the research synthesis to reflect upon CSL as pedagogy for preservice teachers in out-of-school programs for learning science (Feldman and Pirog, 2011; Bevan et al., 2013).

According to Suri's second principle, "All decisions in a research synthesis must be guided by the principle of purposefully informed selective inclusivity" (2009; p. 412). In this synthesis, the sampling criteria was purposefully informed by

 $^{^2\}mathrm{The}$ excluded articles lack transparency and drew conclusions that are different from those included. The diversity of methodologies appears to often reflect research undertaken by academics who were also the instructors of the CSL courses they were studying.

the desire to speak to the possible needs of preservice science teachers, science teacher educators, and, community organizers that are aligned with some of the goals of science teacher education programs. The initial list of 68 articles from phase 1 was vetted by the following inclusion and exclusion criteria. The articles must: (1) include research on K-12 preservice teacher education (both elementary and secondary) (2) be relevant to the teaching of science, (3) integrate CSL as a component of a pre-service science teaching course, and (4) represent empirical studies published in journals rather than technical reports or proceedings.

Finally, and following Suri and Clarke third principle (2009, p. 413), this research synthesis focused on the, "[T]ransparency of process to enhance accountability, credibility, and transferability of synthesis findings." The "transparency of process" criteria significantly decreased the number of articles. Despite their ability to broaden the focus of this review, articles that lacked clear descriptions of their research methodologies were excluded. As a result of the guiding principles posited, articles such as Chinn (2006) and Pappamihiel (2007) were excluded, leaving a total of 25 key articles.

Phase 2 involved the analysis of the remaining 25 articles. Specifically, the articles were examined and summarized with notations in a research synthesis table that includes the categories of the focus of the study, the CSL course and context, and outcomes in terms of science teacher knowledge and practice, community, and children. Notations related to methodology, such as the study's data sources and participants were included in the analytic table to foster methodological comparisons among the studies. A review team met with the authors of this paper to review the salient aspects of the various articles and to assist in reaching consensus on the inclusion of articles in any one of these categories.

Phase 3 of the research included a comparison (and contrast) of the final 25 studies within the categories identified within Phase 2. Analyses were expanded, "[T]o consider themes, shapes, and organization of research ideas present in the overall literature" (Opfer and Pedder, 2011, p. 383). As a result of this cross-case analysis (Khan and VanWynsberghe, 2008), several overarching themes were identified. The findings below report on the themes themselves with conclusions representing our research synthesis.

RESULTS AND DISCUSSION

This section presents six main themes that emerged as a result of the research synthesis. These findings are: congruent definitions of CSL in preservice science teacher education are evident in the literature, meaning the existence of an emerging consensus among researchers and teacher educators alike. A second finding is that there are different models for applying CSL in preservice science teacher education. The third finding is that preservice science teacher outcomes associated with CSL appear favorable for them. Related to this finding and fourth, is that scant drawbacks with CSL in preservice science teacher education are being under-reported. The fifth finding is that critical reflection is a major learning strategy across courses. Sixth and finally, case study is the most common research methodology, especially

in situations where the researcher is the instructor of the course under study. The findings are outlined in terms of their significance to conceptual frameworks for new teacher education programs embarking on a CSL component.

CSL Definitions Are Similar in Preservice Science Teacher Education

In general, CSL is broadly defined as a pedagogy that engages preservice science teachers in activities that meet community needs (Chinn, 2006; Jung and Tonso, 2006; Haines, 2010; Handa and Tippins, 2012). It is distinguished from volunteering experiences with its incorporation of "explicit learning experiences" (Kim, 2010, p. 322) that hold potential for preservice science teachers to improve their understanding of concepts related to teaching and learning in community and, in doing so, fosters better quality teaching. Kim (2010) further differentiates service learning from "community service" by suggesting that analysis and reflection on one's own teaching and students' learning, attends the former. Our analysis supports this contention.

Notwithstanding apparent agreement on the broader definition of CSL as a pedagogy among the articles reviewed, the purposes for using CSL as a teacher education pedagogy were only somewhat varied including: (a) applying course content in a community setting (Owens and Foos, 2007); (b) forming a learning community (Ronen and Shemer-Elkiyam, 2015); (c) gaining (technical) knowledge and skills related to pedagogy, and (d) learning about community and complex social issues (Barton, 1999, 2000; Cox-Petersen et al., 2005; Cone, 2009b,c; Kim, 2010; Lawrence and Butler, 2010; Riley and Solic, 2017). Underscoring this limited variation in purposes were shared notions of civic responsibility and strengthening communities (Borgelt et al., 2009; Haines, 2010) and how important these shared notions were to developing pedagogical skills in pre-service teachers (Chin, 2004; Cone, 2009a).

Different CSL Models Are Evident in Preservice Science Teacher Education

The studies analyzed employ different models to integrate CSL within a broader program of preservice science teacher education. The most common framework (11 articles), involves a "one-on-one model" with the inclusion of CSL within a single science methods course in the form of an after-school program wherein preservice science teachers have opportunities to work one-on-one during their course with children in community settings (Barton, 1999, 2000; Hammond, 2001; Chin, 2004; Cox-Petersen et al., 2005; Jung and Tonso, 2006; Cone, 2009a,b,c; Kim, 2010). For example, in VanWynsberghe and Khan (2014) study, preservice science teachers participate in an after-school club to help secondary students with their science homework.

Another model involves pairing science methods courses with other disciplines in an interdisciplinary and collaborative field experience (Carr, 2002; Cox-Petersen et al., 2005). Carr (2002) studied a "Science Outreach" program that brought together introductory science majors and elementary education majors who team together and teach science as a service to local and homeschooled children (Carr, 2002). In a second interdisciplinary approach, Cox-Petersen et al. (2005) integrate

CSL into their methods courses that focused both on science and language literacy. In their case study, preservice science teachers in two different sections of science and language arts methods classes develop inquiry-based literacy lessons and taught them to children in an after-school program. In both cases, the preservice science teachers report an increase in preservice teachers' confidence in teaching both science and language arts and an increased ability to plan and implement collaborative inquiry-based lessons. Kim (2010), integrates four different service-learning activities into an elementary science teaching methods course that includes the involvement of graduate students interested in language learning. Kim has preservice science teachers participate in CSL contexts where they: (1) help elementary students complete their science fair projects in a local public school, (2) present authentic science experiments to the elementary students and parents (3) present their science fair projects to middle school students, and (4) help English language learners in second grade complete their science fair projects. Pairing with another subject area, such as language arts and English language learning fosters, in some capacity, an interdisciplinary collaboration that can meet community needs and instantiate CSL.

Several offerings of CSL appear to model and support the continued content area development of preservice science teachers. For example, Haines (2010) helps preservice science teachers develop content knowledge in the area of ecology (i.e., rain forest fragmentation, nutrient cycling) in their CSL course. Preservice science teachers attend workshops on ecology before going out into community. These preservice science teachers then visit areas of ecological importance in Costa Rica and engage in observations (noting farming practices of local people), fieldwork (assisting the local farmers) and lesson planning (designing an exemplary unit on ecological concepts) as part of their CSL experiences. (Owens and Foos, 2007) studied a collaboration between a science educator and a geology instructor in a geology course. The aims were to provide future teachers with real-world and engaged scientific research experiences on the local park's resource management issues. The above courses mark a departure from research exclusively focused on science teaching methods. Instead the research on these courses reveals a focus on a science content domain of curricular significance. Moreover, and like some courses mentioned earlier, these courses paired science teaching with another discipline, thus expanding the range of subject matter knowledge available for preservice teachers.

While the majority of models for CSL occurred within single teacher education courses, Handa's et al. (2008) study includes CSL in a community immersion experience. This community immersion experience involves preservice science teachers' living in a rural community in the Philippines, known as barangay, or territorial and political units. The preservice science teachers engaged in science-related community projects in local schools and were engaged in a variety of community-building and educational strategies, such as: trust-building activities, multi-stakeholder collaboration, rapid community assessment, action research, memory banking, co-planning and co- teaching, reflection, and portfolio assessment. This multi-faceted course requires considerable coordination and agreement

among teacher educators and community partners and expands the range of possible outcomes for preservice teachers.

Finally, different models of CSL appear to reflect the programmatic goals of a preservice teacher education course. For example, some models promote the learning of science content such as ecology, others diversity, practice in science fairs, or to support with language learning. Relatedly, some models can be described as full immersion in a different setting, field trip to a site, or regular periods of after or out of school engagement in organizations. The different models of CSL appeared to meet the variety in community needs.

Preservice Science Teachers' Engagement With CSL Is Reported as Mainly Beneficial

Studies that investigate the use of CSL pedagogy in preservice science teacher education contexts report a range of teacher outcomes including: gains in teachers' understanding of scientific knowledge, appreciation for scientific inquiry, and an overall capacity for articulating how to do science (Barton, 1999; Cox-Petersen et al., 2005; Owens and Foos, 2007). In addition, studies noted positive changes in self-efficacy, self-worth, and confidence among pre-service teachers (Cox-Petersen et al., 2005; Thompson et al., 2007; Cone, 2009a,b; Kim, 2010).

Here, and in light of the focus of this special issue, it is particularly important to emphasize the issue and challenge of diversity. The research documents the fact that the integration of CSL into a preservice science teacher education course is to help preservice science teacher's appreciate diversity and develop greater competencies for teaching in multicultural communities. In short, studies found that CSL builds teaching capacity in multicultural and diverse contexts, especially ones different from some of the preservice teacher's own backgrounds (Barton, 1999, 2000; Chinn, 2006; Handa et al., 2008; Cone, 2012).

More than half the studies in the synthesis examined preservice science teachers' understanding of multiculturalism, issues related to diversity, and equitable science teaching practices (Barton, 1999, 2000; Hammond, 2001; Carr, 2002; Cox-Petersen et al., 2005; Chinn, 2006; Pappamihiel, 2007; Cone, 2009a,b,c; Haines, 2010). Several of the purported intercultural competencies acquired included: conducting surveys that are sensitive enough to ascertain community needs (cf. Owens and Foos, 2007; Handa et al., 2008; Handa and Tippins, 2012) and developing culturally relevant lessons (Barton, 2000; Hammond, 2001; Chinn, 2006). Related outcomes associated with social context and community engagement in CSL included making personal connections with people unlike themselves (cf. Barton, 1999, 2000; Carr, 2002) and reinforcing multicultural education within science teacher education (cf. Cone, 2009a; Haines, 2010). For example, in Barton's (2000) detailed study, preservice science teachers undertook CSL activities to teach science collaboratively to children in a homeless shelter. More is explained below.

Benefit 1. Preservice Science Teachers Improve Their Understanding of Science and How to Teach It

By engaging in CSL activities, preservice science teachers were said to enhance their understanding of scientific phenomenon and processes of inquiry (Jung and Tonso, 2006; Owens and Foos, 2007; Borgelt et al., 2009; Haines, 2010; Kim, 2010). For example,

Chin (2004) integrated CSL into a science methods course where preservice science teachers engaged in CSL activities in a science museum. Participating in the teaching activities of the science museum, preservice science teachers reportedly developed an understanding of the science concepts that were embedded in exhibits.

Similarly, in Owens and Foos's (2007) study, preservice science teachers participated in CSL as part of a geology course, that involved working in research teams on resource management projects within parks in the region. The findings indicated that preservice science teachers improved their understanding of science as inquiry by conducting research projects and submitting reports to their Metro Park agency. Similarly, by involving preservice science teachers in a range of CSL experiences (e.g., teaching science at the science museum or nature centers), Jung and Tonso (2006) found that preservice science teachers self-reported gains in their content knowledge of science.

Haines (2010) created a CSL component in an "environmental education and service learning in the tropics" course where preservice science teachers (e.g., elementary education and secondary education majors) as well as students in other majors (e.g., environmental science) worked on sustainability projects, and learned about ecology with this experience.

In terms of building the requisite skills for teaching, CSL appears to enable preservice Science to learn how to teach science (Chin, 2004; Thompson et al., 2007), generate interdisciplinary science lessons (Cox-Petersen et al., 2005), and produce culturally-responsive curricula (cf. Barton, 2000; Hammond, 2001; Haines, 2010). Using CSL to teach science methods enabled Chin (2004) to use the meseum context to help preservice science teachers become aware that student learning and teaching processes occur in different learning environments. Moreover, they developed their ability to integrate a variety of resources, such as museum exhibits, into their lesson planning and became aware of multiple assessment methods to evaluate student learning.

Thompson et al. (2007) analyzed surveys that gauged both preservice teachers' attitudes toward science and general satisfaction with CSL. The authors reported positively, explaining that the preservice teachers viewed CSL (specifically teaching a mini-lesson) as one of the best experiences in the class; more instructive than the labs and experiments in the earth science course for them.

Analyzing preservice science teachers' collaborative portfolios, written reflections, and lesson plans, Cox-Petersen et al. (2005) concluded that CSL made positive contributions to preservice science teachers' ability to plan and implement after-school science lessons that integrated language arts. Our review of the research revealed that foundational teaching skills were reported as enhanced with CSL (Hammond, 2001; Kim, 2010; Lawrence and Butler, 2010).

Benefit 2. Preservice Science Teachers' Appreciation of Diversity and Multicultural Contexts

The preservice science teachers found it challenging to teach children who grew up unlike themselves. Specifically, CSL challenged, "[T]heir definitions of and uses for science, culture,

student experience in their teaching" (p. 815). In some other studies, preservice teachers' engaging with English language learners and at-risk students suggests that the CSL experience is associated with the development of teacher sensitivity to diversity (Cox-Petersen et al., 2005; Pappamihiel, 2007). For example, Pappamihiel's (2007) English Language Learners (ELL) course encouraged preservice science teachers, "[T]o think beyond ethnocentric perspectives of interculturalism to more ethnorelative points of view, to begin to value differences between cultures and see not only the challenges of working with ELL students, but also the benefits" (p. 53). Pappamihiel reported that preservice teachers at some level appreciate some of their prejudices against these students and changed their attitudes toward more positive ones. Chinn's (2006) study in Hawaii emphasized preservice teachers' development of cross- cultural competencies as evidenced by their ability to generate locally relevant science curriculum.

Cultural translators were employed in the Chinn (2006) study to help the preservice teachers gain an insider perspective and according to the author, synthesize knowledge systems. Notably, deficit perceptions of Hawaiian students as difficult to teach were discarded in ways that, according to a preservice teacher, went beyond what, "[A]ny new teacher orientation program could" (p. 390, Chinn, 2006).

Several hypotheses about the ways CSL contributed to more equitable science teaching practices exist. Cone (2009a,b,c) investigates CSL activities where preservice science teachers create new lessons and teach science to diverse student groups at a neighborhood community center. Using questionnaires and interviews, Cone (2009a,b) found that CSL, when supplemented with explicit discussions and class activities about diversity, has a significantly positive influence on preservice science teachers' perceptions of their ability to teach science to all children, irrespective of their sociocultural background. In another well-detailed case study, Hammond (2001) investigated the collaboration among multicultural teacher educators, preservice science teachers, and teachers, students, and community members in an urban California elementary school. These different groups created science curricula to construct a Mien-American house. Hammond (2001) indicates that such an activity teaches preservice science teachers to work in communities to, "[S]upport bilingual and multicultural mentor teachers in their efforts to incorporate minority parents and community knowledge into their curricula" (p. 986). In a rare examination of the effects of CSL beyond the teachers, Hammond noted that parents became new advocates for instruction within a school system. Overall, the literature reviewed reveals that CSL helped preservice science teachers to reflect upon teaching culturally diverse students, thus providing them an opportunity to change deficit models of interacting with and teaching diverse students.

Scant Reporting of Drawbacks With CSL in Preservice Science Teacher Education

Analysis of the research revealed that studies mainly emphasized the benefits of CSL without noting problematic issues, such as: institutional barriers, integration issues with course work, unwarranted conclusions about community, lack of optimal science teaching environments, reinforcement of the status

quo, buy-in among preservice teachers, and the possible manufacturing of need and service. The challenges that were reported; however, included: (a) the potential of viewing CSL as a "tourist" experience and not as science education (Handa et al., 2008); (b) focusing on the experience and not the content of a particular topic (Handa et al., 2008); (c) anxieties due to the lack of experience working with children (Cone, 2009a; Kim, 2010), (d) limited experience with travel (Haines, 2010), and (e) problems scaling-up CSL more widely (Barton, 2000).

Barton (1999), in her valuable case study on crafting multicultural science teacher education, investigated preservice science teachers' changing views of multicultural science education in a methods course where preservice science teachers worked with children in a homeless shelter. In a follow-up paper (2000), she suggested that the CSL experience provided preservice science teachers with opportunities to separate, "[S]cience, teaching and students ... from 'schooling'" (p. 815), and question how "multicultural science education" might become "regular science education."

Kim (2010) describes preservice science teachers as anxious about CSL activities during the first few weeks because of their lack of experience in conducting inquiry with children. The common question [among preservice science teachers] was, "How are we going to do that?" They were unsure of how a service-learning activity was going to turn out and felt nervous because they thought they would not have enough information to keep students interested (p. 327). To eliminate potential anxiety among preservice science teachers at the outset, Kim suggested providing an orientation to the social context of the school with clear goals and outcomes. A second difficulty presented by Kim (2010) was preservice science teachers' lack of motivation to participate when CSL was offered as an optional assignment. Kim suggested making CSL a required assignment with an attendant reduction in other course activities.

In another context, Carr (2002) details a study where CSL fosters interdepartmental collaboration between science and teacher education departments. For a science outreach program, science majors and preservice science teachers co-taught science courses to local and homeschooled children between the ages of 6–8. Using an action research methodology, Carr (2002) collected data through field notes, interviews, student work, self-reports, and an online survey from the students and faculty members in science and education. Analyses indicated that the participants initially experienced stress and tension in relation to the collaboration, however, it slowly abated over the 18-month period. Collaboration is not unique to CSL; however, challenges may be exacerbated because it is often necessary to work with multiple stakeholders.

Cone (2009b) cited qualitative data in reporting on a decrease in teacher confidence after participating in CSL. While the vast majority in their study on CSL reported an increase in confidence, a few preservice science teachers shared sentiments, such as:

I would say I'm less confident than before. I've learned that many schools, especially in the inner city, don't have as much science equipment... I would hope that wouldn't hinder my teaching abilities to minorities or to majorities I am a little nervous simply because I don't feel confident in science (p. 378).

There are at least two possible explanations regarding a decrease in self-confidence in a few. Preservice teachers may enter the CSL experience with low levels of efficacy and confidence about teaching science to diverse students. Low levels of efficacy could be magnified after being placed in unstructured or unsupervised teaching environments. Second, and alternatively, preservice teachers might have entered the CSL experience with unrealistic optimism about teaching science to diverse students and this optimism was challenged during the CSL experiences. Holding onto this critical finding, Cone (2009b) further commented about a decrease in self-efficacy noted in the survey data:

A question that arises from the decrease noted in PSTE [Personal Science Teaching Efficacy scale] is whether the superficial and cursory discussions and activities about diversity left preservice teachers with an inability to connect science content to students' everyday livedexperiences, thus contributing to the magnification of preservice teachers' limited science content knowledge with diverse student groups (p. 379).

Cone recommends that small group instruction utilizing nonschool settings with explicit diversity assignments and discussion in the methods course. Doing so in CSL provides preservice teachers with the opportunity to interact with diverse student groups without the restrictions imposed by traditional school structures and hierarchies (Irvine, 2003).

The scalability of CSL activities in preservice science teacher education programs was also raised as a challenge to CSL integration (Barton, 2000). Providing CSL to all preservice science teachers in a program requires vision, planning, coordination, and collaboration. Barton (2000), for instance, had eight preservice science teachers in the methods course where she integrated CSL and noted that she would not be able to provide adequate support to these students if she had a larger class size:

It would have also been difficult to manage more than eight adults in the same 'learning setting' with 15 to 20 children. [W]e need to figure out more and different ways to provide preservice teachers with out-of-school, yet still guided, collaborative opportunities to craft multicultural teaching practices in science (p. 818).

Similarly, Cone (2009a) argued that, "[A]lthough it may be argued that small group instruction in a non-school setting is unrealistic in the U.S. education system and creates a disconnect between the reality of public schools and the ideal world... these types of experiences should be required components of teacher education courses" (p. 32). For science teacher education, Cone proposes that CSL forms a pathway to truly achieving scientific literacy for all.

The preservice science teacher education literature generally considers CSL a beneficial approach in providing preservice science teachers the experiences that they do not commonly acquire in their traditional teacher education programs. Importantly, of those studies that did report these challenges, a number of them offered feasible suggestions to overcoming any negative associations of CSL on preservice science teachers.

CSL Is supported With a Spectrum of Teaching and Assessment Strategies

Analyzing the pertinent literature revealed several main strategies for integrating and assessing CSL in preservice science teacher education. These teacher education strategies included: (a) scaffolding, (b) reflecting on practice, and (c) qualitative forms of assessment. These supportive teaching strategies enhanced the CSL experience, as described more fully below.

Scaffolding Activities

Several investigations of CSL in preservice science teacher education employed structured scaffolding for preservice teachers to systematically engage with their service experiences. Scaffolding is support that is provided at the appropriate level with an eye to continued learning. Scaffolding was provided in various forms in the literature reviewed, such as facilitated discussions of diversity and fieldwork (cf. Cone, 2009a,b) and pre-CSL activities on assessing community needs (cf. Barton, 1999; Handa et al., 2008). Barton (2000), for instance, used a series of weekly meetings, "[T]o challenge and support each other's experiences; read and discuss papers related to homelessness, multiculturalism and science education as it directly related to their work at the shelter, and collaboratively plan for and reflect on their teaching" (p. 805).

The pedagogical nature of the CSL experience and, specifically, learning how to be in community, was another important theme in scaffolding activities. Handa et al. (2008) had preservice science teachers conduct surveys to learn more about the community, context, culture and people they were immersing themselves in. Owens and Foos (2007) used an orientation to build the context-related skills necessary to conduct a research project on resource management in parks. All examples feature a stepwise progression in learning the context and research techniques.

Reflections

The studies emphasized reflection as a critical component of community service learning, and so while it might be also considered a way to scaffold learning, it bears special mention here. Reflecting on the experiences involved, for example, "[M]onitor[ing]...thinking processes as well as facilitat[ing] the connection between service and learning" (cf. Cox-Petersen et al., 2005, p. 25). Reflection processes also employed: digital narratives, where preservice science teachers prepared digital stories that reflected on their learning within the community (Borgelt et al., 2009); class debriefing sessions to discuss CSL experiences (Barton, 1999; Chinn, 2006); daily or weekly written narratives linking the CSL activities and their applicability to science teaching (Cox-Petersen et al., 2005; Kim, 2010), and email memos to make connections between their CSL projects and the nature of science (Owens and Foos, 2007). Of the three most common strategies employed in CSL coursework, the synthesis revealed that reflection was notably relevan to CSL's success in preservice science teacher education. Seven out of 25 articles explicitly analyzed pre-service science teachers' reflective practices during their CSL experiences (cf., Cox-Petersen et al., 2005; Owens and Foos, 2007; Pappamihiel, 2007; Cone, 2009a,b,c; Lawrence and Butler, 2010).

Varying Assessment

CSL-related assessment methods in pre-service science teacher education courses vary. The methods found include: teaching portfolios (e.g., lesson plans) (Chinn, 2006), reflections (e.g., community needs), self-assessments (e.g., teacher learning), learning artifacts [e.g., student's learning (cf., Cox-Petersen et al., 2005; Chinn, 2006; Handa et al., 2008; Kim, 2010; Lawrence and Butler, 2010), standardized assessments of content knowledge or self-efficacy (Owens and Foos, 2007; Cone, 2009a,b), technical memos (Owens and Foos, 2007), final reports (Owens and Foos, 2007; Haines, 2010), surveys (Thompson et al., 2007), and observations (Barton, 1999; Cooper, 2007).

Ethnography and Case Study Are the Two Most Common Research Methodologies

This research synthesis revealed common research methodologies followed by CSL researchers. Out of 25 studies, 7 of them explicitly labeled and described the research methodologies employed. Among these, 3 of them used case study (Barton, 1999, 2000; Cox-Petersen et al., 2005) and 1 narrative case study (Hammond, 2001), 1 action research (Carr, 2002), 1 collaborative action ethnography (Handa and Tippins, 2012) and 1 ethnography (Jung and Tonso, 2006). Seven other studies, while they did not label their research methodologies, described data collection and analysis procedures that were synonymous with survey or mixed methods research (cf. Cone, 2009a,b,c). Others could be viewed as case study research, according to VanWynsberghe and Khan (2007) prototypical features of a case study (i.e., small sample sizes, contextual details, natural settings, boundedness, working hypotheses and lessons learned, multiple data sources, and extendability). The case studies emphasized different features. Lawrence and Butler (2010) offer rich details, with their small sample size. Borgelt et al. (2009) provide contextual details of both the CSL settings and the teacher education courses. Kim (2010) took care in describing the boundaries of the research's applicability, something case study researchers call boundedness. Chin (2004) drew upon multiple data sources in delineating the common features of the case studies investigated.

Among the studies reviewed, the dominant research model is one where the instructors of the CSL courses were also the researchers. They tended to conduct case studies of their own courses and their largely qualitative findings were mainly reported in terms of positive outcomes of course-based CSL. Only 1 study offers detailed information on the researchers themselves (Handa and Tippins, 2012) and no study reported on the role of the researcher in the research context beyond noting their double role as instructor and researcher. Missing were instructors' values and beliefs, especially in regards to CSL philosophy and pedagogy. These play an important role in the research process and, as a result, the literature under-reported issues related to reflexivity, credibility and transferability and this might detract from the broader applicability of the case studies.

Research Implications and Recommendations for Future Research

In order to inform our understanding of the current state of some CSL research on preservice science teacher education, the authors undertook a systematic review of 25 articles that reported on the use of CSL as an approach in preservice science teacher education contexts. The review revealed six main findings: (1) CSL definitions in preservice science teacher education are congruent but their attendant features are not; (2) the one-onone model within a single science teacher education course was the most common model of CSL; (3) preservice science teachers' CSL engagement fostered many benefits to them, (4) challenges exist with CSL, however few articles listed them; (5) reflection, along with other teaching strategies, are typically employed to support the CSL experience, and finally, (6) ethnography and case study were the two most common research approaches to the study of CSL, where researchers were also the instructors of the CSL course under investigation.

CSL has been undertaken as a pedagogical approach for developing capacities to understand students, communities, and roles as skillful science teachers (Wilson et al., 2015). In the literature, "[M]uch service-learning curricular integration has occurred without the benefit of a theoretical foundation broad enough to encompass the diversity of service-learning goals, practices, and outcomes" (Anderson et al., 2001, p. 1). The recommendations below, can contribute to discussions on shaping the future direction of CSL research foe science teacher education.

More Data on CSL Is Needed

All 25 studies reviewed reported that CSL is associated with benefits and enhanced outcomes for preservice science teachers. While such benefits were commonly reported, we recommend an expanded data corpus, especially one that relays the drawbacks of CSL with a section devoted to this topic (Spector et al., 2019). Comparison of the available research showed that a predominant focus of investigations on CSL in preservice science teacher education courses was on knowledge of teaching science in equitable ways to diverse groups. Indeed only 5 studies out of 25 focused on other matters such as: balancing science content with students' cognitive abilities, language issues, and using inquiry-based science (cf. Chin, 2004; Jung and Tonso, 2006; Thompson et al., 2007; Kim, 2010; Lawrence and Butler, 2010). Based on this synthesis, a call for more research on CSL and expanding its relationship to additional outcomes should be considered.

Additional Strategies for CSL Integration Could Be Investigated

The synthesis identified the most common teaching strategy associated with CSL integration in science teacher education courses as reflection. The course assessments of the CSL experience were also largely qualitative. These methods leave room for additional (and creative) teaching strategies to be explored to promote a positive CSL experience in the course, such as: modeling, role-play, and the use of case methods. It is recommended that research continue to investigate how different types of CSL projects, time requirements, and CSL contexts have

an impact in the way preservice science teachers develop desired outcomes (e.g., content knowledge, pedagogical skills, affective dispositions, orientations toward diversity and community).

A Systemic Investigation of CSL in Preservice Science Teacher Education Is Needed

More research and therefore greater insight into CSL has the potential to support more system-wide adoptions of CSL in the area of science teacher education. While the research mainly includes the investigation of CSL within individual teacher education courses, further research on CSL within an entire teacher education program is needed (Feiman-Nemser, 2001). Erickson and Anderson (1997) suggest different ways for CSL to be integrated into teacher education programs beyond the single course. Examples include the infusion of CSL into the practica (Chin, 2004), or throughout a teacher education program, such as the integration of CSL into middle-level teacher education at California State University-San Marcos (Stowell and McDaniel, 2001). Simultaneously exploring CSL in professional development might suggest an important extension of the preservice science teacher education experience (Darling-Hammond et al., 1995; Hammond et al., 2009).

Research Must Also Investigate the Impact of CSL on Community and Children and Parents

Not surprisingly, the literature on CSL and preservice science teacher education primarily reported only outcomes related to preservice science teachers. Notable exceptions involved special attention to stakeholder outcomes, such as community partners' perceptions and children's learning (cf. Hammond, 2001; Carr, 2002; Handa et al., 2008; Lawrence and Butler, 2010). For example, Carr's interdisciplinary course helped science majors learn more about preservice teachers' perspectives of science and how to teach it. Hammond's (2001) extensive study discussed how Mien parents became advocates for the garden project and began to attend school events in larger numbers. Studies that unearth community perspectives and children and parents' learning would be significant contributions. Longitudinal studies may help in this regard to better locate the broader impact of CSL on preservice science teachers' knowledge and practice, children's learning when CSL is enacted in their classrooms, and desired community outcomes.

Future Research on CSL Should Expand on Methods

Researchers investigating CSL in preservice science teacher education use a variety of research methods, including: case study, surveys, and ethnography. Comparatively far fewer studies reported on preservice science teachers using quantitative measures from standardized instruments (Cone, 2009a,b,c) or quantitative surveys (Carr, 2002). Anecdotal reports on CSL experiences within preservice science teacher education courses were also evident in the literature. While these reports hold value in sharing the variety of CSL experiences, additional empirical investigations would be useful to extend how CSL could be transferable to other contexts. These case investigations

could provide a source for comparing CSL cases to help us understand the phenomena of interest in preservice science teacher education.

Much of the research reviewed was where: "[T]he servicelearning instructor has been the sole investigator responsible both for the administration of measures and data analysis, procedures that permit observer effects and interpretive bias" (Root and Swick, 2001, p. 148). Explicit discussion of the trustworthiness of the studies and more transparent information about the analyses used to investigate teacher practice within CSL settings would expand our understanding of how one could conduct research in this area. For example, direct quotations from members and photographs with permission (cf. Chinn, 2006) might enhance trustworthiness. In addition, the interpretations of CSL researchers could be triangulated by the informants, and in doing so, also enhance the integrity of the data. Future research could also include perspectives of community staff in order to see how their experiences affirm or differ from instructors or pre-service teachers.

Indeed, where the CSL researcher is also the course instructor, further discussion is encouraged on how the information provided by research participants and stakeholders was specially interpreted, from the standpoint of the researcher. Collectively, CSL research in science teacher education would benefit with an expanded and specific section devoted to its methods.

Ethical Concerns Need to Be Reported

Root and Swick (2001) suggest that the principles of consent and privacy and ethical concerns, more generally, should guide the research on CSL. Studies did not always report, for example, on the steps taken to inform participants, such as children and community partners. An advanced discussion on the ethical principles guiding CSL research, on topics such as autonomy (i.e., procedures of informed consent), confidentiality, anonymity, and justice (i.e., recognizing participants and their contributions to the research), would be especially beneficial to those seeking insights on CSL. In summary, ethical concerns regarding CSL are not unique to science-oriented CSL experiences; however, we

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Baldwin, S. C., Buchanan, A. M., and Rudisill, M. E. (2007). What teacher candidates learned about diversity, social justice, and themselves from service-learning experiences. J. Teach. Educ. 58, 315–327. doi:10.1177/0022487107305259 are reminded that issues of consent, privacy, and stereotyping continue to need to be reported in studies on CSL.

As suggested by Anderson et al. (2001), "[S]ervice learning in preservice teacher education needs to develop a knowledge base of shared understandings regarding definitions, rationales, principles of good practice and theoretical underpinnings" (p.x); the research reviewed herein provided evidence that the literature on CSL in preservice science teacher education are not in full agreement on the conceptualizations and principles of CSL. In the absence of definitional clarity, it is also challenging to evaluate the knowledge contributed to teaching practice. Future research regarding CSL must make clear the underlying assumptions being made about knowledge and practice. Only through such clarity, we assert, can CSL itself be well-understood. The literature reviewed posits CSL as a worthwhile consideration for science teacher education programs because it can provide rich learning opportunities and practical experience to preservice science teachers.

It is appropriate to reinforce the fact that among the peer reviewed publications reviewed there was strong sentiment encouraging the use of CSL in preservice science teacher education in order to challenge deficit model of vulnerable students. For example, Gonzalez et al. (2005) suggests facilitating dialogue regarding culturally diverse families, practicing self-reflexivity in ongoing work in the community with careful attention to discourses of deficit, and providing opportunities for preservice teachers to engage in home visits to encounter their cultural resources. Other suggestions include performing case studies of one child throughout an extended period both in school and home contexts and requiring the creation of culturally responsive curricula to teachers (LaMaster, 2001; Darling-Hammond and Berry, 2006; Baldwin et al., 2007; Lowenstein, 2009; VanWynsberghe and Khan, 2014).

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

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Provocation to Dialog in a *Third Space*: Helping Teachers Walk Toward Equity Pedagogy

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This study examines the conceptual basis of how teachers learn, including, importantly, how they learn to relate to social concerns of equity in their teaching, and makes this understanding experientially accessible using a live case of the "practical" (Schwab, 1969). The conceptual understanding emerges from questioning the assumptions behind the valorization in teacher education of "theory" over "practice" that has led to the "theory into practice"/"input—output" model of teacher education. An examination of the constraints posed by this monolithic model of teacher education to teacher learning, development, and change has provided the impetus to work toward a more pluralistic view of knowledge and the new understanding of the nature of teacher learning which ensues. This alternative formation, which is informed by insights from the sociocultural perspectives of Lev Vygotsky and Mikhail Bakhtin among others, has helped in constructing a view of teacher learning as taking shape in authentic social interaction in a "third space" through hybridization of diverse voices. Most importantly, the paper considers its implications for teacher education by abstracting from experience the *nature* of mediation that facilitates hybridization.

Keywords: teacher learning, equity pedagogy, dialog, third space, hybridization, Lev Vygotsky, Mikhail Bakhtin

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INTRODUCTION

In the present era of large-scale migration and multiculturalism, the uneven playing fields that exist for the culturally diverse students are gaining increased attention globally. Reforms in teacher education emphasize the need to prepare teachers for diversity by sensitizing them to the differentiated forms of teaching that build on diverse students' life experiences and languages while introducing them to the expectations of successful participation in school learning (e.g., Melnick and Zeichner, 1995; Darling-Hammond and Bransford, 2005; National Council for Teacher Education [NCTE], 2009; Ladson-Billings, 2014; Yuan, 2018). Such a culture-sensitive pedagogy has organic links to equity in education. It creates space for every student to produce meaning from his/her cultural and experiential location, and for the teacher, the scope to tailor the dialog to help students connect to and make sense of school concepts based on their emerging understanding. However, these curricular expectations are not met in practice. This is because the prevalent traditional script, which rests largely on teacher-centered practices, disregards diversity and subjects all students to a standard uniform teaching. This contradiction has posed an enduring challenge to teacher education in finding ways to help teachers make sense of and assimilate the theoretical insights from research on teaching and learning into their practice (Loughran, 2006, 2019; Zeichner, 2012; Delpit, 2013; Cochran-Smith et al., 2017; Korthagen, 2017; Zeichner and Conklin, 2017).

Although this "problem of enactment" (Zeichner, 2012, p. 2,119) in the education provided for teachers has a resonance internationally, the dynamics by which it is played out is situational and differs from one country to another. Unless we strive to understand how these contradictions develop socially and culturally, we cannot get our bearings to negotiate them meaningfully on our journey toward achieving the envisioned goals of reform in teacher education. This is because current reforms are constrained by the legacies of the past: the institutionalized patterns of beliefs and practices that have crystallized from decisions made in the past (Sarason, 1996).

My paper responds to this challenge through its twofold purpose:

- Discuss what constrains the move toward enacting the culturally sensitive pedagogy advocated by the recently introduced reform process in initial teacher education (ITE) in the specific context of Karnataka, India, where this study is located.
- 2. Illustrate a possible way to facilitate teacher learning and change in a "third space" (Gutiérrez et al., 1995; Zeichner, 2010) where teacher educators, mentor teachers, and student teachers experience and explore what the theoretical construct of "teaching to diversity" can mean in actual practice and reflect on its implication for their respective roles as teacher educators, mentor teachers, and student teachers.

ITE REFORM IN INDIA

Educational policy in independent India (post 1947) was guided by a strong commitment to provide access to all the children who were up until then excluded from school (Government of India [GOI], 1949, 1986) and ensure that they had realistic opportunities for "social mobility out of poverty" (Lewin, 2011, p. xxii), a right which was denied to generations of their forerunners.1 The drive toward Education for All (EFA) has yielded very impressive enrolment figures.² However, this encouraging trend in schooling expansion has been counterbalanced by an equally disturbing trend of a high level of school dropouts. This reflects the magnitude of the challenge involved in achieving the goals of EFA. While the enormous size of the Indian national school education system is a management challenge (National University of Education, and Planning [NUEPA], 2014), there is a greater challenge which has to do with the complexities arising out of the changing demography of student population representing linguistic and cultural diversity of the new entrants to formal schooling. The Indian Census of Census of India, 1961 listed 1,652 mother tongues. The complexities associated with diversity are compounded by multiple factors

such as poverty, malnutrition, child labor, geographical location, gender discrimination, and children with special needs (Govinda and Bandyopadhyay, 2011).

Concerns with preparing teachers for providing quality education to serve all students have been voiced in the reports of successive national education commissions (e.g., Government of India [GOI], 1949, 1985, 2012) and policy statements (Government of India [GOI], 1968, 1986). The implication of diversity for renewing school curriculum and the need to redesign teacher education in consonance with the renewed school curriculum were articulated with added emphasis in the National Curriculum Framework (NCF) 2005 (National Council of Educational Research and Training [NCERT], 2005) and its sequel, the National Curriculum Framework for Teacher Education (NCFTE) 2009 (National Council for Teacher Education [NCTE], 2009). They recommended a paradigm shift from the conventional knowledge delivery model of teaching to a "process model" that viewed knowledge as coconstructed in the social interaction of teachers and learners. There was a strong critique of prevalent teacher education programs that trained teachers to adjust to a system in which education is seen as transmission of information, providing little scope to student teachers to reflect on their experience and develop as empowered agents of change. Both documents stressed the facilitator's role that teachers need to play in meeting the learning need of every student by bringing his/her experience and community context center stage in the coconstruction of knowledge.

The National Council of Teacher Education (NCTE), which is the statutory body responsible for regulating teacher education in India, undertook the task of restructuring ITE in 2014. The duration of the Bachelor of Education (B. Ed) course was increased from 1 to 2 years to provide more time for enhanced theoretical inputs, teaching skills, and field engagement in school and community that could help teachers become reflective practitioners with the ability to integrate theory and practice.

In Karnataka, the 2-year B. Ed. course, which was introduced in 2016, follow the National Council of Teacher Education [NCTE], 2014 curricular recommendations closely in both structure and syllabus (Government of Karnataka [GOK], 2015). Thus, the approach to teaching advocated in the state B. Ed. syllabus, similar to the one already in force in the state's school curriculum, has a "constructivist" orientation.

Although this new curricular position is widely accepted by teacher educators and teachers in principle, it is seldom reflected in their practice. Class observation of both teacher educators and school teachers shows their practice firmly entrenched in text and tradition.

THE MISSING THIRD SPACE IN ITE REFORM IN INDIA: CONSTRAINTS TO CHANGE

Both teachers and teacher educators seem to be unaware of the inconsistency between what they claim and what they do, or of its

 $^{^1\}mathrm{See}$ Ratnam (2015) for a more detailed account of educational inequality in India and how it is perpetuated.

²For instance, there was a progress from 22.2 million children enrolled in elementary school in 1950–1951 to 184.2 million in 2005–2006 (Government of India [GOI], 2007) constituting about 93% of 6–14-year age group at the national level (Pratham., 2007).

devastating effect on their students and student teachers' learning. To a question about the change, if any, that the recent reforms have made to their role as teachers/teacher educators, the typical pat answer from teacher educators is:

Earlier we used to teach; now we are facilitators. Trainees do everything by themselves. We give them lot of activities. They have to do it and present it in class seminars.

And the typical response from school teachers is:

Children construct their own knowledge; they learn by themselves. We just guide them. Teacher need not explain like before. Students come with a lot of knowledge; they know everything.

Nevertheless, class observation shows their practice going the opposite way and teachers have compelling justification for what they actually do in class:

How can they [students] understand if we don't explain the lesson first? These children don't have any background, no support at home. We have to do everything for them. We have to explain.

There is a need for greater conceptual clarity about the different understanding of knowledge, teaching, learning, and teacher-learner role relationship underlying the new curriculum vision if teacher educators and teachers are to see the limitations posed by a transmissive pedagogy for promoting transformative teacher learning and feel the impulse to change. I analyze the problem with the traditional transmissive approach to teaching and the need for dialogic engagement in a "third space," using insights from a sociocultural perspective, mainly the works of Vygotsky and Bakhtin.

For teachers and teacher educators, the idea of teaching as "giving knowledge" and learning as mastering the "given" forms part of their enculturation and education process (Lortie, 1975). From this cultural location, it is difficult for them to imagine the epistemological shift involved in seeing teaching as facilitating learning and learning as co-construction of knowledge. These concepts, which are beamed to teacher educators in experiential vacuum (Russell, 1999; Aliusta and Özer, 2017) in brief 2-3-day training programs, are absorbed by them at the level of "word" and not meaning (Vygotsky, 1987). When teacher educators teach the new theoretical principles to student teachers, they do so without much understanding of them (Beck, 2019). So, they are unable to provide support for the development of meaning in student teachers of the concepts they teach. As a result, what student teachers achieve is "a mindless learning of words, an empty verbalism that ... imitates the presence of concept" in them (Vygotsky, 1987, p. 170). This word, which they acquire through imitation "rather than thought" (ibid.), is insufficient for any meaningful application. The mentor teachers in the schools where student teachers go for internship are also not in a position to provide the experiential assistance to help student teachers make sense of the "theory" they have been given by teacher educators. This is because teachers in school, like the teacher educators, go through training in the new approach where much of what they hear is incomprehensible to them. School teachers use the new jargon to label the traditional practice they model to student teachers and the latter accept it unquestioningly. So, the discourse of the new approach that the student teachers use in their lesson plans becomes only a cover for their classroom practice which remains highly conventional. The ground reality shows that the new curriculum seems to have increased the theory–practice disconnect instead of bridging them.³

The epistemological divide is buttressed by the distance between researchers/teacher educators and teachers marked by a hierarchical relationship; researchers in the university are seen as engaged in the "production" (Wenger, 1998) of knowledge (theory). This is delivered to the student teachers in the B. Ed. course and teachers in school for its "adoption" (ibid.) in practice. This division of labor comes with a double disadvantage:

- 1. It exaggerates the theory-practice dualism by placing them in sequential order and grounding them in two different locales: university and schools, respectively (Ratnam, 2015).
- 2. It leads to a power imbalance by positioning the teacher educators and teachers in a hierarchical relationship.

The traditional behaviorist tendency to split knowledge into theory and practice and the concomitant unequal partnership it sets up between university and school (Dewey, 1904; Schön, 1983; Korthagen and Kessels, 1999; Darling-Hammond, 2009; Zeichner, 2010; Loughran, 2019) fall far short when evaluated against the goals of a culturally sensitive, equity-oriented pedagogy which is inclusive of and responsive to the lived experience of diverse students while helping them to make sense of the knowledge and skills taught in schools. Theory that is "empty of people, feeling and experience" (Willis, 2000, p. xi) misses the flux of the realities of teaching (Hargreaves, 1995), and therefore, it becomes irrelevant to practice. On the other hand, practice that fails to connect with social issues lacks flexibility to respond to the changing needs such as increasing diversity.

Insights emerging from sociocultural perspectives on human learning and development present a radically different view of knowledge and offer tremendous potential for imagining a culturally sensitive pedagogy. In this view, theory and practice are not two separate compartments (e.g., Vygotsky, 1987; Davydov, 1990), but two sides of the same coin (Thompson, 2017). They are mutually constitutive aspects of knowing (coming to know/meaning-making/learning) facilitating its creation in a dialectic interplay set up by reflection.

This integrative epistemology put forth by Vygotsky in the context of child development (see Vygotsky, 1987) has a counterpart in teacher education (see Korthagen and Kessels, 1999). Both suggest the importance of spontaneous concepts (Vygotsky, 1987) or personal experience (Korthagen et al., 2001) for the learner to be able to develop theoretical concepts through reflective appropriation of scaffolded instruction.⁴ It is not useful to impose new theories before teachers are able to gain conscious

³Also, personal communication with Professor Viyayakumari, member, 2-year B. Ed. Syllabus Committee, Karnataka, October18, 2019.

 $^{^4}$ The "realistic" approach to teacher education proposed by Korthagen et al. (2001) starts with personal experience of teacher learners.

awareness of them and before they can place their unique personal experience within a system of relationships of generality (Vygotsky, 1987). The developmental account provided by Vygotsky as well as Korthagen and Kessels helps us see the insufficiency of meaning resulting from the epistemological divide between theory and practice in a convincing manner.

THE DESIRABLE THIRD SPACE IN TEACHER EDUCATION

What does this understanding mean for teacher educator's "facilitator" role? This is where the idea of a third space becomes important. The notion of "third space" advanced by Bhabha (1994) in the context of postcolonial studies is an oppositional response to the dualistic power relationship between the imperial colonizers and the subordinate colonized subjects. It is about dislodging hierarchies to equalize relationships and overcome oppression. Its democratic and equity-oriented tendencies eschewing binaries and tyranny have found a strong resonance in education (Gutiérrez et al., 1995; Moje et al., 2004; Gutiérrez, 2008; Dantas-Whitney, 2013) and in teacher education (Gannon, 2010; Zeichner, 2010; Lewis, 2012; Klein et al., 2013; Flessner, 2014; Beck, 2016, 2018). In teacher education, it has come to signify equitable collaborative partnership between university and school (including the community which the school serves) to overcome dualities of theory/practice and university professors/teachers (also community) and to help student teachers make the differently oriented university course work cohere with practical teaching in school.5

The terms "first" and "second" space in teacher education are seen to allude to physical spaces, viz. schools and university (Flessner, 2014). However, the third space is more symbolic. In this study, the third space is conceived as a metaphoric collective reflective zone for fostering horizontal democratic and dialogic relationship among student teachers, mentor teachers, and teacher educators (including the researcher in the role of a more experienced peer) in order to restore the wholeness of pedagogic knowledge and its meaningful mediation in promoting transformative learning for all. Teacher learning involves the teacher educators, mentor teachers, and student teachers in a collective process of development. This social nature of meaningmaking (learning) is well articulated in Bakhtin's notion of the dialogical relationship between the self and the other, where consciousness begins to operate in social interaction: " not that which takes place within, but that which takes place on the boundary between one's own and someone else's consciousness, on the threshold" (Bakhtin, 1984, p. 287). The teacher educator, mentor teachers, and learners are constituted mutually through "semiotic mediation" (Vygotsky, 1978) in the third space. This third space is created in joint activities facilitated by teacher educators to promote the co-construction

of unique new hybrid meaning toward "greater and more adaptive complexity" (Moore, 2002, p. 26) from a juxtaposition of contrasting points of view. The notion of third space is loaded with critical emancipatory (Freire, 1993) and subversive potential which aligns with the concerns of promoting equity pedagogy. In the study, the growing awareness in the student teachers of the inconsistency between their democratic values and their action, which was authoritarian, led to questioning and reflections on the antecedents and consequences of their action. Teaching as a subversive act was a way of working around the borders of constraints posed by the dominant institutional authoritarian voice to pursue what they considered as a more valid approach.

HYBRIDIZATION IN THE THIRD SPACE

This social process of learning is a complex recursive one and challenging for all involved in learning in the third space. I use Bakhtin's notion of *languages of heteroglossia* to explain what the formation of hybridity in the third space entails.

Languages of heteroglossia are each "specific points of view on the world, forms of conceptualizing the world in words, specific world views, each characterized by its own objects, meanings and values" (Bakhtin, 1981, pp. 291-292). The diverse voices in heteroglossia can be seen in the different "funds of knowledge" (González et al., 2005) that learners (including school teachers, student teachers, and researchers/teacher educators) draw on to construct meaning from the networks of relationship they are part of in school, college, their community, and the wider world including virtual communities. The diverse constellation of voices from learners' social and cultural world inhere in their consciousness as "inner speech" (Bakhtin, 1984) and "[o]ur thought is born and shaped in the process of interaction and struggle" (Bakhtin, 1986, p. 92) among these divergent voices. The formation of hybridization or the creation of new meaning from these disparate and ununified voices inherent in heteroglossia "demands enormous effort" as it is not "the frivolous, mindless and unsystematic mixing of languages" (Bakhtin, 1981, p. 366). It is important to note that these voices need to be dialogized so that teachers assume the critical reflective stance with which they regard one point of view through the eyes of another. Otherwise, as Brookfield (1995) asserts, teachers "may be caught within self-fulfilling interpretive frameworks that remain closed to any alternative interpretations" (p. 5). Reflective dialogization leads to the generation of an "interminable" dialog among diverse viewpoints (Bakhtin, 1981, p. 296) both on the social (interpersonal) plane and individual (intrapersonal) plane. Herein lies its emancipatory and subversive potential. When the value systems and worldviews in the voices in heteroglossia "interanimate" (ibid.) each other in dialog, these values and worldviews become open to scrutiny and a possible re-evaluation. Inside the classroom, this opens a legitimate space for diverse ways of knowing that different participants bring to the dialog disrupting the prevalent normative pattern of interaction. In this democratic third space, the dominant institutional voice

⁵The third space has been conceived in a variety of ways in ITE programs with initiatives attempting to bring practice/practitioners to campus and/or place methods course in schools (see Zeichner, 2010; Beck, 2018 for different ways of coming together to create a third space). Beneficial effects of such partnership have been reported (e.g., Allsopp et al., 2006; Darling-Hammond, 2006).

ventriloquized in the teacher (educator) monologue does not silence or marginalize authentic student voices. Students and teachers interact with equal rights and this intersubjectivity on the social plane nourishes the inner speech or internal dialog in its effort to form a new hybrid perspective from among diverse intersecting voices. This liminality of hybridity (Bhabha, 1994) renders outcomes ambiguous and opens them to diverse alternative possibilities including rejection or subversion of the dominant homogenizing tendencies and hierarchies to create a new reality, a more democratic equation ushering in a new way of thinking/knowing/understanding and acting/practice.

Reflection has a seminal role to play in interanimating the voices in heteroglossia. Dialogization can be seen to be coterminous with reflection and thus provides an understanding of what it means to help participants engage in deeper reflection. Deep reflection goes beyond a reductive focus on technical efficiency in the preparation of teachers (Dewey, 1933) to encompass the emancipatory and moral dimensions of reflection (Brookfield, 1995; Cochran-Smith and Lytle, 1999; Esau, 2013) which focus on the "origin and consequences" of one's actions as teachers (Zeichner, 1983, p. 7). Learning, development, and change involve encountering new experiences, which are controversial or uncertain in nature, and consequently, having to make difficult judgments. Creating new understanding entails comparing perspectives on teaching, learning and learners, thinking about contexts of curriculum, schooling and society, weighing evidence, considering the validity of such evidence and, in the light of it, re-evaluating prior knowledge (Ratnam, 2016a). The "facilitative" role of the other lies in making alternative cultural tools/voices experientially accessible to teacher learners and helping them gain a conscious awareness of it whereby it reaches the threshold level (Vygotsky, 1987) to "inundate" teachers' "inner speech" (already internalized dialogs and voices) (Bakhtin, 1984, p. 238) and intensify the interaction among differently oriented voices on the way to realizing their "self" in new ways. The teacher educator's facilitative role also involves an empathetic understanding of the intellectual and emotional challenge involved in coping with contradictions/complexities (Perry, 1970) and helps sustain the process through a judicious mix of support and challenge (Ratnam, 2016b).

The following section analyzes an empirical instance of the dialog provoked by new social and epistemological experiences teacher learners encountered in a third space. It shows how in this dialog the student teachers' point of view and my own were deconstructed and reconstructed to produce new meaning in the metaphoric third space. It illustrates how the ensuing dialogization of voices nudged the participants to think in new ways about issues of equity and its implication for their practice including ways of subverting to achieve their goals.

THE STUDY

The Birth of a Third Space: Participants

This study emerged from my dialogic engagement with a cohort of 10 first year B.Ed. student teachers (ST1-10) and their teacher educator (TE1) at a College of Education (CTE) in

Karnataka, India. This development took place in the course of a larger ongoing study (2018-) I am undertaking into how student teachers and teacher educators make sense of the recently introduced "forces of change" (Fullan, 1993/2000) in ITE, Karnataka described in the earlier sections. The dialogic third space was sparked by a question I raised for consideration when the supervising teacher educator requested feedback on a peer teaching class that I was observing. This question, which was prompted by my genuine concern about acknowledging difference in class, had a very different slant from the feedback that the student teachers were used to giving and receiving from teacher educators and peers. The typical feedback consisted of remarks about how well the student teacher executed the skills/techniques of teaching taught to them: "You could have used TLM (Teaching Learning Material) for showing alternate angle."; "Blackboard work must be more organized."; and "Time managementyou couldn't complete the teaching items you have in your lesson plan."

There was a shift of focus in my question from a critical appraisal of teacher behavior to learners and their perceptions as the following excerpt shows:

Tara: The instruction you [the student teacher who did the peer teaching] gave the class regarding the drawing you wanted them to do got me thinking. I couldn't figure out the purpose of asking everyone to do it.

Rashi: That was the "engage stage" - to engage all the students.

Tara: That's a nice goal. But does engaging students mean simply asking of them to do something?

Rashi: No, I asked them to give me the answer.

Tara: Yes, you did throw the question open to the whole class. But you stopped with the second student who gave you the 'correct' answer and you used it for your explanation that followed. I was thinking of other students who had different responses. This student beside me, her drawing showed a very different understanding from the way you explained it. There were others, including me (shows her drawing), who had done different things that made me curious. Do you think it would have been worthwhile to find out how we arrived at these diverse responses, our thinking, our understanding that made us come up with different drawings? Had we got the instruction wrong or were these acceptable, valid alternative viewpoints? Would it be useful to spend a little time on this in class?

This new dimension of learner perceptions that the above exchange brought into focus seemed to touch a new "ontological" (Matusov, 2011) chord particularly with those student teachers whose diverse response went unnoticed by the teacher. After the class, two other student teachers who had their peer teaching sessions following wanted me to stay on. The teacher educator (TE1) expressed keen interest too and said that it would not only be useful for the student teachers, but also for her. It would provide new angles to view teaching and diversify her feedback. Since then, we have developed as an informal community of

⁶Student teachers are expected to follow the 5Es instructional model (Bybee and Landes, 1990) consisting of Engage, Explore, Explain, Elaborate, and Evaluate in order to promote inquiry-based learning. However, in practice, it is short of this intent and reduced to a ritual.

inquiry learners, sharing "histories and experiences" (Clift et al., 2000) over the past 13 months (since January 2019). We meet twice a month on average in class and once a month outside class hours for 2 h. This is apart from the daily visits I made to observe student teachers during their 2-week microskills teaching and simulation teaching in January 2019. The out of class meetings are attended by a few more participants with whom I have ongoing dialogic relationship in other contexts: two senior students (Sr ST) who attended my invited guest sessions at CTE, another teacher educator (TE2) whom I have interviewed and observed in class as part of the larger study, three school teachers (T1–3), and two faculty from DIET (DT1 and 2) (District Institute of Education and Training). The participants in the group have developed a sense of belonging to it and refer to it as "our group" (henceforth OG).

The interactions in OG are bilingual. This is largely because it has a mix of student teachers studying B. Ed. in Kannada (regional language) and English medium.

METHODOLOGY

The study recognizes the importance of inquiry on practice stance (Stenhouse, 1975; Cochran-Smith and Donnell, 2006; Cochran-Smith and Lytle, 2009) with an emphasis on reflection (Dewey, 1933; Schön, 1983; Zeichner, 1983, 1987). The aim of this dialogic qualitative research study is to deepen the process of meaning-making through ongoing dialog among its participants rather than the prediction, control, and measurement that characterize positivist research perspectives (Tobin et al., 2009; Matusov et al., 2019). In this sense, it aligns with the self-study method which seeks to "provoke, challenge and illuminate rather than confirm or settle" (Bullough and Pinnegar, 2001, p. 20). The purpose of the study coincides with the way of doing it as both revolve around meaningmaking mediated by critical dialog (Matusov et al., 2019). This process involves teacher participants, including the researcher, in raising and addressing questions that are subjectively engaging for them, regarding (testing) one point of view through the eyes of the other, and deconstructing beliefs and assumptions held by self and others to creatively "reaccentuate" the scripted meaning beyond the status quo. Since this pedagogic (Denzin, 2006) methodology is conceptual (Sawyer and Linggett, 2012) rather than prescriptive, the analysis is focused on "evidence of the reframed thinking and transformed practice" (LaBoskey, 2004, p. 859).

My positionality in this study was one of "in-betweenness" (Tooke, 2000, p. 217); I was an outsider and a purveyor of alternative ideas and, at the same time, an insider with knowledge of and working experience with educating teachers. Our dialogic relationship was built on mutual trust and confidence. It was my genuine interest in listening and

responding to the participants that challenged their takenfor-granted ways of thinking and roused their curiosity in the potential contribution our dialogs could make in raising and addressing their newly emerging questions. The friendly, non-judgmental nature of conversations in the group reduced power imbalance (Scott and Usher, 1999) and created a safe environment for everyone's self-expression.

Ethics

This study emerged from the voluntary coming together of the participants as a community of learners. However, for the purpose of research and its communication, permission was obtained from the Principal of the College of Education where my research used for this study was located and written consent from all the participants. All the names used in this study, except mine, are pseudonyms based on participants' preference.

Sources of Data

The "focal activity" (Gutiérrez et al., 1999) for analysis used in this study is the dialogization of voices in the interactions that followed my modeling of a culture-sensitive pedagogy at student teachers' behest. They wanted some concrete example to understand what they read in theory about "creating a learning environment that addresses children's diverse needs" (National Council of Educational Research and Training [NCERT], 2005, p. 81). However, this is not to be seen as an isolated activity. This joint activity and ongoing discussions on it are nested within other learning experiences. The histories and experiences shared over months afford a depth of contextualization for profound meaningmaking by setting up a dialectical relationship between the past and emerging meaning. This continuing learning provides rich data to trace participants' developing perceptions to revision and reshape practice. The multiple sources of data that helped capture the multiple perceptions of participants over time include class observation of student teachers' peer teaching followed by feedback sessions; the inquiry-based activities and discussions in OG to address questions raised by participants (including the researcher); documents (curriculum framework, syllabus statements) that helped in describing the context of the study; other artifacts such as lesson plans made by student teachers and school teachers, checklist for evaluating teaching practice; and reflective conversations with participants individually or in pairs where I shared my data analysis and the emergent patterns of meaning. Although these conversations consumed much time,8 they proved valuable. The free flowing and friendly nature of these conversations not only served as a sounding board for my analysis and interpretations, but also provided occasions for gathering nuanced reflective information about the new meanings that participants were developing as they contributed to our dialogic engagements in the group. In addition to cross-checking my interpretations with participants, my journal writing facilitated reflexivity by helping me to examine constantly the values and

⁷The DIET faculty train in-service school teachers. CTE is located in the same campus as the DIET and I am connected to the DIET through a joint project I am carrying out with school teachers. The three school teachers and DIET faculty mentioned above are among the participants of this project.

⁸I have about 19 h of recorded data from these conversations.

assumptions underlying my experiences, thoughts, and feelings (Russell and Kelly, 2002).

Data from class observations and discussions were recorded and transcribed. I have translated the parts in Kannada (used largely by student teachers from Kannada medium) into English to make it accessible to readers.

Analysis

"Thematizing meaning" (Holloway and Todres, 2003, p. 347) from data involved a rigorous iterative dialectic process of reading and rereading transcripts, reflecting and making notes of the emergent topics and, in turn, holding the data against the developing themes to see whether the data really supported it. Built into this thematic analysis (Braun and Clarke, 2006) and its interpretation were layers of social checks that enhanced its validity and trustworthiness. My theorizing was aided by social processes that engaged me constantly in discussion with participants and associated reading both of which fed into my inner dialog. Besides, the patterns of meaning were also reviewed by a critical friend who was familiar with the objectives of the study and its dialogic orientation. In writing up an account of the analysis, I lay this socially constructed meaning open to further validation in the resonance it has for the readers (Whitehead, 2004), in the questions and new interpretations they bring to it, and the pedagogical insights it bears for them in their attempt to promote culturally sensitive equity pedagogy.

The conceptions of teaching that participants had imbibed as students (Lortie, 1975) and in the workplace made them see teaching as delivery of ready-made knowledge. In the view that I brought to the group, knowledge was not something out there but co-constructed in inquiry activities undertaken jointly by students and teacher. These two contrasting views presupposed two constellations of voices from the larger social world (Ratnam, 2016c). These can be captured by what Bakhtin (1981) calls, "authoritative discourse" and "heteroglossia," respectively. They are grounded in different epistemological systems, responsive to different relationships and practices. The authoritative discourse "demands that we acknowledge it, that we make it our own.... We encounter it with its authority already fused to it." (Bakhtin, 1981, p. 342). Pedagogically, the practice of "reciting by heart" (ibid., p. 341) corresponds to authoritarian discourse within a structure of hierarchical relationship. Heteroglossia, as pointed out earlier, is dialogic, open to connect with other voices in a dialog horizontally and thus open to growth and change. The pedagogical goal associated with heteroglossia is "retelling in one's own words" (ibid.), where the words of others, playing a role in one's inner speech, gets reaccentuated based on one's own intent (authorship). This is "innerly persuasive discourse" (Bakhtin, 1981, p. 346) as opposed to "authoritative discourse." In the analysis below, notions of "authoritative" and "internally persuasive" discourses provide a heuristic in both the critique of the dominant cultural practice in teacher education, where singular "universal" knowledge is privileged, and its reconstruction in the third space created in OG that acknowledges a pluralistic approach to knowledge.

DIALOGIZATION OF VOICES IN THE THIRD SPACE: DECONSTRUCTING MEANING TO REACCENTUATE IT

The episode from my teaching that provided the "grounded dialogic provocation" (Matusov et al., 2019, p. 254) to mediate the concept of culturally sensitive pedagogy was an ESL class I took for 47 grade VIII students who were culturally diverse. In small groups of three, the students were engaged in coconstructing a story from a series of picture panels. In one of the groups, while two boys, Anil and Shashi, were busy in discussion, the third boy, Anand (from a vernacular medium), sat quietly apart staring down at the pictures. As I approached them, Anil and Shashi looked up and sought my help regarding the pictures they were puzzling over. In response, I addressed Anand first. In the course of the conversation that followed, Anand brought to the task his experience and observations from real life and made meaningful connections to offer a perfectly cogent interpretation of the picture story that Anil and Shashi were struggling to find. This contribution from Anand had changed his identity of participation in the group. From being dismissed by Anil and Shashi as that "quiet boy from Kannada medium," Anand was now acknowledged by them as a more competent peer.

Following is an Illustrative excerpt from original data transcripts of the discussion that followed in OG about the class. This will enable readers to relate and respond to the analysis that follows.

- 1. Shiva (ST5): This [Anand's experience] is my story; the same thing I went through in that biotic/abiotic class. When Janaki akka⁹ (Sr ST1) asked Mani to write down all the examples we were giving for 'biotic' on the board. I said 'fruits', but she didn't hear.
- Mani (ST4): I heard it, but since akka [Janaki] didn't pick it up, I thought it wasn't a suitable example and didn't write it.
- 3. Shiva: So, you decided it was not biotic and dropped it and I kept quiet. But I had that doubt in my mind. After class, in the feedback session, ma'am [Tara] said she had some doubts about the way biotic and abiotic were defined and asked us whether we didn't have any questions. I took my chance to ask my question when it came from her, because she is always patient and listens with interest to what we say.
- 4. Janaki: I should have taken it up. But I was confused by that example and when we are stuck like that, we just go on. But that day during the after-class discussion when it came up again, I realized that I had made a mistake.
- Tara: I wouldn't see it as a mistake. You were following what you have seen as normal practice without giving it any thought. Now because we talk about it, you start seeing things differently perhaps.

 $^{^{9}}$ It is a cultural practice in CTE to address senior students as akka (elder sister) and anna (elder brother).

- 6. Janaki: In that class, ¹⁰ I was thinking only of carrying out my plan perfectly, especially because I was giving demonstration of a simulation class to the juniors. I wanted them to get a clear idea of the steps. All my classmates, including our teachers [teacher educators] appreciate my class and that left me believing that this is how a good class must be... I am very careful now not to 'silence' students when they say something different.
- 7. Tara: Do you see any use in creating an environment where students talk, feel free to pose their questions and doubts?
- 8. Sidda (Sr ST2)¹¹: Certainly. We heard about Shiva's question and in our science pedagogy class, this is still not fully resolved. There are two teams, biotic and abiotic and we are fighting (laughter). It keeps erupting when we find new points to support our argument. We are learning a lot and thinking a lot also.
- 9. Shiva: Before our group (OG) was formed, we never posed any question during peer teaching; only a few answered teachers' questions and we opened our mouth only when it was our turn to give feedback.
- 10. Pragna (ST6): Even that because it was compulsory. It was so monotonous. We always went in circles: the comments were all about presentation, use of TLM, examples, voice modulation, board work and interaction.
- 11. Lakshmi (ST7): My class on Newton's first law, I'll never forget the feedback I got. It was a turning point for all of us. We have become very alert in class. We listen carefully to what the teachers say, what students say. It has raised our level of thinking and questions have started to flash.
- 12. Kavya (ST10): Thinking produces questions. Now our group is famous in the college for raising questions (laughter).
- 13. Tara: If we want to view it from a student's point, how did you feel when you got a chance to ask questions? (Shiva makes a gesture to draw attention).
- 14. Pushya (TE1): Yes Shiva, you have something.
- 15. Shiva: Yes ma'am, about my story. I want to share how I felt in that class [Janaki's class on biotics and abiotics]. There was a great sense of inner joy. My doubt had led to a very long and serious debate. In B. Ed, teachers and my friends have been very good to me, always encouraging me, giving me chance to participate in activities and telling me what to do because I am from village and lack exposure to many things. But when you ([Tara] took up my question, it was not simply to be nice to me or include me. Everybody listened and got involved, not out of politeness but out of real interest in my ideas. Just like that boy Anand- he was appreciated because of something valuable in him. There was an affirmation (dridhikarana) of his language, his experience. Same way, I had that feeling of self-worth (swayam maulya) for the first time in my educational life.

- 16. Sangam (ST9): What made Anand open up was the real interest in him to hear his experience, the same thing we experience in our group that makes us speak. But in school it was the opposite for us. We used to get beaten for wrong answers. We were scared to open our mouth. When we came to high school, also in college, we were always left out. Teachers always chose students with good communication ability for everything. They looked impressive and confident. We were shy and inhibited compared to them. We were quiet and just listened. Teachers thought we had no ability and we also believed it. This was how school was for the likes of us and we accepted it. We learned what we could and our goal was to pass the exams.
- 17. Tara: Do you think, as teachers, all of us can try to improve the situation for such students, create opportunities to bring out their competence?

Dialogization of Voices in Interaction: Waking Up to the Oppression Hidden in the Authoritative Discourse

The above excerpt shows that the classroom episode was not analyzed by participants in isolation. Their response was not confined to what transpired in that particular modeled class under consideration. Instead, it became a tool for dialogization of voices. The episode evoked and got interwoven with participants' experiences, thoughts and feelings, and their hopes and concerns. As a result, the edifice of the voice of authority was shaken in participants' pursuit of what was internally persuasive for them.

Anand's experience had a special resonance for Shiva as it related to his experience and it is this personal relevance that shaped his narrative: the erasure of his "self" in the oppression born silently (turns 1-3) and the joy of finding his "self" through a release of his suppressed voice (turn 15). Shiva approached Anand's story through the eyes of his own experience, interanimating the voice of authority which constituted a large part of his school and college experience with the more recent liberating languages of heteroglossia he encountered in the new community of learning he was part of. Shiva's story of oppression drew in other voices of heteroglossia (turns 6, 8, 10, 11, and 16) into the dialog. This oppression in the classroom is largely associated with the silencing of students' voice, their subjective perceptions. It happens when the teacher is focused on getting across the dominant curricular meaning to students and neglecting the meaning they bring to class. An example of this ubiquitous practice of unintentional silencing was seen in the peer teaching session where the student teacher, Rashi, accepted the answer that met her expectation and provided no space for students with divergent answers to voice and justify their point of view. A similar silencing occurred in Janaki's class when she failed to acknowledge Shiva's genuine doubt, because it went beyond her script.

In OG interaction (cf. the illustrative transcript provided above), the accepted authority of the unitary institutional voice that implicitly guided teachers' action became open to dispute. As a result, the oppression, which was concealed by the sense of

 $^{^{10}{\}rm Janaki's}$ first brush with our group was on the day she took the demonstration class. She has been attending our group meetings since then.

 $^{^{11}\}mathrm{Sidda}$ heard about the discussion on Janaki's class from her and this made him join OG.

equilibrium the participants were ensconced in as they applied the universal norms laid down by the institutional authoritative discourse mechanically in their practice, stood exposed. The participants questioned their held beliefs and practices (turns 6, 10, and 16). They became aware of the multiple sources of oppression they themselves had experienced as students which they had accepted passively as "the way things are done" (Shotter, 1978, p. 70) (e.g., turn 16).

Linking Personal Meaning to Larger Historical Meaning: Reconceptualizing Practice

Dialog in the third space connects individual subjectivity to the social other, expanding personal meaning to the social and historical context of which the individual is a part (Cochran-Smith, 1999). In our dialog, "story begets stories" (Norris, 2008, p. 234). Anand's story made Shiva recall his past experience. This, in turn, brought forth Sangam's narrative, attuning to the commonalities in their experiences. These individual narratives came already dialogized connecting them to the larger social and historical context (Bakhtin, 1981). The more general "we" (turn 16) in the story Sangam recounted invokes the collective memory of the historically and socially marginalized and silenced students in India. This dialogization of voices from the past and present opened the space to mean, causing shifts in understanding. The participants became critically conscious of the voices that were being quietened in class thus robbing them of the opportunity to learn by engaging in meaning-making. Their own complicity in this silencing using their authority as teachers was brought home to the participants sharply through the lived experience of Anand, Shiva, and Sangam (e.g., turn 4).

The new understanding made participants sensitive to how inequity is perpetuated in class by the negative impact of their thoughtless actions and interactions with diverse students. It made them look for alternate emancipatory possibilities for future action (turns 6 and 11) that subverted the authoritative voice: e.g., Kavya:

In Sir's [supervising teacher educator] presence, we follow what is expected. When we are on our own, we try to follow our "heart" (laughter). 'Trying', because we are still learning how to do it.

The participants' contribution to dialog in the third space seems to have allowed them to "achieve a deepening awareness of both the sociocultural reality which shapes their lives and of their capacity to transform that reality through action upon it" (Freire, 1993, p. 27). It is important to note here that the participants were not in pursuit of a Utopian dream in constructing a vision for future action. Their vision was tempered with the voice of reality and the constraints posed to their action by this reality:

Lakshmi: But we must be ready to face a lot of criticism. As Naina ma'am (T3) and Shaila ma'am (T2) say, in school they will expect us to do things in a particular way-explain, give notes and revise answers for exams. We have to learn how to manage both, school goal and our goal. Here, in peer teaching also we are facing the same problem. I was doing sound and gave the example of string instruments for sound produced from vibration. Swathi asked a

question, "Isn't silent vibration possible? Phone vibrates when it is on silent mode." Instead of closing it with a 'yes/no' as we usually do, I decided to take it up and it led to more questions. The whole class time went in exploring the mechanism of producing sound. In the feedback Sir [supervising teacher educator] said, "You don't go so deep into the topic, you won't have time to cover the content then. You didn't complete what you showed me in the lesson plan." Then he told the others [peers], "Tarale questions kelbedi." (Don't ask unwanted questions).

Learning in the third space is itself constructed within the constraining context of institutional control. In fact, it is an understanding of the constraints posed to action that gave the participants the agency to reconceptualize their practice to work around the restricting borders (Bakhtin, 1986) to "teach in the cracks" (Schultz, 2017).

Teacher Change: Walking Toward Equity Pedagogy

The learning taking place in the third space of OG is equity oriented with transformative potential for all its participants, largely because of the open-ended nature of questions posed for discussion. This openness accommodates diverse languages of heteroglossia based on participants' diverse cultures, interests, purposes, and values with increased opportunities for dialogization of voices and hybrid meaning construction. The third space is not seen here as an exclusive social space, unconnected to the participants' work place. The transformative inclusive learning experienced by participants in OG permeates their practice in their workplace. The dialogs in OG activate participants' thinking and raise further questions with reference to the reality of teaching in their respective contexts and the challenges/dilemmas they experience as they explore new possibilities to personalize learning for all students in the classroom. Teaching for understanding by engaging students in a dialogic meaning-making process involves a pattern of relationship in which the active contribution of students using their diverse funds of knowledge plays an important role. Listening to students to understand their communicative intent and assisting them to progress along intended lines are time consuming. It goes against the institutional ethos of teaching to the test by imparting ready-made knowledge. Both in ITE and in schools, there is a general lack of confidence among stakeholders in the efficacy of a knowledge building pedagogy to achieve the goals of examination. This cynicism could be an alibi for continuing with old and familiar practices. It could also spring from a lack of understanding of the conceptual basis of culturally sensitive constructivist pedagogy. As Lakshmi has demonstrated, there is little tolerance among teacher educators of practices that build on what diverse students bring from their home culture. The time spent on this, according to them, is better utilized covering the syllabus and practicing to the test. Under these circumstances, following a culturally sensitive pedagogy with concerns of equity becomes a subversive act for student teachers and teacher educators who are more reflective and intentional.

The interactions in the third space mediated learning for all of us in unique ways which was reflected in the different

takeaways we each spoke of, each according to his/her needs and interests (space limitation does not allow illustrative excerpts). Teacher educators are learning to redefine their roles by changing the criteria of evaluation to focus more on what learning was promoted and on how student teachers reach out to the learners. Student teachers are learning to change their focus from following the curriculum to following the learners (Korthagen, 2017). School teachers are trying to find space for attending to the needs of the individual child amidst constraints. There is also a marked change in the impatient attitude they usually showed toward student teachers during school internship. Tiny and Seema from the DIET are gaining a better understanding of the teacher's facilitative role and are learning to model it in the in-service training they conduct. The change in participants is marked by the development of empathetic understanding of the students we teach. It urges us to find time to improve the social relations and interactions with our students (McDonald and Messinger, 2011; Makoelle, 2019), even amidst the rush to fulfill the highly demanding institutional directives.

Our dialogs have made us more purposive. They are helping us develop perceptions and practice that are in keeping with the epistemological shift implied in the reformed curriculum for teaching to diversity and play our respective roles more effectively.

In the next section, I share my learning from my personal experience and reflection on how the third space was created and sustained in preparing teachers for culturally sensitive and equity-oriented pedagogy.

OPENING THE SPACE TO MEAN: IMPLICATIONS FOR TEACHER EDUCATION

Choice of Meditational Means: Mediating Imitative Behavior and Mediating Reflective Action

The difference in the meditational means used typically in the student teachers' course and the one used in OG reveals how the choice of meditational means makes a difference in promoting "reflective action" (Lampert-Shepel and Murphy, 2018) or meaning-making.

The mediating communication in both the courses that teacher educators teach and the classroom practice of student teachers is characterized by monologic "instructional talk" (Gallimore and Tharp, 1990/1998). In both, the locus of control is in the hands of teacher educators and student teachers, respectively, where "teachers ask questions and students give answers" (Sarason, 1996, p. 362). Teachers' a priori expectations make them impervious to learners' zones of development (Vygotsky, 1978). There is an implicit play of power in teachers' control that is reinforced and sustained by the normative practices and expectations in both school and teacher education. These practices and the attendant asymmetrical social relationships are linked to common cultural practices of the wider community and society (Bourdieu et al., 1994; Ratnam, 2013).

These metanarratives, which usually work at a taken-for-granted level, marginalize and silence students' diverse voices without making it visible to consciousness. Janaki's teacher-centered practice, which was referred to in our OG dialog earlier, is an example of how her practice was shaped by her socialization into and acquisition of what was valued in the social and institutional context and which was appreciated by other student teachers and teacher educators alike who seemed uncritically deaf to the voices it muted. The problem with ignoring disruptive/destabilizing voices of students (e.g., Shiva's legitimate question) in the classroom is that it stifles their curiosity and creative expression. It is not as if students stop thinking. The point is that when students' voices are silenced, the opportunity to elaborate on and link them to school knowledge is lost (Gutiérrez et al., 1995). As a result, the potential for promoting learning using students' capacity to think and reason remains unrealized. It restricts co-construction of meaning and the consequent shifts in understanding.

There is a lack of mediation of meaning at all levels of teacher education be it course work, modeling practice by teacher educators and school teachers, or practice teaching by student teachers. As a result, student teachers' practicum becomes an occasion to "demonstrate" the skills of teaching that they learn from teacher educators (Zeichner, 1996) and not an opportunity to promote "inquiry as a stance" (Cochran-Smith and Lytle, 2009) examining how their practice affects the interests of students within larger educational and social contexts. Unreflective action constrains the development of autonomy to subvert the voice of authority and enact practices that are more socially just. There is no nutrient in the feedback student teachers receive from teacher educators or mentor teachers to take them beyond a technically rational practice (Schön, 1983) and the surface level behavioral "action-oriented" reflection (Hoekstra, 2007) involved in it, to the level of transformative "meaning-oriented" reflection (ibid.) that helps in probing the rationale or the "pedagogical reasoning" (Loughran, 2019) behind what teachers do. The criteria sheets for observing student teachers' practice are replete with behavioral components of teaching as if teaching is an activity separate from learning: Teachers "used gestures," "modulated voice," "changed interactional style," "used pausing," "used prompting questions," "re-directed questions," "used examples," "used TLM" and the list goes on. A focus on positive and negative aspects of teacher behavior eclipses learners and learning as the main issue in the after-class discussion. A failure to link the skills student teachers are trained to enact to the purpose they are supposed to serve reduces teacher reflection to focus on perfecting their behavior and "effective delivery" of curriculum content rather than on the "subjective cognizing" world of diverse students (Lobok, 2017; also, Korthagen, 2017) to promote their potential to mean. The latter needs transformative reflective action which is what was mediated in the third space of OG.

Animating Reflective Action in a Horizontal Collective Zone

As opposed to the monologic "instructional talk" that dominates teacher education practice, the OG was suffused with dialogic

"instructional conversation" (Gallimore and Tharp, 1990/1998) where every participant had the democratic and moral right to question, respond, agree, or disagree (Bakhtin, 1981) from his/her unique subjective perceptive location. My role in OG, as a more experienced peer, was to animate this process of reflective dialog among diverse voices both intersubjectively and intrasubjectively in the formation of hybridized knowledge and identity. What sparked the creation of the third space in OG, as previously mentioned, was a question and the ensuing dialog that transported participants from the monotony of dead routines divested of interests and purposes to a world where their lived experience and those of their students were the center of attention. The third space enabled their voice to engage in spontaneous conversation breaking with the classic initiationresponse-feedback (IRF) (Sinclair and Coulthard, 1975) tradition. The IRF pattern with its focus on knowledge recall questions brings a closure to the meaning-making process, whereas the open-ended questions that I posed on the topic of discussion brought back the flavor of the natural "eventness" of students' everyday communication (Bakhtin, 1984, p. 88) endorsing their unique subjectivities: their feelings, thoughts, emotions, opinions, and purposes. Open-ended questions thus helped me connect to the participants, activate their thinking, and bring out their voice. Most importantly, it helped participants engage as active agents in the process of their learning. The following excerpt is an example of the questions they posed which emerged from curiosity and interest to gain deeper understanding. It should be noted that this question which had remained latent during the peer teaching class was voiced in the enabling and encouraging environment of the after-class (see turn 15 in the earlier OG discussion transcript):

Shiva: Miss, plants bear fruits, but when you pluck them, do they become non-living and abiotic?

Janaki: No, they can reproduce. When you put a mango in soil, it grows into a plant. The seed gives life.

Shiva: What about banana then? Its seeds don't grow. So, is it biotic or abiotic when plucked?

Questions such as the above and others from other participants fueled further dialog and stimulated everyone to engage in more (re)search. This mutual engagement in the meaning-making process gave me room to foster a *collaborative zone of development* by contributing to it as one of the voices with "equal rights" (Bakhtin, 1981) without seeking to replace participants' existing perceptions. Valuing students' unique subjective perceptions as a form of competence meets their affective needs and gives them an identity of participation as full members in the classroom. This is how Shiva experienced his participation in the OG (turn 15).

The alternative perspectives I brought to OG, which were based on "knowledge building" (Scardamalia and Bereiter, 2006) pedagogy as opposed to knowledge transmission pedagogy, put ideas, subjectivity, and meaning-making at the center in a process where teachers and learners engaged together in gaining deeper understanding of the topic or situation under consideration. Ideas of such personalized teaching/learning process collided with the conservative self-contained lay voices (Lortie, 1975;

Nias, 1989; Hargreaves, 1997, 2019) of the participants for whom teaching meant delivering ready-made knowledge given in the textbook for its reproduction by the students. The collision of these perspectives led to a creative disequilibrium (McLaughlin, 1997) or "pedagogic disequilibrium" (Mansfield, 2019) motivating everyone to negotiate anew the histories of meaning existing within the larger communities of practice (Wenger, 1998) of which they were a part.

Mutual Engagement in Meaning Negotiation

The alternative tools afforded in OG, which prompted our reflection, were grounded in concrete experience of participants' (including researcher) practices, practices which were based both in traditional and alternative perspectives. Modeling proved an effective way of helping teachers experience alternative practices. The asymmetry of views represented in these divergent practices provided tangible material for mutual engagement in negotiation of meaning which included both production and adoption of meaning. If the experience of teacher learners is not adopted, in other words, when it is not acknowledged as a form of competence, as what happens in mainstream teacher education, it causes a split between production and adoption of meaning and curbs learning. However, teacher learners' unique personal experiences embraced exclusively and unreflectively, as has been pointed out, also fail to achieve the goals of transformative learning (Hargreaves and Goodson, 1996) or hybridization. Their personal knowledge or subjective perception becomes useful only when developed in suitable contexts in reflective ways enabling them to establish a dialectic move between their experience and understanding. A healthy distance between experience and competence is necessary to create a "generative tension" (Wenger, 1998) where meaningmaking toward greater complexity can take place. What creates the discontinuity between the two aspects of knowledge, practice and theory, in teacher education is the teacher educator stance based on a privileged conception of theoretical knowledge. Such a stance does not nurture the interanimation of diverse voices as it undermines the capacity of teachers to reflect, interact, and "produce" proposals. In OG, although I was positioned as a significant other, my interpretive frame, which emanated from an alternative paradigm of thought/theory, was not given to others for adoption as "self-evidently universal" (Dressman, 1998). It was called into question by teacher learners' experience, their lived reality which was recognized as a legitimate form of competence with "equal rights" in OG's third space: e.g., Swathi (ST8):

My worry is, if we did this [differentiated teaching] instead of assuming that everyone understood our explanation, we might be going against the system.

Awareness of the Emerging Gaps Between Action and Understanding: Development of Moral Answerability

In the concrete experiences that participants had and the exploratory discussions on them in OG, theoretical perspectives

provided in the course work started to make sense. However, the happiness derived from the gradual increase in conceptual clarity was offset by a disquieting realization that this understanding did not "readily translate into practice" (Russell, 2018, p. 5; also, Ratnam, 2010; Zeichner, 2012):

Swati:...It [engaging in spontaneous conversation with students to facilitate their self-expression] looks very simple, but it is not easy when we try in class.

Participants had no opportunity to experience this decentering feeling earlier, because formal teacher preparation operates largely with absolute certainty about "what" to teach and "how." However, in OG, the main focus of discussion was on the challenges experienced in class and the powerful messages underlying their "normal" actions. For example, Janaki's class, which was initially seen by participants as one of the "best practices," became a reference point, an eye opener: Rekha (ST3):

It's the same classroom and the same situation, but we have new eyes now to see what is happening in the classroom, what we are doing and how it affects our students, how harmful it is.

The ability to see oppression concealed in classroom routines they carry out is itself "a form, if not the first seeds of transformative practice" (Leistyna et al., 1996). Teachers' endeavor to hold their pedagogical act to scrutiny is an act of moral answerability (Redder, 2019). The development of moral sensitivity (Morton et al., 2006) and care (Noddings, 2005; Held, 2006) including empathy spurs their activism and commitment to "make a difference to the lives" of those who they teach (Day, 2012, p. 7) by meeting their needs:

Pragna: That [going back to ritual content covering] will not happen. We won't have satisfaction if we do that. If we carry on without clarifying students' doubts, topic will go forward, but students will remain behind.

Awareness of the "Unfinalized" Nature of Teacher/Teacher Educator Learning

The experience of engaging in continual reflection on classroom events and the dilemmas they faced brought home the deliberate, iterative nature of learning to teach (Eisner, 2002), involving cycles of action, reflection, and development (Ramsey, 2006). It exploded the myth of resolving practical challenges faced in teaching with ready-made "theoretical solutions" in one encounter. Participants experienced the third space in OG as an "unfinalized" space where the potential to mean is never closed. It is, in fact, maintained by their emerging dilemmas, questions, and competing voices in conflict:

Janaki:... Each day is new and each class is different. We have so many questions, so much to discuss, we can go on and on.

The tools of questioning and reflection, which have become part of the participants' consciousness, will remain with them to nourish their development through their career as teachers.

TENTATIVE CONCLUSION AS PROVOCATION TO FURTHER DIALOG

Preparing teachers for equity and social justice pedagogy in the context of enduring global crisis of socioeconomic polarization and conflict is one of the crucial challenges facing teacher education today. The example provided here of tangible cultural experiences associated with such equity-oriented pedagogy in a particular curricular context helps in gaining deeper insights into how opportunities are created in the third space for shifts in thinking about what counts as knowledge and participants' role in it.

Restructuring teacher education unaccompanied by reconceptualization (Wideen and Grimmett, 1995), which fails to foster teacher autonomy, makes it tilt toward *status quo* rather than change (e.g., Lo, 2019), fueling the "discourse of derision" about ITE (Furlong, 2019). A loss of credibility in university-led ITE courses is leading to deregulation and marketization of teacher education (Zeichner and Conklin, 2017). Is this a dangerous trend? If teacher education is reduced to a zero-sum game, it can no more produce anything of genuine value (Haque, 2018), least of all, work to create a pedagogy that is sensitive to the concerns of equity and social justice.

The inertia beneath all the movement of structural changes in teacher education points to a denial of reality in the system. The structural reform does not appear to have helped teacher educators and mentor teachers shake off the deceptive sense of stability provided by the "unity and fixity" (Bhabha, 1994, p. 37) of the authoritative discourse that reduces teaching to "sanitized routines" (Eisner, 2002). As Russell (1999) asserts, for teacher education to promote teacher change, the changes have to occur in teacher education first. The reform has not been successful in supporting teacher educators take an active stance, question whose agenda the taken-for-granted ways of teaching serves, and the distorted beliefs implicit in them. Unless they see teaching in a new light, asking new questions, the character of existing traditional paradigm will not change and authoritative teacher-centered practices are all the cultural tools that remain with them to mediate student teachers' learning. This, in turn, severely curtails student teachers' voices and their potential to interanimate the institutional authoritative voice and practices, hold them to scrutiny in order to pave the way for practice that is equity centered.

The study shows that student teachers who participated in this study seem to be very pliable and possess the adventurous spirit to subvert institutional authority and reposition themselves vis-à-vis this authority in order to follow what are culturally inclusive practices. Teacher education needs to nurture this spirit by creating an environment where their subjectivity is not erased and where they can realize their unique creative potential. For many student teachers, ITE is a disillusioning experience, because the passion for teaching with which they enter it is tamed by the stifling regimen they are put through that fails to connect to their passion, purposes, experiences, and values including the "moral center" of teaching (Sockett, 2009).

Although the problem of change seems endemic to teacher education, this study strikes a note of optimism in participants'

realization of the "unfinalizability" of meaning and the ongoing movement between action and reflection it has initiated in them. Narratives of success in teacher education programs, which view theory and practice as mutually constitutive in culturally mediated collaborative activities, are on the increase in teacher education literature (e.g., Gorodetsky and Barak, 2008; Ellerbrock et al., 2016; Mauri et al., 2019). "Actionable" illustrations (Brayko, 2018) such as the one presented here show how theories become meaningful when they are mediated as practical tools for teachers to engage with subjectively rather than transmitting them as information unconnected to their phenomenological world. The value of this work lies in stirring up the conceptual thinking that is necessary to breathe meaning into systemic changes. While not being prescriptive, this study adds to the possibility of imagining the creation of a third space where one form of knowledge is not privileged over the other and where the dialogization of voices in heteroglossia helps teacher educators, teachers, and student teachers walk together toward equity pedagogy.

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DATA AVAILABILITY STATEMENT

All datasets presented in this study are included in the article/supplementary material.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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Opening the "Can of Worms": **Preparing Teachers to Address Issues Relating to "Race"**

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This paper reports the findings of a study which involved a critical examination of "race"-related provision on initial teacher education (ITE) programmes in England. It draws upon data collected as part of a national survey of ITE provision which included interviews with providers and students, and case studies of ITE providing institutions. The study utilized aspects of Critical Race Theory and Critical Whiteness Studies as a theoretical framework with which to analyse the data. The paper explores the nature of provision relating to "race," suggesting that teacher educators and student teachers are often ill-equipped to address the complexities relating to this area and, as a result, they can fail to recognize the importance and potential impact of their professional practice, and their pedagogical decisions. It suggests that ITE practices are often underpinned by dysconscious racisms and manifestations of Whiteness, leading to a marginalization of "race" input, with opportunities for deeper interrogation missed, or actively avoided. The paper explores some of the constraints impacting on ITE namely a lack of time; a lack of confidence on the part of a predominantly White teacher educator workforce; a lack of recognition of the importance and significance of "race" on the part of White student teachers, and an emphasis of superficial measures of student satisfaction at the expense of deeper interrogation and deconstruction of hegemonic norms. It makes recommendations relating to how practice can be improved within the current challenging global contexts in relation to "race" equality. It calls for teacher education to aspire to produce novice teachers willing and prepared to embrace "race"-related challenges in their teaching careers, and to contribute to curricula which acknowledge and address inequality.

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INTRODUCTION AND CONTEXT

This paper will outline and discuss the findings of a study which examined provision relating to "race" on initial teacher education (ITE) programmes in England. The reference to the "can of worms" in the title alludes to the fact that previous research (e.g., Ladson-Billings, 1999; Aveling, 2002, 2006; McIntyre, 2002; Solomon et al., 2005; Picower, 2009; Lander, 2011, 2014) has concluded that preparing teachers to work in contemporary, globalized, and ethnically diverse societies can be difficult terrain to navigate. The term "opening a can of worms" has been defined as "planning to do or talk about something is much more complicated, unpleasant or difficult than is realized and

which might be better left alone" (Collins Dictionary, 2019). The paper presents and discusses data collected from ITE providers in which provision related to "race" is constructed as difficult to address with student teachers, is rarely given priority, and is often reduced to a tokenistic "one-off" session or left to an "expert." The paper therefore concludes that provision related to "race" can be defined as a "can of worms" as it is an area of complexity, and one which is either deliberately, or unwittingly avoided, thus undermining its potential impact on future teachers.

In the interim period since the research was completed, it could be argued that work of this nature is all the more important given recent political developments in the UK and globally, with a reported rise in racism, right-wing political discourses, an increase in migrant and displaced populations (Clark, 2018) and the persistence of racialised educational inequalities (Alexander et al., 2015; Gillborn et al., 2017). The summer of 2020 has also seen the re-emergence of the Black Lives Matters movement following US-based events which have over spilled on a global level. The area of "race" is once again on educational agendas and the time is ripe for meaningful discussion and action in order to disrupt the persistence of racism in schools and wider society, and to prevent the inaction and tokenistic practices of the past which have had little impact (Mirza, 2005). Many commentators have challenged the notion that we live in a post-racial society, and in her recent consideration of White privilege, Bhopal (2018, p. 163) argues that more recent policy, within a neoliberal context, has failed to "acknowledge the role that race and inequality play in perpetuating advantage over disadvantage." She concludes, from her consideration of the UK and US contexts that "race acts as a marker of difference in a society poisoned by fear, insecurity and instability" (Bhopal, 2018, p. 164). Furthermore, Alexander et al. (2015, p. 4) suggested that:

Education remains a primary area for both the maintenance of entrenched racial stereotyping and discrimination on the one hand, and anti-racist activism on the other. Concerns over structural racism, low educational attainment, poor teacher expectations and stereotyping, ethnocentric curricula and high levels of school exclusions for some groups remain entrenched features of our school system.

The training of teachers who will educate future generations, equipping them with the skills to thrive in a diverse society and an increasingly globalized world is therefore of paramount importance. Within the context of the UK, Ball (2008) has expressed concern about the deleterious effect of neoliberal reforms of education and, specifically in relation to ITE, the concomitant erosion of critical spaces within teacher training programmes. Hill (2001) suggested that this has affected student teachers' ability to address, or even acknowledge the significance of issues relating to social justice and I would argue that this applies particularly to those relating to "race" (Smith and Lander, 2012; Lander, 2014). In my study, "race"-related provision was interpreted as fostering in future teachers an understanding of the nature of racisms (Garner, 2010) including structural factors which disadvantage particular Black and minority ethnic (BAME) groups, exploring possible reasons for differences in patterns of attainment amongst particular groups, and feeling prepared to teach in a diverse, multi-cultural society. This latter interpretation was of particular interest as previous research in the UK (e.g., Gaine, 2005; Lander, 2014) highlighted a tendency for those teachers working in predominantly "White" areas to regard "race" related issues as less relevant, as opposed to an integral part of their practice, thus undermining the potentially transformative nature of education in this area.

TEACHER EDUCATION, "RACE," AND WHITENESS

Significantly, within the UK, the past decade has seen a gradual erosion or dilution of practices aimed to promote race equality in education, and a marginalization of race equality more generally, fuelled by the promotion of post-racial discourses (Bhopal, 2018). As part of the latest incarnation of the National Curriculum (Department for Education, 2014a) and the Teachers' Standards (Department for Education, 2011), there has been a greater demand on schools to address issues related to religious fundamentalism and extremism. Schools are no longer legally required to report and monitor racist incidents as they were following the Race Relations Amendment Act (2000), but instead, have a duty to promote "fundamental British values" (Department for Education, 2014b) and, under the Prevent duty (Department for Education, 2015), to monitor and report any pupils deemed to be at risk of radicalization. Dunne et al. (2018) argue that this shift contributes to a silencing of more critical discussion relating to race equality, fuelled by a misplaced notion that "race has been 'dealt with' in a post-racial era" (p. 163). Other critiques of the focus on fundamental British values (e.g., Farrell, 2016; Smith, 2016) have concluded that this not only serves to silence or marginalize racism as a concern, but could be interpreted as a more dangerous apparatus through which inequality and injustice remain beyond scrutiny, and the concept of a nationalistic cultural homogeneity is promoted. Elton-Chalcraft et al. (2017) criticized the introduction of fundamental British values, calling for deeper interrogation of its meaning and for further opportunities within teacher education programmes for the term to be explored critically. They challenge the implicit assumption that teachers "know how to promote such values and indeed be able to articulate them clearly to children and young people without seeming to indoctrinate or promoting jingoism in schools and classrooms" (p. 30). It should be pointed out that the duty to promote fundamental British values was not statutory at the time when the data upon which this paper draws was collected. It is however, important to acknowledge such change as it serves as evidence that the political context within which ITE is delivered has become more complex, and the critical spaces within educational discourse and policy have subsequently become even more eroded (Dunne et al., 2018; Warmington et al., 2018).

Until relatively recently, work in this area conducted in the UK was quite limited. However, building on work conducted in the US (e.g., Ladson-Billings, 1999, 2001, 2005; McIntyre, 2002;

Marx and Pennington, 2003; Cochran-Smith, 2004; Marx, 2004, 2006; Sleeter, 2008; Gorski, 2009), with some other significant international perspectives (e.g., Finney and Orr, 1995; Aveling, 2002, 2006; Santoro and Allard, 2005; Solomon et al., 2005) research conducted in the UK has echoed some persistent themes. Wilkins (2014) suggested that consideration of "race" equality within ITE curricula in the UK has become increasingly marginalized and cites Gillborn (2005, p. 499) claim that such marginalization "retains race injustice at the center." It is important to acknowledge the differences in the political and racialised histories of particular contexts where such work has been conducted, although despite such differences, there are similarities in relation to "race," and in particular, to issues impacting on ITE. Key emerging themes from this body of literature include the notion of resistance on the part of White trainee teachers to being asked to consider and interrogate the notion of White privilege (Picower, 2009); the narrow interpretation of "race" to mean the racialised "other," often underpinned by deficit or exoticised perceptions (Lander, 2014); a lack of focus on "race" within UK-based education policies and practices, some of which apply to ITE, which serve to insulate, or render invisible discriminatory practices (Gillborn, 2008); and an appropriation of the nebulous term "diversity" to make "race"-related provision palatable to a predominantly White audience (Ahmed, 2007). More recently, research has also considered the impact of student teachers' identities and the impact of this on their conceptualization of "race" (Bhopal and Rhamie, 2014). Bhopal and Rhamie (2014) concluded that there was a need for issues of identity to be embedded across ITE and for the explicit teaching of how to manage racism in schools. This paper therefore aims to analyse how likely this is to be realized, considering the constraints affecting ITE providers, and how more recent UK-based policy has further exacerbated what was already a challenging undertaking.

For those who are unfamiliar with ITE in the UK, it is worth pointing out that there exists a range of available routes into teaching, some of which are three-year undergraduate programmes leading to a qualified teacher status (QTS) recommendation, and a degree-level qualification. Another option is a post-graduate certificate or diploma consisting of 1 year's study with the majority of the time spent in a school-based context. Some post-graduate school-led options (e.g., School Direct, Teach First) have also gained in popularity. It is beyond the remit of this paper to discuss in more depth the complexities of ITE in the UK and the related government policy. For an overview of UK-based routes into teaching, see: https://getintoteaching.education.gov.uk and for the most recent summary of current policy direction relating to ITE, see Foster (2019).

The analysis draws on two broad, and inter-connected theoretical sources: Critical Race Theory (CRT) and Critical Whiteness Studies (CWS). The application of CRT to the context of education has, to date, been dominated by US academics (e.g., Crenshaw et al., 1995; Ladson-Billings and Tate, 1995; Delgado and Stefancic, 2000) although more recently, it has been applied to the UK context (e.g., Gillborn, 2008; Bhopal, 2018) and more specifically, to ITE (Lander, 2011). CRT is premised

on the notion that racism is a permanent feature of society and education (DeCuir and Dixson, 2004), and that its manifestations can be subtle, both individual and systemic, and relentless (Gillborn, 2018). It is therefore the aim of CRT to uncover, and expose racism at its many different levels (Ortiz and Jani, 2010). Futhermore, it aims to deconstruct and challenge liberal discourses surrounding "race" — "the seemingly 'colorblind' [sic] or 'race neutral' policies and practices which entrench the disparate treatment of non-White persons" (Stovall, 2006, p. 244). Although not applicable to this particular study, CRT also foregrounds the minoritised voice, "shifting the frame and beginning to value the knowledge of people of color (Crenshaw, 1989, p. 8)."

It is important to note that Sleeter (1994) and later, Ladson-Billings (1998) expressed concern about the mainstreaming of CRT by the (predominantly White) educational establishment, or the tendency of Whites to "take over, to set directions and agendas" (Sleeter, 1994, p. 5) This dilemma is discussed by Bergerson (2003, p. 52) who, as a White academic, struggled with the notion that for White people to move into the area of CRT would be a form of colonization in which "we would take over CRT to promote our own interests or recenter our positions while attempting to 'represent' people of color." She concluded however, that CRT can indeed be used by White people, and, perhaps more significantly to this paper, can help those committed to fighting individual and structural racism in three ways. Firstly, it reinforces the importance of centring race in our personal lives and work which in turn means acknowledging the privileges that come with our "race" and challenging "manifestations of racism that are observed" (Delgado, 1997, p. 615); it makes us understand that CRT is a framework developed by minority ethnic groups to understand and explain their experiences and to move toward social change and racial equality; and thirdly, it necessitates White academics joining the fight to legitimize and publicize research that utilizes alternative methods such as CRT.

Unlike CRT, the study of Whiteness, and particularly its relevance to ITE has a longer, and richer history, particularly in American, Canadian, and Australian studies (e.g., McIntyre, 1997; Levine-Rasky, 2000; Aveling, 2002, 2006; Marx and Pennington, 2003; Solomon et al., 2005; Bonilla-Silva, 2006). Work relating to Whiteness within the UK-context is more limited although some notable exceptions (e.g., Bonnett, 2000; Garner, 2007, 2010) have applied aspects of CWS to the UK context. In relation to education however, and to ITE in particular, there has been much less attention to the impact and potential significance of Whiteness.

Frankenberg (1993) suggested that Whiteness has three dimensions. Firstly, it is a standpoint, a place from which to view the world. Important to this dimension is the notion that Whiteness is something that defines the "other" but is not itself subject to others' definitions (Bonnett, 2000). Whiteness is therefore relational—the "norm" against which the racial "other" is judged. Frankenberg (1993, p. 30) added that "Whiteness makes itself invisible precisely by asserting its normalcy." Frankenberg's second dimension is that Whiteness is a position of structural advantage or "race" privilege. Dyer (1997) noted that many successful White people refuse to believe that their ethnicity has any part to play in their achievements,

preferring instead to hold on to meritocratic, colourblind, or in Frankenberg's (1993) terms "color [sic] and power-evasive" explanations. Pearce (2014, p. 390) explains Frankenberg's preference for the term "color and power evasive,"

"..because it encapsulates the strategy of appearing to recognize and value cultural differences, while refusing to acknowledge the role of race in structuring social inequalities."

Finally, Frankenberg's third dimension is that Whiteness is a set of unmarked cultural practices. It is an inability to recognize and name one's own culture, leaving intact therefore the notion that Whiteness is a neutral place from which to look at others. Those engaged in critical analyses of Whiteness and colorblindness (Bonilla-Silva and Forman, 2000; Bonilla-Silva, 2006) have highlighted this third dimension as perhaps the most dangerous in terms of sustaining White power and privilege, and of perpetuating racisms.

"White people's lack of consciousness about their racial identities has grave consequences in that it not only denies White people the experiences of seeing themselves as benefitting from racism, but in doing so, frees them from taking responsibility for eradicating it (McIntyre, 1997, p. 16)."

McIntyre (1997) adds that being unable to, or indeed never having to conceptualize Whiteness, means that White people are unable to see the advantages afforded to the White population. Furthermore, they fail to see how these advantages come at the expense of the disadvantaged. Critical scholarship on Whiteness is therefore not an assault on white people *per se.* (Gillborn, 2005), nor is it an attempt to essentialise or homogenize all White people. Rather it is an assault on the socially-constructed, and constantly reinforced power of White identifications and interests.

The combination of CRT and CWS provided a critical lens through which to examine the data arising from the original research (Davies and Crozier, 2006), providing an opportunity to examine and disrupt ITE practices, to analyse the constraints which can impact on this, and to consider how this can be challenged and addressed in the future.

METHODS

The study drew upon data initially collected for a Government-commissioned survey of ITE practice relating to "diversity" which was conducted by the author (Davies and Crozier, 2006). The survey adopted a mixed methods approach consisting of a combination of questionnaires, telephone interviews and four focussed case studies.

The questionnaire was designed to elicit basic information relating to the nature of the provision available at the particular institution, and to identify any particular pedagogical practices being adopted. It asked respondents to rate their institutional provision in terms of quantity and quality of and also to identify any constraints impacting on this area of their practice. Opportunities were also provided for respondents to respond

to more open-ended questions and to make further comments in relation to their practice. The questionnaire was distributed to 205 ITE providers, with a response rate of 40% from a range of different training routes, and geographical areas across England. The arising data was analyzed through quantifying initial descriptive statistics, and some initial thematic analysis of the more open-ended responses. The data was then used to inform and plan subsequent stages of the research. Clough and Nutbrown (2007, p. 143) suggest that "it is unlikely that a questionnaire will reveal the depth of those views and experiences in any of their rich detail." However, a questionnaire can play a useful role in qualitative research in setting the scene, mapping out a social world (Denscombe, 2014), or in establishing a broad picture, in this case, of provision within a range of ITE settings. This broad picture was then used as the basis for the selection of a sub-sample of respondents to be followed up through a telephone interview.

An overview of the sample is provided in **Appendix 1**. For full details of the descriptive statistics arising from the initial survey, please see Davies and Crozier (2006).

A total of 7 males and 23 females were interviewed across the 28 chosen institutions. 30 telephone interviews were conducted with all but one respondent identifying as "White British" which is indicative of the ethnic make-up of the teacher workforce (86.2% of teachers identified as White British in the latest Government statistics (www.gov.uk, 2018). Written, informed consent was obtained from participants, all of whom were over the age of eighteen. All participating institutions and respondents were allocated a pseudonym in order to protect their identities.

The main aim of telephone interviews was to give the respondent an opportunity to expand on their questionnaire responses, to probe responses further, and to begin to unravel complexities. The telephone interviews were used to elicit the kinds of richer qualitative data which a questionnaire could not, and to provide an opportunity for expansion and explanation. The questionnaire survey, despite its well-documented shortfalls (see for example, Cohen et al., 2011) was a useful starting point from which to structure and guide the interview.

The final stage of the research was the collection of further data from four ITE providers chosen as case studies. The aim of the case study work was to illuminate the general by looking at the particular (Denscombe, 2014). It was not the intention to present the case studies in full in a more conventional interpretation (Walters, 2007), or to form generalisable conclusions to be applied across ITE providers. Rather, they informed some of the arising themes and issues following the analysis of the telephone interview data. In this way, the insights afforded through faceto-face dialogue and observation of practice, coupled with notes and analytical memos taken in the field, strengthened the analysis and the conclusions drawn. The case study data differed from the telephone interviews in that they enabled firstly, the establishment of a "rapport" between the researcher and the respondents and secondly, access to visual and non-verbal cues which were "thought to aid communication and convey more subtle layers of meaning (Irvine, 2010, p. 1)."

Arising interview data was analyzed within an interpretivist paradigm (Savin-Baden and Major, 2013), drawing on element

of a grounded theory approach involving initial open and axial coding (Cohen et al., 2007), an on-going comparison of emerging themes in order to identify, develop and relate concepts (Strauss and Corbin, 1990). This was used as a means of bridging more traditional positivist methods with those more associated with a critical, interpretative approach (Charmaz, 1995).

ITE providers' responses were analyzed and on the basis of coding, they were categorized into ideal types (Miller and Brewer, 2003). The complexity and multifaceted nature of the data made it difficult to establish definitive categories as there was often overlap and contradiction. This was exacerbated by the complexity of routes which providers offered so for example, on one programme within the same institution, provision might have differed according to a particular route or age or subject specialism. The ideal types presented are therefore "representations constructed on the basis of what the researcher considers their character in some pure essential form (Miller and Brewer, 2003, p. 147)."

KEY FINDINGS

Provision Relating to "Race"

Provision relating to "race" was often very limited, consisting of a one-off lecture given in isolation or, in some more extreme cases, as an optional, additional session. For many trainees, or newly qualified teachers therefore, it would be reasonable to assume that they were likely to begin their teaching careers with little, or very limited preparation in relation to "race."

Providers were categorized into two broad ideal types (Miller and Brewer, 2003) and named "race conscious" and "race dysconscious." Those in the former category were characterized by an awareness of the importance of work in this area for student teachers, and a commitment to the potentially transformative nature of teacher education. While it was not the intention of the research to quantify ideal types, it was significant that very few providers met the criteria to be considered as "race-conscious." Those that did included reference to the need for student teachers to consider their own identities and backgrounds and to be mindful of preconceptions and stereotyping and how these might impact on teachers' expectations and pupil outcomes.

In the following example, the provider describes a session she delivered with the intention of disrupting the stereotypical perceptions of trainees.

"Respondent: What they have is a session on recognizing diversity, barriers to learning where they're actually encouraged to challenge their own stereotypical views across the board.

Interviewer: Right, I mean how do you actually encourage trainees to recognize their own stereotypical views?

Respondent: Well they do like a workshop, we have all sorts of different types of people up on boards and they go round and they actually write down, stereotypical views that they think are associated with those, you know for example football fans, men and women."

Eve: Subject Leader, Professional Studies, Primary Undergraduate route

The notion of the need for teacher education to involve the unpacking of trainees' preconceptions and stereotypical views, though prominent in the literature relating to this area (e.g., Gaine, 2001; Aveling, 2002, 2006; McIntyre, 2002; Ullucci, 2010) was not found to be a common element of provision being mentioned as a feature of provision in only two providers. In the example above, I argue that the provider was attempting to do this, although she avoided making reference to racialised stereotyping in the examples that she offered. In a very small number of providers however, a focus on trainees' own identities and the ways in which this impacted upon their views and subsequent professional practice was explored, albeit to a limited extent. This approach is exemplified below:

"We ask them to consider professional values and practice and that's a strand that runs all the way through. So it's, you know erm, it's looking at... I think first of all, particularly on the undergraduate programme, it's actually helping them to tease out where they are in terms of their own perceptions and then building it from that."

Rebecca: Programme Leader, Primary undergraduate route

Another provider, Tina, explained her institution's starting point:

"What we do is we try and understand what we mean by difference, what we mean by culture and we get trainees perhaps more to the view that, well culture has probably evolved and we can't, you know, have stereotypical understanding and simply group children into those groups, what we have to understand is that culture evolves, and that people place their allegiances to different cultures, as and when they want to or need to, so we look at what we understand by culture, by looking at trainees' own cultural groups, their own group affiliations, their own sort of, how they would perhaps group and classify themselves, we then look at why we need to classify and we need to, and then we look at what, what can go wrong if these classifications are made on people without really understanding that these are not fixed boundaries."

Tina: Diversity Support Tutor, Primary and Secondary post-graduate routes

In Tina's response, the focus on identity appeared to be very much on the identity or culture of the "other," thus contradicting Levine-Rasky's (2000, p. 271) assertion that dialogues need to shift away from the racial "other" to a "critical problematisation of whiteness itself." However, in Tina's explanation, although she does demonstrate a more critical understanding of the nature of culture than most respondents, in her explanation of group affiliation, she does not name Whiteness. This was however, the closest example which could resonate with Marx's (2004, p. 32) recommendation that "White teachers and teacher education students must be guided in an exploration of their own Whiteness." What was not as clear however, was the extent to which this was played out in practice. Indeed, in a later interview, Tina expressed frustration at the lack of institutional commitment, suggesting that she felt her role as "diversity support tutor" absolved other colleagues from the responsibility of having to address potentially uncomfortable, or difficult issues with students. The creation of the role of "diversity support tutor" could, on one level be seen as a positive step and an institutional commitment

to tackling diversity-related issues proactively. However, from another perspective, it could be seen as, in CRT terms, a "contradiction closing case," (Gillborn, 2018) an action which creates a veneer of anti-racism commitment, but actually masks the perpetuation of mainstreamed discriminatory practices, and has little impact on day to day activity.

A further characteristic attributed to the "race-conscious" type was an awareness of the need for "race"-related provision to agitate and disrupt (Aveling, 2006). The following respondent articulates her approach:

"After my session, it's difficult really, I kind of think, if they're all smiling and happy, then I haven't really done my job properly-I have become used to getting a bit of flak now! I don't mind putting people's backs up if I can then still work with them, but when they just walk out of the lecture thinking, 'well she's got a bit of a bee in her bonnet hasn't she?', it's really frustrating – this kind of thing needs to be followed up properly."

Rebecca: Programme Leader, Primary undergraduate route

The frustration at the lack of opportunity to "follow-up" lead lecture input is linked to the perception of a lack of time on ITE programmes which will be addressed subsequently. Her frustration is, however, also linked to her later comments relating to colleagues who do not necessarily continue and develop discussion in smaller group contexts.

"You need experienced staff. Staff who are confident and committed to this and although we have fantastic staff, I'm not sure, hand on heart, that I could say that they would all fit into that category." Rebecca: Programme Leader, Primary undergraduate route

The issue of levels of staff confidence to deliver sessions, and lead discussions relating to "race" will be explored later in the paper but this adds to the complexity of analyzing provision in that, having one committed member of staff, who, in the case of this research, was often the gatekeeper for the institution, did not necessarily mean that this was echoed by other colleagues.

In summary, therefore, for those providers described as "'race'-conscious," an expression of commitment to anti-racism was made and an understanding of the importance of, and need to engage student teachers with work in this area was articulated. Most respondents in this group viewed themselves as key drivers of work in this area and this was evident in the impact that they had on session content or course design. However, there was a significant lack of reference to the concept of Whiteness and related hegemonic norms which can permeate wider society and educational institutions (McIntyre, 2002) and it was not clear whether the commitment expressed by one member of the staff team was a true reflection of wider institutional practice. Therefore, in terms of implications for future practice, I argue that, although providers in this first category demonstrated some elements of effective provision, its impact was often compromised due to other, more systemic factors.

In contrast, there existed a larger "type" defined as "racedysconscious." These providers were those who embedded "race" provision within the broader concept of "equality," claiming that trainees' understanding of "race" was developed through curriculum subjects, or through a *permeation* throughout their programme. The term "dysconscious" therefore is not intended to signify that "race" received no attention at all, but rather it was done in a more acritical, and perhaps piecemeal way. In defining this type, I draw on the work of King (1991) who developed the term "dysconscious racism" to describe,

"... an uncritical habit of mind that lacks any ethical judgment regarding or critique of systemic racial inequity. By unquestioningly accepting the status quo, this mind-set, which is identified as an outcome of miseducation, prevents teachers, for example, from questioning the existing racial order and leaves no room for them to imagine practical possibilities for social change or their role as change agents (King and Akua, 2012 in Banks, 2012)."

Provision was predominantly characterized by the claim that "race" was *embedded* or *permeated the* curriculum. This is explained by one provider below:

"On the, on some of the academic modules there's one on cognitive development and one on learning in the early years [Right] Both those modules will touch on these issues [issues relating to 'race']. I guess you could say that it permeates everything they do."

David: Programme Leader, Primary undergraduate route

It was interesting to note that David was unable to provide any specific examples of what this "permeation" would involve and later in the interview, he conceded that the effectiveness of such an approach relied heavily on who was actually doing the delivery. This supports the assertion that input can become so permeated that it disappears altogether (Jones, 1999; Gaine, 2001). Other research (e.g., LeRoux and Moller, 2002, p. 184) has suggested that in reality, a permeation approach does little to disrupt or explore areas which are often "ethnocentric in orientation and content," thus reflecting King and Akua's (2012) assertion that such an approach is unlikely to create opportunities for novice teachers to "imagine possibilities for social change." However, the approach still appeared to remain a popular one amongst ITE providers, with the majority of the sample indicating that this was their approach of choice. Alongside this strategy, some providers utilized one-off, "flash and dash" (Sleeter, 2005, p. 1950) sessions with little or no opportunity for discussion. These were sometimes delivered by external speakers who, in some cases were from a BAME background, which was considered to be significant by respondents. When probed, respondents found it difficult to explain or articulate the nature of this input, as exemplified in the quotation below:

"Respondent: We have the local education authority in. They come and do a half day conference session with all our students.

Interviewer: And what would that involve?

Respondent: Well [laughs] I thought you might ask that – I didn't actually go to the last one so I can't really tell you but other colleagues went, so they would be better placed. I have been to previous ones where you know they come in and do a bit of this, and bit of that relating to EAL, or diversity, or something along those lines [pause]."

David, Programme Leader, Primary undergraduate

In the case of "race"-dysconscious' provision, input therefore appeared to be implicit within a broader "diversity" agenda, with this umbrella term, perhaps unwittingly, reducing the more explicit focus on "race," and often leading to it being interpreted in simplistic ways. Most notable in terms of the distinction from "race"-conscious provision was the tendency to present information to trainees with limited opportunities for discussion or deeper analysis of the implications for practice.

Constraints Affecting Provision

The coding process identified some key constraints impacting on provision which were mentioned by respondents. These were: a lack of time available on Programmes; a lack of confidence on the part of providers, fuelled by, for some, a lack of experience with "race;" a lack of priority or importance attached to "race" on the part of trainees, and an emphasis on superficial measures of trainee satisfaction at the expense of more transformative and innovative practices. These will be addressed in turn below.

The most frequently-mentioned constraint was that of a lack of time available on ITE programmes, particularly on shorter post-graduate routes, echoing Hill's (2001) concerns about a lack of the erosion of critical spaces and the "ideological straight-jacketing" (Hill, 2009, p. 305) caused by centralized policy. However, on deeper analysis, this also appeared to be linked in some cases to what was interpreted as a lack of priority being attached to "race" on the part of providers. As one respondent remarked:

"The modules are always rather like empty suitcases and it's very much a question of what you choose to put in them, and what people choose to put in them is what they believe to be important." Paul, Senior Lecturer, Education Studies, Primary and Secondary

While time is undeniably a factor with so much to cover on already over-crowded ITE curricula, my analysis suggested that this was sometimes used as an excuse not to address issues relating to "race" which often stemmed from a lack of confidence on the part of providers. This was manifested in simplistic interpretations of "race" and related issues, often resulting in provision becoming one session considering those pupils for whom English was an additional language, with little or no reference made to more socio-political issues. Some respondents were open about their own lack of confidence which they attributed to their lack of experience of working in more culturally or racially diverse contexts. In the quotation below, a respondent explains her reluctance to discuss issues relating to racism:

"I do think that the students don't grasp the difference between multiculturalism and anti-racism but anti-racism is something that I don't feel confident about approaching myself as a White person.. I don't want to do a session on racism myself so that is provided by [name] [Local Council representative] who's done a lot in promoting anti-racism – she's from a BME background herself and so is in a much better position than I am to handle it." Amy: Course tutor, SCITT (School-centered route)

The respondent's reference to, and awareness of her own Whiteness as a barrier to feeling confident to tackling the area of "race" highlights the way in which Whiteness is seen as a neutral viewpoint, and how a person from a Black background is somehow "in a better position" to address this issue. The tutor's comment relating to "not wanting to do a session on racism" indicates that she is choosing to actively avoid it, using her Whiteness to justify this. As Hayes and Juárez (2012, p. 10) point out, "Whites do not talk about race and racism because Whites don't have to: Whites use their racial power to ensure that they don't have to talk about race and racism."

It is also important to consider the model that this action gives to trainees and how it might impact on their perceptions of their role in talking about "race." Although the use of a local authority "expert" was justified in terms of her being able to make more of a positive impact, the unintended consequence of fostering a belief that racism is about the "racial other" and not anything from which White people may benefit seems likely, particularly, in this case, given the predominantly White cohort in the particular institution.

In another interview, a respondent recounted a student making a racist joke as part of a presentation to the rest of this group.

"I thought, 'Oh, please don't go there' you know, 'don't do it'. I didn't challenge it and you know it just happened, and it did make me feel very concerned that to be honest -that happened and I didn't do anything, so it's easy to say, 'Well I would challenge this, I would be ready and I would be...' but I didn't, so there you have it - things like that do happen. It's easy to say that you would challenge it, but in reality... I don't know how many other - I think there were 10 other presentations where I was just really impressed with the level of, at which they tackled these issues in what I thought was a very good way - and that particular group, that was the only thing that made me feel sort of very concerned, and the rest of what they said wasn't the slightest bit racist really but then I thought, well how much must they have really thought about these issues and you think afterwards, like you say, should I have said something and perhaps, you know we should, but I also find it very interesting that these people are, you know they are adults obviously so how far do you - where is the line, when would you step in, when would you, you know... Please tell me that I shouldn't be worrying about this! I've got ideas theoretically where I would step in but ..., I find it quite interesting working with adults now, you know - would I do that at the same point at which I would have done with children you know for me there are interesting issues with children - you've got the - you are more of an educator aren't you? And with working with adults there is a thing that, well you know, free speech or you know...if you jump on everything, the danger is that the students just stop saying anything at all.,"

Elizabeth, Course Tutor, Primary PGCE

The incident, and the way it is recounted is revealing on many levels. Firstly, it is an example of a tutor's lack of confidence in her own ability to challenge overt examples of racist behavior, but also her minimization of the significance of the incident—the fact that the rest of the presentation was "not in the slightest bit racist" being given as part of a justification for her not challenging it. This represents an example of the aforementioned definition

of "race" dysconsciousness in that the provider demonstrates an "uncritical habit of mind that lacks any ethical judgment regarding or critique of systemic racial inequity" (King and Akua, 2012 in Banks, 2012. Furthermore, the way in which she seeks approval from a fellow White teacher educator: "please tell me that I shouldn't be worrying about this" reveals the levels of insecurity which can underpin this area and illuminates why previous research suggests that ITE providers' lack of confidence in dealing with "race" can lead to them avoiding the subject altogether (Hick et al., 2011). Finally, the distinction the respondent makes between children and adults and her reluctance to "police" trainees' language and actions reveals her construction of her role as a teacher educator in the promotion of social justice and indeed begs the question of where, if not in a teacher education context, would such behavior be challenged and problematised? This particular example is in stark contrast to Gonsalves' (2008, p. 16) assertion that the teacher educators' role is to "help prospective teachers re-evaluate their assumptions in order to recognize beliefs that are grounded in racist ideologies." In the example above, there is very little evidence that trainees were encouraged to analyze the approach that they took to their presentation which ultimately serves to reproduce and reinforce racist ideologies rather than deconstruct and disrupt them (Sleeter, 1994).

A further constraint identified by respondents was a lack of importance or priority attached to "race" both on the part of trainees and in some cases, in the schools in which they spend time as part of their training.

"It isn't their [trainees'] prime concern, or the one after that, or the one after that, really!"

Carl: PGCE (Secondary Science) Course Tutor

Another respondent explained:

"It's so hard trying to cram everything in and people will come to what is most urgent or pressing in their particular context. It can be really difficult to make someone interested in this area when it's just not an issue for them in their particular school."

Alice, SCITT (School-Centered route) Manager

A third respondent suggested systemic issues which made it too easy for people to think of other issues as more important (Rob, Tutor, PGCE Secondary Science). This lack of prioritizing could therefore be seen as a product of the standardized ITE curriculum, or, seen through a different lens, as a form of White resistance to the interrogation of understandings of "race" which ultimately preserve the status quo and allow trainees to adopt "unreflective standpoints" (Pearce, 2003, p. 465) which are underpinned by Whiteness.

Linked to the theme of the priority attached to "race" was the concept of student satisfaction. In a context where institutions compete for students, and when student satisfaction surveys are in the public domain [e.g., National Student Survey for undergraduate routes www.thestudentsurvey.com; Newly Qualified Teacher survey (Department for Education, 2018)], it could be argued the kinds of transformative practices which previous research has suggested can irritate or foster resistance

on the part of some students, may well be avoided, or at least, rendered palatable for a predominantly White audience. The quotation below is an example of how "race"-related input can reportedly be received by trainees.

"I have never had active resistance as such – they would all recognize its importance, I'm sure, but for them, there are just more important things – more immediate priorities I suppose. There are also a small number of people who... I wouldn't call it resistance but they clearly get irritated by input relating to 'race'."

Midtown University: Course tutor, Secondary PGCE

The palpable discomfort evident in the interview could suggest two things. Firstly that the "effective" practice described during the telephone interviews, is, in fact, not necessarily a shared commitment across the institution and perhaps more significantly, that many teacher educators do not feel equipped themselves to challenge and expose more subtle forms of systemic racisms (Bhopal et al., 2009; Hicks et al., 2010), but tend to "play safe" or to deny that any problem exists.

Some interviewees expressed concern that they might make a comment that could "cause offense," while others adopted a more "color-blind" approach, effectively failing to consider that the experiences of Black students could be different in any way to their White peers. There were also instances of practices rooted in stereotypical constructions of the "other." For example, one provider expressed concern about the recruitment of "young Asian females" as they "tend to be more passive, as that's their cultural background" (Sam, SCITT course tutor). In the following example, a provider illustrates her frustration and lack of confidence in effective practice:

"Again you know I've thought of maybe having a day, a diversity day at the University where we could celebrate different cultures but [interviewee reports attending a national conference where she had suggested this] and again the Black teacher trainers are saying that, you know, 'That's horrible, that's like saying, right you're different, let's get you in at the university and let's, you know, have a look at your culture.' So, I just don't know any more! I mean I thought that was an effective move but apparently not, and I really worry about offending people – I mean some of the Black teacher trainers at the conference were getting really cross about it, you know, and I thought, oh gosh, I'd better keep quiet, they know more than I do, you know what I mean?" [Laughs]

Alison, PGCE Course Leader, Secondary

It is clear from the example above that there needs to be ongoing dialogue and debate in order for providers to feel more confident, and to develop a clearer vision of what effective practice might involve.

One respondent reported that his sessions on "race" consistently received the lowest ratings in student evaluations in comparison to his teaching in other areas. Another respondent suggested that if input was negatively received, it would not be repeated the following year. Her justification is explained below:

And you've also got to be careful with the speaker that you get talking to your audience is not going to turn them away from the

positive work that you've already done, because you do occasionally get speakers with their own chip on their shoulder about ethnicity, and there are problems then.

Jill: Course tutor, School-based route

One has to question what 'a chip on their shoulder about ethnicity' might mean in reality, and whether the strategy of prioritizing student satisfaction over more challenging input which might agitate, could be interpreted as an act of White resistance to input which seeks to disrupt White hegemonic norms. The respondent's comment is also reminiscent of Hooks (1989, p. 113) assertion that White-dominated institutions "want very much to have a Black person in 'their' department as long as that person thinks and acts like them, shares their values and beliefs, is in no way different." It is suggested therefore that decisions relating to how diversity will be interpreted, and "how much 'diversity' will be tolerated" (Hayes and Juárez, 2012, p. 8) is decided by the White majority, thus maintaining its power and dominance.

DISCUSSION

It is clear that provision relating to "race" is complex and, although two distinct "ideal types" were identified, these were difficult to define categorically. What was clear however was that any explicit attempts to address or disrupt White trainees' hegemonic understandings, or their "tools of Whiteness" (Picower, 2009, p. 205) was absent. Rather, the majority of providers tended to "play safe" or to avoid either irritating or upsetting White trainees, or causing offense to Black trainees. Using the critical lens afforded by Critical Whiteness Studies (CWS), I argue that "race-conscious" providers do, at least, acknowledge and recognize the complex, and entrenched nature of racisms. However, the available time and resources on ITE programmes render any opportunity for meaningful discussion and activity which could, potentially, lead to transformative practice, less likely. On the other hand, "race dysconscious" practice does little to even acknowledge the significance of racisms and therefore any potential to disrupt the racial power of Whiteness is compromised, or indeed, missed altogether. However, I argue that this enactment of White privilege is not necessarily one that is totally passive (Hayes and Juárez, 2012) but one which stems from a lack of critical awareness on the part of White people of their own privilege, and how this can be enacted. While this "lack of awareness" could imply an unwitting innocence, or in Milner's (2008, p. 343) terms, a "false racist innocence," the data analysis suggests that the choices that are made by some of the ITE providers actively divert attention away from Whiteness, thus preserving its power. While this is not necessarily a new perspective (see for example, Ladson-Billings, 2001), particularly within the context of the US, there has been very little work within a UK context to explore this which, I argue, could be a contributing factor to the stubborn persistence of racisms within education (Mirza, 2005).

The additional theme of the need to manage student satisfaction, and the active avoidance on the part of some providers, of more critical, introspective analysis could be indicative of the increasingly marketised higher education system

in the UK which has resulted in a reduction of more critical spaces in favor of pedagogical approaches which are less likely to cause students to be critical in their evaluations of teaching (Haggis, 2006). These spaces are vital if we are to impact on the thinking, self-awareness and future practice of teachers.

In conclusion therefore, analysis of ITE practice exposed manifestations of Whiteness on the part of providers. Examples included an inability or reluctance to disrupt "normalized" viewpoints; a lack of confidence to do so, and the presence of deficit view of the "other." Even in cases where providers had a strong understanding of the kinds of activities which might help students to develop critical race consciousness, this was often thwarted by more systemic factors such as a lack of time, a lack of broader institution-wide shared commitment and understanding, and an over-reliance on the "expert." As a result, in the main, Whiteness and its processes which can serve to perpetuate inequality and institutional racisms appeared to be allowed to continue, largely unaddressed.

CONCLUSIONS AND IMPLICATIONS

The research concluded that although some practices existed within ITE which aimed to disrupt trainee teachers' thinking in more transformative ways, in the main, this was limited. It was more common for provision relating to "race" to be more piecemeal, enough to be seen to be compliant with national requirements, but limited in its potential impact on trainees' thinking. For many trainee teachers, and indeed, ITE providers therefore, the "can of worms" remained firmly closed, the difficult and often problematic questions, left unaddressed, and the complexities relating to "race" and Whiteness remain unexplored. I conclude that this can serve as a form of preserving the multi-faceted complexities of racism and is a missed opportunity to disrupt White hegemonic norms which can pervade education and wider society. As part of a core, and compulsory ITE curriculum, there needs to be time dedicated to this, regardless of the nature of the training route or the location of the provider.

The implications of the research suggest that there is a need for a (re-)centralization of race and racisms within ITE and that this should be done in a meaningful way which moves beyond political rhetoric and superficial models of compliance. This would necessitate core and compulsory teaching sessions as part of ITE curricula which consider how "race" intersects with other aspects of social justice or in Gillborn's (2008) words, other "axes of oppression" such as class, gender, disability, and sexuality. It would also require a commitment to on-going professional development for teachers and teacher educators in order for this to be seen as a shared undertaking, and not the responsibility of an "expert" or the "other." The use of more critical theoretical lenses such as those offered by Critical Race Theory and Critical Whiteness Studies could play a role in this, offering new perspectives on stubbornly persistent issues, providing a voice for sometimes previously marginalized groups, and disrupting student teachers' and indeed ITE providers' world views and understandings of the manifestations of contemporary racisms.

Critical Race Theory directly challenges post-racial stances, thereby centralizing "race" as an integral part of provision and requiring a critical examination of "race," its manifestations, both individual and structural, to be explored and disrupted.

Finally, it is important to acknowledge this is a highly complex area, and not one which can be "addressed" within what, for some, is a short and intensive period of training or preparation. There is a need for on-going professional development for teachers post-qualification, particularly in light of changing political landscapes both nationally within the UK, and more globally with a rise in far-right thinking and legitimized discourses fuelled by racist and nationalistic ideologies. Teachers need to be equipped to support all of their children to thrive and to work positively and constructively within the communities they serve. There is also a need to equip future citizens with the insights necessary to make society more understanding and inclusive of all of its members. The research suggests that there is a need for teachers at varying stages in their professional development to have opportunities to engage in honest dialogue about their own understandings which shifts the gaze away from the "racial other," and to continue to explore why, for many, addressing "race" remains a "can of worms."

DATA AVAILABILITY STATEMENT

The datasets generated for this study are available on request to the corresponding author.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Sunderland University. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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APPENDIX 1

The following table represents an overview of the sample selected for telephone interview.

| TABLE 1 Overview of sample. | |
|--|---|
| Region of England | Participating Institutions HEI: Higher Education Institution SCITT: School-led route DRB: Designated recognized body (School-led) GTP: Graduate Training Programme (school led, no longer available as a route) |
| East Midlands | 3: 2 HEIs and 1 SCITT (Primary and Secondary) |
| London (including greater London) | 4: 3 HEIs and 1 DRB |
| North West | 4: 3 HEIs and 1 GTP Consortium (Secondary) |
| North East, Yorkshire, and Humberside | 5: 4 HEIs and 1 SCITT (Primary) |
| South East | 4: 3 HEIs and 1 GTP Consortium (Primary) |
| South West | 4: 2 HEIs and 2 SCITTs (1 Primary and 1 Secondary) |
| West Midlands | 4: 3 HEIs and 1 SCITT (Secondary) |





Developing Preservice Teachers' Equity Consciousness and Equity Literacy

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Teachers need the knowledge and dispositions to identify and dismantle barriers contributing to persistent educational inequity. This work begins by centering equity in teacher education with a focus on developing teachers' critical consciousness of the systems of power and privilege in educational institutions. Utilizing equity-focused instruction and coaching, this study explored the development of preservice teachers' Equity Consciousness and Equity Literacy knowledge and dispositions during a teaching-coaching-reflection transformative learning experience. Participants demonstrated increased Equity Consciousness and Equity Literacy, recognizing their assumptions about learners' lived experiences and the funds of knowledge students bring to the learning environment. Findings from this empirical study indicate this approach contributes to the development of the equity-based dispositions essential to dismantling current educational barriers and replacing them with inclusive and empowering instructional practices.

Keywords: teacher education, equity consciousness, equity literacy, transformative learning, self-authorship

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INTRODUCTION

Teacher education is critical to the development of teachers' equity consciousness and equity literacy; without this critical consciousness, there is a danger that equity may become yet another empty educational buzzword (Jackson, et al., 2019; Shelton, 2019; Williams and Brown, 2019). Education is rife with buzzwords representing trends driven by socio-political forces; these words become labels ascribed to reform initiatives. Accountability is one such buzzword emerging in the wake of *No Child Left Behind* (NCLB) to explain changes in curriculum, instructional practices, and test preparation initiatives (Ladd, 2017). However, accountability did little to fulfill the promise of NCLB: elimination of the education debt created by systems that oppress rather than emancipate (Ladson-Billings, 2006). While accountability draws attention to disparities in educational outcomes, it does little to alleviate the severity, prevalence, and root cause of the problems (Darling-Hammond, 2007).

With the passage of the *Every Student Succeeds* (ESSA) legislation, a new term has become prevalent in the educational lexicon: Equity. The intent of ESSA is to prompt examination of systems and identification of practices and procedures creating barriers for historically excluded populations, including minoritized students, students with low socio-economic status (SES), English learners, students with disabilities, and those who are homeless or in foster care (Cook-Harvey et al., 2016). The promise of ESSA is that equity can be achieved by providing all students access to higher-order thinking and learning, multiple measures of equity, and evidence-based interventions (Cook-Harvey et al., 2016).

When meaningfully implemented, accountability and equity can be more than empty or misapplied educational buzzwords. Data (e.g., discipline, graduation, dropout, attendance, and academic testing) within an accountability system provide a means for revealing inequities created by racist, classist, and sexist practices (Darling-Hammond, 2007; Cook-Harvey et al., 2016; Gorski, 2016). Authentic equitybased practices are grounded in intentional identification and removal of the barriers creating inequity; this requires knowledge of the systems of power within educational spaces and an understanding of what equity means. Reform is necessary to create a central focus within teacher preparation programs on providing knowledge and nurturing development of Equity Consciousness (a teacher's belief in the importance of equity and the commitment to ensuring all children receive an equitable and excellent education) and Equity Literacy (cultural knowledge and abilities to disrupt inequity) (Skrla et al., 2009; McKenzie and Skrla, 2011; Sleeter, 2012; Cochran-Smith et al., 2016; Gorski, 2018). A first step involves distinguishing equity from equality.

Equity is Not Equality

Educators often mistake the concept of equity with that of equality and use these two terms interchangeably (Jackson et al., 2019; Shelton, 2019; Williams and Brown, 2019). In fact, there is a noteworthy distinction in meaning (Cramer et al., 2018). According to the Center for Public Education (2017), "Equality in education is achieved when students are all treated the same and have access to similar resources. Equity is achieved when all students receive the resources they need." To address educational inequities, both equal access and equitable services must be provided.

To better understand current change initiatives and problems of practice in K-12 school districts, the authors conducted interviews and focus groups with in-service teachers and educational leaders and noted that these educators used the word equity often, but usually in conjunction with descriptions of pacing calendars, professional learning community work, interventions, and reducing suspensions. While the intentions may be well meant, for equity-based change to be realized educators must do more than repackage long-held practices and justify them with a misguided equity label. Equity will only occur if we have a deep understanding of what equity means and then take steps to remove the inequities that oppress students (Skrla et al., 2009; Gorski, 2012; Ladson-Billings et al., 2017).

An outcome of this work with K-12 educators was a commitment by the authors to research, create and implement professional learning designed to develop the Equity Consciousness and Equity Literacy of teachers and educational leaders. This work began with a literature review that informed the development of an empirical study to examine the possible impact of equity-focused instruction and coaching, beginning in preservice teacher education and extending through professional learning networks in K-12 educational institutions.

LITERATURE REVIEW

To ground development of an instructional model for use with preservice teachers, a review of literature focused on teacher education and theoretical frameworks of Equity Consciousness, Equity Literacy and Transformative Learning was conducted. Knowledge from this review informed the instructional model and research methods used in the investigation.

Learning to Teach and Teaching to Learn

During the teacher preparation program, preservice teachers learn the craft of teaching as apprentices, engaging in practice teaching with a focus on content and instructional pedagogy to develop a better understanding of the perspectives of naive learners and the intricacies inherent in the teaching-learning process (Segall, 2001). While the emphasis on curriculum and instruction is evident, a focus on equity-based practices and dispositions is often absent from most teacher preparation programs (Darling-Hammond, 2006; Warren, 2018). To fully prepare preservice teachers for the challenge of educating all children, teacher preparation must include three components: content pedagogy, instructional skills, and dispositions for equitable teaching (Warren, 2018). To address this oversight, teacher educators can center coursework and fieldwork to ensure future teachers plan lessons with equity in mind; teachers with equity-based beliefs and dispositions recognize the importance of inclusion, community, social learning, and diversity in creating a student-centered learning experience that is not based solely on hegemonic norms (Beck and Kosnik, 2006; Skrla et al., 2009; McKenzie and Skrla, 2011; Krahenbuhl, 2016). Essential to increasing equity-focused instruction and meaningful change in teacher education practice is knowledge relative to cognitive empathy and relational teaching.

Cognitive Empathy and Relational Teaching

Preservice teachers develop foundational knowledge of content pedagogy that prepares them for the technical aspects of teaching. Equally important is the aspect of relational-thinking and perspective-taking that is at the heart of the practice of cognitive empathy and is also instrumental for equity consciousness when planning for understanding students' unique learning needs (Barr, 2011; Sanford et al., 2015; Warren, 2018).

The first step toward building Equity Conscious educators is supplanting deficit thinking with an asset view of students and families (Skrla et al., 2009; Valencia, 2010; McKenzie and Skrla, 2011; Warren, 2018; Carter Andrews et al., 2019). Imperative to humanizing teaching and creating inclusive environments is the belief that students and their families come to educational institutions not as blank slates but as individuals who possess funds of knowledge that contribute to the learning process (McAlister and Irvine, 2002; Llopart and Esteban-Guitart, 2018).

Relational teaching is based on the premise that teachers will co-construct knowledge with their students so that students are more likely to recognize what they learn as relevant and meaningful (Sanford et al., 2015). When pedagogy is taught

through a relational and empathetic lens, teachers assume students come to school with prior knowledge and experiences that can contribute to sense making and, therefore, facilitate the learning process. They teach in ways that build on that foundation, designing instruction to make explicit connections to integrate new learning with students' culture-based knowledge and previous academic learning (McAllister and Irvine, 2002; Brownlee and Berthelsen, 2008; Barr, 2011; Llopart and Esteban-Guitart, 2018).

Recognizing the funds of knowledge students bring to education and authentically taking their perspectives will not happen without deliberate instruction and practice of these skills during preservice education coursework (Llopart and Esteban-Guitart, 2018; Llopart et al., 2018). Learning to consider the perspectives of others is a teachable skill. As was concluded by Barr (2011) teacher education programs "need to focus more on training future teachers to recognize and exercise their cognitive empathic capacities" (p. 368), including planning lessons with the students' knowledge and perspectives in mind.

Teaching future teachers about relational teaching is critical; however, without creating learning opportunities for teachers to practice implementation of relational-thinking in the context of classroom instruction this discussion may be no more than a hypothetical academic exercise. Little impact is created when abstract discussion is not put into concrete practice within a real world context (Sanford et al., 2015; Blanchard et al., 2018). An understanding of Equity Consciousness, Equity Literacy, Transformative Learning and Self-Authorship theoretical frameworks can guide this important change in teacher education practice.

THEORETICAL FRAMEWORKS

To facilitate preservice teachers' learning and capacity to embrace and enact equity-based educational practices, teacher educators must ensure future teachers learn and can articulate the difference between equality (all get the same) and equity (each receives what is needed). Integrating Equity Consciousness and Equity Literacy within preservice teachers' professional knowledge is required to achieve this mission. Recognizing the dimensions of adult learning and the importance of relevance and situational learning, teacher education programs which transformative learning experiences may guide preservice teachers to identify and critically assess their assumptions and beliefs about students, teaching, and learning and the roles of teachers and students in this process (Kegan, 2000; Cranton, 2016).

Teaching content knowledge and instructional strategies can be prescribed and a "formula" can be provided; however, equity-based dispositions require opportunities for adult learners to engage in self-authorship: "the internal capacity to define one's beliefs, identity and social relations" (Baxter Magolda, 2001, p. 269). Baxter Magolda (1992) identified three key learning environment principles that support development of self-authorship: 1) validating the learners' capacity to know; 2) situating learning in learners; and 3) mutually constructing

meaning. Creating learning experiences in which future teachers develop awareness and critical consciousness of their beliefs and dispositions provides a framework for developing Equity Consciousness and Equity Literacy.

Equity Consciousness

Building on work relative to Equity Consciousness and effective equity-based teaching practices (Skrla et al., 2009; McKenzie and Skrla, 2011), McKenzie (2016) argued discipline-specific content pedagogy, student-centered instructional pedagogy, and Equity Consciousness serve as foundational elements in teacher preparation. Using the metaphor of a three-legged stool, McKenzie explained that the first leg of the stool is content; teachers must possess deep content knowledge and pedagogy specific to effectively teaching that content. The second leg of the stool is pedagogical knowledge that aims to improve learning processes and outcomes. Instructors must use instructional practices that ensure all learners are included in instruction and that barriers to equitable learning are removed (e.g., whiteboards and random selection to reduce bias when checking for understanding). The third leg of the stool is Equity Consciousness-a teacher's belief in the importance of equity and the commitment to ensuring all children receive an equitable and excellent education.

Skrla et al. (2009) define Equity Consciousness as the belief that all students, regardless of gender, race, class, culture or religion, are capable of high levels of success. McKenzie and Skrla (2011) further explain Equity Consciousness as an individual's level of awareness regarding the degree to which others receive equitable treatment, how well they understand the concept of inequity, and how willing they are to be authentically engaged in redressing inequity. Equity Consciousness is centered on the belief that traditional systems include barriers to equity that marginalize others and that those with fully developed Equity Consciousness purposefully work to identify, dismantle, and replace inequitable practices with systems that include high expectations and support success for all students. The Equity Consciousness Continuum as developed by Skrla et al. (2009) includes five levels: None (no knowledge of equity and a deficit view of students); Limited (some understanding of equity for some subgroups); Inauthentic (developed Equity Consciousness and articulates but does not always act according to those beliefs); Vacillating (developed and deep understanding of equity but may not always follow beliefs when pressured); and Authentic (deep understanding of the necessity to implement equity).

Equity Literacy

Complementing the concept of Equity Consciousness, Gorski (2018) contends a framework of Equity Literacy enables educators to disrupt persistent patterns of inequity. In the Equity Literacy framework, educators strive for proficiency in cultural knowledge and also in developing four specific abilities to advocate for equity. First, they must be able to *Recognize* bias and inequity, even when it is subtly manifested. Second, they need the ability to *Respond* to inequity immediately. Third, they work to *Redress* bias moving into the future. Fourth, they have the ability

to *Create and Sustain* equitable and bias-free environments in schools, classrooms, and institutional cultures.

The basic principles of Equity Literacy are based on transformative practice and critical consciousness. Gorski (2016) asserts that attending to diversity and cultural competence of educators is not enough because these approaches do not disrupt inequity. As part of his work with the Equity Literacy Institute, Gorski (2018) provides eight principles of Equity Literacy: 1) direct confrontation with inequity; 2) recognizing the "poverty of culture" is actually a power and privilege problem; 3) equity ideology as a lens and commitment; 4) prioritizing the initiatives to provide the greatest impact on marginalized populations; 5) redistributing resources to increase access and opportunity; 6) "Fix Injustice, Not Kids"; 7) realizing that one size fits few; and 8) using evidence rather than fads or trends to drive action (http://www.equityliteracy.org).

Developing the inclusive attitudes and practices essential to Equity Consciousness and Equity Literacy requires opportunities for transformative learning so preservice teachers experience inquiry and perspective taking regarding difference, equity, and inclusion and the impact of oppressive and inequitable practices on student learning (Beck and Kosnik, 2006).

Transformative Learning

Transformative Learning posits that through experiences that challenge existing beliefs, individuals gain new perspectives. Mezirow (2000) identified ten phases that contribute to transformative learning: a disorienting dilemma, self-examination of assumptions, critical reflection on assumptions, recognition of dissatisfaction, exploration of alternatives, plan for action, acquisition of new knowledge, experimentation with roles, competence building, and reintegration of new perspectives into one's life. For transformation to occur an individual need not experience all phases; nor must the phases be experienced in a given order.

To be transformative, an individual must experience learning that raises consciousness. Through the work of scholars like Freire (2000), consciousness-raizing has been associated with freeing individuals from oppression and this freedom stems from the critical reflection that expands self-knowledge. Cranton (2016) explained that while some may experience transformative learning through exposure to new knowledge, consciousness-raizing more often occurs when individuals engage in perspective taking that is dissonant to the typical habits of mind from which they have previously constructed meaning.

One approach to creating a disorienting dilemma that can prompt learners to engage in critical self-assessment and perspective taking is role play. Cranton (2016) argues, "for role play to lead to consciousness-raizing, debriefing is important. Participants should have the opportunity to discuss their experience fully, especially what it felt like to view the situation from an alternative perspective" (p. 111). A transformative learning experience creates opportunities for learner empowerment. The learner can engage in critical consciousness-raizing by questioning assumptions and perspectives, engaging in rational dialogue, revising habits of

mind, and planning for different action based on the transformative experience (Cranton, 2016).

Integrating knowledge of cognitive empathy, relational teaching, Equity Consciousness, Equity Literacy, and Transformative Learning provides a foundation on which construction of revisions to current teacher preparation practices can be made. To prepare teachers with the knowledge and dispositions needed to rise to the challenge of implementing authentic equity-based practices, there is a need to understand preservice teachers' Equity Consciousness and Equity Literacy. This knowledge may inform future professional learning for educators to ensure that equity does not become yet another meaningless educational "buzzword."

MATERIALS AND METHODS

The purpose of this study was to seek better understanding of the Equity Consciousness and Equity Literacy levels and perceptions of preservice teachers regarding the needs of diverse students, including English learners and students with specific learning disabilities. Moreover, the researchers attempted to examine how guided rehearsal and reflection through role play may help preservice teachers to develop self-authorship and Equity Consciousness. Further, it was important to understand the degree to which participants might perceive such an approach as beneficial for their professional development in equitably serving diverse student populations in K-12 schools. Qualitative methodology was appropriate for this study because it allowed for interpretation of meaning from participants' lived experiences during the instructional model (Merriam and Tisdell, 2016).

Participants

Participants included 12 preservice teachers, one of whom identifies as male, enrolled in a teacher education reading and language arts in special education methods class. Seven planned to work at the elementary level and five at secondary. Six of the students self-identified as Black, African-American, Latina or mixed race and the other six identified as White. None of these participants had begun their student teaching.

Procedure

This study included three rounds of lesson simulations conducted in four separate research sessions over a 12 week period. During the simulations, participants played the role of teacher, student, and observer. Each simulation included active content-focused instructional coaching and debriefings by the second author. The first author video-recorded the simulations and debriefings and provided equity-focused instruction and coaching relative to consideration of K-12 students' perspectives, equity literacy framework principles, and the impact of instructional moves on school-age children as learners and as individuals.

When playing the teacher, the participant developed and delivered a mini-lesson focused on literacy. In the role of student, participants enacted the learning profile they had created of an elementary age child with disabilities. When

acting as observers, participants watched the interaction between the teacher and student, taking note of both instructional and interactional evidence of teaching and learning.

Each participant played the role of teacher, student, and observer in at least two of the three simulation rounds. During each simulation, the second author would observe for teachable moments and would stop the simulation to provide in-themoment coaching. She would model and explain specific teaching strategies and provide insight into the impact of content pedagogy on student learning. The simulation then resumed to give the teacher and student an opportunity to apply learning from the coaching session. When the lesson ended, the authors then engaged the observers in an intermission coaching session.

During intermission, participants shared their observations of effective practices on the part of both the teacher and the student and provided suggestions for what they might have done differently or what more they would like to see the teacher and student do. At this point, the first author also provided equity-focused coaching. The second author would then direct the teacher and student to an area of focus and the simulation resumed for another 3 to 5 min. After each simulation, participants changed roles, shifting from one role to another for the next simulation. Over the course of the first three research sessions, participants enacted each of the roles (teacher, student, observer) at least two times.

Participants and the authors engaged in debriefing sessions following each simulation round. During debriefings, participants shared how they felt while enacting each of the three roles. They unpacked their realizations about the difference between learning about theory and enacting pedagogy in a teaching situation. The authors prompted metacognition and self-awareness through questions designed to probe participants' assumptions about the teaching process, the learning needs of students, and the lived experiences of the diverse students they will be teaching in the future. In response to participant comments, the authors provided explanations and suggestions for culturally inclusive teaching and equity-based practices when working with students and families.

Following the simulations, participants watched the simulation videos and completed a written reflection on the learning gained from enacting each of the three roles. In addition to reflecting on content and instructional pedagogy, participants responded to equity-based prompts to make visible participants' thinking regarding asset and deficit views of students and how these views may have changed throughout the simulations, coaching, and debriefing sessions. During the final research session, the first author facilitated a focus group during which participants articulated their content, instructional skills, and equity consciousness learning over the course of the three simulations.

Data Sources and Analysis

Transcripts of the videotaped simulations, debriefing sessions, and focus group interviews were the primary data sources. To substantiate and provide contextual information of the primary data, secondary data were collected, including participant-created

lesson outlines, student profiles, observation notes, and written reflections.

Guided by Transformative Learning theory, Equity Consciousness, and Equity Literacy frameworks, the researchers utilized a comparative analytic approach to derive meaning from the results (Merriam and Tisdell, 2016). Transcripts from each simulation and subsequent debriefing sessions were coded. Data from one simulation to the next were then compared with an analytical focus on the degree of change relative to Equity Consciousness levels and Equity Literacy abilities.

Over multiple joint coding sessions, the researchers engaged in analytical jotting and memoing to identify deeper or underlying issues or patterns for further analysis (Miles et al., 2019). Member checking was conducted by presenting initial interpretations to participants to check for plausibility of findings (Merriam and Tisdell, 2016).

Limitations

Limitations of this study include the small sample size and the absence of pre and post self-assessment data on the participants' Equity Consciousness and Equity Literacy levels, content pedagogy, and teaching skills. Therefore, it is difficult to qualify and quantify the effect of the transformative learning experience on participants' learning gains in these areas.

RESULTS

Results are presented within the context of the five levels (*None, Limited, Inauthentic, Vacillating, Authentic*) of the Equity Consciousness framework (Skrla et al., 2009) and within the four abilities (*Recognize, Respond, Redress, Create and Sustain*) of the Equity Literacy framework (Gorski, 2018). In addition, results are framed using the Equity Literacy principles of *Fix Injustice, Not Kids* and *Equity Ideology* (Gorski, 2018) Evidence of developing Equity Consciousness and Equity Literacy emerged from a comparative analysis of one rehearsal and reflection simulation to the next.

Findings indicate that during the first simulation participants did not provide evidence of Equity Consciousness or Equity Literacy. Nor did they Recognize their assumptions regarding students and their lived realities. In the second simulation, evidenced some participants awareness of Consciousness in that they consciously used non-specific terms for family members or provided the opportunity for students to share who the individuals are in their support systems. They were more conscious of the reality that not all families and dynamics within a family are the same. Throughout the six rounds of role play in simulation three, consistent evidence of Equity Consciousness development was noted for all participants. Examples include teacher efforts to connect lesson vocabulary to languages spoken by the student, demonstrating awareness that English learners have funds of knowledge on which they can co-construct their new learning. Findings derived from analysis of each of the three rounds of simulations and participants' written reflections are provided.

Evidence of Equity Consciousness Levels and Equity Literacy Abilities

Simulation One. The most obvious assumption made by participants was that all children live in traditional family environments. This was evidenced by multiple teachers when checking for understanding or helping students to make connections to the text (*The Surprise Family* by Lynn Reiser) in the reading lesson. Prompts included statements that revealed an assumption that all children have a mom in their lives: "like when your mom has her arms around you (in an attempt to evoke a response from students about a warm feeling)" and "If you did that (running into water like the ducklings) to your mom (who was a hen in the book), would she be worried?".

Participants also asked many questions, most of which were at the recall level, reflecting a low level of expectations for student funds of knowledge or abilities. In addition, multiple participants posed questions and then, without waiting, answered the questions themselves. No follow-up questions (such as "How do you know?") were asked to prompt students to provide evidence to support their answers or to explain their thinking.

During the debriefing, in the context of discussing how to ask in-depth questions to monitor student's comprehension, the authors framed discussion to guide participants toward unpacking the assumptions and unconscious bias from which they operated when developing instructional questions. For example, in this story, with ducklings and a hen as characters, the word gizzard was used in conjunction with the word grit. The teacher in the lesson told the student, "you would never eat that" unconsciously dismissing the reality that in some cultures the gizzard is considered a delicacy. A similar bias was evident when a teacher did not attempt to explain what grit was as she assumed it was an easily decodable word. Overall, the participating teachers in simulation one operated at the level of no Equity Consciousness or Equity Literacy.

Simulation Two. Nasreen's Secret School by Jeanette Winter, a true story from Afghanistan, was used in simulation two. Participants were instructed to ask probing questions to facilitate students' use of words to describe feelings. When participants asked questions to activate a student's prior knowledge, their questions were not based on assumptions about the narrowly defined typical family:

Teacher (pointing at the book): What's happening to Nasreen right here?

Student: The grandma is hugging her. Teacher: Who helps you feel safe?

Teacher: When do people usually get hugged?

Student: When you're feeling sad. When someone hugs me I

feel safe.

Student: My grandma and my aunt.

In this instance, the teacher did not assume the child had a mom in her life to make her feel safe. She did not ask a rhetorical question, such as "just like your mom?" Instead, she asked an open and neutral question: "Who helps you feel safe at home?" Similar examples were evident in simulation two, which suggests

the simulation one debriefing and coaching influenced the participants' Equity Consciousness and Equity Literacy. However, in this example, the teacher did not prompt the student to elaborate upon what feeling safe means.

The plausible assumption was that feeling safe is a universally understood concept and there was no need to check for understanding. This participant's Equity Consciousness was at the *Limited* level and she demonstrated the Equity Literacy ability of *Recognition*. She was aware of equity and had an asset view of a student's home life. Between simulations one and two, the *Fix Injustice*, *Not Kids* Equity Literacy principle was evidenced in that the participants *Recognized* they needed to change their previously inequitable practices to *Create* conditions that empower rather than marginalize students.

Cultural assumptions and bias were evident in simulation two. This was most obvious when the teacher pointed to a picture of males in a story set in the Middle East and said, "they're sneaky" to describe boys who were, in fact, attempting to distract soldiers in an effort to protect their friends. Later in the story, she points to another male character and says, "he's bad". Importantly, the Author's Notes for the book provide key background information essential to understanding the story: girls were not allowed to go to school after the Taliban seized control of Afghanistan; women were not allowed to leave home without a male relative as a chaperone; and women were not allowed to work outside of the home. All of the simulation teachers omitted this information in their lessons. Without explicitly referencing the background information, the teacher could not help naive learners fully comprehend the events that were outside of their life experience when discussing the complex emotions exhibited in one of the conflicts of the story. In addition, by referring to the characters as sneaky and bad without referencing the cultural context of the story, students' learning was limited to the deficit view the teachers exhibited regarding the characters. In this example, the teacher's Equity Consciousness and Equity Literacy ability operated at the None level.

Attempts at higher levels of questions were evident in simulation two. While some participants continued to ask basic recall questions beginning with who or what, or could be answered with yes or no responses, others had prepared questions designed to unpack student thinking such as "Why do you think that happened?" "What would you have done?" Some participants still struggled with the dynamics of asking questions and listening for student responses. For most participants, when questions that could probe at deeper levels of understanding were posed, teachers often missed the opportunity to unpack student thinking. In the following example, the teacher appeared to recognize the symbolism of the dark cloud and foreshadowing of a major event (Taliban Soldiers knocking on the door of the secret school). However, the teacher did not follow with higher expectations for evidence of student learning:

Teacher (pointing to text): Look, there are those clouds again. Do you think they're a good sign?

Student: No.

Teacher: Probably not.

While the teacher in this example operated at the *None* level during teaching, during the debriefing session she evidenced *Limited* Equity Consciousness and the Equity Literacy ability of *Recognition*. During the debriefing, she articulated realization of her low level of expectations: "I am not asking them deep enough questions; they can do more" and engaged in dialogue with her colleagues regarding how to support students in ascribing words to feelings and making inferences. Through this dialogue the participants engaged in a conversation focused on the *Fix Injustice*, *Not Kids* Equity Literacy principle. They articulated the importance of changing their practices and not seeing the students as deficient.

During the debriefing, in the context of affect labeling (putting feelings into words) participants discussed what it means to be open to a new idea and to taking the perspectives of others. They acknowledged the instructor's coaching to explore beyond simple emotions (happy, sad, and mad) helped them realize the need to teach students to make connections between their experiences and that of characters in the text. For example, that people can cry for joy as well as sorrow, which was demonstrated by the main character Nasreen. They also explored the varied emotions experienced by different people in the same situation, demonstrating a connection to being culturally inclusive. More importantly, participants were coached to use analogy (such as open and closed doors) to help students understand an abstract concept, such as feeling open. They also referenced their realization that they can guide students to talk about how their bodies feel when they experience certain emotions.

The participants also demonstrated heightened Equity Consciousness when they stated their new understanding that one student (in the hegemonic group) understanding the concepts does not mean all learners will understand them as immediately. Participants articulated their realization regarding the importance of checking for understanding and inviting students who might otherwise be marginalized into classroom discourse. In these instances, participants were operating on the *Limited* level of Equity Consciousness and the *Recognizing* ability of Equity Literacy. Importantly, this was also an indicator of participants developing the *Equity Ideology* principle (Gorski, 2018), recognizing that equity is a way of thinking and not merely an instructional strategy.

Simulation Three. Participants consistently demonstrated awareness that families are multifaceted. Asking open ended questions like, "who lives in your house?" and "who might do that for you?" showed recognition that each child may have a family dynamic that is different from the teachers' lived experiences.

When checking for understanding, it was apparent teachers continued to struggle with higher level questioning. However, there was evidence that they were aware of the importance of engaging with each student in the group. One teacher playing the role of the student stepped out of the simulation and commented to peers that when asking students to make connections to the text, the teacher "had thoughtful conversation with each student, not just one or two as

teachers often do. She encourages students and makes it o.k. that they all have different answers".

One participant not only asked guiding questions to help students with disabilities (as enacted by the participant) unpack what jealous means, but also prompted students to generate a real-world solution, "What can you do the next time you feel this way?" A defining element of Equity Consciousness and Equity Literacy is having high expectations for all students. In this instance, asking students with disabilities the same high level questions a gifted student might receive is an indicator of the Equity Consciousness based disposition and *Equity Ideology* principle that all children are capable of performing at high levels.

When analyzing data relative to cultural inclusiveness in simulation three, the first indicator of developing Equity Consciousness was evidenced in the diversity of books selected for the lesson. In addition to topics exploring emotions, adoption, acceptance, and stories related to friendship, characters were representative of ethnicities, cultures, and customs other than those typically represented hegemonic curriculum. Selections provided opportunities for teacher-created lessons that centered diversity and inclusion. While participants struggled with how to discuss these concepts within a literacy lesson, their attempts to engage with the children (as enacted by fellow adult learners) in the lesson indicated their awareness of the importance of lessons that include and value what students bring to the learning environment. Teachers made a concerted effort to invite and encourage each student to join the discussion, including using peer-assisted mediated learning to have other students paraphrase what the teacher just said and then the teacher checked for understanding. These actions suggest that the preservice teachers were operating at Developing Equity Consciousness as well as Recognizing and Responding Equity Literacy abilities. Through these actions, participants evidenced dispositions reflecting the Equity Literacy principles of *Fix Injustice*, *Not Kids* and *Equity Ideology*.

During the third debriefing session, participants who played the role of student discussed what they had learned about constructing a learner profile for a student with disabilities and staying in character during the lesson enactment. Participants who played the role of teachers commented on the challenge of teaching students about a complex emotion such as jealousy when students do not know the meaning of the word. Each participant recognized that they had made a marked improvement in creating student-friendly yet rigorous explanations. Teachers also articulated learning about the importance of utilizing the funds of knowledge that students bring to their own learning processes. Evidencing the Equity Ideology principle, they stated that they were responsible to help students make sense of what they were learning and grappled with multiple ways to teach vocabulary knowledge and comprehension, particularly, as one participant illustrated, "because each student has their unique learning needs and knowledge to build upon". These discussions suggested that, while only at preliminary levels, all participants made marked

progress in their development of Equity Consciousness and Equity Literacy over the duration of the study.

Final debriefing and written reflection. Following the third simulation, participants submitted a written reflection based on their own simulation three teaching videos. In this reflection, they described what they had learned in the three rounds of simulations, from in-the-moment and intermission coaching, and post observation debriefing. Most participants commented on gaining in-depth content pedagogy knowledge in how to teach vocabulary knowledge and comprehension strategies. They explored their own assumptions when they developed their lesson outlines and assumed the teacher roles. Participants also explained their learning as a result of constructing a learner profile and their efforts to stay in character when enacting the role of a student during the lesson. All reflected upon how they felt and reacted when "students" gave an unexpected answer and the importance of examining and reflecting upon these reactions.

Three themes emerged from analysis of participants' written reflections. Participants grappled with questions such as "What are my assumptions?" "How do I include students' viewpoints in the lessons?" and "How do my beliefs about my students impact my lesson preparation and teaching?" Results are presented here using Cranton (2016) reflective questions for habits of mind and kinds of knowledge relative to Content, Process, and Premise.

Content: "What are my assumptions?"

- I learned I have to think more when preparing the lessons. I
 need to think about what the students already know and
 what they need and not just what the textbook says. Making
 sure I am thinking about their cultural knowledge and what
 they have learned before will help make sure they get what
 they need.
- I definitely think this gave me the opportunity to get a glimpse of what my areas of growth are. It did get me thinking about how I would react in a situation. I'm glad I know now not to make a student feel bad by assuming their family is like mine. I know I would feel terrible if a student said, "Oh, well I don't have a mom." Now I know not to assume things about a student's life.

Process: "How did I integrate others' points of view?"

- I appreciate when a classmate talked about the tears and crying for different reasons. I think it's good also because it makes students feel that they're not alone - they feel more connected to other people. Like, "Oh, I'm not different. I'm just like somebody else. Somebody else understands me."
- I realize it's difficult to draw things out of people without feeding them too much vocabulary. Relating it to their prior knowledge is a good way to do it. I liked examples of similes and bringing students into it by activating their own experiences. Role playing helped me see that students know things we can build upon.

Premise: "Why Should I Revise or not Revise my Perspective?"

- When I played the student it really put learning into perspective for me. Some of the parts I really didn't know, and it was nice to have a teacher who is encouraging and not just giving you the answer. I had a little bit of a struggle in the lesson, but once I got it, I felt a lot better about it. I know now that it is ok for a student to have a productive struggle.
- I've learned it is important to be careful. Playing the student and creating a learner profile helped because we need to know our students. Also I think there's a possible problem with the learner profile. We are putting them in a box and not giving them a chance. I thought, 'What if I put him with the stronger readers? He could be a stronger reader. I put him in the weaker box, and I've labeled him. I've put a label on a child that probably already has a million labels, and I've just done that to them. So I have learned you need to be careful.

Reflections shared in debriefings and written reflections suggest participants first experienced a disorienting dilemma and attempted to engage in critical self-reflection and rational dialogue with their peers and coaches to reconcile the competing ideas. Participant reflections indicated their views about learning to teach, teaching to learn, and equity were transformed during this experiential learning.

DISCUSSION

When comparing the data from one simulation experience to the next, participants evidenced growth in Equity Consciousness and Equity Literacy. Over the course of all three simulations, they moved from *None* toward *Limited* Equity Consciousness, demonstrating developing understanding of equity. In terms of Equity Literacy, they evidenced the ability to *Recognize* bias and deficit views and to plan lessons in an attempt to *Respond* to biases in the immediate term. In addition, their growth in equity dispositions was reflected in evidence of their enactment of the *Fix Injustice*, *Not Kids* and *Equity Ideology* Equity Literacy principles. Importantly, participants shared that equity-focused coaching during the simulations and during debriefings helped them to understand that equity and equality are different and that there is no one size fits all teaching approach.

Evidence of participants' growth in relation to Equity Consciousness and Equity Literacy can be further understood within the framework of Transformative Learning. Equity Consciousness and Equity Literacy sense-making was developed during the debriefing sessions, focus group, and reflective writing exercises, providing evidence of the importance of perspective taking and critical reflection in the transformative learning experience. "At the heart of Mezirow (2000) theory of transformative learning is critical reflection and critical self-reflection—questioning assumptions and perspectives" (Cranton, 2016, p. 50). While engaging in the simulations and being the center of attention for other adult learners, participants experienced a disorienting dilemma. In playing each of the three roles (teacher, student, observer), participants gained a 360° view

of a teaching-learning environment which was further explored in debriefing sessions.

Through debriefing and reflection, participants realized that how they teach is integral to how students respond. At the end of each simulation, participants and the researchers engaged in debriefings, during which they critically examined the learning experience. Building on Mezirow's work, Cranton (2016) developed reflective questions for the habits of mind and kinds of knowledge that individuals experience in transformative learning situations. In the debriefing sessions and the final focus group, participants articulated evidence of these habits of mind and development of Equity Consciousness and Equity Literacy dispositions. They realized the importance of recognizing and maximizing upon the funds of knowledge students bring to the learning process and that seeing students from asset rather than deficit views is critical (Skrla et al., 2009; Valencia, 2010).

From this transformative learning experience, these future teachers became consciously aware of their assumptions, the value in taking the perspective of others, and how they can further develop their teaching and learning practice to more fully evolve their Equity Consciousness and Equity Literacy abilities (Cranton, 2016). "Equitable educators should be proficient not only with cultural knowledge, but also with the knowledge and skills to ensure and advocate for equity" (Gorski, 2018). Awareness that inequities are issues of power and privilege and of the need to recognize and respond to bias and inequity is the first step toward authentic Equity Consciousness and Equity Literacy (Gorski, 2018).

Teacher Education Program Significance

Centering equity knowledge and development of equity beliefs and dispositions is critical to the preparation of teachers. A traditional textbook-reading and lecture-giving method of delivery is neither sufficient nor effective. Similarly, writing a detailed lesson is a good academic exercise for preparing to teach, but it does not adequately address preservice teachers' blind spots when teaching diverse learners. Learning experiences that support teachers in achieving self-authorship and critical consciousness are needed throughout teacher education programs. To achieve the goal of recognizing and dismantling systems of oppression in educational spaces, teachers must learn about Equity Consciousness and Equity Literacy.

Equity-based practice is teachable, just like content and instructional pedagogy. In this study, we integrated Equity Consciousness and Equity Literacy development with clinical skills. One-size-fits-all approaches and instruction delivered from a hegemonic perspective meets the needs of few learners, including preservice teachers (Sleeter, 2012; Bauml, 2016; Gorski, 2018). Preservice teachers need instruction, guidance, and support so they are better equipped to perceive and process what teaching to learn entails in their professional development and how their students can benefit from this reflective practice (Teemant et al., 2011). Essential to success with all learners is a teacher who is well versed in Equity Consciousness and Equity Literacy as well as content pedagogy and instructional skills.

This study explored the efficacy of teaching preservice teachers the concepts of Equity Consciousness and Equity Literacy within a reading methods class. Instead of limiting learning by asking preservice teachers to write a detailed lesson plan and to perform a lesson demonstration, we engaged these future educators in the innovative approach of learning to teach through a lesson simulation-coaching-reteaching-debriefing experience.

Participants demonstrated enthusiasm when learning about equity; they were eager to integrate Equity Consciousness and Equity Literacy alongside content and instructional pedagogy. Adding Equity Consciousness as the "third leg" of teacher preparation will shift the dynamics of teaching, increasing the number of teachers who enact the belief that all students can learn (McKenzie, 2016) and that equity approaches that fail to directly confront inequity play a significant role in sustaining inequity (Gorski, 2018). To help preservice teachers understand and develop an Equity Ideology, we need to equip them with conceptual understanding and guide them to develop confidence in these belief systems before entering the profession (Blanchard et al., 2018; Gorski, 2018). Teachers need to see students beyond perceived deficits and weaknesses. They must guide students to utilize their life experiences, cultural heritage, personal strengths, and interests to enhance their learning processes and to improve their learning outcomes (Brown, 2007).

Another equity disposition teachers need is the ability to ask guiding questions to help students unpack their thinking. Posing high-quality guiding questions is positively correlated to Equity Literacy and Equity Consciousness, without which teachers struggle to ask questions that are practical, relevant, and meaningful to learners (Cramer et al., 2018). In responding to such questions, children can develop the critical thinking, communication, and collaboration skills intended within the ESSA legislation.

CONCLUSION

This study explored a transformative learning experience that included equity-based instruction and coaching as a means to develop preservice teacher Equity Consciousness so they will be prepared to enact Equity Literacy and to accurately distinguish the concepts of equity and equality. Findings from this study indicate that as a result of their learning these participants are more prepared to challenge when equity is being used erroneously or as a buzzword. Results indicate participants were highly responsive to coaching and quick to implement practices following equity-focused coaching. Further research building on this initial study is needed with preservice teachers. Additionally, the approach shows potential for positive impact with in-service educators, particularly instructional coaches working with classroom teachers, mentors working with induction teachers, and administrators in their role as instructional leaders.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/Supplementary Material, further inquiries can be directed to the corresponding author.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the California State University Stanislaus

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AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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Black Women's Labor and White Ally Development in an Urban Teacher Education Program

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The article uses events and narratives from the perspectives of Black women professors as examples of how allyship can be birthed and to illustrate the roles, responsibilities, and risks inherent in allyship development and work. It focuses on the labor needed to establish and sustain allyship as critical anti-racist educators in an Urban Teacher Preparation Program at a Historical White Institution. Dispositions of White allies are discussed, in addition to the various tensions allies may face in creating and sustaining equitable spaces and practices. Considerations for reciprocity are also offered to better support faculty of color.

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INTRODUCTION

Hudlin et al. (2017), a movie documenting the life of then-young attorney Thurgood Marshall, a traveling attorney who was working for the NAACP, solicits the help of a local White attorney named Sam Friedman to try the case of a Black man who is accused of sexually assaulting and attempting to murder a White woman. In the 1940 case, *The State of Connecticut v. Joseph Spell*, the initially unwilling Friedman is coerced into working under Marshall's leadership, and because Marshall, an out-of-state attorney, was forbidden from speaking in court, Friedman became the voice of the trial. As a White man, Friedman could also help ensure that the Black defendant Joseph Spell received a fair trial. Through Friedman's experience working side-by-side with Thurgood Marshall, an ally and Civil Rights activist was born. In this paper, we refer to the process of Black people working alongside White people to prepare them to serve as allies as the process of *ally development*.

For both Marshall and Friedman, their work required immense sacrifice. Their contested work led to threats to their physical safety and that of their families. They also risked becoming social outcasts, yet they persisted, and Joseph Spell was acquitted. After the attorneys won the case, Sam Friedman went on to continue to engage in Civil Rights work. This example of allyship is evident throughout history beginning with the underground railroad and White abolitionists who supported the dissolution of slavery (Kendi, 2017).

We share this story as an example of the way in which allyship can be birthed and to illustrate the roles, responsibilities, and risks inherent in allyship development and work. It took the commitment and intellectual work of Marshall and the NAACP to guide Friedman in his work on behalf of a historical legal victory that had broad implications for addressing the vulnerabilities of Black people wrongfully accused of crimes. In this example, Black-White allyship required Marshall

and the NAACP to: (1) encourage engagement in social justice work, (2) train someone from the White majority by enhancing their legal knowledge, (3) coach the individual on their courtroom argumentation technique or style of engagement, and (4) assist the individual in dealing with the physical, social, and emotional implications of the work. Furthermore, the work created tensions and moments of friction between the two men as they worked toward the goal of racial justice—a most intense endeavor.

We find this aforementioned process to be quite analogous to our processes for developing white allies. In this paper, we (Coleman-King and Anderson), refer to ourselves Black Women Critical Antiracist Educators (BWCAEs), and describe the work we undertook in leading a program with two White women clinical faculty members, and two White men graduate assistants through a journey endeavored to cultivating allies and maintaining and sustaining a critical urban education program at a Historically White Institution (HWI). In this paper, we specifically highlight the labor of the Black women faculty involved in this process and the tensions inherent in allyship development, specifically considering the labor involved. We share an account of our experiences attempting to develop allies across several groups: teacher candidates, clinical faculty, doctoral students, and school and community partners.

THEORETICAL FRAMEWORK

Allyship between Black, Indigenous, and People of Color (BIPOC) and White people has been long heralded as an important strategy for overcoming racial injustice. Allyship allows White people, through their positions of power, an opportunity to use their privilege to create space and advocate for minoritized groups (Tatum, 2007). However, we must ask the question, how do allies come to be? While scholars acknowledge that the road toward allyship can be difficult and contentious (Patton and Bondi, 2015), literature on how to intentionally cultivate allies is sparse and does not highlight the multiple roles embedded in this process and how those roles vary depending on individuals' identities and positionalities.

In framing this work, we draw from the work of Tatum (2007), who argues that it is important for White people to acknowledge and align with their history in using their privilege to counter oppressive systems. Tatum (2007) states:

It is possible to claim both one's Whiteness as a part of who one is and of one's daily experience, and the identity of being what I like to call a "White ally": namely, a White person who understands that it is possible to use one's privilege to create more equitable systems; that there are White people throughout history who have done exactly that; and that one can align oneself with that history. That is the identity story that we have to reflect to White children, and help them see themselves in it, in order to continue racial progress in our society (p. 37).

In order to be an active ally as Tatum (2007) suggests, White individuals must not be bystanders, but must *act* (Sue et al., 2019).

We lean on interdisciplinary research to operationally define White allies as a person who positions themselves as a learner and who possesses positive and affirming attitudes on issues of inclusion and diversity (Broido, 2000); consciously commits to ongoing and purposeful engagement of challenging white privilege (Ford and Orlandella, 2015); disrupts systems and cycles of injustice (Waters, 2010); and who do not see themselves as "saviors" to a measurable end, but aim to dismantle individual and institutional beliefs, practices, and policies that impede the growth of historically minoritized groups (Sue et al., 2019).

In an effort to understand the context in which allyship develops, we draw on Critical Race Theory (CRT) and critical whiteness studies as they help us situate allyship building within a larger framework and help explicate the inherent possibilities and tensions in this work.

Critical Race Theory

At its roots, CRT hinges on the belief that beneath every social structure, institution, and construct, racism exists on some level (Yosso et al., 2001; Delgado and Stefancic, 2017).

Embedded in this is the notion that within every social scenario, institution, and construct, there are positions of power and oppression based upon race that can be investigated critically (Yosso et al., 2001; Delgado and Stefancic, 2017). This is the first tenet of CRT: racism is a normal and permanent aspect of life (Yosso et al., 2001; Delgado and Stefancic, 2017). In other words, racism functions daily as an every-day commonality of American culture, life, and society (Yosso et al., 2001; Ladson-Billings, 2016; Taylor, 2016; Delgado and Stefancic, 2017).

CRT scholars have identified several tenets as central to the ideology and enactment of racism. These tenets include: interest convergence, the role of the voice through counternarratives/storytelling, the concept of intersectionality, whiteness as property, and the critique of liberalism (Yosso et al., 2001; Bell, 2016; Delgado and Stefancic, 2017). Interest convergence refers to the principle that dominant white power groups will only concede benefits, rights, and privileges to minoritized groups when those benefits also 'converge' with the interests of White people (Bell, 2016; Delgado and Stefancic, 2017). The telling of counter-narratives and the role of the voice actively seek to dismantle and revise the dominant narrative by providing explicit examples of experiences with oppression and racism that unsettle white-washed historical representations (Bell, 2009; Ladson-Billings, 2016; Delgado and Stefancic, 2017). The role of narrative voice also demonstrates the ways in which race and reality are socially constructed by allowing individuals the autonomy and space to "name their own reality" (Ladson-Billings, 2016, p. 20). Voice also plays a central role in understanding intersectionality as unique narratives often provide an outlet for individuals to describe how their multiple identities intersect to create unique experiences (Bell, 2016; Delgado and Stefancic, 2017). Lastly, CRT focuses on the critique of liberalism, which addresses advances made through and since the Civil Rights Movement and disputes the rhetoric of meritocracy, color blindness, and post-racialism propagated by liberals and the liberal agenda (Bell, 2016; Delgado and Stefancic, 2017). Additionally, CRT is also founded on a commitment to social justice, meaning that although racism

is deemed permanent, we must not cease to work toward ending the subordination of one group by another because of differences related to race, religion, ethnicity, ability, and the like (Cappice et al., 2012).

Several tenets of CRT are particularly useful in helping us understand the concept of allyship and why allyship might be useful in moving forward a social justice agenda: (1) whiteness as property, (2) interest convergence, (3) the critique of liberalism, and (4) intersectionality.

Whiteness as Property

Coined by Cheryl Harris (1993) and accepted widely by CRT scholars, this principle posits that whiteness has been socially constructed such that White skin carries with it an inherent value that can be used to negotiate social networks and amass goods and services that lead to distinct privileges and advantages for White people (Allen, 2004; Ladson-Billings, 2016; Delgado and Stefancic, 2017). As was the case in the movie Marshall, Friedman's whiteness carried an inherent value, despite his lack of knowledge or skills in trying Spell's case. Although Friedman's words and actions were highly prescribed by Marshall, it took Friedman's whiteness to legitimize Marshall's ideas to a White audience. Likewise, White bodies continue to possess value and gain recognition when addressing issues related to social justice. This is especially evident in scholarly communities where White scholars receive recognition, fame, and notoriety for engaging in scholarship that BIPOC have been doing for decades (Osayande, 2010).

Interest Convergence and the Critique of Liberalism

Interest convergence, described by Ladson-Billings (2016) as "the place where the interests of Whites and people of color intersect" (p. 19), directly problematizes the concept of allyship. In the academic context, allyship insinuates instances of interest convergence. As conference themes, journal issues, educational initiatives, and academia at large move toward equity and social justice orientations (albeit often superficially), White faculty benefit from allyship because it furthers their own research, careers, and interests. While allyship should not be generalized as an ubiquitous manifestation of interest convergence, awareness of this intersection and its implications are critical to formulating authentic allied relationships. Moreover, when allyship is framed by the critique of liberalism and the liberal perspective, it further problematizes the ally relationship because White people are often the "primary beneficiaries" (Ladson-Billings, 2016, p. 19) of liberal policies and practices that can be derived through allyship.

Intersectionality

According to Delgado and Stefancic (2017), "[intersectionality] means the examination of race, sex, class, national origin, and sexual orientation and how their combination plays out in various settings" (p. 58). CRT scholars recognize that identities often overlap, creating unique experiences with privilege and oppression. However, when people experience multiple minoritized identities, their unique concerns often go

unaddressed by mainstream social justice movements, which tend to focus on one particular form of oppression or essentialize minoritized groups. Particularly, Collins (2000) and Crenshaw (1991) employ the concept of intersectionality to explore and better understand how Black women experience marginalization within both race- and gender-based movements, rendering them invisible. One obvious way this plays out in academia is the separation of Black Studies and Women's Studies on college campuses, neither of which centers Black women (Hull et al., 1982). In the androcentric and ethnocentric setting of the academy, allies must recognize the intersections of oppression that Black women faculty face, which will differ from their own experiences with oppression, and work to center Black women's concerns and accomplishments.

RELEVANT LITERATURE

Invisible Labor

As we consider the tenets of CRT, it is important to recognize the positionalities of those involved in the process of developing allies. As we consider these positions, particularly those of Black women, the impact of invisible labor must be examined. Invisible labor according to Crain et al. (2016) is defined as activities that occur within the context of paid employment that workers perform in response to requirements (either implicit or explicit) from employers and that are crucial for workers, yet are often overlooked, ignored, and/or devalued by the employer. Numerous scholars have discussed how invisible labor manifests, and is perceived, particularly amongst minoritized faculty. There are deep gendered divides: gender segregation, stereotyping of jobs, gendered expectations in work organizations and other social arenas, and policing of gender-adequate behaviors (Park, 1996; Crain et al., 2016). While women and faculty of color may work to make the academy a more inclusive space, and study equity as part of their work, this work is often undervalued and can hinder chances for promotion (Bird et al., 2004). Crain et al. (2016) also assert that in addition to service to the university, faculty of color also experience physical and mental health concerns such as anxiety and stress.

Historical Traditions of Black Women's Labor

Given CRT's thrust to eradicate the subordination of minoritized groups, we focus our attention on the historical traditions of Black women's labor. Anna Julia Cooper—educator, feminist, and activist—discussed the intersectional systems of oppression for Black women: racism, sexism, invisibility, and classism (Cooper, 1892). As stated by Cooper (1892), "I speak for the colored women of the South, because it is there that the millions of blacks in this country have watered the soil with blood and tears, and it is there too that the colored woman of America has made her characteristic history, and there her destiny evolving" (p. 712). Cooper argued that Black women have a unique epistemological perspective about the interactions, observations, and actions one might take in confronting and correcting oppressive structures (Gines, 2015).

Parks (2010) too argued that "generations of people—Black, White and just about everybody else—have been raised with the underlying assumption that Black women will save them" (p. xiv). In alignment with Cooper's (1892) position, Dillard (2012, 2016) calls for Black women to claim and recognize our worthiness from an endarkened epistemology-making sense of our lives against a Black backdrop-even as we endure the pain and frustration of experiencing and bearing witness to oppression. That means, as Black women name our own experiences, we move beyond the often deficit and mischaracterized understanding of our experiences as simply being a singular or "personal" view, and not a result of systemic and structural oppression (Dillard, 2016). As Black women extend and correct misnomers about our labor and position(s) in the academy and other leadership spaces, we affirm that our work matters, and how we center our work matters (Dillard, 2016).

There has been little progress in how society values Black women's work (Collins, 2013; Dillard, 2016). Black women who choose to enter higher education, face barriers to full participation and success due to widespread systemic racism on college campuses; in addition, there is a lack of representation of Black women in faculty and staff positions on university campuses who could act as role models and/or provide support for students (Hughes and Howard-Hamilton, 2003). For context, of the 176,485 tenured full professors in public and private institutions in the United States, only about two percent are Black women (Pittman, 2010; Esnard and Cobb-Roberts, 2018). The visibility of Black women professors in higher education has been an issue of concern for researchers, feminists, and higher education administrators in the United States (Evans, 2007; Davis et al., 2011; Esnard and Cobb-Roberts, 2018). While Black women are earning more doctoral degrees and entering the academy, they continue to be underrepresented in higher ranks and are promoted at a slower rate than their White counterparts (Evans, 2007; Griffin et al., 2013; Esnard and Cobb-Roberts, 2018).

According to Esnard and Cobb-Roberts (2018), "Black women are valued for their diversification of the educational environment, in terms of both race and gender, but they seem to be penalized for those very same attributes and are further expected to fill a huge void although occupying limited space in numbers" (p. 11). Even with the low number of Black women recruited and retained by institutions of higher education, Black women tend to engage in "care work"—teaching, mentoring, and advising, with the latter being a significant lift. These laborious tasks are masked within broad categories that are not accounted for in the tenure process (Patton, 2009; Crain et al., 2016). Additionally, Black women disproportionately engage in tasks that require emotional labor where they must stifle their own anger and frustrations, but placate and tend to the emotional needs of others (Durr and Harvey Wingfield, 2011).

Using Dillard's (2016) framework, we use the endarkened epistemology framework by naming and contextualizing our gendered racial experiences through an intersectional lens (Crenshaw, 1991). Black women have discussed their labor in higher education and other educational settings, the cultural taxation of said labor, and the benefits to others as a result of these laborings (Shavers et al., 2014; Boutte and Jackson, 2014).

However, few of these analyses move beyond the baseline of their extensive labor and cultural taxation, to discuss the process by which Black women act as conduits of ally development, both within and outside of institutions. Furthermore, few studies address allyship development from the perspective of Black women (Boutte and Jackson, 2014); this work has been operationalized mainly through the eyes of White individuals.

Allyship and Critical Whiteness

Authentic allyship requires an awareness of and understanding of critical whiteness. This framework, informed by CRT tenets, seeks to racialize and problematize whiteness (Frankenburg, 1994; Miller and Starker-Glass, 2018). Within this work, critical whiteness implores us to not lose sight of the racial nature of white existence. It also serves as a reminder to watch for elements of systemic white supremacy and the unearned privilege it bestows. Most importantly, critical whiteness identifies the necessity of avoiding colorblind and 'racially neutral' perspectives that often pervade departments, programs, and institutions. Moreover, this racial neutrality fosters and facilitates invisible labor for faculty of color, as their White peers remain blind to the additional burdens faced by faculty of color (Crain et al., 2016).

One recommendation important to White staff and faculty is the need to grow meaningful relationships with people of color. These relationships are paramount for White allies (Allen, 2004). For White individuals to see whiteness, Allen (2004) writes, "they require the spark of knowledge that comes from people of color" (p. 124). Without guidance and relationships from people of color, White individuals will never, "learn how to see the world through new eyes that reveal the complexities and problematics of whiteness" (Allen, 2004, p. 130). Thus, these relationships provide the space for White allies to uncover and begin to perceive the additional labor required of faculty of color. Most scholarship and research on allyship development are through the lens of the White individuals, discussing outcomes of their racial identity interrogations, coupled with action steps for other allies to continuously interrogate the functions of whiteness in Black and Brown spaces, and ways not to perpetuate the exploitation (e.g., labor) of POC in higher education (Leonard and Misumi, 2016; Levine-Rasky and Ghaffar-Siddiqui, 2020).

To that end, there are a small number of urban education licensure programs across the United States—even fewer in the southeast region of the United States— and in these spaces, few are examining allyship development from the viewpoint of Black women (Coleman-King et al., 2019). There have been calls for a critical analysis of teacher preparation programs focused on issues of race, equity, and social justice, particularly at research intensive institutions (Hollins and Guzman, 2005; Labaree, 2008; Zeichner and Conklin, 2008). Additionally, there are few studies focused on the nuances of the programming: delivery, content, implementation in urban schools, and/or the explanation of the cultural taxation associated with the delivery of preparing culturally responsive, anti-racist teachers (Boutte and Jackson, 2014; Henry, 2015). To continue to prepare teachers for urban schools, critical examinations of allyship development through course content and delivery in urban programs must be explored. Mayorga and Picower (2018) argue that teacher

education programs should prepare teachers who engage in "active solidarity" with the Black Lives Matter movement by defending public education, providing stipulations for who becomes teachers, and preparing pre-service and supporting in-service teachers whose work aligns with the movement. In addition, critical explorations should address how Black women's labor is situated in these programs and development, moving the conversation beyond cultural taxation to active conduits of allyship development.

RESEARCH CONTEXT, PARTICIPANTS, AND QUESTIONS

This study took place at a historically white university in the southeastern region of the United States. The program was a 5th-year master's degree program that prepared teachers to teach in elementary schools in urban communities inhabited by racially, socioeconomically, and linguistically minoritized students and their families.

The Urban Teacher Preparation Program (UTPP) required prospective students to engage in an application and interview process where they were expected to demonstrate an interest in teaching in urban schools and some knowledge of issues related to equity and diversity. Once selected for the program, students followed a five-semester cohort model (including two summer semesters) in which they took core classes with their major instructors for at least three semesters and up to five semesters if they enrolled in the Urban Education Certificate program (see Table 1). The three core courses followed a sequential trajectory built on racial identity development theory (Helms, 1990). The first course highlighted the history and trajectory of US anti-Black racism through the use of young adult literature, teacher candidates' personal beliefs about issues on race and equity, and the development of a cultural autobiography highlighting teacher candidates' socialization experiences and resultant ideologies they brought to their work. In the second course, the curriculum centered around multicultural and critical theories related to teaching in urban schools such as multicultural education, culturally responsive pedagogy, critical pedagogy, anti-racist teaching, and critical race theory. In the final core course, teacher candidates were tasked with applying the theories from their previous courses to instructional practices in their elementary classroom placements. This included planning and teaching lessons related to critical issues affecting the students they served.

While most of the content taught in the core courses were taught by BWCAEs, clinical faculty (CF) and doctoral graduate assistants (DGAs) attended all classes and taught several course sessions based on their areas of expertise and interest. We functioned as a team, planning, teaching, and collaborating together on research and writing projects. CF and DGAs also mentored teacher candidates in their year-long internship providing support and feedback on the development and implementation of lessons.

Although each of the additional team members had an interest in and commitment to issues of diversity and equity, the degree to which each person had formal educational training or teaching experience related to these issues varied. Additionally, the racial and gender makeup of the team (see **Table 2**) was an anomaly in many ways. In a field largely occupied by White women, two Black women held the most senior positions on the team, leading course development, research directions, and university-school-community engagement efforts. The team organization was the reverse of the typical power hierarchy with the Black women at the top, White CF members in the middle, and White men at the bottom. The White male DGAs were selected from a pool of incoming doctoral students due to their expressed interest in issues of equity—they seemed most compatible with the team. Securing BIPOC DGAs would have been highly unlikely in the prospective student pool; however, the White male DGAs represented a numeric minority in the field of elementary education (Ingersoll and May, 2011).

During one of our weekly research meetings, we discussed the unique make-up of our team. This prompted systematic exploration of our relationships to one another, and equity work even as we navigated our racial and gendered positionalities within and outside of the university. The data shared in this paper reflect the narratives and analyses of three of six team members—two BWCAEs and one White male DGA—all authors of this paper, who agreed to collaboratively share our narratives and analyses as part of a larger study examining the UTPP. While this work includes the perspective of a White male DGA, we have chosen to center BWSAEs' experiences and narratives—a voice that is often missing in scholarship on allyship.

Participants and Positionality Chonika Coleman-King

I grew up in New York City, the child of Jamaican immigrant parents. As a Black Caribbean-American girl, I keenly was made aware of how I was different from both Black and White Americans. Much of the cultural dissonance I experienced occurred in schools and while I loved the academic aspects of schooling, the cultural and racial hierarchies I experienced detracted from my otherwise positive schooling experiences. These tensions intrigued me and piqued my interest in examining the intersections between race, class, culture, immigrant status, and education and continue to shape my understanding of schools as spaces of *both* unbridled possibility *and* overwhelming oppression.

My love of learning and desire to create better educational opportunities for Black children prompted me to become an elementary school teacher. I taught just outside of Washington, D. C. at Title 1 schools where I bridged classroom and community by living in the neighborhood in which I taught and sharing space with families and caregivers in and outside of the school. In my most recent professional roles, I have worked as an urban teacher educator to prepare mostly White women to teach Black and Brown children from economically disadvantaged communities. As a university course instructor, I draw on critical pedagogy (Giroux, 2020) and anti-racist teaching (Love, 2019) philosophies. I am insistent that my students engage deeply in critical theories *and* apply those theories to practice and research. For me, this work is not merely directed at my students' job and

TABLE 1 | UTPP curriculum overview.

| Semester 1 (Spring) | Semester 2 (Summer) | Semester 3 (Fall) | Semester 4 (Spring) | Semester 5 (Summer) |
|---|--|--|-----------------------------------|---|
| Spring Block* | Introduction to Urban Education** | Internship | Internship | Critical Literacy** |
| Key terms | Listan of urban ashasis | Urban emergent/ | Urban emergent/ | Across content areas |
| • Implicit bias | History of urban schoolsCharacteristic of urban | characteristic school | characteristic school | Various media as texts |
| Young adult literature (narratives) | schools | Action research | Action research | Experiential learning |
| Racial identity development | Diversity Pedagogy** | Curriculum Theory* | Social Justice and Social Action* | Multiple modalities |
| Historical connections | Minoritized identities and pedagogy | Multicultural | Group lesson plans | Dual Licensure Courses |
| Cultural Autobiography | Listening to students | Critical pedagogy | Classroom lesson plans | |
| Community engagement | Pedagogy as freedom | Culturally responsive pedagogy | • EdTPA | |
| Urban School Rotations | Storytelling, culture, and hip-hop pedagogy | Critical race theory | Home visit and parent interview | |
| | Freedom School visits | Anti-racist teaching | | |
| | and lessons | Community mapping | Math Methods | |
| | Science Methods Social Studies Methods | Reading Methods | | |

^{*}Core courses.

career preparation, but should also shape who they understand themselves to be within a myriad of systemic structures and their intentionality about how they choose to exist in the world.

Despite the challenges of engaging in this work, I remind myself that if my work helps facilitate praxis, the primary benefactors will be Black and Brown children, and they are worth it. I am also the mother of three Black children and as a result, I still navigate elementary education spaces on a personal level, ensuring my children have rich educational experiences and addressing issues of inequity when they arise. My work is both personal and professional in many ways.

Brittany Anderson

I come to this work using an endarkened feminist epistemology (Dillard, 2012, 2016) to frame my personal experiences as an early career tenure-track professor in an urban education program. I identify as a cisgender Black woman who attended K-12 schools in an urban area, a first-generation college graduate attending HWIs, and as a critical feminist scholar who focuses on the experiences of Black girls and women in educational spaces (i.e., gifted education, talent identification and development). My worldview and approaches to advocating for equitable practices in urban education are influenced by my K-12 and postsecondary experiences in Title I schools and HWIs, background as a general education elementary teacher, and engagement in underserved communities. As a scholar, I position my work in teacher

education, focused on how the intersections of gender, race, class, and gifted ability manifest in K-12 settings, with a concentration on talent identification and development of students of color.

My journey through this work has evolved from my roles in leadership positions in K-12 schools, talent development agencies, and now as a consultant, researcher, and professor in higher education. As I unpack the experiences of engaging in teacher preparation programs, schools, community/third-spaces, and grassroots organizations, I lean on my human, cultural, social capital to create experiences and share knowledge with future and current teachers. Using Dillard's (2016) framework, I demonstrate my ways of being (culture), my ways of knowing (my theory), and ways of leading (culturally engaged) as I analyze and discuss ways that my labor matters, in addition to sharing my racialized realities and experiences in higher education. This work has been a labor of love and commitment to enriching the lives of youth in urban settings, but I also want to share the challenges, benefits, invalidation, and erasure that has occurred as I dedicated my time and energy. As an early career faculty member, it has been challenging to navigate these spaces with so many confounding, systemic, and mediating factors at play.

Nate Koerber

I am a cisgender White male who epistemologically aligns with critical and pragmatic orientations, and whose research focuses on policy, policy implementation, and the ability for

^{**}Urban Education Graduate Certificate Courses.

TABLE 2 | Program team.

| Position | Race and gender | Study participant |
|---|-----------------|-------------------|
| Assistant Professor and Program Coordinator | Black woman | Yes |
| Assistant Professor | Black woman | Yes |
| Full-time Senior Clinical Faculty | White woman | No |
| Part-time Clinical Faculty | White woman | No |
| Doctoral Graduate Assistant | White man | Yes |
| Doctoral Graduate Assistant | White man | No |

policy to promote equitable education. As a former middle and high school ESL (English as a Second Language) teacher and a third-generation immigrant, who was educated in large urban public-school settings, my worldview is rooted in my experiences and my recognition that I benefited from my positionality and the privileges it bestowed. From my time spent as a DGA in the urban education program, my experience as a K-12 teacher, a leader of professional developments focused on equity, and even through my AmeriCorps service, I have been able to utilize my positionality and provide practical support to communities and individuals with whom I have worked. However, I have also witnessed the challenges and additional burdens faced by BIPOC students and in relation to this topic, those faced by Black faculty when engaging in these predominantly white spaces.

Research Questions

This paper focuses on describing the *characteristics* and *processes* of allyship development and relationships across four planes: Black women critical antiracist educators (BWCAEs) and (1) teacher candidates (TCs), (2) doctoral graduate assistants (DGAs), and (3) clinical faculty (CF), school partners, and community stakeholders. We are particularly interested in highlighting *how* allies are cultivated drawing on Freire's (1970/2000) notion that only the oppressed can help humanize the oppressor. It is by bearing witness to our own oppression and advocating for our humanization that the oppressor, dehumanized through their engagement in oppression, becomes humanized. Drawing on these ideas, we examine our work in relationship with and to, allies and developing allies (WA/DAs). Consequently, our inquiry focuses on the following questions:

- (1) What kinds of labor did BWCAEs engage in as a means of developing anti-racist allies across multiple groups such as teacher candidates, doctoral graduate assistants, clinical faculty, and school and community stakeholders?
- (2) What themes were most characteristic of BWCAEs' labor in the ally development process?
- (3) How did WA/DAs engage in the ally development process?
- (4) What are the implications of BWCAEs' labor and how might White allies and developing allies engage in a more reciprocal process of allyship development in support of BWCAEs on the tenure track?

METHODS

We employ narrative inquiry as a means of exploring the processes by which our work led to the development of antiracist allies. This work stems from larger efforts to examine our own practice as teacher educators as we simultaneously taught TCs to engage in the inquiry process. Knowledge generated from educator inquiry "is socially, culturally, historically, and institutionally situated in and responsive to [educators'] professional worlds and needs (Golombek and Johnson, 2017, p. 16)." Narrative inquiry provides a space for systematically identifying, naming, organizing, and analyzing one's own experience, a process that is hugely important to the work of educators and those engaged in the anti-racist project.

According to Liou (2016), CRT rejects notions of neutrality and objectivity, supporting an account of reality that values retrospective accounts as a methodological approach and "challenges master narratives that rationalize social infrastructures, hierarchies and belief systems" (p. 85). Narratives that counter dominant paradigms are critically important to anti-racist work. Narrative storytelling is a reflexive process that centers the stories and analyses of the individuals. Critical race theorists refer to these stories as counternarratives (Solorzano and Yosso, 2002). Through narrative inquiry, or perhaps (counter)narrative inquiry, we work to make meaning of our lived experiences.

Narrative inquiry allows for the analysis of what was, what is, and what could be (Golombek and Johnson, 2017). It creates a space for remembering and creating connections between past and present. This work also aligns with Dillard's (2016) notions of (re)membering and endarkened feminist epistemology (EFE) that centers (re)searching, (re)visioning, (re)cognizing, (re)presenting, and (re)claiming. We allow space to frame our narratives and lived experiences centering on our intersecting identities as Black women with similar intersecting identities to guide the understanding of our interactions from a Black feminism qualitative inquiry perspective (Evans-Winters, 2019). This perspective seeks to give meaning to important historical events, and how people construct themselves through the past (Yow, 2014). The process of remembering helps the narrator recognize critical moments and generate knowledge about the social meaning of one's lived experience as informed by one's race, gender, and other identities (Delgado and Stefancic, 2013).

We used data drawing on personal encounters and conversations within and between racial groups to unpack our experiences, guiding the analyses with our voices (Boutte and Jackson, 2014). We also aim to unpack the understanding of a White male doctoral student about our labor and positionalities in this space, as well as ways he constructs his own understanding of the work regarding equitable practices. Furthermore, we ask in what way(s) does our mentorship help him commit to conscious acts of dismantling cycles and systems of oppression and active self-reflection about his privilege.

For this study, we provide descriptions around a series of events, using narrative inquiry and analysis. According to Clandinin and Connelly (2000), the use of narrative inquiry

can assist in unpacking our stories-merging life experience and research. Furthermore, narrative inquiry allows for a study's purpose to shift and blur and moves away from the convention of maintaining distance from research participants.

In our case, we began this project with the intention of examining allyship relations among our UTPP team as recommended by program DGAs, but later decided to expand the focus to reflect a more comprehensive scope of our work and to center the experiences of the Black women in the group. We used narrative inquiry in our roles as both researchers and research participants together, interrogating our own and each other's experiences as we worked together to develop allies. We interrogate the functionality of our relationships even as we interface with teacher candidates, doctoral students, colleagues, and community members.

According to Clandinin and Connelly (2000), "There are two starting points for narrative inquiry: listening to individuals tell their stories and living alongside participants as they live their stories"—we engaged in listening and living alongside one another (p. 543). The data sources for this study include reflective conversations between authors as well as documentation of our conversations and activities over the 2 years we worked alongside one another in the UTPP. Reflective conversations were rarely planned, but occurred in response to various tensions and hostilities, new pedagogical ideas, or celebrations of the progress we were seeing in our ally development work. These reflective conversations also included our analyses of experiences that occurred before BWCAEs' time working together. We often recorded these conversations once we recognized the depth of reflection and how our conversations captured our experiences. Recorded conversations were coded and then transcribed as needed. Data also included reflective journals and field notes from course sessions, UTPP team meetings and retreats, teacher professional development sessions, and community events. Using these data, we underwent inductive and process coding (Saldaña, 2016) and interpreted themes related to our allyship development work (see Table 3). We recognize that our unique lenses, experiences, and positionalities influence how we framed the study and how we interpret the study's findings.

TABLE 3 | Coding and data sources.

| Themes | Sub themes | Data sources |
|--|---|---|
| Types of labor (i.e., events and activities) across groups | Formal curriculum labor, informal curriculum labor, labor with TCs, DGAs, faculty, practicing teachers, and local organizations | Observations, reflective conversations, field and meeting notes |
| Characteristics of labor | Time, emotional, conceptual, high expectations | Reflective conversations and field and meeting notes |
| Ally development process | Commitment/buy-in, intentional engagement, knowledge development, awareness and reflection | Observations, reflective conversations, and field and meeting notes |

Boundaries of the Study

One of the limitations of this study is that it is bound by one case that took place within the confines of an urban teacher education program located in a specific geographic region.

While this might limit the generalizability of our findings, we recognize the importance of sharing counternarratives that document the experiences of minoritized groups and ways to advance a social justice agenda. Furthermore, we recognize possible tensions inherent in collaborating with a DGA to describe their working relationship with faculty members.

However, the DGA initiated exploring our unique cross-racial collaboration as a means of identifying the benefits of this type of deeply engaged graduate experience and his mentorship by Black faculty, which mirrors his previous experiences with Black faculty (see Nate Koerber's positionality statement below).

FINDINGS

In this section of the paper, we share the most salient themes that emerged from our work. We begin by identifying the kinds of labor we engaged in as a means of ally development across multiple constituents such as TCs, DGAs, CF, and school and community stakeholders. While the extensive service labor of Black faculty has been documented extensively (Shavers et al., 2014; Henry, 2015; Brown and Mogadime, 2017; Daniel, 2019), we endeavored to highlight the kinds of activities BWCAEs engage in relative to teacher preparation and demonstrate the expansiveness of our reach. Next, we highlight the nuances of this labor and the role our epistemological leanings, time, emotional investments, and the role of excellence and high expectations. Finally, we identify several key components necessary to ally development processes such as cultivating authentic crossracial relationships, engaging BIPOC communities, expanding knowledge and skills through a commitment to intellectual study, and ongoing critical reflection and openness to critique.

Labor Across Multiple Constituencies

As previously noted, Coleman-King and Anderson worked alongside multiple White constituents to help build their capacity for allyship or continued allyship across various contexts. In this section of the paper, we describe the formal and informal 'curriculum' BWACEs used to engage in anti-racist instructional and leadership practices. We describe the kinds of content, commitments, and activities used to help shape potential allies' historical knowledge regarding racial injustice and understanding of theoretical frameworks that describe the nature of racism, and modes of engagement both in and outside of the university classroom.

Teacher Candidates

The Formal Curriculum

In the UTPP, we engaged in both formal and informal curriculum geared toward preparing teachers that not only understood the inequities their students faced, but were well poised to enact change on individual and institutional levels. In an effort to realize these goals, we had to move beyond

the traditional expectations of what students' time with us might entail and the norms of engagement placed on teacher candidates in other elementary education programs in the larger department. We define the formal curriculum as that which was included on the course syllabus and recognized as a contractual agreement between the students and their instructors—the 'non-negotiables' of courses as well as programmatic and institutional requirements.

As a program, the UTPP was tasked with ensuring that TCs were well prepared in the basics of elementary teaching (e.g., lesson planning, classroom management, parent-teacher communication, etc.), while also creating space to enhance their preparation as culturally responsive, anti-racist teachers (see Table 1). In essence, we were preparing teachers to recognize and incorporate, "the rich and varied cultural wealth, knowledge, and skills that diverse students bring to schools" (Howard, 2006, p. 67), and also seek to empower students by critically deconstructing curriculum, conceptions of knowledge, and confronting the historical and current ramifications of racism in schools and society (Kailin, 2002). Although we were allotted the same amount of course time as the other elementary programs, we utilized every space we could within and outside of course time to provide additional instruction relevant to critical issues in urban schools. In classes that were typically reserved as seminars for students to reflect on field experiences, we assigned extensive weekly course readings. This was in addition to TCs' methods courses each semester and work as interns in elementary schools four full days per week.

We engaged TCs in off-campus activities such as field trips to local historical and cultural sites and had members of community organizations come speak to our class. Additionally, TCs and their mentor teachers attended a series of off-campus professional development opportunities related to culturally responsive experiential learning including a collaborative weekend residential program in the Delancey Mountains and several full-day weekend workshops. Our goal was to ensure that TCs were especially prepared to engage in *praxis*—the ability to act on their knowledge in substantive ways (Freire, 1970/2000, p. 51) and serve as allies to fellow educators, students, and local BIPOC communities.

The Informal Curriculum

While there were instances where lines between the formal and informal curriculum were blurred, our work with and availability to TCs did not end with instructional class time. We readily made ourselves available to support TCs by attending special programming at their school placements like assemblies or viewing important lessons on critical issues (outside of scheduled teaching evaluations). In addition to attending local meetings where TCs and alums spoke, we also planned and attended social events like game nights and dinner parties to help build and maintain a sense of community within and between UTPP cohorts and ourselves. We began each semester by welcoming students to the UTPP family.

In addition to our support of current students, we also maintained relationships with alumni who would reach out to us with questions about teaching resources or ways to address systemic challenges like the school districts' refusal to build a new school in a low-income community serving Black and Brown children despite the school being overcrowded and subject to regular gas leaks that led to school cancelations. Amanda, who we continued to mentor, invited UTPP faculty to attend the school board meeting the evening she decided to share her concerns with the school board. Following the meeting BWCAEs had the following exchange:

Chonika

I really wanted to go support Amanda at the school board meeting last night, but I have been away from the kids for the last few days. I didn't want to come home late again. How was it?

Brittany

She did really well! I am so glad I had a chance to go support her. I am amazed that she spoke up even as a new teacher.

Chonika

Yup! This is what we have been preparing them to do-to take risks and advocate for students. Our students make me so proud!

Situations where TCs and alums took risks to challenge the power structure often required multiple phone calls, meetings, and emails with BWCAEs to develop problem-solving strategies. All of this work was outside the scope of the formal curriculum, but supported WA/DAs' agency and promoted equitable change within the schools and the local community.

Doctoral Graduate Assistants

In addition to working with TCs, which was our primary instructional role in the department, there were DGAs who were assigned to the UTPP to work as TCs' mentors during their 1year placement in local elementary classrooms. DGAs' role was strictly field-based and only required faculty support for clinical responsibilities. However, as a part of this work, we believed it was imperative for DGAs to fully understand the thrust of the UTPP and the kinds of teaching we expected to see from TCs—teaching that reflected the critical theories we addressed in class. As was the tradition of the program before BWCAEs joined the faculty, DGAs were required to attend all weekly seminar course sessions designed for TCs, usually the equivalent of one or two threecredit courses per week. An indirect result of this was that our DGAs were given first-hand exposure to our teaching of critical issues across the entire UTPP core curriculum. In addition to attending courses, DGAs also attended planning meetings prior to the start of each semester where we planned the course syllabus and also attended monthly program meetings to discuss the TCs' progress and conduct program-related business. This created an opportunity for DGAs to experience all phases of the course planning and implementation process—a key experience for doctoral students who are generally required to teach collegiate courses with little to no formal instruction in teaching at the postsecondary level (Austin, 2002). Furthermore, this gave DGAs experience in planning for and teaching in a niche area of teacher education that centers race, class, language, ability, and immigrant status in urban schools.

According to Picower (2009) and Sue (2017), course content that disrupts students' ways of seeing the world is often met with resistance—a tenuous tension for instructors to navigate.

This resistance also intensifies based on the intersecting identities of the instructor. Generally, instructors with one or more minoritized identities, like Black women, receive the most resistance when teaching material that challenges the *status quo* (Treitler, 2016). In observing course sessions, DGAs had the opportunity to see how Black women professors maneuvered around TCs' moments of disruption and discontentment, and continued to challenge students in ways that were supportive but did not undermine the values of anti-racist teaching.

BWCAEs were very clear about being intentional regarding how we mentored students especially since there was not a departmental culture around doctoral mentorship. In one conversation Chonika argued,

I am not sure what they are doing here about mentoring students, but students who work in our program should be well-prepared for the job market. We should be having regular research meetings. Before [DGAs] graduate, they should have experiences doing research, publishing, and presenting at conferences. They can take an independent study course to get credit for their work.

We scheduled weekly 3-h working meetings with DGAs where we came together to check in about how DGAs were doing in their courses, and to discuss any challenges they might have been having as they mentored TCs in their field placements. However, the main thrust of our meetings was to help guide DGAs in the process of developing their skills and identities as researchers whose scholarship centered critical issues. It was during these meetings that DGAs engaged in the process of conceiving and enacting a study from start to finish-including developing research questions, selecting appropriate research methods, securing institutional review board (IRB) permissions, collecting and analyzing data, and preparing papers for conferences and journal submissions. Most importantly, all of our projects centered around topics like culturally responsive experiential learning (Anderson and Coleman-King, 2020), urban teacher education curriculum, and developing culturally responsive practicing teachers through professional development. DGAs were invited to assist in research projects and professional development sessions. In the midst of and beyond the work of teaching and research, we also reserved time for a summer retreat where we stayed in cabins and worked to refine the content and goals of the UTPP to ensure the program's alignment with the kinds of outcomes we had hoped to see in TCs. We also reserved time to socialize and bond as a team.

Faculty, Practicing Teachers, and Local Organizations

Our work in developing anti-racist allies extended beyond our responsibility to students and included our work with fellow faculty, local educators, and community organizations. Due to the structure of our program, CF also joined Friday seminars where they observed BWCAEs teach core courses. In fact, over the years, CF often remarked that they felt like they were auditing a course because they learned so much from our class sessions.

While CF members had significant experience as teachers and teacher educators, they received little to no formal training in issues related to equity and diversity beyond that of their own self-directed reading and personal interests. In attending meetings with CF, BWCAEs would often have to advocate for and defend particular positions related to student assignments and course requirements that might have been deemed unnecessary or seen as competing with others' academic interests given constraints on instructional time. Beyond the UTPP, we were expected to serve as the voice for diversity and equity issues on departmental, college, and university committees, where our ideas were often met with resistance. For instance, we were asked to evaluate a potential program collaboration, and after highlighting several significant failings of the program, our dissent was rebuffed.

University faculty and local organizations also relied heavily on BWCAEs to gain access to the local Black community and help recruit for their programs and research projects. In a similar vein, community organizations who had been historically isolated from the university community, relied on BWCAEs to provide access to university resources to support programming in Black and Brown communities. This required regular communication and network building as we acted as intermediaries between the two communities, often with direct benefits to those entities and limited recognition of our role in helping to create, maintain, and sustain vital partnerships.

The Many Facets of Black Women's Labor

Data from this study elucidated the multifaceted ways in which both BWCAEs and WA/DAs worked toward advancing social justice aims. Evidence shows that the process of allyship building and development required a significant amount of labor from both groups— labor that became inextricable from individuals' personal identities and commitments. Social justice work is not simply about amassing and utilizing knowledge and skills in particular contexts, but creating a new self and lifestyle that integrates issues of equity into daily considerations and lived experiences. Although these commitments were evident for both BWCAEs and WA/DAs, the ways in which this played out for each group varied. Below, we document themes that surfaced demonstrating the kinds of labor that went into meeting an imagined end—one characterized by ongoing praxis endeavored toward equity and justice.

In coding data related to the ally development work of BWCAEs, several themes emerged as central characteristics of their work: (1) An inordinate time commitment through voluntary and involuntary means, (2) use of often taken-forgranted intellectual and experiential expertise, (3) significant emotional labor, and (4) holding WA/DAs to high expectations. The most evident of the themes is one that has been widely documented as characteristic of Black women's work in the academy. By naming and coding the litany of ways we used our time as BWCAEs, it became increasingly evident that our commitment to and involvement in ally development was its own full-time job.

Time Commitment

Although the time that BWCAEs put into our 'work' was significant, the time commitment was difficult to quantify due to the flexible nature of academic positions, but also because our commitments to supporting others in their development as anti- racist allies was both personal and professional. How we chose to spend our time was voluntary. There seemed to be no line of demarcation between our formal work as academics and educators and the work we did beyond the parameters of our official teaching and scholarship requirements. As previously indicated, we created both formal and informal structures for supporting TCs, DGAs, CF, and other community members which required planning for and teaching courses, attending meetings outside of class time, and responding to phone calls and emails during personal time as issues and needs arose. Furthermore, this support was not only made available to currently enrolled students, but program alumni who had graduated from the program within the last 7 years.

In addition to the time voluntarily spent engaging WA/DAs, there were additional expectations placed on BWCAEs. It was also expected that BWCAEs would serve on university committees or engage in service work that enhanced the appearance of the institution's commitment to equity and diversity, without a genuine desire to shift the status quo. Though some might argue that agreeing to these commitments were voluntary, pre-tenure faculty, who were also members of minoritized groups, were vulnerable to retaliation (whether imagined or implied) for not adhering to colleagues' requests. These dynamics caused further tensions as BWCAEs were essentially forced into spaces where they were expected to be present and ensure inclusivity, yet our insights were not valued and our recommendations were often overlooked, and in many instances we faced retribution for holding colleagues accountable for actualizing purported goals.

Sharing Knowledge

Beyond the use of our time, allyship development also required a significant use of our intellectual, experiential, and embodied knowledge. In the movie Marshall, Friedman was wholly unprepared to engage in antiracist work. What he learned was not of his own volition, but by Marshall openly sharing the knowledge, skills, and expertise that he had worked hard to attain over many years and through struggles and trials he experienced as a Black man pursuing higher education in a society built on white supremacy and racism. Similarly, BWCAEs worked their way through HWIs, where we routinely encountered racism in and outside of the classroom, while trying to access knowledge and skills that were not always readily available through traditional course listings. While we shared our knowledge willingly and in the service of a larger cause, our unique expertise was often taken for granted. We regularly encountered individuals who believed that social justice work simply requires good intention or membership in a minoritized group, rather than significant training, intellectual rigor, and professional expertise.

This expertise goes beyond content knowledge to include expertise regarding *how* to engage in anti-racist pedagogy and

ally development that led to productive change. This knowledge includes the ability to lead grassroots initiatives, mobilize groups of people, and bring together collaborative voices to engage in substantive change. The aforementioned results are different from that which we typically see in mainstream institutions where the focus tends to be on shifting knowledge, and perhaps dispositions or creating statements and declarations around diversity devoid of any substantive reform. Critical race theorists warn of this trap in their critique of liberalism (Yosso et al., 2001; Bell, 2016), which ultimately serves the interest of White people who want to give the appearance of equity without having to change the larger power structure.

Emotional Labor

Another critical element of our work was the degree of emotional labor it required. While emotional labor is not a new concept, its role in anti-racist work brings its own set of challenges. Initially defined as the effort, planning, and control necessary to express desired emotion(s) during interpersonal transactions at their job or organizational structure (Morris and Feldman, 1996); emotional labor has come to describe the ways in which certain members of the workforce, particularly women and other minoritized groups, are disproportionately responsible for work that either results in intense emotion or centers the need to address the emotional concerns of others with little recognition or validation of that labor (Bellas, 1999). The kind of emotional labor related to anti-racist teacher preparation and training required regular engagement with and critique of racist systems and structures-much of which are violent, brutal, and cause deep pain. In our classes, we paired deeply moving first-person narratives texts like Copper Sun (Draper, 2012), The Hate U Give (Thomas, 2017), and BUCK: A memoir (Asante, 2014) with traditional academic literature. In the story Copper Sun, Tidbit, a young enslaved boy is taken and used as alligator bait. Coleman-King taught this text while she was pregnant with her son 1 year and reread the text the following year with her months-old son lying in bed next to her. The thought of bearing and rearing a Black son in a world that has historically viewed Black lives as disposable, caused her a great deal of distress. During a class session, she shared:

I noticed that you all did not mention much about Tidbit being used as alligator bait. It's interesting what resonates with us in texts. I really struggled reading this week's reading and looking over at my beautiful baby boy sleeping, realizing he could have been taken from me and used as alligator bait and there would not have been anything I could have done about it.

Sharing stories of Black trauma, created its own trauma for BWCAEs as our vulnerabilities as Black people were often on display. However, we believe these personal connections were important to our pedagogical commitments and helped shape our students' development.

Additionally, we created a social media page where instructors and TCs shared online videos and articles of historical and current events related to course content. In some instances, we shared content as benign as diverse reading lists, but other times, we shared articles of BIPOC being harassed for doing

mundane things like wearing a t-shirt with the Puerto Rican flag (Irizarry, 2018) or speaking a language other than English (Bermudez, 2018). As a result, TCs and instructors engaged the harsh realities of everyday people affected by injustices related to race, class, immigrant status, language, and sexual orientation. Both instructors and TCs were often so moved by these realities that on many occasions you could find BWCAEs fighting back tears or despondent due to the sheer gravity of inequities faced by minoritized groups and the unrelenting power of white supremacy. However, the emotional weight was not relegated to professors alone, our vulnerability enabled students' to also tap into and display their emotions of sadness, anger, rage, despair, and hope.

Emotional labor also went beyond the acute issues being addressed in anti-racist work to the emotional toil necessary to deal with resistant and even hostile TCs, faculty, and others.

Personal attacks directed at BWCAEs occurred through course evaluations, dealing with the need to defend and protect the UTPP program from others who sought to alter the program's structure or reduce programmatic resources. In a one-sided, ongoing feud, other program faculty complained that they had too many students despite their status as clinical faculty with a more substantive teaching load. They successfully rallied to have UTPP student numbers increased and theirs decreased. This was in addition to having to navigate the academy as Black women, who also experienced regular microaggressions in departmental meetings, social isolation in the larger work environment, and intense scrutiny of our work. As BWCAEs, we engaged in what felt like daily battles in order to defend the UTPP and ourselves, even as we engaged in the most mundane work-related tasks.

High Expectations

Lastly, BWCAEs came to their work with a deep level of resolve to improve the learning conditions of minoritized children. With that, there also came a deep commitment to enhancing and maintaining an effective, high-quality urban education program. This often meant going above and beyond the general expectations of a university professor. The labor of high expectations consisted of regular planning and revisions of programmatic content as evidenced by program retreats, regular team meetings, and ongoing analysis of what was and was not working. Additionally, we worked tirelessly with students to ensure that assignments were meaningful and wellexecuted, which meant students were able to revise assignments as necessary so that the goals of the assignment were met. For example, in the first core course of the program, we met with each student to discuss their cultural autobiography assignment. Conversations that were supposed to last 15 min each easily doubled in time as students sat sharing deep emotions and personal traumas that shaped their lives. Anderson worked with students to ensure that their action research projects reflected relevant, equity-focused questions, stellar execution, and wellwritten analyses.

Supporting students to meet high expectations meant lots of individual meetings with students to discuss their work and ideas, multiple iterations of feedback on written assignments, reflection on gaps in student understanding and the development of curriculum to address those gaps. Furthermore, the labor of high expectations required intentional relationship building with TCs that led to one-on-one mentoring relationships. We realized that unlike other faculty, our students and alums' reputation in the field would be a reflection of us recognizing that Black women and programs with critical content are often under intense scrutiny (especially in politically conservative contexts) and as a result, we had to protect our personal reputations and that of the program. Because of our desire to affect change in schools, we were committed to holding ourselves and others to high expectations, which required more consistent, intense labor on our part. Consequently, we had schools that sought to hire our students annually and without a formal interview. In fact, our former students became the most senior teachers at hard-to-staff schools with high teacher turnover rates, because they had been well prepared for the urban school context.

White Ally Development: The Role of Relationships, Engagement, Knowledge, and Reflection

While data clearly show the significant role of BWCAEs in the development of White allies, it is important to also interrogate the ways in which WA/DAs engaged and experienced in the allyship development process. Data from this study show that significant elements of WA/DAs' allyship development process included: (1) A notable experience that sparked an interest in issues of race and equity, (2) allowing time and space for authentic engagement with BIPOC individuals, (3) study of historical and theoretical knowledge related to race and racism and current implications, and (4) ongoing opportunities to cultivate self-awareness and reflection.

Cultivating Commitment and Buy-In

Across the various groups of White doctoral students, teachers and TCs, faculty, and community members who were WA/DAs, we found that most individuals committed to allyship had at least one significant experience that informed their impetus for engaging in anti-racist work. For one CF member, her impetus for allyship was prompted by her experience working in a majority Black, low-income school for a great deal of her career. During this time, she built significant, intimate relationships with children, parents, and Black colleagues. It was through these direct relationships and the lens of her social work background that she was able to humanize those she encountered and recognize the role of structural challenges in shaping their experiences.

In another instance, our DGA, reflecting on his implicit biases as a part of a course requirement, and realized that his commitment to anti-racist work also stemmed from significant cross-racial encounters and relationships. He journaled:

During my first doctoral course, we were asked to take the Implicit Associations Test—an assessment that helps identify implicit biases across domains such as race, gender, religion, and age—and share our results, if we felt comfortable. I've long recognized we all hold biases, often some we aren't even aware of. However, my results confirmed this when I discovered I had a moderate preference for

Black people. I was certainly a bit taken aback, but upon reflecting, it became clear that this was because at two pivotal moments of my life, Black individuals supported and guided me through trauma I could not have dealt with individually. A Black male elementary gym teacher and two Black professors played vital roles in my achievement, growth, and trajectory in life because they valued me as a person first, and a student second. In fact, the courses I took with the two black professors initiated and solidified my transition from a Biology major to an English major, and when I earned my degree, my area of concentration was in African American Literature because I took any and all courses taught by these two individuals.

While interracial contact is significant in creating opportunities for individuals to want to learn more, it alone cannot prompt antiracist allyship. Individuals must bring a disposition of humility and see their Black counterparts as fully human or at least come to that place through their interactions. Additional experiences included grappling with literature, especially first-person narratives, which also helped to encourage allyship. The use of narrative literature helps support a kind of imagined encounter with an individual. Grappling with the intimacy of narrative texts helped change TCs' perspectives as indicated by students' journal entries. Kendra, a UTPP student wrote:

Reading Copper Sun and Monster made...injustices more real. When I read a story written in first-person about a person who experienced these travesties, I have a strong emotional reaction. It's easy to get bogged down by numbers and statistics, but when you're faced with someone who actually experiences injustice, it's hard to turn away.

For TCs, the pairing of first-person narratives with readings that also addressed "the facts," helped to create a balanced and holistic view of how systemic oppression works on an institutional and personal level. By triangulating personal accounts and statistical data, TCs came to a clear understanding as one stated, "clear discriminatory labels [are] placed on people of color [across all the texts]. Because of skin color, people of color have been viewed in a negative manner, pushing injustice and inequality throughout history."

Creating Intentional Time and Space for Authentic Engagement

While BWCAEs spent their time engaging in a multitude of ally development activities, the work that appeared most significant to WA/DAs development the extent to which they created time to engage BIPOC communities. Beyond initial experiences that led WA/DAs to pursue allyship, it was necessary for them to continue to engage in authentic experiences with BIPOC on their terms and in their communities and spaces. For the DGAs, their time working with the UTPP provided some of that exposure through their relationships with the BWCAEs, but also through their work in schools and communities. However, DGAs went beyond these school-related spaces to also cultivate personal relationships with members of minoritized groups. For example, Nate regularly played in a diverse soccer league. This was also true of entire UTPP team. In many ways, the personal and professional were blurred as relationship building was key to sustaining the

UTPP family and building strong ally relationships. However, relationship cultivation required the participation of all parties involved, which meant DGAs, CF, and TCs often gave of their time to support equity-focused professional development workshops and attend culturally specific social outings. For example, each year for MLK Day, Chonika was invited to conduct a professional development workshop for the local district. Members of the UTPP team would attend to support the sessions by handing out materials, setting up, and contributing to group conversations. It was through engagement in these authentic spaces that their understanding of and appreciation for minoritized cultures grew.

Additionally, authentic engagement led WA/DAs to witness differential treatment firsthand, further strengthening their knowledge of the workings of racism. Allen (2004) emphasized that White individuals will never fully comprehend the "problematics of whiteness" (p. 130) until they form authentic ally relationships. Nate argued,

Through our relationship and work together, I have witnessed how [Black faculty] are inundated with additional requirements for which they receive little to no recognition, and I have witnessed how their scholarship has been subordinated by these excessive burdens. Moreover, even when the labor is recognized, it is often minimized. For instance, after returning from an international conference, where all members of the team gave multiple presentations, other White faculty from the department casually stated that, "it looked like we had fun." (fieldnote, December, 2018)

Faculty's comments diminished the value of the experience the BWCAEs provided for DGAs through their scholarship and writing. Additionally, BWCAEs also supported DGAs in getting papers accepted to the fields most distinguished conference—a conference that most faculty in the department did not bother to attend. Crain et al. (2016) highlight the additional burdens faced by BIPOC faculty and WA/DAs witnessed how silent burdens are placed upon BWCAEs, reinforced, and perpetually situated as an unspoken, unacknowledged component of their labor and work responsibilities.

Historical and Theoretical Knowledge and Current Implications

In addition to voluntary means of developing relationships, TCs and DGAs also committed time to the study of critical theories and issues. In many cases, WA/DAs were intentional about enrolling in courses where critical content would be taught like the Urban Education Graduate Certificate program or Critical Race Theory courses. Even then, many went beyond course requirements to engage in additional opportunities to broaden their knowledge. This often included trips to museums, reading relevant literature, attending meetings and talks, and taking on opportunities to engage in activism. Additionally, some TCs began to share literature with their friends and family. One TC, Dannielle, planned a family trip to Washington, D.C. to visit the National Museum of African American History and Culture—a profound experience for her dad who otherwise failed to acknowledge the historical impact of racism and white privilege.

Awareness and Reflection

Finally, the role of ongoing critical reflection was central to WA/DAs continued development and growth. This was the work that WA/DAs had to undergo on their own and when there was likely no one else to hold them accountable. According to Howard (2006), White people have the privilege of remaining in encapsulation and incubation stages of identity development. White people also have the privilege of disengaging from allyship and BIPOC, existing in an oblivious white space. It is through formal and informal reflections that WA/DAs came to recognize how privilege functioned in their lives and resultantly, how this privilege ultimately created disadvantages for BIPOC communities.

According to Nate, "ongoing reflection was crucial to eroding the encapsulation and incubation whiteness affords and to understanding the burdens faced by [BWCAEs]."

Overall, it appeared that WA/DAs experienced a process whereby they were propelled into antiracist work through some profound point of contact (Helms, 1990)—a significant experience, relationship, or medium such as literature, which ultimately led them to become intentional about gaining more knowledge and information about systems of inequity whether through formal or informal means. For example, many of the TCs in the UTPP had indicated that they wanted to study urban education and identified some experiences that led to that decision.

From that point, they gained ongoing exposure to minoritized groups through a variety of mechanisms that provided opportunities to cultivate authentic relationships. However, the real work occurred through regular reflection on their actions, the role of white privilege, and the manifestations of racism, which ultimately led to praxis—changes in actions and the development of new orientations, programs, and processes. These changes included regular engagement in activism, speaking out against racism and inequity, integrating critical and culturally relevant content into their teaching, and maintaining cross-racial relationships.

DISCUSSION

Creating Room for Reciprocity: Considerations and Implications of Allyship Development

In presenting our work on allyship with DGAs at an urban education conference, a Black man in the audience asked, "So, how do you two [Black women] benefit from your labor?" It was a pointed and important question that BWCAEs later engaged in critical reflexivity sessions. As anti-racist educators and professors, we understand that the fruit of our labor benefit our White students and colleagues, but more importantly, they benefit the Black and Brown students these groups engage within K-12 schools, communities, and in institutions of higher education. By sharing our funds of knowledge through engagement in the academy and our daily lives, we provide insights that potential White allies

will likely never fully comprehend. However, we understood that this was a weighted question that many of Black women needed to explore. For this paper, we felt that it was important to not only name or experiences, but to also provide insights to others and they contemplate engagement in allyship development.

We draw from our own experiences and interdisciplinary research to provide best practices for allyship development. An ally is not simply supportive of BIPOC communities, wanting to "help", but an individual who actively chooses to be an agent of change (Ford and Orlandella, 2015). Helms (1990, 2006) identified three types of allies: (1) ally for self-interest: works on individual interventions rather than acknowledging how they are implicated with the larger structural system of racism, (2) ally for altruism: works for members of target groups who he or she sees as victims in a patronizing effort to do the "right" thing, and (3) ally for social justice: works with members of oppressed groups, acknowledges his or her role in the racist system, and connects with other group members. White allies should use this system of development to assess where they are as an ally, and continue to reeducate themselves to work at the highest level. Boutte and Jackson (2014) offered the following guidance for WA/DAs:

- 1. Silence on issues of racism is not an option;
- 2. Become familiar with the academic literature on the topic(s) (i.e., equity, invisible labor, race, gendered racism; bias);
- Understand how racism is codified in policies and practices and how injustice is normalized in schools and universities;
- 4. Be prepared to lose 'friends' as your status changes to an action-oriented ally;
- 5. Be willing to unlearn one's own racism and begin creating positive definitions of Whiteness;
- 6. White allies will have to avoid upstaging the emphasis on people of color (p. 638).

White accountability requires individuals to persevere, despite emotional fatigue. Scholars also emphasize the need for White accountability in the journey for social change (Goodman, 2001; Ford and Orlandella, 2015).

Labor

We are in agreement with the items on Boutte and Jackson's (2014) list, but add a few additional items for allies to consider. Of the scholarship focused on allyship, few focused on the labor it takes for BIPOC, and rarely is the BIPOC's perspective centered in the work (Boutte and Jackson, 2014). As we shift from a Whiteally centered perspective and provide a counternarrative, we have to first acknowledge that this *is* labor— often strenuous labor for BIPOC. This labor requires an intense time commitment, and the BIPOC may encounter emotional fatigue.

For many Black women and other BIPOC, this work is often invisible and does not build our tenure dossiers. The recognition of the double minoritization of Black women is essential for potential allies to cogitate as they engage in the work, and should always be a consideration as they navigate allyship. One might

consider asking, how can I work in support of BIPOC individuals who devote their time to cultivating White allies? For WA/DAs who engage in social justice efforts, their work is valued and benefits their careers in ways that BIPOC do not reap rewards. According to the tenets of CRT, white skin privilege makes it such that White people's work—even when derived from Black epistemologies, pain, and experiences—is celebrated.

Patton and Bondi (2015) found that although White men allies did not engage in risk-laden practices, they received great rewards for the most minimal contributions. It is important for our allies to understand the benefits and limitations of our positionalities as we maneuver anti-racist work.

As educators focused on equity and the greater good of Black and Brown children, rarely do we take a position of selfishness, but we have to take into account the time, energy, and effort allocated to engaging in this work. Therefore, we suggest that other BWCAEs be considerate of the time and effort given to mentorship, particularly if they are tenure-track. The cost-benefit analysis may demonstrate that this work is fruitful and needed on college campuses, but we must find ways to document the work such that it adds to areas that have currency in promotion criteria. For example, our former students consistently reach out to us for meet-ups, and to discuss organizing strategies and lesson plan ideas. We want them to be successful in the field and recognize that community is essential to sustaining this work long-term. This past year, we decided to study the ways our students understand our labor and utilize our support in the field, which is a gap in the literature, and strengthens our research agenda.

Approach to Allyship

To truly shift the structural and institutional barriers for BIPOC in higher education, K-12 schools, and other institutions, collaboration is key. As the relationships between allies are established and cultivated, it will be of great importance for both parties to understand the difference between technical, inquiry-based, and relational knowledge. As White allies begin to unpack the nuances of engagement, they should be aware of the technical information needed to engage in topics around race, gender, class, sexuality, sociocultural knowledge, and critical frameworks, literature, and theories. In addition to understanding the technical knowledge and (un)learning White supremacist ideology and approaches, allies should be actively engaged in inquiry-based practices associated with equity and social justice. This means that White allies should be interrogating the practices, thoughts, and actions happening within and around them and this does not always have to involve BIPOC populations.

Being an ally is more than being 'nice' or 'helpful,' it is about intentionally disrupting inequitable practices (Patton and Bondi, 2015). Relational knowledge is critical and undergirds the practice and authenticity of allyship. The allyship process requires knowledge development and reeducation (Helms, 1990, 2006); it also necessary to have a sense of humility as individuals (un)learn old ideological frames and generate new frameworks. As WA/DAs take on a learning stance, they must be open to critical feedback, reflection, and

acknowledgment of BIPOC's experiences and perspectives. White allies also need their own racial affinity spaces to discuss issues around allyship.

Below we present a series of questions to guide the direction of allyship work:

Reflection/guiding questions for BIPOC faculty

- How are you protecting your time and documenting your labor related to ally development?
- Are you prioritizing service/mentorship that will assist in your promotion?
- How are you reminding the WA/DAs of their responsibilities in the process?
- How are you responding to emotional fatigue, and how are you relaying these feelings to your ally(ies)?

Reflection/guiding questions for White allies

- How are you questioning your actions and reflecting deeply on what you are noticing?
- How are you pushing against the racist, sexist, classist, and other problematic ideas within society and schools?
- How are you ensuring that you are decentering whiteness and avoiding interest convergence when engaging in allyship?
- How is reciprocity modeled in your engagement with BIPOC scholars? How are BIPOC scholars benefiting from your allyship?

Challenges Associated With the Work

There are many challenges associated with negotiating and engaging in authentic allyship. Matias (2013) documented the ways trauma is associated with training colorblind White teacher candidates. She operationalized the pedagogy of trauma as a survival mechanism BIPOC scholars take on as they train preservice teacher candidates at the expense of the their own pain. According to Matias (2013),

Scholars of Color are also heroes who are constantly challenged because of our nuanced knowledge of race and racism, and intimate understanding that hegemonic Whiteness blinds White folks to. We are the warriors that shoulder this agonizing racial burden despite being chastised as not being collaborative, wrongfully accused of being personally mistrustful, or worse, mislabeled the "real" racist when we bravely engage how the ugly reigns of race is manifesting itself (p. 56).

We often have to relive our pain to explain our experiences of racism to allies in order for them to understand and have critical discourses around these issues. Not only is this taxing, but we also have to battle their white fragility. White fragility framed by DiAngelo (2011) is a mindset of expectations for racial comfort, while simultaneously lowering the ability to tolerate racial stress. This state inhibits White individuals from engaging in a minimal amount of racial stress and triggers defensive moves (DiAngelo, 2011). In our experience, white fragility can trigger different responses—anger, betrayal, fear, separation from situations, and varying levels of passive aggressive behavior. If the situation requires White individuals to be uncomfortable, they might dismiss the concern as a non-issue or claim hypersensitivity

on the part of BIPOC individuals. Boutte and Jackson (2014) encourage White allies to not retreat, but remain steadfast in advancing a social justice agenda.

Reciprocity

As we think about all the challenges BWCAEs encounter as underrepresented members of HWIs, it can sometimes be a challenge for us to explicitly identify how our ally relationships with White individuals are reciprocal. We witness how our DGAs, TCs, and colleagues benefit from our labor, but often have difficulty outlining how we benefit or how other BIPOC benefit from these arrangements. At times, it feels one-sided, and at any time, White individuals can choose to withdraw from the work—wasting our time and energy. In addition, BIPOC are often the first to be reprimanded when there are challenges in attempting to create more inclusive spaces. In efforts to create and sustain equitable relationships between BWCAEs and allies, White allies must be inclined to share space, resources, publication and grant opportunities, promotions, and influence important decisions in favor of BIPOC faculty. For example, if a diverse perspective is needed and the task cannot be completed without the BIPOC's expertise, WA/Das should ensure they are given a leadership role, adequate compensation, opportunity to publish, and acknowledgment. Our perspective is often essential to constructing inclusive practices or structures, but the quantifiable value of our knowledge is not recognized. WA/DAs should show appreciation for our expertise. As a developing ally, one should think about how the ally relationship benefits the BIPOC on the front end and be intentional about applying support mechanism. This does not mean asking them to engage in fruitless service work, but adding the individuals as co-PIs on grants, offering lead authorship on publications, course releases, or bringing in additional doctoral students to help share the research load on collaborations. This can also mean speaking up in faculty meetings if you are noticing disparities or mischaracterization of their conduct or work. Lastly, there are times when White allies should take the backseat if the work is about true allyship; WA/DA do not need to be front and center, even if other colleagues inadvertently position them as an expert. A key to achieving reciprocity is intentionality-targeted behaviors and structural changes that benefit minoritized groups.

CONCLUSION

Miller (2018), a columnist for the HuffPost framed the conversation around Black-White allyship using the movie *Black*

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Panther. Miller (2018) stated, "The lesson of "Black Panther" for White allies is this: [White people] must learn to be the sidekick, to be at the fringe, to give up power, to have people of color in their ears directing them on how to be useful in fighting for the cause of justice." This was also true in the movie, Marshall. While sharing the efforts in resistance, White allies have to consider the needs of BIPOC and shift the focus and narrative from White individuals being positioned as the savior and victor. As a guideline, we are asking those who are interested in engaging in allyship to refocus their attention to the labor of the BIPOC, thus humanizing our efforts, specifically in teacher education spaces.

White allies have to consider their privilege and embody a disposition of humility. This requires courage, a great deal of self-work and critical reflection. Cross-racial allyship is needed to create change within and beyond educational institutions. As critical, antiracist educators, we labor in hopes of affecting change in our communities for our teacher candidates, K-12 students, graduate students, and local educators. However, as Black women, we cannot continue to pour into these relationships with White allies without reciprocity. As BWAECs, our knowledge matters, our labor matters, and we matter.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by University of Tennessee-Knoxville IRB. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

CC-K served as the lead author, focused on introduction, findings, and context. BA worked on literature review, methods, considerations, and conclusion. NK contributed to the findings narrative and literature review. All authors contributed to the article and approved the submitted version.

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Narratives of Systemic Barriers and Accessibility: Poverty, Equity, Diversity, Inclusion, and the Call for a Post-Pandemic New Normal

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This paper captures the intimate, intensely lived, and storied experiences during the pandemic, on teachers' narratives of teaching and education. The narratives illuminate deep knowledge and insight into pre-existing school systemic barriers prior to the pandemic, and how those same barriers are magnified during the pandemic in what has become a global watershed moment that calls for equity reform in school systems. A narrative theoretical framework is used, as well as an ethic of care framework that informs the study. Issues of poverty, diversity, equity, and inclusion are illuminated, with further focus on topics of technology access, streaming, resilience, and teacher-student identity and relationship. Recommendations to eradicate systemic barriers in schools are explored, highlighting suggestions for equity reform in areas that include: enhancing professional practice; building a school culture of care, and; developing partnerships and relationships.

Keywords: systemic barriers, inclusion, poverty, BIPOC, technology, streaming, resilience

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INTRODUCTION

In the wake of our worldwide pandemic and its unexpected impact on educational policy, many diverse student populations face unprecedented and formidable challenges in their educational pathways. Such challenges stem from deeply rooted systemic barriers that have existed prior to the COVID-19 pandemic, which include but are not limited to: accessibility to educational resources and technology; access to Internet service and bandwidth necessary for remote (online) learning; the streaming of children and youth into non-academic pathways, and; students' inability to succeed due to systemic barriers and implicit discrimination in school systems and society at large (Ciuffetelli Parker, 2015, Ciuffetelli Parker, 2019; DDSB, 2019; People for Education, 2020).

This paper captures the intimate, intensely lived, and storied experiences during the pandemic, on teachers' narratives of teaching and education. The narratives illuminate deep knowledge and insight into pre-existing school systemic barriers prior to the pandemic, and how those same barriers are magnified during the pandemic in what has become a global watershed moment that calls for equity reform in school systems. A narrative theoretical framework is used, as well as an ethic of care framework that informs the study. Issues of poverty, diversity, equity, and inclusion are illuminated, with further focus on topics of technology access, streaming, resilience, and teacher-student identity and relationship. Recommendations to eradicate systemic barriers in schools are explored, highlighting suggestions for equity reform in areas that include: enhancing professional practice; building a school culture of care, and; developing partnerships and relationships.

LITERATURE REVIEW

In order to contextualize the present study, our review of the existing literature is organized according to four main themes: 1) Technology and access to technology; 2) Systemic barriers in school systems; 3) Resilience and marginalized students; 4) Reform practices and policies in school systems. The overarching umbrella where these themes are situated, originates from the longitudinal research program on poverty and schooling (Ciuffetelli Parker and Flessa, 2011; Ciuffetelli Parker, 2013; Ciuffetelli Parker, 2015; Ciuffetelli Parker, 2017; Ciuffetelli Parker, 2019).

In accordance with findings from the principal investigator's larger research project, which closely examined poverty and its intersectionality with schooling, mental health, and diverse student populations (Ciuffetelli Parker, 2018; Ciuffetelli Parker, 2019; Ciuffetelli Parker and Ankomah, 2019; Craig et al., 2020), children and youth living in poverty have been significantly impacted throughout the COVID-19 pandemic. Despite policies, declarations, and goals set in place, Canada still faces dire issues of youth and family poverty that sustain conditions of social and economic marginalization. The pandemic, unfortunately, has magnified exponentially pre-existing disparities for diverse student populations living in poverty. Data from Campaign 2000 (2020a) report card on child and family poverty in Canada calculates that more than 1.3 million children (i.e., approximately one in five children in families) lived in poverty before the 2020 global pandemic ensued here in Canada. The report card also indicates that First Nations, Métis and Inuit peoples, children with disabilities, children from female led lone parent families, racialized children, and immigrant children are notable groups who are overrepresented in rates of poverty (Campaign 2000, 2020a). For instance, within the province of Ontario, one in seven families live in poverty. However, this number increases to one in three for lone parent families who are living in poverty (Campaign 2000, 2020b). Nonetheless, a recurring theme prevails: "No matter how you measure it, children in poverty are falling through the cracks" (Campaign 2000, 2020b, p. 1). Further, issues and barriers related to accessibility can significantly contribute to higher rates of poverty among children and youth in vulnerable families, including children in women-led households (especially those who have fled violence), undocumented children, children of migrant workers, and First Nations children/youth living on reserve (Campaign 2000, 2020b). While the data from the 2020 report card illustrates that urgent, thoughtful, and timely action is needed to eradicate dire poverty rates and income inequities across Canada, the onset of COVID-19 has magnified pre-existing disparities, inequities, and systemic barriers within school systems and society at large. This literature review details such barriers below.

Technology and Access to Technology

On average across OECD countries, PISA (2018; as cited in OECD, 2020c) found that 9% of 15-year-old students do not have access to a quiet learning environment within their homes. In this case, despite having access to quality Internet connection,

some vulnerable children and youth are likely to appear as the most represented among those who do not have a proper, quiet, and equipped learning environment to complete school work and study in their homes. For instance, the OECD (2020a) Policy Brief reports that immigrant and Roma students who live in crowded households or camps may not only find it challenging to locate a quiet space to study, but are also more likely to lack motivation. Given the challenges of providing each student with a quiet and equipped work space, parental, familial, and peer support (for the purpose of virtual learning) has become an identified barrier to inclusive and quality remote learning (OECD, 2020a). Moreover, not all children and youth receive the same amount of parental and familial support when navigating the complexities of virtual learning in their respective home environment. The OECD (2020a) provides an example of how this particular inequity continues to pose a significant barrier, as evidenced in a study conducted within the Netherlands during school closures:

...even if nearly all parents stressed the importance of helping their children in keeping up with their study at home, students from advantaged socio-economic background received more parental support and had access to more educational resources than those from disadvantaged backgrounds. Some parents, such as parents of immigrant and refugee students, may not be able to work from home (due to their overrepresentation among those considered essential workers) or support their children with homeschooling due to their limited education and/or lack of proficiency in the language of instruction. In this case, the continuity of limited physical educational services and the availability of multi-languages resources, respecting hygiene and social distancing, can be key for many students (Bol, 2020; as cited in OECD, 2020a, p. 6).

As exemplified in the above excerpt, COVID-19 has exacerbated systemic barriers currently faced by marginalized, oppressed, and low-income children and youth.

In relation to COVID-19, the pandemic has shone an especially bright spotlight on a systemic issue that has existed in Canadian communities and school systems prior to COVID-19—digital inequity (i.e., the issue of access to technology, especially that of Internet and phone connectivity). The rapid and unprecedented changes in both the educational and healthcare landscapes demonstrate that the lack of access to a digital device has become a further impediment to equity in education, student success, and achieving good mental health. Teachers in Ontario's Northern school boards, for example, voiced that the region's vast geography and sparse population presented a series of challenges that were not considered in Southern parts of the province (Thompson and McQuigge, 2020). Thompson and McQuigge (2020) article entitled, "Northern Ontario schools face additional challenges for reopening-and staying closed," highlighted how the school boards' process of developing COVID-19 contingency plans did not take into account the lack of resources in the far

North. More problematic, barriers to remote learning in Northern Ontario were reported as significantly greater as many do not have Wi-Fi in their homes, albeit some residents who pay exorbitant fees to obtain Wi-Fi for the purpose of distance learning (Thompson and McQuigge, 2020).

Students profoundly experience isolation when their school doors are closed in an attempt to contain COVID-19 according to government restrictions. UNESCO (2019; as cited in OECD, 2020a) calculates that "more than 188 countries, encompassing around 91% of enrolled learners worldwide, closed their schools to try to contain the spread of the virus" (p. 2). When required to immediately pivot to virtual pandemic teaching-learning, a number of countries and school systems demonstrated a seemingly universal response to school closures with the creation of online teaching-learning platforms. Such platforms have been imperative to support teaching staff, students, and families when learning remotely. Students' equitable access to information and communication technologies, especially digital devices, learning resources, and quality Internet access, notably varied greatly across countries. In response to digital inequities and accessibility issues, several civil society organizations and governments provided minoritized students with devices, such as computers and tablets as well as Internet access, or organized their teaching through mediums ranging from television or phones (OECD, 2020a). There have been several significant developments and partnerships with national educational media and free online learning resources to reach all learners of various circumstances and SES. For instance, students in New Zealand were offered a new online learning space, learning packs in hard copy format, and television programs for the purpose of effective remote learning (New Zealand Government, 2020; as cited in OECD, 2020a). The government of Colombia also developed an online platform that houses more than 80,000 pedagogical resources that are free of access for low-income families and, when lacking Internet connectivity, users are still able to access the online platform without having to consume any of their mobile data (Government of Colombia, 2020; as cited in OECD, 2020a). In this manner, the pandemic highlighted how equitable access to Internet and telecommunication indirectly acts as a social determinant of health (Somers et al., 2020) and is thus an integral component to ensuring equity in education for all students.

Virtual Learning for Vulnerable Students

In the report entitled, *Technology in Schools-A Tool and a Strategy*, People for Education (2020) write,

An undeniable reality has emerged in the COVID-19 pandemic: Technology can be a very useful tool in education, but it cannot act as a replacement for the rich learning and human development that happens in the myriad face-to-face settings and relationships that exist in schools (p. 1).

While teaching staff, students, and communities work to navigate a COVID-19 climate with an intermix of in-class and virtual teaching-learning, the existing literature reaffirms how the pandemic has amplified pre-existing social inequities and barriers that have "always been there," most notably: students' access to technology; the impact of poverty; discrimination, and; families' social capital, as it relates to varied family resources to support students outside of the classroom setting and in the home, for example (People for Education, 2020).

The Organisation for Economic Co-operation and Development's (OECD) November 2020 Policy Brief entitled, The Impact of COVID-19 on Student Equity and Inclusion: Supporting Vulnerable Students During School Closures and School Re-Openings, reports on the ways in which school closures have had a profound impact on all students, specifically children and youth from vulnerable populations. Such youth from vulnerable populations, who are more likely to confront additional barriers, comprise the following demographics: students from low-income and single-parent families; students from immigrant, refugee, ethnic minority, and Indigenous backgrounds; students with diverse gender identities and sexual orientations, and; students with special education needs (OECD, 2020a). Vulnerable students especially suffer and bear the brunt of systemic inequities and barriers throughout the pandemic, given their deprivation of physical learning spaces and resources that offer social and emotional supports available in schools, coupled with essential services such as school meal programs.

Similar to findings reported by the OECD (2020a), Eizadirad and Sider (2020) identify how students who enjoy financial security and/or have access to supportive home environments will find challenges related to the pandemic and virtual learning easier to overcome in comparison to students with poor/limited access to resources (or considered to have special needs). Eizadirad and Sider (2020) frame and situate such inequities as sequential "critical events" (para. 6) within the 2020 pandemic year in particular. The first critical event encompassed social movements across Canada that addressed anti-Black and anti-Indigenous racism, which in turn gained significant mainstream media coverage, reporting, and advocacy work to challenge policies and practices that privilege whiteness and, at the same time, oppress non-dominant social groups (Eizadirad and Sider, 2020). The second critical event comprised school closures in mid-March of 2020, thus resulting in learning disruptions and a rapid shift to online learning with challenges surrounding access to technology and high-speed Internet connection to complete school work in a time efficient fashion. In this manner, a fundamental call to action requires an investment "in placebased learning where schools can adapt policies and practices to reflect the needs of their student demographics and surrounding community, or else we risk reproducing similar power dynamics that historically privilege whiteness at the expense of marginalizing others" (Eizadirad and Sider, 2020, para. 12).

Further to pandemic challenges surrounding the degree of ongoing parental support available in a child's home when learning remotely, discussed in the previous section, there remains concerning inequities related to children and youth's socio-emotional needs, which have not been met throughout the pandemic. The strong sense of belonging that students acquire in

relation to their respective school community may in fact "be lost unless they can keep in touch for learning, but also social activities, such as virtual games and reading buddies, via online resources like Zoom. The lack of social contact can be particularly impactful for vulnerable students: those with broken families, abusive families, in foster care, suffering from food insecurity or lacking housing" (OECD, 2020a, p. 9). Yet suddenly, such disparities in mental health and social-emotional well-being have been profoundly highlighted by the pandemic given that many students lack access to vital necessities offered by school systems and within their communities at large, ranging from counselling to social and medical services, for example.

Growing mental health challenges, especially amid COVID-19, however, illustrate the need for a comprehensive and equity-oriented mental health strategy (Jenkins et al., 2020). In an article published in The Conversation Canada, mental health researchers conducted a national representative survey in partnership with the Canadian Mental Health Association surrounding the mental health consequences of COVID-19 in Canada (Jenkins et al., 2020). The researchers identified that increases in mental health challenges are specifically "attributed to months of physical distancing, growing job loss, economic uncertainty, housing and food insecurity and child care or school closures" (Jenkins et al., 2020, para. 4). The data is indeed pronounced for those affected by systemic oppression and food insecurity in particular, whereby "[t] his concern was magnified to affect 37 per cent of those living in poverty, 28 per cent of those with a disability, 26 per cent of racialized people and 25 per cent of Indigenous people" (Jenkins et al., 2020, para. 9). While this research reaffirms how mental health challenges are magnified for oppressed students due to aspects of their identity such as their gender, income, ethnicity, and socioeconomic status, Ciuffetelli Parker (2015) stresses that it is imperative to "reframe our thinking and push past preconceived notions of class, race, culture, and stereotypes of what it means to be poor. We must focus on conditions of poverty rather than attributing the problem to students and families who experience poverty" (p. 1).

Systemic Barriers in School Systems

The relationship between socio-economics and systemic barriers in educational landscapes has garnered much attention in the wake of school closures due to COVID-19 and fundamental social justice activist global movements, such as Black Lives Matter. Nonetheless, poverty is the root cause of many systemic barriers grounded in economic inequity. It is important to note:

Coronavirus hasn't caused the educational inequities that impact students. But it has shed a light on how our most vulnerable communities are marginalized, silenced and oppressed systemically due to lack of access to opportunities perpetuated historically, socially, economically and politically via Canadian institutional policies and practices including by schooling (Eizadirad and Sider, 2020, para. 3).

Bell hooks (1994), for instance, closely examined how African American students from low-income working families were the most vocal about issues related to socio-economics and "about issues of class" (p. 182). hooks 1994) found that African American students "express [ed] frustration, anger, and sadness about the tensions and stress they experience trying to conform to acceptable white, middle-class behaviors in university settings" (p. 182). What remains significant is that systemic barriers, ranging from students' lack of technology to systemic biases and prejudices held against marginalized and/or oppressed youth, set the precedent for students' access to curriculum knowledge (e.g., type of curriculum work assigned) and academic success (e.g., academic achievement in terms of grades attainment).

Jean Anyon (1980) article, "Social class and the hidden curriculum of work," illustrates such disparities in students' inequitable access to curriculum work based on socioeconomics; that is, a child's socioeconomic status is a precursor to the type of curriculum work they will access according to their income and family circumstances/dwellings. The article examines findings from five elementary schools in the United States, which are situated in what the author refers to as "contrasting social class communities" (Anyon, 1980, p. 67). Upon analysing data retrieved from assessment of curriculum and other materials in each classroom, classroom conversations, and interviews of students, teachers, principals, and district administrative staff, Anyon (1980) found notable differences in the type of school work assigned to low-income, middle-income, and high-income students. Foremost, students of low-income were offered curriculum that prepared them for future wage labour that is mechanical and routine in nature. In contrast, students who attended the "affluent professional school" (i.e., students of higher income) were granted rich curricular opportunities to develop linguistic, artistic, and scientific skills/ expression necessary for cultivating society's artists, intellectuals, advancements in science, and other professions. Students of middle-income were offered lessons, instruction, and assignments appropriate for employment such as paperwork, technical work, and social service in private and state bureaucracies. Reserved for students of high income was rich curricula that cultivated their knowledge of and practice related to ownership and control of the means of production in society, but also their control of physical capital. The varied differences in curriculum for student participants in Anyon (1980) study both reveals and suggests a problematic "hidden curriculum" (p. 89) for students of diverse SES: differing curricular, pedagogical, evaluation, and classroom practices were offered for lowincome, middle-income, and high-income students. These varying classroom curricula and practices serve to replicate socioeconomic disparities, as they prepared students for particular educational and career trajectories aligned with their current socio-economic status. Thus, these curricular inequities illustrate how hidden barriers students from low-income must overcome have a lasting impact on their educational and career aspirations and success.

As evidenced in the study cited above, we can see that not so long ago, in the 1980's, systemic biases and prejudices were held

against the most vulnerable and oppressed students, according to factors such as SES and teachers' (biased) expectations of student achievement based on demographics. Unfortunately, this still remains a permeating practice and lived reality for many students of diverse backgrounds and identities in Canada and beyond, where unconscious assumptions of diverse and vulnerable groups of students, many who also live in poverty, result in students being deprived of an equal education based on stereotyping and systemic discrimination. One such systemic practice has been the streaming of students away from academic pathways based on implicit bias of students' academic achievement ability. What follows are examples of streaming practices as reported in the literature.

Streaming Low-Income and Marginalized Students in School Systems

There has been considerable literature on the systemic issue and discriminatory practice of streaming students in Ontario school systems. COVID-19 has especially highlighted the systemic inequity and barrier of streaming, particularly for Black, Indigenous, People of Colour (BIPOC). However, we can see that the biases cited in the literature extend beyond BIPOC children and youth given that such biases are attributed to student populations for many reasons: gender, age, race, ability, language, socio-economic variables, family dynamics, dwellings, home support, and students' behaviour in the classroom. Consequently, school systems have profiled students (i.e., achieved through stereotypes and labels) whereby students with high achievement levels are polarized, juxtaposed, and contrasted to youth with low achievement levels and those who are typically streamed. For instance, consider the following labels and stereotypic profiling of students: low-income students versus high-income students; the "troublemakers" (behavioural/delinquency) who are "falling through the cracks" versus the academic "superstars" who always complete their homework; and the students with poor family support "who do not care" about their education versus the high-achieving, hard-working student who takes every effort to improve their academic performance (e.g., via tutoring). The case study of Anyon (1980) research, cited above, is not an isolated example of how academic outcomes and limited access to curricular knowledge-what we would now call as "dumbing down the curriculum"— vary because of implicit systemic biases attributed to specific student demographics and are aligned with unconscious discrimination and stereotyping educators hold about particular students. In order to contextualize such biases for diverse student demographics, we provide a review in the subsequent section of the literature review.

Cited in the literature reviewed are patterns of streaming that can be notably exacerbated for students living in poverty and low-income dwellings. In a study conducted by Parekh et al. (2011), which was based in Toronto, the researchers found that the following groups lacked access to "socially valued educational programs": low-income students, students enrolled in Special Education, and students whose parents/guardians did not obtain a post-secondary education (p. 249). Data from the study also

revealed the degree to which low-income students were overrepresented in receiving special education services coupled with their enrollment in other programming that serviced/offered few options for post-secondary education. As a result, Parekh et al. (2011) found that work-oriented programs were most notably made available in the lowest income neighbourhoods in the city of Toronto:

Unless we assume that wealthier students are inherently more academically capable, this correlation is disturbing, all the more so given the international and Ontario evidence that suggests that taking applied courses itself may not merely reproduce disadvantage, but actively exacerbate the risk of problematic academic outcomes (People for Education, 2013, p. 6).

The recurring issue here is the intrinsic connection between 1) systemic streaming that offers limited and fewer academic opportunities for students and 2) a child's SES.

Streaming students from low-income households into less academic courses follows the impacts this has on student engagement and retention in education. Clandfield et al. (2014) make reference to a Toronto study, in which the Toronto District School Board (2012; as cited in Clandfield et al., 2014) found that 25% of students dropped out by the end of the five years of their secondary school experience, and among this group, "there were more than three times as many dropouts from families in the lowest decile (tenth) of family income as those in the highest-income decile" (Clandfield et al., 2014, p. 79).

Streaming and BIPOC Students

BIPOC students face discrimination and systemic barriers in their schooling through the practice of streaming into lower nonacademic programs, unfair targeting for expulsion, and have low rates of secondary school completion (Colour of Poverty, 2019a). As documented in a comprehensive fact sheet published by Colour of Poverty-Colour of Change: "Children from poor families are half as likely to attend university as those who are well-off, and some communities of colour and Indigenous groups have very low rates of high school completion" (Colour of Poverty, 2019a, p. 2). Furthermore, 41% of chronically poor immigrants (living below the Low Income Cut-Off for 5 years consecutively) obtained degrees, while the income gap between racialized and non-racialized residents in Canada increased from 25 to 26% (Colour of Poverty, 2019b). Here in Canada, The Walrus reports on prolific data that detail anti-Black racism in Canadian education where schools can in fact be a site of harm, degradation, psychological violence, and discipline for many Black youth (Maynard, 2020). The Walrus similarly describes how the streaming of students (according to race) into lower tracks of educational opportunity is still a current practice, especially in Toronto, Canada, "where Black students make up 13 percent of the student body but only 3 percent of those labelled "gifted," compared to white students, who are one-third of the student population but more than half of those labelled "gifted"

(Maynard, 2020, para. 9). Hence, Black, Indigenous, and other marginalized students are under-represented in enriched and gifted classes (James, 2020). Black youth are streamed into lower tracks given systemic factors and prejudice, such as student records, low educational performance, and racial stereotypes and expectations held by teachers (James, 2020). Indeed, recurring patterns of systemic oppressive practices in education target BIPOC students given their overrepresentation in applied streaming, incarceration, in-school suspensions, homelessness, drop-out rates, poverty, and precarious employment (Eizadirad and Sider, 2020).

As evidenced in the data cited herein, implicit biases have been—and are still attributed—to marginalized students in school systems, while also internalized by guidance counsellors, teachers, and society at large. These biases determine students' academic success and entrance into post-secondary institutions. With specific reference to Canadian research based in Southern Ontario, Shizha et al. (2020) investigated the ways in which newcomer students, particularly those of African origin, are discouraged from pursuing school curricula that would otherwise guide them towards their desired career aspirations. This discouragement, however, is attributed to systemic structures in schools whereby teachers and career counsellors hold negative, racist, and prejudicial stereotypes about not only African students themselves, but also their abilities, intelligence, success, and academic performance (Shizha et al., 2020). What remains significant is that the presence of institutional racism, coupled with the streaming of youth, has been profoundly accentuated by the Black Lives Matter movement and protests that voice inequities related to systemic racism of African youth. Shizha et al. (2020) assert,

The BLM protests have brought to the surface a history of systemic racism and discrimination, which permeates the politics of race and that of education. This history of discrimination is found in the ways Black students are treated by school teachers, counsellors and administrators who do not see education and career preparation as processes that matter for the future of Black students. It is these privileged gatekeepers who apply a complex process through which African students are subjected to differential and/or unequal treatment (para. 8).

Streaming and Biased Notions of Achievement

Further to the biases cited herein is the phenomena of labelling students as "academic achievers/superstars," and "good students who complete their homework" versus those who are "dropouts" and attain low achievement scores in their schooling. Clandfield et al. (2014) publication of *Restacking the deck: Streaming by class, race and gender in Ontario schools*, documents how the practice of streaming based on students' race, ability, SES, and gender, still prevails in education. The authors' discussion on the history of intelligence testing in schools, however, is intrinsically related to the types of labels placed upon youth who are not the

"high-achievers." For instance, Clandfield et al. (2014) discuss how intelligence testing, which has been proven to be notably biased and in favour of White middle-/high-income students, "can be seen largely as an effort to devise more efficient means to sort people for their social destinies on the basis of supposedly fixed intrinsic capacities" (p. 27). In this case, the history of intelligence tests has become the basis for inferring the general intelligence of elementary and secondary students via high stakes assessment and evaluation, thus setting the precedent for labeling and streaming them in their educational trajectory. Furthermore, when serving children and youth with exceptionalities, students with Mild Intellectual Disability (MID) and Behavioural needs will be accommodated in Applied or Locally Developed level courses (i.e., workplace-directed programming), while students who are designated as Gifted will enter the regular Academic level stream with in-class enrichment curriculum (Clandfield et al., 2014). As this book makes clear, the practice of streaming students "is one way the public educational system serves to restrict access to some advanced forms of knowledge and legitimates political and economic inequality" (Clandfield et al., 2014, p. 298).

In an article published in the *Harvard Graduate School of Education Magazine* entitled, "The Troublemakers", Lander (2018) writes about her experience as a secondary school teacher in the United States by responding to a permeating question in her writing:

When students act out, why do we seek out flaws in their character? Shouldn't we instead search for the flaws in our schools and our teaching, holding us, the adults, primarily responsible? Shouldn't we find better ways to understand the problem children, the ones we label the troublemakers (para. 1)?

The demographics of Lander (2018) U.S. History class comprised 11th and twelfth-grade students who were recent immigrants and refugees originating from more than 25 diverse countries. In her article, Lander (2018) focuses upon a student named Joe, who she describes as a funny, opinionated, and polite student. Joe also had a loud volume in the classroom and often required frequent reminders from his teacher to raise his hand when speaking aloud, as opposed to calling out during inappropriate times. Lander (2018) described how "[w]e teachers all have our Joes. Our students who consistently call out, talk back, refuse to participate or sit down or stay on task. They throw our lessons into disarray, make our heads pound" (para. 8). Lander (2018) goes on to recount the many methods teachers often employ in order to manage and support the "troublemakers" in class like Joe, such as utilizing tracking systems, implementing rewards for desired behaviour in the classroom, and deploying periodic changes in seating plans. Moreover, she highlights how schools often respond to the "troublemakers" who exhibit misbehaviour by excluding such students through practices such as timeouts, visiting the principal's office, and assigning suspensions and expulsions (Lander, 2018). In a similar vein, Jarvis and Okonofua (2020) research closely examined the degree to which biases affect school

leaders, particularly school principals' severity of discipline in response to managing both White and Black students' misbehaviours that occurred in the classroom. Jarvis and Okonofua (2020) investigated "whether the racial stereotyping processes that affects teachers' roles in the disciplinary process might also apply to principals' roles in the process by testing how race impacts disciplinary decisions" across two misbehaviours (p. 493). The study, which was based in the United States, comprised a sample of public middle and high school assistant principals across two misbehaviors. Jarvis and Okonofua (2020) found that the school principals "endorsed more severe discipline for Black students after the second misbehavior compared with White students. Because misbehaviors were held constant, we can conclude it is due to the student's perceived race and not aspects of the misbehavior" (p. 496). Furthermore, the researchers found that Black students were not only more likely to be considered as "troublemakers" compared to other White students, but also received harsher punishments from their school administrators, such as the assignment of a greater number of detention days. This article, therefore, highlights the labelling process that is inherent to biased disciplinary actions for "troublemakers" by virtue of systemic discrimination and the legacy of labelling students. The higher rate and length at which Black students are excluded, in comparison to their White peers, also raises concerns of how these more severe patterns of punishment are impacting marginalized students' academic success.

Resilience and Marginalized Students

The American Psychological Association (2020) defines resilience as follows: "the ability to adapt well to adversity, trauma, tragedy, threats, or even significant sources of stress" (para. 3). The Ontario College of Teachers (2020) also encapsulates resilience as possessing the skill to solve problems, cope with challenges, and find new opportunities. A resilience mind-set, however, "acknowledges that the infinite variety of future threats cannot be adequately predicted and measured, nor can their effects be fully understood. Resilience acknowledges that massive disruptions can and will happen" (OECD, 2020b, p. 11). In this manner, students of various backgrounds, identities, living circumstances, and ability are taught that their resiliency is testimony to their ability to overcome adversity in their personal-professional experiences. Resilience training through curriculum design and educators' pedagogical practices serves as a supposed solution to support marginalized and vulnerable students. However, is the push for resiliency training truly conducive for all students who face systemic barriers and inequities in their schooling? Education systems themselves may actually "have become an adversity through which people must pass as part of their preparation for society" (Shafi, 2020, p. 59). In her research and examination of resilience in education, Shafi (2020) writes.

The drive for improving standards in education has led to a standardisation of education (through national curriculums), a measurement culture (through incessant national and international tests), a surveillance approach (though e.g., OFSTED), all combined with a rapidly changing society means that young people need to be resilient just to navigate the systems and structures of a formal education system (p. 60).

Indeed, the term resilience appears to have become a buzzword that "invited critics to suggest a conceptual haziness and a temporary fashionableness, which has lent support to those who argue that the word has come to mean everything, but nothing" (Shafi, 2020, p. 69). Moreover, Shafi (2020) makes it clear that the concept of resilience is "by no means a silver bullet—it cannot solve problems but it can help provide the environment for solutions to prosper" (pp. 69–70). As advocated by the OECD (2017):

Schools are not just places where students acquire academic skills; they also help students become more resilient in the face of adversity, feel more connected with the people around them, and aim higher in their aspirations for their future. Not least, schools are the first place where children experience society in all its facets, and those experiences can have a profound influence on students' attitudes and behaviour in life (p. 3).

Therefore, in deconstructing the resilience literature cited herein, we can see that there is a critical call to action for educators to support students in developing not only the resilience to cope with daily challenges both in and outside of the classroom, but also developing the resilience to cope and then appropriately respond to systemic structures and barriers in society that prevent them from achieving their fullest potential and personal-professional aspirations.

Practices and Policies in School Systems

In Restacking the Deck, Clandfield et al. (2014) argue:

The way the system has been structured by those in power and the ways in which teachers are required to work within these prescribed boundaries are mainly at fault: the grouping, selective treatment of students, differential program streams, differential expectations, the large classes, the pressure on teachers to cover a standardized curriculum, the lack of opportunities and resources for teachers to offer innovative curricula, courses and programs to students, not to mention the multitude of regulations, policies and procedures that determine where and how teachers will carry out their duties (p. 7).

Indeed, schooling for a new normal will meaningfully and effectively manifest only when teachers and students are placed at the center and are actively involved in *all* phases of reformation (i.e., planning to implementation to useful assessment and evaluation for all students) and advocate for the particular needs of their school community (Clandfield et al., 2014). At no other time during this

pandemic global crisis, and as the world waits in hope for a healthier tomorrow, is it ripe for a meaningful new normal of schooling for an equitable education for all students.

In relation to the unprecedented changes in education and its implications for educator providers (both pre-service and in-service), the disruption of COVID-19 "has changed education forever" (Association of Canadian Deans of Education, 2020, p. 2). Recently, the Association of Canadian Deans of Education (ACDE) released a position paper advancing that "[a]t the core of challenges and opportunities created by COVID-19 is how to reimagine a system of education based largely around physical schools, and how to prepare educators" (Association of Canadian Deans of Education, 2020, p. 2). The Association of Canadian Deans of Education, 2020 recommendations are part and parcel of its five high-level markers that ensure investment in flourishing via education and teaching in a present and post-pandemic Canada. The five markers are: 1) Responding directly to increase mental health and well-being and other needs of students and colleagues due to the pandemic; 2) Ensure the prioritization of Indigenous education equity in the national and regional COVID-19 response planning and implementation; 3) Capacities and capabilities related to ensuring ongoing professional learning for new and experienced teachers; 4) Connectedness and cohesion associated with teachers' participation in community-based post-pandemic initiatives, in addition to inschool activities and educational research; 5) Resilience and transformation through investment in research within the field of education, human capital, embracing innovation, leadership, and knowledge transfer.

The existing literature takes into account the lived reality that high-income, privileged students whose parents have obtained higher levels of education and better-paid, prestigious jobs benefit from accessing "a wider range of financial (e.g., private tutoring, computers, books), cultural (e.g., extended vocabulary, timemanagement skills) and social (e.g., role models and networks) resources that make it easier for them to succeed in school" (OECD, 2016, p. 63). Students from families with lower levels of education or those severely affected by low-paid employment, chronic unemployment, and poverty (OECD, 2016), are not provided the same academic opportunities, cited above, in comparison to their affluent, higher-income peers. The findings of systemic barriers in the literature spotlight the dire need for schools to seek ways to establish human connections with their community of learners, affirm student voice and identity within virtual and face-to-face classrooms, and acknowledge students' lived experiences, aspirations, and interests (Shah, 2019). This paper will exemplify a lived curriculum (Kitchen et al., 2011) of teachers working alongside students during COVID-19 where relational stories inform an urgent need for schools to recreate systems of care, equity, diversity, and inclusion for all.

THEORETICAL FRAMEWORKS

Narrative Inquiry

This research is a narrative inquiry that is school-based research (Xu and Connelly, 2010; Kitchen et al., 2011). Following Clandinin and Connelly (2000) ground-breaking work on

teachers' personal practical knowledge and the professional knowledge landscape of schools, narrative inquiry has long been an empirical research method that often focuses on the examination of how teachers come to know schooling as a lived curriculum. Connelly and Clandinin (2006) use a three-dimensional inquiry space to describe facets of narrative storied experiences as research is conducted. The three-dimensional space helps researchers attend to: 1) temporality of experiences or happenings in the school site and how the temporal past of teaching at the school community, the present of teaching during a pandemic at that same school community, and the future of teaching post-pandemic, help to shape the stories of participants; 2) sociality, or interactions with teachers and students, which help deepen the understanding of each of the stories told; and 3) place, or the topological setting where the events take shape, which aids in making each narrative tangible (Connelly and Clandinin, 2006).

Narrative inquiry is the research form as well as the research method; that is, it is both method and phenomenon (Clandinin and Connelly, 2000). To help researchers deconstruct storied data, a 3R narrative element framework (see **Figure 1**) was used (Ciuffetelli Parker, 2013; Ciuffetelli Parker, 2014). Ciuffetelli Parker (2019) writes,

Narrative inquiry gives first-hand and authoritative voice to the life stories ... The terms *narrative reveal*, *revelation* and *reformation* are useful to help burrow deeply into issues of bias and systemic barriers in educational landscapes. Observing from a wider perspective using the elements of reveal, revelation, and reformation, helps untangle how teaching and learning get enacted when assumptions also get enacted in classrooms, schools, and the larger community.

Narrative reveal is used to help excavate participants' stories that surface in the living and telling of experiences of teaching in systems that have barriers affecting under-represented students. Narrative revelation shows, once a story has surfaced, how it can be interrogated further against systemic issues in schools, to gain further perspective of students' and teachers' lived curriculum, in particular in the present telling of these stories during a pandemic-hindered experience of schooling. What results is a magnified revelation on the barriers that already existed prepandemic. Narrative reformation shows how lived narratives of educators can begin to help reform newer understandings through an awakened mindset towards change—in this case towards change of practice in schools to begin to eradicate systemic barriers for students who lack social capacity.

Ethic of Care: Identity and Teacher-Learner Relationships

This research also uses a theoretical framework encompassing an ethic of care (Noddings, 1995). Within this realm of an ethic of care, Nel Noddings (1995) advocates for the reorganization of school curriculum to encompass teaching themes of care in the classroom. It is imperative to note that teaching such themes of care is not merely reduced to "a warm, fuzzy feeling that makes people kind and likable" (p. 676), but rather a teacher's vocation



FIGURE 1 | 3R narrative framework (Ciuffetelli Parker).

to ensure that their students are genuinely cared for and learn to reciprocate that form of care towards others. A teacher's curriculum design that envelops the ethic of care may be focused upon thematic units such as life stages and spiritual growth, while a theme related to "caring for strangers and global others" might include the study of poverty, war, and tolerance (Noddings, 1995, p. 676). Moreover, Noddings (1995) notes a striking reality for many educators surrounding the ways in which teaching care transcends beyond the demands or conventions of traditional hard copy books and pencil/paper pedagogy. Noddings (1995) writes,

All teachers should be prepared to respond to the needs of students who are suffering from the death of friends, conflicts between groups of students, pressure to use drugs or to engage in sex, and other troubles so rampant in the lives of today's children. Too often schools rely on experts—"grief counselors" and the like—when what children really need is the continuing passion and presence of adults who represent constancy and care in their lives (p. 678).

Evidenced in the above passage is the fundamental importance and moral imperative of diversifying and enhancing the curriculum to meet the academic, emotional, cognitive, and psychological needs of all learners. It is through this diversification that Noddings (1995) argues how "[o]nce it is recognized that school is a place in which students are cared for and learn to care, that recognition should be powerful in guiding policy" (p. 678).

The ethic of care is also a powerful guiding policy within the field of education, as referenced in the *Ethical Standards for the Teaching Profession*, by the Ontario College of Teachers (2016) in Ontario, Canada. The four ethical standards—Trust, Respect, Integrity, and Care—reflect "the professional beliefs and values that guide the decision-making and professional actions of College members in

their professional roles and relationships" (p. 6). The ethical standard of *care* is defined by the College as including "compassion, acceptance, interest, and insight for developing students' potential. Members express their commitment to students' well-being and learning through positive influence, professional judgment and empathy in practice" (OCT, 2016, p. 9). The emphasis placed upon an ethic of *care* in both accredited preservice and in-service programs of professional teacher education (OCT, 2016), in tandem with Noddings (1995) advocacy for teaching themes of care in the curriculum, exemplifies the profound interconnection between care and commitment to student success.

Equally important is fostering and nurturing not only students' identities but also educators' identities, within the realm of an ethic of care. Hence, closely examining identity and its interconnection with teacher-learner relationships is an integral aspect of proactive practices during and post COVID-19. The participants in this study made this very clear as they shared their narratives. Parker Palmer (2007), The courage to teach: Exploring the inner landscape of a teacher's life, advocates for such a vision of the type of compassionate teacher necessary for effective reformation practices that emphasize the importance and cultivation of both educator and student identity. Palmer (2007) asserts that "[t]eaching, like any truly human activity, emerges from one's inwardness, for better or worse. As I teach, I project the condition of my soul onto my students, my subject, and our way of being together" (p. 2). Furthermore, Palmer (2007) posits the notion that "we teach who we are" (p. 11) and argues that the often concealed, inner landscape of an educator's life is heavily dependent on self-knowledge. For instance, if a teacher does not know themself, how can they know their own students because, "When I do not know myself, I cannot know who my students are. I will see them through a glass darkly, in the shadows of my unexamined life-and when I cannot see them clearly, I cannot teach them well. When I do

not know myself, I cannot know my subject..." (Palmer, 2007, p. 3). Consequently, an educator's identity is fundamental to knowing each unique student that comprises the teacher's community of learners; advocating for students identified needs through practices that are equitable and specifically address vulnerable and oppressed students is the crux of how educator narratives are illuminated in this paper.

METHOD

This research used a qualitative study approach, with a focus on experiential narratives. Use of narrative telling (Connelly and Clandinin, 2006) by participants provide close-to-the-ground experiences that allowed for revelations and complexities of teachers' and students' lives pre-pandemic and pandemic, and situations, school and family, in the context of mixed demographic population of students (socio-economic, ethnicity, race, ability, identity, sexual orientation, etc.), and school programming. Narrative inquiry is a contributing method that represents stories of systemic barriers in school systems, in particular as it regards students living in low-income, racialized, or other marginalized contexts. Practising stories of teaching were lived and told through educator participants (Clandinin and Connelly, 2000; Ciuffetelli Parker, 2014). The narrative retellings give first-hand voice to the life stories of teachers teaching during a pandemic, in view of already existing systemic barriers that minoritized students face. In addition to the research method using narrative inquiry as phenomenon (Clandinin and Connelly, 2000), this paper uses a casestudy lens that takes a qualitative close-to-the ground approach, with flexibility to address perspectives and viewpoints (Merriam, 1998). In this way, the research is also complementary in method (Connelly and Clandinin, 2006).

The larger context for this paper is derived from a multi-year research program led by the first author, consisting of over 180 participants in two district school boards within four large secondary school sites from 2015 to 2020. Research program participants in the larger project engaged in specified focus groups as well as interviews consisting of: 48 secondary school students; 24 cross-grade teachers; 12 administrators; 24 parents and; 20 community workers. The larger research project focused on poverty and its intersectionality with schooling, mental health, and diverse student populations (Ciuffetelli Parker, 2018; Ciuffetelli Parker, 2019; Ciuffetelli Parker and Ankomah, 2019; Craig et al., 2020).

This paper drills down to capture the intimate, intensely lived, and storied experiences during the late fall and winter of 2020, of educators in one of the project's school sites. The school site is described as a suburban large high school, mixed social economic demographic (low-income, middle-income, and high-income families), mostly White students, with about 20% of the population identified as Black, Indigenous, Asian, and Indian. Educator narratives illuminate deep knowledge and insight into pre-existing school systemic barriers prior to the pandemic, and how those same barriers are spotlighted during the pandemic, which garner rapid change practice and necessities.

Participants

This paper has its focus on data collected in the COVID-19 pandemic year 2020 with two educators who were participants of the expansive research project conducted by the principal author since 2015.

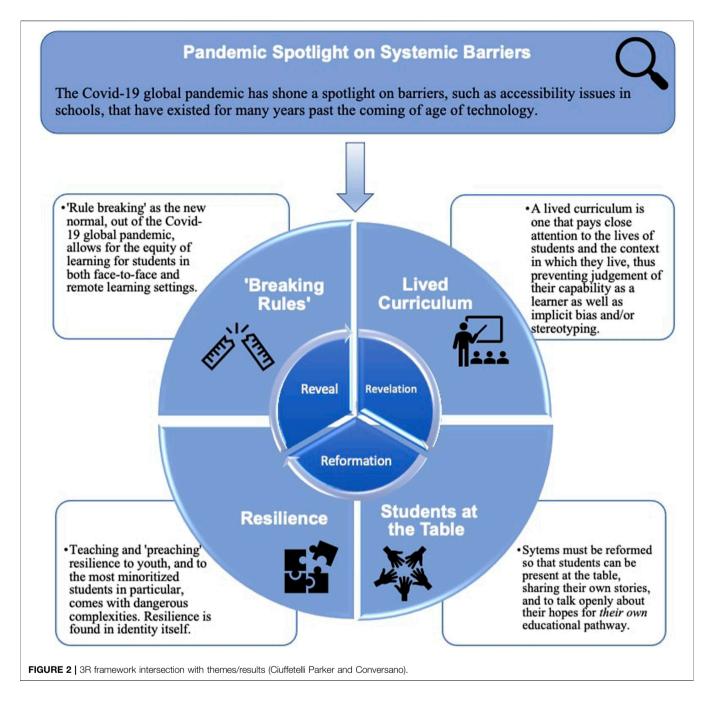
Kelsie is an experienced decades-long high school teacher, finishing her last year of her career before retirement. She teaches Anthropology, Psychology, and Sociology, with an additional speciality in teaching English Language Learners and Special Education. Catherine is a veteran educator who heads the district school board's equity and inclusive unit and is a member representing provincial assessment and evaluation for her district; as well, in her role as a consultant and liaison for K-12 schools, Catherine provides ample collaboration within and outside of K-12 school systems on topics of research, assessment, policy, and curriculum advancement.

Data Sources and Analysis

The data focuses on: one 2-h interview, one conversation, and approximately ten email correspondences between the principal investigator (first author) and participants. Also relevant is data collected from the participants in this paper from 2015 to 2020. This data provides background context and a narrative continuum of their teaching lives, as it relates to systemic barriers in schools, as well as their curriculum philosophy on students' social capital and access due to living circumstances, race, culture, language, mental health, and ability.

The first author as principal investigator and second author as research assistant conducted the interview by Lifesize call, due to pandemic distancing protocols. The first author then followed up with telephone conversations and email correspondences with the participants for any missing details relating to questions asked. The second author transcribed the recorded interviews and both authors triangulated the data. We asked the general question: How has schooling been successful or not during this global pandemic and in already challenging circumstances for the most vulnerable students? Other examples of the focus group questions/discussions that generated narratives were:

- 1) If you can reflect on yourself as an educator five years ago to the educator you are today, how have you changed, or not, and what have the conditions of our rapidly changing world revealed about you as an educator or as part of what you believe about schooling and curriculum?
- 2) What is your experience or revelation about teaching during a pandemic as it relates to students' accessibility to learning and pathways for secondary and post-secondary education?
- 3) How has this pandemic shifted the way you think about, or how your students think about issues of equity (i.e., the Black Lives Matter justice movement; diversity, inclusion, equity, poverty, race, culture, language, gender, identity, ability, etc.)?
- 4) How do you view accessibility for learning, especially for students as it relates to technology accessibility, curriculum accessibility, social capital? How have you processed this and enacted issues of accessibility in your teaching or work with students, colleagues, administration, parents, etc., despite challenges in school systems?



5) What reformations do teachers and society need to embrace, if any, for post-pandemic education?

A bottom-up approach was used to analyze the data (focus group interviews, transcripts, narrative reflections, field notes). Multiple data sources were sought and open-ended interview questions were used; triangulation of themes, categories, and theoretical propositions were used. The use of narratives that explored participants' core values as a way to more deeply understand the narrative were sought. The data was analyzed by culling all sources, reading and coding the issues, coding the issue relevant meanings as patterns, and then collapsing the codes into themes (Creswell, 1998, 2005).

Limitations

Limitations of the data set of this paper includes the small sample size (from the larger research project and participants). That said, as in narrative inquiry qualitative method, "Story is not so much a structured answer to a question, or a way of accounting for actions and events, as it is a gateway, a portal, for narrative inquiry into meaning and significance" (Xu and Connelly, 2010, p. 356). Narrative inquiry pays less attention to the volume of quantifiable words and numbers, and more attention to the participants' storied experiences as lived and told through stories on a longitudinal continuum. The stories are represented as "actions, doings, and happenings" (Clandinin and Connelly,

2000, p.79) over a longitudinal research program, and we ensure authenticity and defensibility by paying attention to understanding how this inquiry is anything more than trivial or personal. We set the data garnered against the larger research project where these same participants have been a part of over the last several years, as well as what the narrative inquiry helps us learn about the phenomenon of schooling and systemic barriers during COVID-19.

Findings: Narratives of Teaching in a Pandemic

The findings are presented in themes generated from the analysis of data (see Figure 2). The themes focus on interviews and storied responses from educators Kelsie and Catherine, while in the midst of the pandemic as they tell and share: their past and present experiences in teaching and leadership; their relationship with students and colleagues, and; how systemic barriers and accessibility in schools have been further magnified by the pandemic. While both Kelsie and Catherine engaged in sharing their storied experiences, it is Kelsie that shares in abundance her personal teaching narrative, particularly as the discussions took place in the midst of the pandemic while she was teaching in person and, as waves of the pandemic hit, remotely. Alternately, because Catherine's role is as educator consultant, her storied perspective is in response to Kelsie's narrative but with a system-wide point of view, memories of her teaching, and present system-based practices and policies that she oversees. The themes are titled: 1) Pandemic spotlight on systemic barriers: Uncovering what was always there; 2) Breaking rules to create a new normal; 3) Lived curriculum: Teacher-learner relationship 4) Students at the table: A move for reforming streaming practices; 5) Resilience: Connection to identity and breaking down barriers.

Pandemic Spotlight on Systemic Barriers: Uncovering What Was Always There

Kelsie identified decades-long shortcomings. Barriers, and accessibility issues for students and teachers in school systems, and how the pandemic shone a spotlight on these barriers that have existed for many years, past the coming of age of technology. She is passionate as she describes necessary tools that all students should have access to in publicly funded schools:

[W]hen we look at the timeline like thirty years, and we look at how things have changed dramatically . . . if we were back even ten years ago, we wouldn't have had technology [during a pandemic]. This wouldn't be happening. We'd all be in isolation as we would have been in 1918. Alright, so we kind of think, you know, it's a very different approach. Umm, in school, the mandate has always been—and correct me if I'm wrong—if you are expecting students to perform in a certain way, you must provide them with the equipment, the tools necessary for them to do their learning . . . in the past it was a textbook. So, we always had textbooks. You provided textbooks . . . So if the expectation is that all students are going to have to have internet access at home [the system] is going to have to have technology, whether it's a Chromebook, a laptop, whatever it might be, at

home outside of school—then it must be provided for by the [system]. It has to be. And it has to be equal across the [school] board. We don't want to segregate, isolate, you know, have students stand out because "well, how come she gets that and he doesn't get that?" Right? And so, we have to sort of say, you know, when it came to textbooks everyone got a textbook. When it came to pencils, we used to actually give out pencils. Everyone got a pencil. So, you know, since we're not spending on the textbooks, we're not spending on the pencils and the paper, then I think we need to provide students—every student, regardless of background, regardless of socioeconomic status—with the exact same tools. And then we are leveling the playing field.

Kelsie further shares that there can be other changes made that pertain to scheduling, in particular at the high school level:

I don't think that you can deliver during a pandemic Monday to Friday, four periods a day. That is not reasonable. It's not healthy for the children because they're going to be competing for time slots, and logging in, logging out, four times a day, which is just . . . not gonna happen. It's gonna create more issues than not. So, I think moving to more of a post-secondary style of delivery where you are meeting once a week. Maybe Monday's Period 1, Tuesday is Period 2 . . . I mean, you just have to re-imagine this so that way there is consistency.

Further, she explains why scheduling similar to post-secondary systems, as an institutional reform, is vital for student success:

There is ... a schedule because children need a schedule. [Students] need to know when things are happening, and this will reduce anxiety for those that are highly anxious. But then those that aren't anxious at all, now have anxiety, you know, concerns ... because their world is turned upside down. So, I think changing it up and being open to saying, Monday's Period 1, Tuesday is Period 2 ... and Friday is ... like our office hours. So, I think that there has to be a way of supporting the teacher, the student ... and allowing for us to not have to be tied to a particular routine because that's what it always has been. My quote that I use regularly with class: "If you always do what you've always done, you will always get what you've always got." And we can't keep doing what we've always done. It wasn't working anyway, to be honest. I've been doing this for thirty years—it wasn't working.

Breaking Rules to Create a New Normal

Kelsie's values and how she thought about how to create a new way of teaching with technology, a new way of scheduling her courses in high school, and a new way of listening to student needs required, revealed that sometimes what needs to happen is a 'breaking of the rules' of sorts, of school working policy and traditional Eurocentric ways of schooling:

Okay. So, I kind of went against the rules. (Laughs). I was a little bit of a—yeah, that doesn't work for me. (Laughs) . . . My thought process was: if students are gonna make a TikTok out of me, they're going to do it in class. They're still gonna do a little video of me. They're gonna do it in class. They're gonna do it online, they got nothing else to do!... Bring it on. You know? It

didn't make a difference to me. So, I actually went live immediately. I did meetings, virtual meetings, and I have to tell you I had at the very beginning ... about 95–100 percent [student attendance].

This is not to say that Kelsie did not have complications, as she reveals her Grade 12 students' anxieties and sadness about how the pandemic had affected their last year of high school:

Now the students ... a lot of them fell apart. My Grade 12s were devastated. But ... my very first meeting with them was: "Hi, everybody! We're gonna not have class today. We're just gonna talk about how we're coping or not coping." And it was a beautiful opportunity for them to look at each other. There were some tears, uh, on both ends. My side, too ... that shows the humanness. It shows the impact and it also opens up the conversations for the comfortable ones saying, "I really didn't want to get out of bed. Actually, I'm still in bed. See!" Umm, you know ... it opened up the world for them and then that segued into my lessons because I teach Social Science.

It was as if Kelsie had no choice but to break the rules, despite her being a "rule follower." She explains:

Well, I'm going to address the rule breaking. That was tough for me, alright. I am a rule follower and ... when it comes to getting in trouble, I'm just like the students. No one wants to get in trouble. But I also knew . . . the benefit of this outweighs any type of repercussion that I would have faced because I knew that my students needed this as much as I did, too. So, there was a little bit of selfishness in this decision as well but I also knew in the long run it would benefit my students [to break the rules]. So, I think with the rule breaking, we do have to ease off a little bit on these protocols where it comes down to: you're not allowed to go to a student's house [to deliver a Chromebook], you're not allowed to phone a student from your personal device [to arrange for technology home support while you are teaching some students in class and some at home]...where we have such a boundary—which is important to have boundaries but in this particular time, in a time of crisis, we [have] to throw everything out ... And so that we can maintain some sense of normalcy, right?... We need to create this new normal. We need to re-imagine how we're teaching. And we need to not have such stringent rules around that.

And I think there has to be more flexibility with regard to when we're [teaching live], when we are accessible, and when the students will be in class if we're [teaching] virtually. So, I think that we have to move to this flex time versus this eight o'clock till 2:15 timeline. [8 o'clock to 2:15] doesn't work.

Rule breaking as the new normal, out of the pandemic, became Kelsie's new normal of scheduling. What Kelsie long argued during her career as a high school teacher, such as early start times in the morning for still-developing adolescents, was something that caused tension for her during her thirty years as an educator. It took a pandemic for her revelation to rouse and a compel her to "break the rules" for the equity of learning for her students.

Lived Curriculum: Teacher-Learner Relationship

Both Catherine and Kelsie reveal their inner deep-set thinking of the teacher-learner relationship and how they both envision the making of curriculum that is both subject specific but also a lived curriculum that plays close attention to the lives of students and the context in which they live. Catherine shares this revelation:

I've taught every grade—K to 8—but mostly Grade 8. And when I left the classroom several years ago we were having more holistic conversations around students' learning and achievement based on, of course, their grades but also the learning skills and work habits. And I would argue that at the time, there was this sort of shift to: "Okay. Well, if students, you know"—from the high school lens— "if students are achieving a solid B, let's say, seventies. Then still they can do academic." And then I saw some, you know, belief systems [shift]. What teachers believe about students can either cripple them or empower them. So, if you think that, you know, a student misbehaves, umm . . . they can't get their homework done, they can't self-regulate, how are they ever going to survive in an academic classroom?

Kelsie Adds

And that's our job—is to be the greatest observers of all. The ones to notice ... to see the person. And when I talk to my students, when I talk to my friends, I say: "I see you." And then they know that I'm seeing their potential regardless of the mess that they're living in, I see you. And I can see what you can bring to this table. Now, I think that's something that . . . maybe it can't be taught. It may become part of who you are as a person and how you deliver, and how you perform ... And when we're looking at offering more as an educator . . . I used to teach just these students. And I would teach them, and I would support them to some degree, whereas now my role has changed so dramatically that I'm not just their teacher and disseminator of information ... I'm assisting them in the next step to wherever they're going in life ... It's lovely to have this beautiful curriculum and these lovely expectations but.... if you share your stories with your students, to some degree—they see you as a person. And then seeing you as a person, they connect with you. And in connecting with you, that gives you an opportunity to be even greater and to have a greater influence. And so, I really think that's key for new educators: don't be afraid to show that you're human. And don't be afraid to show your emotion.

Students at the Table: A Move for Reforming Streaming Practices

Catherine, as a systems educator/consultant, and with a progressive pedagogy for teaching, revealed a systemic issue of streaming students that has caused ire throughout the years. She relays how several guidance counsellors mislead elementary students going into high school:

"You know, if you take applied you only have to take this course to get to academic." No. Kids need more time to feel where they're at and we need to really revisit what we're doing about [streaming students into applied courses] and how we're teaching them ... because the applied classes have been offered to the kids with "behaviour problems" and the academic [courses] for the kids who "do their homework."

And that's how it's playing out in schools and it's not right. And I feel really badly about that ... And I've been playing on this de-streaming with Senior Admin for a while. And when ... recommendations came out from the Minister of Education [to eliminate streaming by de-streaming students] ... I forwarded it to my Superintendents that: "I wanna spearhead this work at [our district school board]. I believe in de-streaming." I've been talking about de-streaming for years and no one listens to me. Because—I get it. There's a logistical . . . there's unions to work with and what not. But, I'm so glad to see [destreaming] coming and I hope it's coming for all the right reasons, and to empower our Black and Indigenous students, and people of colour, and all students who don't see themselves as learners. And we need to help them so they find their way, whatever it may be in life.

It is an issue of equity, and labeling, as Kelsie agrees:

And when I think back to my career teaching Grade 7 and Grade 8, making recommendations, yada yada, for students. Umm, we get into that whole we've pegged them at a certain spot. We've labelled them. They become the label, and then there's their life ... and as a Grade 8 teacher ... I did my job. I did it well. I was very open and looking at the holistic child, not just the academic performance, and made recommendations based on the entire picture. I don't know that's necessarily the norm, even in today's day and age. Umm, and I can only speak to my direct experience with my students and my own children who have gone through the system that feeds our school. And I've unfortunately witnessed some negative outcomes.

Catherine adds another revelation, in making sure and allowing students themselves at the table to make decisions about their own education pathway, especially those students who are the most marginalized and racialized in school systems:

And I'd like to add to that I think what you're saying is sort of connected to what I'm saying. Because I work closely with our student management system operator, the documentation that is currently happening within these notes that are secured, umm, from a system level, are not the flavour of notes you would expect to read about students and you wouldn't want to read some of these notes. And there's the whole privacy issue. So, I think what we're really talking about ... is how do we create more opportunities for these conversations to happen with the students at the table? So, we even talk about the transition meetings eight to 9—why aren't the kids there having a conversation? Because if we can say something about that child, the child should be at the table to explain their own learning journey, what they're experiencing, strengths, needs ... In our student voice surveys, we ask how many students have been involved

in those processes and usually the reporting on that is very few. It's about them! So, they should be at the table and perhaps alongside their families. Students [should be allowed] to talk more intimately around their needs and how we can support them? And I think that's super important when we're thinking about our own identities. All of us [who are] White, with lots of privilege. We can't say that we understand when we don't, and we shouldn't. We need to learn. We need to listen.

Resilience: Connection to Identity and Breaking Down Barriers

Student resiliency, especially during the pandemic when all seemed exposed and highlighted as it regarded students' needs, mental health, academic success, and well-being, was a topic taken up by both Kelsie and Catherine. Kelsie spoke of resiliency past and present:

Resiliency of the students ... when I reflect back, students today compared to the past, umm... It's a different type of resilience that we're seeing. And I think that them being able to roll with change is really important. This [pandemic] has really kind of put things in the forefront, right? We've had to disconnect from everything that we have normally done and find a whole new way of re-connecting. And I think this [pandemic] has truly created an opportunity for Canadians to see how important our education system is to the fabric and the fibre of our country, of our people ... And I think that this pandemic has really sort of put in the face of society, it's like "Oh, wait. We can't. We need you." Right? "This doesn't work this way without [teachers]." And I think that's kind of like still a key element with the resilience factor that we have trained our students to become more resilient, to cope in a different way.

Catherine acknowledges Kelsie as an extraordinary educator, and provides her own understanding of the term resiliency and how it bumps up against students whose world offers little equalizing of the "playing field," especially as it relates to student identity and educator identity:

The disclaimer on resilience for me is—I know we reduce it to a set of practices like lessons on empathy, or umm, I don't know, maybe some sort of meditation or whatever. But if you got barriers in place like, when we talk about being in institution and system level, and barriers in schools and policies, and rules that could . . . block our attempt to develop resiliency in each other, in students . . . So, I think it's important to remember that . . . Resilience sounds nice but it's not always possible if everything else is working against us . . . So, it's important to recognize, you know, within systems like publicly funded education . . . what are we

doing in our systems and institutions that are disabling these sorts of things, like being resilient? But it's super important, again, to know yourself as a student, a family member, the educator, a principal—whatever—to know yourself. That identity piece is huge - knowing it and then it sounds like the people who are comfortable enough, like the extraordinary educators we have here ... knowing it well enough and being comfortable with it to share it, so you can build some trust and connection with your student, so they can see that to be resilient is possible while hopefully we're breaking down any barriers for them to be able to act as resilient people.

DISCUSSION OF FINDINGS

The issue of technology and access to technology has been a barrier in schools for many years and certainly prior findings that have come out of this research project on marginalized and vulnerable students has highlighted this inequity prior to COVID-19. Kelsie acknowledges there has been a systemic problem for years and adeptly compares textbooks and pencils—the basic necessities for elementary and high school students, to Chromebooks and computers. This sort of debate, perhaps a mere two years ago, might not have been a wellreceived argument for institutional leaders to hear or pay attention to, never mind act, due to budget constraints and so on, leaving this accessibility barrier unanswered for. Yet suddenly, with the pandemic taking over globally, online learning has become a dire necessity for schools to function, and so too are Internet bandwidth, technology tools, and accessibility for every student in every school district in Canada and other developed and developing countries. The pandemic spotlight on school systems forces educators like Kelsie and Catherine to give voice and evidence to what basic necessities for schools actually mean. It is no longer pencils and paper and hard copy books. Alas, it is technology advancement itself that forces necessary technology access for every student, in order for school systems to "catch up" to our modern world. Technology itself has been the saving grace during this pandemic to allow for curriculum teaching and learning to occur. And yet, how many students did not have access to technology? The pandemic was the catalyst that unveiled what was behind the curtain—outdated systems that tout middleincome assumptions that all families have access to tools and technology. But this is the farthest thing from the truth. The pandemic has shown clearly that there is dire inequity for students that have little to no access to the modern tools of society, like technology, which includes not only technological tools, but also Internet and bandwidth.

What Kelsie and Catherine help us realize is that the pandemic has emphasized the reality of the multitude of students in systems that continue to experience severe barriers and disadvantaged learning because of lack of accessibility. Important not to ignore is the assumption that society and systems enact a technology-abundant world for all people. In reality, technology is not accessible to at least one out of seven students in Ontario,

because of low-income living alone. It is worse in single parent homes, in homes where racialized and minoritized families have little access or easily accessible access to the same resources of mainstream families. The pandemic has exposed this reality to those that either made assumptions, or were complicit in their understanding; we have witnessed this aftermath after the pandemic forced school closures that then began a forced online teaching and learning in K to 12 schools. Kelsie understands that it is a necessity to 'level the playing field' and the pandemic, as twistingly ironic as it has been, has helped her articulate this in a manner that has shown what is possible for an equitable education for all children and adolescents. Every student in her school system was provided a Chromebook and Internet access for families who required it. Kelsie was forced to "break the rules" of teacher student boundaries and she delivered the Chromebooks and telephoned for easy access to Internet for her students' families. So now the question we ask is: is Kelsie breaking the rules, or is Kelsie breaking down barriers to even the "playing field" for all students?

Kelsie illustrates how she breaks the rules by not having a regular scheduled lesson, in order to have a discussion about "coping or not coping" during the pandemic. She cried together with her students, out of compassion and deep understanding of what they were going through, and then she taught her lessons after taking care of the socio-emotional condition of her students and herself, both in the context of what the world was experiencing and in particular on what her Grade 12s were experiencing during the turmoil of final high schoolyear, a year that what would have otherwise been a joyful rite of passion as graduating seniors.

A lived curriculum, suggests Catherine, is one that gives value to students' experienced context, where every educator needs to take notice and honour that context, rather than judge the capability of a learner with implicit bias or stereotypical understandings of students' lives. Kelsie echoes the same sentiment and suggests that new educators should "not be afraid to show that you're human." She insists that her role as she ends her teaching career has been not as a disseminator of knowledge but as a human being who assists her students "in the next step to wherever they're going in life." Catherine lays bare the issue of systemic racism and bias against the most vulnerable of students: Black, Indigenous and students of colour, students living in low-income, and all students who have been implicitly discriminated against in school systems based on race, gender, sexual identity. Her warning is palpable given the reality in schools, pronounced further during COVID-19, "What teachers believe about students can either cripple or empower them." Herein lays the critical importance of relationship and care in systems. Is the teacher-learner relationship given the critical importance it requires in our modern-day school systems and especially post-pandemic, where the reality of online learning as a default mode of teaching may remain? An ethic of care is essential as we transition to a new face of education, post pandemic.

Months before the pandemic hit, there was much discussion in Ontario about eliminating the streaming of elementary students entering high school into general applied-level courses, without proper merit, or worse, based often on implicit systemic discrimination regarding ability, race, immigration, behaviour, and in relation to achievement expectation. Christine believed it devalued and oppressed students and families as she firmly articulated, "how it's playing out in schools is not right ... I believe in de-streaming . . . and I hope it's coming for all the right reasons." For all the right reasons, for educators like Catherine and for those whose mindset has shifted, perhaps because of the pandemic and the inequities on so many students, means that students' rights to an equitable education, no matter their living condition, may be a little closer to a hopeful realization, if systems are reformed, and barriers are removed. Catherine advocates for students to be present at the table, sharing their own stories, to talk openly and intimately about their hopes and dreams for their own pathway, and for teachers to support, rather than dismiss by assumption, the possible pathways for students. Catherine suggests further that educators' own identity is connected to reforming past practices, especially by listening intently to a student's context and life circumstance, "All of us [who are] White, with lots of privilege, we can't say that we understand when we don't ... We need to learn. We need to listen."

The topic of resilience was complex throughout the duration of this research program over the years and the conversation with Kelsie and Catherine unpacked this complexity further. Kelsie valued her teacher-learner relationship with students, and the many in-class and online conversations with students because "students need to have this grounding . . . a key element with the resilience factor that we have trained our students . . . to cope in a different way." Conversely, Catherine, albeit acknowledging the extraordinary teachers like Kelsie in the field, has noticed over the years that teaching and preaching resilience to students, and to the most minoritized students, comes with dangerous complexities. Catherine notes a disclaimer on resilience, and this has been her position over the years in advisory board meetings, in research panels, and in many other research focus groups. She posits that the reduction of resilience to "lessons on empathy," in the face of systemic barriers, hinders success. She warns us that teachers need to be mindful and pay close attention to "what we are doing in our systems and institutions that are disabling . . . like being resilient." Her solution, as she has brought these complexities to the surface, is found in identity itself: "That identity piece ... knowing it well enough and being comfortable ... build some trust and connection with your student, so they can see that being resilient is possible while hopefully breaking down any barriers for them to ... act as resilient people." To be clear, the disclaimer here is that resilience for all students can only work if it is immersed in identity: identity of students' lived context and learning; identity of teachers and their full understanding of their own context vis-à-vis their students' context of living, and; breaking down barriers to be able to realize the full potential of resilience to be able to have a pathway to success for all students.

The next section offers recommendations, divided into three pillars of opportunity: enhancing professional practice; building a school culture of care; developing partnerships and relationships.

RECOMMENDATIONS TO BEGIN ERADICATING SYSTEMIC BARRIERS

Influenced from the data in this paper and correlating to a recent report of the larger research program written by Ciuffetelli Parker (2018) entitled, "Youth Strategy Research Partnership", we suggest beginning reform practices that can bear fruit now, as we await a post pandemic world of schooling:

Enhancing Professional Practice

Enhancing professional practice should take root by challenging deficit conceptualizations, preconceptions, and assumptions of poverty for youth, by educators at all levels of systems. The following recommendations are made:

- Offer professional development as a requirement on topics of equity, diversity, and inclusion, including topics on poverty and schooling, anti-racism, gender, sexual orientation, disadvantaged learners, language learners, and immigrant experiences.
- 2) Implement equity-based action research projects by practising teachers alongside youth. Issues of equity identified in this paper, taken up as action research with youth, will promote an equityrich and resilient-positive conceptualization of students.
- 3) Offer tutoring and peer tutoring programs within schools by teachers and teacher candidates, trained volunteers and specialists, for students requiring academic support in courses, including support for accessibility to learning tools (e.g., technology).
- 4) Educate with high expectations rather than lowering the bar based on implicit bias. Higher order teaching strategies readily include lessons, discussions, and in class participation that engage youth to learn by: applying, problem solving, reflecting, critiquing, creating, analyzing, connecting, and interpreting.

Building a School Culture of Care

Building a school culture of care begins with knowing intimately the environment, make up, and people within the community where educators service youth. To hold the view that it is a privilege to service a community of learners within the community where they live, is a beginning step to understanding deeply the call of teaching and the ability to create a safe, engaging, and inviting school culture. The following recommendations are suggested:

- Reconsider school rules and policies that strip dignity from youth. Such discipline of power, including educator use of unintended sarcasm, body language, yelling or unrealistic punishable penalties are examples that scar a student's ability to succeed as well as a student's human right to learn in a healthy space.
- Address systemic barriers and discrimination as an educational system, and in classrooms. Pay attention to the life of students and offer reprieve for those living in challenging circumstances.
- 3) Consider resources and school policies that matter. For example, up-to-date and new literacy technology is required in schools and in homes. Assumptions that homework and reliance on Internet for homework assignments is not a viable solution for most youth in challenging circumstances.

- 4) Implement innovative school-based strategies for educators and leaders, such as parent teacher student meetings—where the student has voice and is affirmed for their learning and successes and goal setting.
- 5) Consider more funding for youth with disabilities, challenges, trauma related learning disadvantages, etc., that offers sustained learning and a place of well-being and care.

Developing Partnerships and Relationships

Creating partnerships (between people and between schools and universities, colleges, non-profits, corporations, community hubs, etc.) has its foundation in the relationship that is built between teachers and students, teachers and parents, and schools and the larger community. The following recommendations are made:

- Engage youth with determination, continued effort and rigour. Successful teachers do not give up on their students. Successful schools do not give up on their community.
- Pay attention to the life narratives of youth, and embed a relationship-based and higher order pedagogy that adds context rich academic rigour and citizenship along with relationship building through care, trust, respect and dignity.
- Enrich and foster social services and health related community agencies for both physical and emotional wellbeing of youth. Socio-emotional well-being is directly correlated to academic achievement.
- 4) Combine an ethic of care with a pathway to resilience that is understood through the life experiences of each student, by listening and understanding contexts that are not always similar to your own. Resist judgement, bias and stereotyping by understanding the lived experiences of students.

CONCLUSION

The poignant narratives of systemic barriers and accessibility for students shared by the study participants make it clear that the outbreak of COVID-19 and pivot to remote learning has become a watershed moment on school systems. COVID-19 did not create systemic barriers and inequities cited in the storied data but, rather, amplified such disparities for our most vulnerable youth. The narrative findings from the present research study reaffirm that the following inequities are pervasive in educational school systems: access to technology; the academic streaming of youth; the perpetuating stereotypes and systemic biases that serve as an impediment to student success beyond secondary school, and; the complexities associated with proposing resilience training as a catchall solution for students, and particularly those students most vulnerable and minoritized. The data also reveals the dangers in following a traditional paper and pencil/textbook pedagogy that does not align with or reflect students' 21st century lived contexts (i.e., curriculum of life), especially in the context of pandemic teaching-learning. Fundamentally, there remains an undeniable and intrinsic connection between resilience and the identity of both students and educators. What we have learned from the narratives of Catherine and Kelsie, in essence, is that we must consider the value of identity for both educators and students, in

order to deepen the teacher-learner relationship founded upon an ethic of care, which thereby advances the possibility and hope of resilience, student voice, and student achievement, especially in the face of a post-pandemic new normal. Topics and issues that compel educators to take notice, such as poverty, equity, diversity, and inclusion and their effects on schooling, has rained down on systems by the pandemic's magnification. It is time to listen, to understand, and to act. As Catherine passionately advocates and reminds us, "We can't say that we understand when we don't . . . We need to learn. We need to listen."

The use of narrative inquiry has been invaluable to our understanding of how we can better deconstruct, reform, and rebuild new pathways to teaching and learning in order to support and meet the needs of our most vulnerable students. By deploying the 3R narrative framework to closely examine the narrative data cited herein, the present research reveals how the pandemic has made it possible for educators like Kelsie to engage in the practice of 'breaking the rules' as a means through which educators can successfully value students' lived contexts as a living curriculum. Administrative and teaching practices that emerge from shifting practices can, in fact, translate into effective post pandemic policy, recommendations, and equity reforms necessary for contemporary schooling that incites a new horizon of schooling, free of systemic barriers for all students. Such equity reforms will significantly advance the face of education in and beyond the global pandemic, as suggested by Catherine and Kelsie, by enhancing professional practice, building a school culture of care, and developing partnerships and relationships, towards the eradication of systemic barriers and a new normal of schooling accessibility for every student.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Brock University and NCD School Board REB #02-03-15-10 and REB #14-198. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

The first author, DC, is the principal investigator of this paper, involved in a longitudinal research program on poverty and schooling in elementary and secondary school settings. This paper focuses on narratives of systemic barriers during 2020. The second author, PC, is the research assistant for this paper and was involved with the principal investigator in the data collection for this paper as well as contributing to the literature review, transcription, data analysis, conclusion section of the paper, formatting (including references).

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Seeking Clarity in Murky Waters: Nuances of Equity and Social Justice From a Teacher Perspective

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In this study, I examined interactions between an English teacher and her students to illustrate ways in which issues of equity and social justice may play out in nuanced ways in the implementation of school curriculum in a diverse, Midwestern high school. These stories of classroom teacher and student experiences reveal complexities of how equity and social justice might unfold for students, and be understood by a teacher as she works with her students, to build a body of "teacher knowledge" (Clandinin and Connelly, 1996) that grows as the teacher gains experience. Examining complexities of "teacher knowledge" as a classroom teacher attempts to acknowledge her students' social and cultural backgrounds while also implementing curriculum that meets requirements established by her school board, offers insight into challenges a teacher might encounter while working with students of diverse backgrounds in a school context.

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INTRODUCTION

He stood up and exclaimed, "That's racist! That's racist!"

I asked him, "Did you hear what they were saying?" Then I asked the class, "Can someone summarize the message of the video for Jordan?"

Alicia responded, "She said that sometimes, you talk more casually, like when you're with your friends, and sometimes you, like, use more formal language."

And then, he stormed out of the classroom, and I haven't seen him since. . .

Nancy, a tenth grade English teacher at Midwest High School, was telling me about one of her student's responses to a video and follow-up discussion about the use of vernacular English that she had shown in class that day. We had fallen into the routine of talking about the morning classes as we ate our lunch together, Nancy at her desk at the front, right-hand side of her classroom, and me at one of the student desks facing the white boards that lined the front of the room. We usually had our computers open, intending to do some last minute class prep or grading of student work, but more often than not, we talked about recent events at school. Sometimes, we puzzled over the unexpected events or responses, such as the one that had unfolded in class that morning.

There are many ways that Nancy's description of the classroom interaction above might raise questions for a teacher. To begin with, Why did the student respond in this way to the lesson? Did he perceive the curriculum content to be offensive? And if so, what did he disagree with? Were there other factors contributing to his response? Could the same lesson have been presented in a different way? Where did the student go, and would he be coming back? I began with this vignette to capture some of the uncertainties associated with how issues of equity and social justice might arise and unfold

in class for a teacher when implementing curriculum for students of diverse social and cultural backgrounds in a school context.

Equity, defined as "the quality of being fair and impartial" (Fowler and Fowler, 1995), is examined here as ways in which students' equitable access to resources, including classes, curriculum materials, time needed to engage in school lessons, and financial resources available to support academic success, may be challenged due to circumstances in their lives. Meanwhile, attention to social justice in a school context suggests a commitment to striving, sometimes systemically, for a more equitable distribution of educational resources, for students. This goal is often grounded in the understanding that those with limited access to available resources may be assisted in accessing resources similar to those for whom access was more easily achieved through circumstances in their lives, such that they may be supported in achieving greater academic success.

REVIEW OF LITERATURE

Through the large, and growing, body of research literature focused on issues of diversity in education, we have gained valuable insights into ways in which students of diverse social and cultural backgrounds may experience schooling (Igoa, 1995; Carger, 1996; Valdes, 1996, 2001; Valenzuela, 2005, 2009; Chan, 2007; He et al., 2007; Olsen, 2008; Cameron, 2012) and ways in which their teachers may experience their work of supporting their students (Igoa, 1995; Paley, 1995, 2000; Cummins et al., 2005; Chan and Ross, 2009; Gatti, 2014). For all students, issues of equity and social justice should be important considerations at the core of their schooling. For many students of diverse backgrounds, issues of equity and social justice often seem to be highlighted or experienced in the form of challenges or obstacles in actively participating or engaging in school curriculum and activities. Academic challenges are often associated with limited proficiency in the language of instruction (Igoa, 1995; Cummins, 2001; Nieto and Bode, 2018), made worse by language policies which discourage the use of their home languages to support language learning (Cummins et al., 2005; Gandara et al., 2010). English language learners (ELLs) in American schools, for example, may have difficulty understanding lessons, completing assignments, and communicating their knowledge to teachers and peers due to their varying levels of proficiency in English (Igoa, 1995; Kouritzin, 1999; Au, 2010; Gandara et al., 2010). Cummins (2001) described how it can take as many as 5-7 years before language learners reach a level of proficiency needed to complete academic tasks with ease in a target language, although they may achieve oral proficiency much sooner. Sleeter and Stillman (2017) acknowledged language challenges as among the recognized dangers of standardizing knowledge in schooling when the student population is becoming increasingly diverse. High stakes testing required at critical transition periods in schooling, such as toward the end of their high school years, may be especially detrimental since ELLs may be hindered from progressing on to higher education due to difficulties in passing standardized tests (Au, 2010).

Students may also have experienced traumatic events before, during, or following immigration and settlement into new communities (Igoa, 1995; Pipher, 2002; Ross and Chan, 2008; Chan and Schlein, 2011). These challenges may be exacerbated by difficulties associated with limited access to financial, familial, social, and psychological support (Pipher, 2002; Ross and Chan, 2008; Chan and Ross, 2009; Chan and Schlein, 2010; Ciuffetelli Parker, 2013). Students sometimes arrive at school still struggling from traumatic departure from their home countries that included war and loss of birth homes, death or injury to family members, or relocation to communities where they do not have family or acquaintances. Even when immigration is planned well in advance and experienced under relatively safe and calm circumstances, changes in responsibilities and expectations for students that are associated with changes in the family's economic circumstances or familial composition following immigration are sometimes enough to create obstacles or distractions in students' ability to focus on schooling. Middle school students featured in Chan and Ross (2009) and Chan and Schlein (2011) studies, for example, elaborated upon how they were expected to assist their parents with the care of younger siblings and with the upkeep of their homes following immigration since both parents needed to work outside the home in order to support the family, whereas they were free to focus on academic pursuits or leisure with friends in China before emigration to Canada; a parent who had previously assumed these responsibilities at home now needed to work outside the home to financially support the family. Moreover, grandparents and extended family members who remained in their home country were no longer available to assist with childcare.

In some situations, where students are identified as having cognitive or language processing difficulties, academic success might be further challenged. Carger (1996) wrote about ways in which Alejandro, an American-born student from a Mexican immigrant family living in the United States, struggled in school due to undiagnosed language processing difficulties that rendered his learning of English more complicated than what others might encounter in the process of acquiring a second language. Alejandro did not receive special education support needed to help him to develop ways of accommodating for language processing issues, and his progress in English language acquisition was further hindered by teachers who attributed his difficulties to laziness and a lack of desire to work hard in order to learn English, rather than a disability in need of professional, specialized support.

While the student featured in Carger (1996) study had special education needs that were overlooked, the opposite also occurs with greater frequency among immigrant and minority students than among mainstream students in North American schools. Harry and Klingner (2014) described how students of minority background are more likely to be over-represented in special education classes; their challenges in school are sometimes mistaken for learning disabilities rather than as difficulties associated with the acquisition of a new language. Furthermore, their parents, without in-depth knowledge about how best to navigate a school system that they did not experience themselves as children, may be at a

loss about how to advocate for their children. Carger (1996) described how Alejandro's parents agreed to have his sister identified as having special education needs although they were not certain that her difficulties were the result of a learning disability, in order for her to be able to access resources in school to assist her with English acquisition. Erroneous diagnoses, of ELLs as a special education students, not only contributes further to the overrepresentation of immigrant and minority students in special education, but also hint at the need for further attention to learning about complexities of educating students of diverse social and cultural backgrounds in school.

Importance of Culturally Sensitive and Culturally Relevant Curriculum and Pedagogy

There are many ways in which school practices and curriculum in the host community differ so significantly from those of the home culture and society of many immigrant and minority students that the transition from home to school each day may be jarring (Li, 2002, 2005; Valenzuela, 2005, 2009), sometimes to the extent of being perceived as 'ruptures' (Hamman and Zuniga, 2011). It is not uncommon for immigrant and minority students to feel a sense of disconnect because differences in values and expectations between home and school (Kalantzis and Cope, 1992; Paley, 1995, 2000; Cummins et al., 2005; Chan, 2007; He et al., 2007; Gay, 2018) are so marked.

Given these differences, feelings of isolation might develop among newcomer students, especially when there are few others who speak their home language or who share their home culture. Feelings of isolation may be exacerbated by language policies that restrict the use of the maternal language in the school context (Gandara et al., 2010), or that communicate to the students the lack of proficiency in English as a deficit while overlooking language capabilities in the maternal language as an asset (Cummins, 2001), especially when proficiency in the home language is seen as hindering the development of English language skills.

Challenges associated with SES, ability to engage in curriculum content and school activities, and discrimination due to preconceptions about their abilities are among the more obvious ways in which equity and social justice may arise for immigrant and minority students. Olsen (2008) ethnographic study in a public, American high school provided a glimpse into complexities of student life as immigrant students navigated classes and interactions with American-born peers and teachers. Carger (1996) narrative inquiry provided insight into challenges that members of a Mexican American family encountered as they worked to support their child in school with limited financial resources and literacy skills. Lee (1994) work examining the experiences of Asian students in an American high school helped dispel some of the stereotypes of Asian students as 'model minorities' while also highlighting potential difficulties students may encounter due to preconceptions about their behavior and their academic skills. All of these studies address issues that may challenge the ability of students of immigrant and minority background to engage in school curriculum, and in that way, may be understood in terms of equity and social justice in the planning and enactment of curriculum and school practices pertaining to immigrant and minority students.

Carger (1996) work also offers a glimpse of the potential of narrative inquiry into challenges teachers may encounter as they work to support their students of diverse backgrounds in school. Seiki et al. (2018) outline narrative inquiry as social justice practice, through its attention to details and nuances that may be accessed to reveal complexities not obviously apparent without going beneath the surface. Seiki et al. (2021) explored the use of familial curriculum to assist preservice teachers in moving from theory to practice in the implementation of subject matter curriculum. Grounded in the theory of transformative curriculum making (Seiki, 2016), preservice teachers' histories and familial knowledge were repositioned and valued alongside science learning. By using science curriculum and instruction to cross the border between home and school, the curriculum became more accessible to the students. This narrative inquiry into preservice teachers' work of translating theory into practice in science instruction offered insight into teachers' experiences in relation to equity and social justice.

OBJECTIVES

As described in existing research, students bring with them experiences shaped by the unique circumstances of their own lives. These circumstances, in turn, have the potential to impact on their ability to engage in school curriculum, and to access associated benefits of education in their school context, such that issues of equity and social justice may play out in complex, and sometimes unexpected, ways.

In this study, I examine ways in which ideas of equity and social justice may play out in nuanced ways for a Midwestern, high school English teacher in her diverse, high needs school. I consider ways in which issues of equity and social justice might unfold for students in the implementation of school curriculum at the secondary level. Examples of equity and social justice from interactions between a teacher and her students reveal further complexities of how these issues might be understood and addressed by a teacher as she attempts to acknowledge her students' social and cultural backgrounds in her curriculum while also implementing curriculum to meet academic standards established by her school board. Examining these complexities of "teacher knowledge" (Clandinin and Connelly, 1996) offer insight into challenges teachers might encounter in working with students of diverse backgrounds in a school context.

THEORETICAL FRAMEWORKS

I referred to Dewey (1938) notion of the dialectic between personal and social as a framework for considering tensions

between personal and professional responsibilities experienced by teachers who work with students in diverse school contexts. Dewey (1938) philosophy of education as being inextricably intertwined with life experience reinforced the importance of the role of experience within and beyond school in contributing to shaping the school experiences of the students, and the professional knowledge of their teachers.

I examine here the intersections of student and teacher experiences on a diverse school landscape to explore complexities surrounding notions of equity and social justice in a school context. Equity and social justice, as ideas guiding education for a highly diverse student population, are terms that may be grounded in underlying notions about public education in a democratic society (Sizer, 1992). General commitment to ideas of equity and social justice are not uncommon among educators in a North American context, and the idea of educators striving for equity of access for their students may even be considered among the "sacred stories" (Clandinin and Connelly, 1996) of the profession. Indeed, architect of the common school, Horace Mann, once described school as "the great equalizer" (Steinberg, 2001), while acknowledging challenges associated with this ideal of equitable access to education by students. This commitment to equity in schooling may even be viewed as a foundation on which public education is based. Along these lines, ideas about how we might move toward more equitable and socially-just school curriculum and practices seem to be offered sometimes without deep discussion or deliberation about what these notions mean. More specifically, questions linger about how ideas might translate into practice, or how they might be experienced by teachers who are typically responsible for implementing school-based practices and classroom curriculum (Connelly and Clandinin, 1988; Craig and Ross, 2008), or how they might be experienced by the students for whom they were intended. The struggle to identify and define equity among the many practices and programs initiated and supported in school remains difficult; definitive plans about how best to accomplish equity and social justice in practices and teaching are even more elusive.

For these reasons, the idea of equity and social justice pertaining to students of minority background may be among the grand narratives (Clandinin and Connelly, 2000) often referred to in describing schooling to which many schools in North American communities claim to adhere. Closer examination of the complexities of student circumstances, as they intersect with professional responsibilities of teachers reveals challenges of aspiring to create equitable and socially just school communities, some of which seem inherent in the implementation or enactment of curriculum when attempting to engage large numbers of students from vastly different backgrounds who are likely striving for very different goals. As such, the enactment of practices and curriculum grounded in ideas about equity and social justice in a school context is rife with tensions, by virtue of the differing ideas about how these ideas should play out in a school context despite the passion that often drives a commitment to these ideas. These tensions become all the more apparent when

students' vastly different experiences also need to be taken into consideration.

METHODOLOGY: LEARNING ABOUT NANCY'S EXPERIENCES AT MIDWEST HIGH SCHOOL USING A NARRATIVE INQUIRY APPROACH

In this study, nuances of complexities in the experiences of a teacher learning about the experiences of her students were uncovered through in-depth, long-term observation to uncover "life in classrooms" in the way Jackson (1990) modeled in his school-based research. I used a narrative inquiry approach (Clandinin and Connelly, 1994, 2000; Clandinin, 2013) to learn about Nancy's experiences as an English teacher at Midwest High. This study was embedded into a larger study addressing the intersections of culture and curriculum in a school context. Given my interest in learning more about complexities of acknowledging the social and cultural diversity of students in the implementation of school curriculum and teaching practices from a beginning teacher perspective, I focused on Nancy's "stories of experience" (Connelly and Clandinin, 1990) as she worked to acknowledge the diversity of her students while also meeting school board guidelines for the acquisition of content area material. The stories presented here capture some of the nuances and highlight potential challenges to implementing ideas about equity and social justice in a classroom context.

I took part in Nancy's classes as a long-term participant observer, and conducted interviews and follow-up conversations with Nancy about details of her classes and her interactions with her students. I, along with two research assistants, participated in each of Nancy's four English 10 classes, three times a week, from the beginning of the school year in August until the end of the school year in May. We observed Nancy in class with her students on Mondays, Wednesdays, and Fridays, and attended student events (e.g., sports night, music performances, student assemblies, Fall Festival, . . .) throughout the year to learn about their school lives. I regularly discussed details of her classes as we ate lunch together each day that I spent in her classroom.

I audio-recorded two 30 to 45-min, semi-structured interviews with Nancy about her lessons, teaching materials, enactment of her English curriculum, and school-based and out-of-school events as they pertained to her students, and professional development events in which she had participated. I also discussed with Nancy her ideas and experiences of cultural diversity in twice-weekly conversational interviews throughout the year as issues arose in class, in interactions with her students and colleagues, and at events in the school community. I focused on complexities of curricular decisions, presenting them as instances of "hovering between passion and responsibility" as Nancy balanced a commitment to providing academic instruction to prepare for graduation and for standardized, state-wide literacy testing, with professional goals to support students in ways she believed would help to instill a passion for learning within and beyond school.

I recorded data in the form of: detailed fieldnotes from class observations, conversational interviews, and interactions with teachers and their students; interview transcripts; and researcher journal entries. I composed detailed fieldnotes following each school visit and classroom observation. I used a two-column format described in Clandinin and Connelly (2000) whereby details of observations, interviews and conversations were recorded on the left-hand side and questions, interpretations, and themes to help guide future interactions with Nancy and her students were indicated in the right-hand column. I also collected artifacts, including class schedules, samples of student work, teaching materials and curricula, and flyers and pamphlets as documents contextualizing school programs and practices aimed at supporting diverse students and their families. All data were filed into a research archive.

Learning About Nancy's Experiences at Midwest High

"Stories of experience" (Connelly and Clandinin, 1990) from the fieldnotes, interview and conversation notes, and artifacts gathered from school were set into the temporal, spatial, and social-personal dimensions (Clandinin and Connelly, 2000) of Midwest High during the 2013–2014 school year. I organized the stories of experience according to themes as they became apparent through analysis of fieldnotes, and during weekly research project meetings, and ongoing discussion about school events.

Midwest High School is known locally to be among the most socially and culturally diverse high schools in the district, and where generations of the same family are among its alumni. Among the 2,528 students, 49 birth countries, and 42 home languages are represented, and 313 were identified as ELL students. The school boasts a wide range of academic programs, ranging from special education, differentiated and AP courses in Math, English, and Sciences, an IB program, and a wide selection of international languages, to champion athletic teams, active school council, school newspaper and yearbook clubs, orchestra, and award-winning dance and slam poetry groups. Nancy's students participated in varsity football, basketball, dance troupe, track and field, talent nights, and culture clubs representing different ethnic groups in the school, to name a few. The availability of programs to meet the wide range of academic and social needs and interests of the students reinforce the community reputation, at least on the surface, as a school where differences are accepted.

As I spent time learning about the teachers' and students' experience in Midwest High, I kept in mind the following questions to guide my interactions with my participants – What does it mean for a school to be equitable and socially just in the development, implementation, and assessment of curriculum and classroom practices? To what extent do teachers' and their students' experiences suggest that curriculum and school practices support the social and cultural diversity in the school community? In what ways might decisions, such as those made in the spur of the moment during class lessons, reflect school practices and offer insight into ways in which issues of equity and social justice

might unfold in the enactment of curriculum in this secondary school context? Is a school community that strives to be accepting of diversity also striving to be equitable and socially just? I referred to these questions in my fieldnotes written after school visits and interactions with participants.

All data, including detailed fieldnotes from class observations, interviews, and interactions with teachers and their students, interview transcripts, and researcher journal entries were examined numerous times to identify common narrative themes, and then organized by theme using a color coding system. I used Clandinin and Connelly (2000) metaphor of the three-dimensional narrative inquiry space as a framework for drawing out contextual, interactional and temporal meaning of "stories of experience" from among the common themes.

The thematic and contextual analysis of common narrative themes uncovered in this study provide a lens for examining diversity in schools as interactive and generative. Schlein and Chan (2013) advocate for the use of this lens to explore multicultural education through story for analyzing diversity in school contexts.

This lens is grounded in Clandinin (1986) curricular lens of "teachers' images in action" that sees teachers as the primary curriculum agents whose images of teaching shape and are shaped by the act of teaching, as *multicultural education-in-action*, and expanded from Phillion (2002) use of the term "narrative multiculturalism" This lens was fashioned within Schlein and Chan (2013) examination of administrative narratives to underscore how multicultural education might be created through both story and experience, in ways that might be facilitated by administrators as lead teachers and building leaders.

PRESENTATION OF FINDINGS: NUANCES OF EQUITY AND SOCIAL JUSTICE IN NANCY'S CLASSROOM

The diversity of the student population at Midwest High provided a forum through which issues of identity, culture, and ethnicity could develop, and increased the potential for opportunities for students to interact with peers from various ethnic, racial, social, religious, and linguistic backgrounds. Interactions in school between Nancy and her students, and among her students, revealed countless nuances in how issues of equity and social justice might unfold in a classroom and school context. I present here stories from classroom observations, and conversations and interactions with Nancy to explore how issues of equity and social justice arose in the implementation of curriculum in her tenth grade English class.

I kept in mind Clandinin and Connelly (2000) metaphor of the three-dimensional narrative inquiry space as a framework for considering contextual, interactional and temporal meaning of "stories of experience" from among the themes identified in the stories. While each of the stories was set into the spatial context of Midwest High School, and more specifically, in Nancy's English 10 classroom, I was struck by ways in which temporal and interactional details of the stories began, or were impacted by, events and circumstances beyond the school and classroom.

Curriculum Tensions: Potential of Curriculum to Engage and to Dismiss Students

I documented Nancy's curricular experiences as she attempted to acknowledge the diversity of languages and cultures that her students brought to class, while also supporting them to meet academic milestones, such as preparing them for the upcoming WGDE testing¹ (LPS reference) required in order for students to graduate from high school.

Jordan in English Class

On the day in which the incident presented in the introductory vignette unfolded, Nancy had just finished showing a video about the use of vernacular language and was beginning a discussion about ideas from the video when Jordan stormed out of the classroom after an angry outburst. That day at lunch, Nancy described what had unfolded in class, both of us raising questions in an attempt to better understand what had contributed to his response. Nancy began by summarizing the video she had selected consisting of a narrator-led introduction about the use of vernacular language, accompanied with upbeat scenes of teens interacting in a variety of contexts, from crowded school hallways and scenes of family mealtimes, to neighborhood stores and community settings, to more formal settings such a job interviews or classroom contexts. The narrator then described situations in which vernacular language might be appropriate and when standard English could be used. Some of the youth featured in the video were African American and others were of Caucasian, Hispanic, or Asian backgrounds. As the video ended, Nancy asked the students what they thought of the video, and whether or not they agreed with the messages conveyed. She explained to me how she had asked questions with the intention of engaging students in a discussion about their ideas about the use of vernacular language, hoping to have them share experiences and discuss possible nuances in the topic. Jordan's response that the message had been racist had been surprising to Nancy. She thought that the topic had been presented in an age-appropriate manner when she had previewed it prior to showing it in class, and that the ideas and perspectives featured in the video would be ones that her own students might relate to. In talking about her work of planning the lesson, selecting materials, and identifying discussion questions as a follow-up activity, Nancy described how she had hoped that the students would raise interesting tensions about ideas presented in the video, and perhaps refer to their own experiences, whether in support of or in opposition to ideas presented in the video.

- Pass the Writing Graduation Demonstration Exam (WGDE), or
- Complete designated writing assignments at a satisfactory level in the Composition Course, or
- Score at a satisfactory level on WGDE retest in English 11."

(Reference: https://www.lps.org/post/index.cfm?collection=50).

Of students in Nancy's English 10 classes, approximately 1/4 to 1/3 were African American, depending on the class; some had recently immigrated from African countries while others were from families who had been in the United States for generations, as well as students whose families were originally from Mexico, Argentina, Spain, Puerto Rico, Vietnam, India, Myanmar, or Indigenous backgrounds, depending on the section. Nancy explained that she had selected the video because she thought the topic would be a positive way to recognize diverse languages and dialects spoken among the students, while also helping provide students with knowledge that might be practical for a job search. She hoped the video might also provide a way to raise ideas for discussion, and be helpful for students as they learn to navigate a diverse school and community context.

As we discussed the incident, we also acknowledged that there might be other factors in Jordan's life in and outside of school might have contributed to his abrupt departure from class that day. In the weeks prior to the video and discussion in class about vernacular language, he had been asked to attend a number of meetings with school guidance counselors due to truancy, and incomplete classwork. I remembered that from the beginning of the school year, Nancy noted to me that Jordan's work was rarely done; not only did he rarely complete work that was assigned during class time, but his homework was not usually completed either. I knew that Nancy sometimes assigned questions and short writing assignments for the students to complete in class following a shared or assigned reading, and that during these work periods, the students usually worked independently at their desks. Given that the classroom was arranged in rows of single desks facing the front, with the space between rows large enough that the students would not be able to talk easily even with a classmate sitting in the row next to them, I asked Nancy what Jordan did during these work periods if he did not work. The students had recently done a work period like this following a viewing of a video of 'Fahrenheit 451' from the 1960's, and I noticed that most students worked quietly at their desks. Nancy responded that during the previous work period, and sometimes during class, Jordan put this head down on his desk on to his folded arms, and rested. Jordan did not submit his page of questions, as she had asked the students to do as they left the classroom. When she went around tidying up the room before the next group of students arrived, she saw that his page was blank when she picked it up off his desk; he had not even written his name on the page.

During the 2–3 weeks previous to this day in class, Nancy had been preparing to submit grades for report cards to be sent home. Nearly every day in class, at the beginning and sometimes at the end of class as well, she reminded her students to submit outstanding assignments. She identified a block of time after school many days of the week when students could go to her classroom to work on assignments. One day during a work period, she individually called each student up to the front of the class where she sat on a stool, and showed them their grades on a table. She pointed out how she had calculated their overall grade from points accumulated from work completed during the term, effectively

¹WRITING GRADUATION DEMONSTRATION EXAM (WGDE)

[&]quot;For the writing demonstration, students . . . must show writing and editing skills. To meet the writing requirement, students may

also showing them in the process whether or not they had assignments that still needed to be completed. In addition, she spoke individually with students who were missing multiple assignments, and asked them to come to her class after school to complete the work.

Jordan was among those students who were informed that they had outstanding assignments. Some students asked questions about when they could complete the work, and told Nancy that they would hurry to complete their assignments. Some of the students went to Nancy's classroom after school during the available work periods to complete their assignments. Jordan did not ask questions about the unfinished assignments, nor did he hurry to complete them. He did not initially attend the after-school work sessions either; it was not until Nancy told him directly that he needed to come to her classroom, along with a handful of other students who had a number of missing assignments, that he attended one day. Nancy explained that she had told him at the time that she would continue to ask him to attend these after-school sessions until all of his assignments had been completed before he would be absolved of this responsibility. She described how Jordan completed the work quickly that day, and then left class. When Nancy picked the work off the desk after he had left, she saw that it had been done well - he did not get all of the answers correct, nor did he seem especially interested in the work while he was doing it, but the work was done without much struggle or complaint and most of the answers were correct. More specifically, he responded to the questions in a way that illustrated understanding of the lesson and the responses had been written in grammatically correct sentences without spelling or significant punctuation difficulties. In fact, the quality was better than that of many students who had completed the work in class. Moreover, it had not taken Jordan long to complete the work. Nancy added that she had not known how her request for him to come to her classroom to complete his assignments would go over, since the repercussions of refusing to abide by her request were minimal. He did not seem to be bothered if he was given a detention, and according to colleagues who had given detentions, Jordan often did not attend them even if he had been told he had a detention. She asked him to come in again to complete to rest of the missing work, but Jordan did not come in again.

ANALYSIS OF FINDINGS VS. THINKING WITH STORIES

Attempting to Understand Jordan's Response

Jordan's response to the video was surprising for his teacher and his classmates in many ways because it was unexpected. An outburst followed by an angry departure is not the usual, or anticipated, response to curricular materials presented in a high school English class, nor is it an expected response to a video message about contexts for the use of vernacular and standard English.

The message of the video did not seem out of line from Nancy's perspective, given her intentions. Nancy elaborated upon her goals for the lesson for the materials and discussion that day, describing her intention to help students to gain knowledge that might be helpful in navigating a societal context where many of the students would be seeking employment in the near future. She believed that having an understanding of situations and contexts in which different levels of formality in speaking different kinds of English might be practical. In addition, she wanted to orient students to recognize and to appreciate diverse ways of communicating while also acknowledging that different levels of formality in language use might be expected of them in some contexts. She believed that the ability to recognize and to use more formal language is a skill that is important for all students, regardless of whether or not they use Black vernacular speech, or not. For example, students might be expected to use less casual language in a job or classroom context than they might use in their homes or when interacting with friends or peers.

Given these intentions, Jordan's response was unexpected from Nancy's perspective. As we unpacked the lesson and ensuing response, we wondered, would Jordan have responded similarly on another day? Did he find the content offensive? Or uninteresting? Were there other students in her other English 10 class who had similar responses to the materials but refrained from saying anything? Would the materials have been received differently with another group of students? On another day? With a different teacher? With an African American teacher? In a discussion with other African American students? We had so many questions that could not be easily addressed or answered in the moments following his departure from class.

Building Connections With Peers and Teachers in School: Finding Ways to Connect Across Landscapes of Difference

Cameron (2012) wrote about ways in which students' engagement in school reflected the extent to which they believed that others in their school context, namely their teachers, supported and liked them. Similarly, Clandinin et al. (2013) and Kuo (2017) featured students in their work who found it difficult to engage in school when they did not feel connected in meaningful ways to peers or teachers who appreciated their values.

I wondered about the extent to which Jordan felt comfortable and welcome in school. Did he feel liked and supported by his friends and his teachers? Was it a place he felt a sense a belonging? Did he believe he had a right to be there? Did he enjoy spending time there? These questions seem trite in that we might expect that all students desire these traits from others in their school community, but there is research to support the notion that many high school students do not feel that their school environment would be described in these ways. Jackson (1990), for example, asserted that schools may be a more supportive learning context for students whose understanding of school is in line with that of their teachers

and administrators. I wondered about the extent to which Jordan felt supported at Midwest High, and about the extent to which he perceived the time spent and materials presented in school to be of interest to him and to be helpful for his future. Nancy described how, since the beginning of the school year, she struggled to get Jordan to complete classwork and homework. During days when I was in class, Jordan sometimes arrived late, and he rarely participated in discussions about materials that were being read in class as a group. He did not seem to stand out in class, with the exception of a couple of occasions when he did not comply with Nancy's instructions to complete work during class and instead talked with students seated nearby. These kinds of interruptions were common in class, and therefore, did not draw much attention from his classmates.

Nancy described Jordan as a puzzle. We did not know much about him, and he did not seem interested in talking much or in completing English assignments. He had a few friends in class but did not seem motivated to attend class in order to see them. Instead, he spent a good part of the class with his head on his desk, sometimes with a headset on, and other times with his eyes closed. I do not remember ever seeing him raise his hand to answer questions or to contribute to a class discussion during days when I was in class.

Some researchers focus more specifically on challenges that Black, male students may encounter in school, describing tensions as the result of the notable difference in expectations for behavior and values between how students see themselves in and out of school. Laura (2014) outlined ways in which schooling practices and policies experienced by her younger brother might be described as a breakdown in social justice for a student at risk of leaving school early and becoming negatively involved with the law. Fine (1991) went so far as to describe policies and practices in school as being so unsupportive of some students that the students might be described as 'pushouts' rather than 'dropouts.' Laura (2014) referred to the notion of a 'school-to-prison' pipeline for students such as her brother whose 'bad kid' reputation in school contributed to repeated punishments associated with zero tolerance policies in school and later becoming a 'person of interest' by police as a teen. Chan and Ross (2014) examined experiences of a school equity policy from the perspective of a student, his teachers and administrators, and his parents. They highlighted how a policy, specifically the 'Safe Schools Policy' (Toronto District School Board, 1999) that was intended to enhance equity of access to resources to all students in the school and reinforce a sense of safety in school, seemed to be more likely to negatively impact upon students of some racial or culture groups than those of other groups. Chan et al. (2015) addressed complexities associated with building relationships with students of diverse social and cultural backgrounds in order to engage them in school curriculum, in their study focused on examining nuances of building a culturally-sensitive curriculum from the perspective of a beginning teacher. They described challenges in building and sustaining supportive practices when there was so much potential for differences in opinion and ideas, even when practices were driven by good intentions. In addition to the potential for decisions about actions taken at the school level impacting upon students' subsequent participation in school, issues of professional identity also became apparent when differences in perspective were revealed in face of tensions arising from differences in the way in which policies and practices were enacted. These studies highlighted complexities in the implementation of an equity policy at the school level.

Further challenges also contributed to difficulties experienced by some students. Delpit (1995) elaborated upon tensions that might arise when students come to school with experiences that are so significantly different from those of some of their teachers that finding a common ground may involve conflict and a need for a shift in perspective. Kozol (2012) documented some of the 'savage inequities' within and outside of school that might contribute to shaping students' ability to adapt and succeed in school. Chan et al. (2015) study examining complexities of building a culturally-sensitive curriculum revealed nuances in building relationships with students of diverse social and cultural backgrounds in order to engage them in school curriculum. Ladson-Billings (2006) provided insight into ways in which structural inequities in access to schooling for African American students continued long after segregation ended; she described ways in which access was hindered to the extent that it would be more appropriate to describe the difference in academic performance of African American students as an 'education debt' rather than an 'achievement gap,' as it has often been referred.

In many of these instances, researchers refer to and describe some of the added challenges encountered by Black, male teens in American schools, and ways in which existing statistics might contribute to an increased likelihood of students leaving school before the completion of a high school diploma. In the interaction presented at the beginning of this paper, Jordan fell into the description of a male, Black student who was not productively engaged in school work, and following the incident featured in the introduction, did not return to school.

From an equity and social justice stance, statistics about lower graduation rates and the academic success of students of diverse backgrounds, when compared to that of their White peers (Ladson-Billings, 2006), raise questions about the extent to which we have gathered sufficient information about their experience in school or developed appropriate ways to better prepare and support continued learning for educators (Ladson-Billings, 1994, 2001), and teacher educators, in order to enhance equity and access of educational resources for students at risk of early school leaving. When reflecting upon what was known about Jordan at Midwest High, so many questions arose that it became obvious that we needed more information about how to better engage him in school learning as a way of improving upon his school experiences.

Further information about Jordan's experiences prior to and while attending Midwest High is needed to inform our understanding of the impact of interactions with teachers and other students, and the extent to which appropriate curriculum and teaching practices are needed. More information would help teachers and other school staff to support students like Jordan who, based upon irregular school attendance and seeming low level of interest in curriculum material and school activities, may be at risk of leaving school before graduation. Details of what we know thus far about Jordan and about Nancy's experiences at Midwest High suggest complexities that raise further questions, however. We could make assumptions about Jordan from the vignette and associated descriptions of Jordan in class but to what extent do they represent Jordan accurately?

Midwest High is a diverse, public high school that included many Black students among their student population. Black students were accordingly represented in Nancy's English 10 classes. While some of the students struggled academically or were among those who did not actively participate in class or in extra-curricular programs, there were also many who performed well on academic assessments across their school subjects and were actively engaged in the school community, whether in the form of athletic teams, yearbook, student government, concert band or orchestra, or any number of the many school-sponsored activities available to students. Questions about how teachers and school staff might engage students like Jordan, who did not seem especially interested in school life at Midwest High, remain, highlighting further the need for better understanding about students' ideas about their school experiences.

For example, while Jordan's response to the video and discussion following the viewing of the video seemed 'angry' and I had described him as having 'stormed' out of the classroom, it is also important to acknowledge that this description was made without knowledge of reasons for his response. As an observer in the classroom that morning, even with Nancy's knowledge of Jordan's participation in school from previous conversations with his guidance counselor and from her regularly-scheduled teacher meetings with colleagues who also taught the same group of students as a way of keeping one another updated as to developments in the students' attendance and participation in school, we did not feel we knew enough about him to be optimally helpful and supportive. We did not know what might have contributed to his response to the video, or nuances of what it means to speak African American vernacular English (AAVE) referred to as "the intimate sounds and gestures... normally saved for family and loved ones" (Hooks, 1994, p. 147), within the community. As I reflect upon this vignette, it is possible that he took offense to having his language discussed -even deliberated- among peers, many of whom do not speak AAVE and who are not a part of this community. It is possible that there were other events in his life around that time that also impacted upon his ability to attend to school and related academic tasks, since he did not return to school shortly after this interaction. So much of Jordan's experiences was unknown, and Nancy and I questioned our ability to make sense of the interaction without more information, yet we found ourselves wanting to better understand factors contributing to Jordan's response to the lesson. We can, nonetheless, conclude that the incident highlighted the extent to which one incident has many interpretations and many perspectives. It is so unsettling to acknowledge that we did not know enough about how

best to support Jordan, and that his departure from school that day still haunts us, for these reasons. It is, at least in part, the reason for which I am now writing about this incident.

The stance of "thinking with stories" (Morris, 2002) may be a way to shift the focus to include a wider range of interpretation of experiences and influences that teachers and students might bring. Estefan et al. (2016) describe the potential of this stance in shaping interpretation and understanding of experiences in ways differently than what one might initially come to, without opportunities to share and deliberate the meaning and impact of experiences of others. In this study, it would have been helpful to follow up with this response by speaking with Nancy, Jordan, his classmates, his guidance counselors, and his other teachers to learn about ways in which their own experiences might have contributed to shaping their understanding and interpretation of Jordan's response in class and his participation in school. It might also have been helpful to talk with others in the school to learn more about common practices and policies, to learn more about specific details of Jordan's participation in school until that day in class.

I chose, however, to present this incident from the stance of a classroom teacher who has limited access to information about her students' lives outside of her classroom, since this is a common stance from which many teachers work with their students. Although some students have a history of documented interactions, detailed, adapted education plans dating back from earlier in their school careers, and teachers and counselors with previous experience with the students in school, many, such as Iordan, do not. Given that many classroom teachers are left to make the best with limited information about their students at their disposal, it was important to examine nuances of equity and social justice from this stance of classroom teacher. This stance, however, contributed to an incomplete, at best, and likely, a skewed interpretation of Jordan's engagement in class, while a process of 'thinking with stories' would likely have included a wider range of possible interpretations and understandings of Jordan's experiences in school. The incident reinforces ideas about ways in which issues of equity and social justice are exceedingly complex.

Further Complexities of Equity and Social Justice From Student Experiences of School

Other interactions in Nancy's English 10 classes offered further insight into the nuances of ideas pertaining to social justice and equity in a school context. Reflection upon Nancy's decisions about the design and implementation of curriculum in her English 10 classes and tensions she experienced about how she might engage her students in subject matter learning revealed complexities, highlighting not only thought provoking points about the curriculum content but also about her students' responses to curriculum assignments. For example, in the enactment of curriculum, there arose instances when professional tensions arose about how best to manage class time in order

to maximize learning of subject matter content within tight time constraints.

Inequity of Access Due to Limited Proficiency in Target Language

During the same term, a few weeks prior to the incident described at the beginning of this piece, other examples where Nancy felt torn about the implementation of her curriculum also unfolded. These incidents might be interpreted as examples where equity and social justice were factors impacting upon students' access to the curriculum. Jordan's classmates, Denpo, whose family immigrated from Myanmar 3 years previously, and Minh, whose family had been in Lincoln for just 2 years, respectively, had both achieved sufficient proficiency in English that they no longer needed language support in the form of a separate English-learner class in school, but had not yet achieved sufficient proficiency to be able to write about and express more abstract ideas with ease or confidence. I was reminded of the complexities of the path toward English language proficiency as I helped Minh work on a poster outlining dangers of cigarette smoking. He included a written piece about how his father continued to smoke although he had told him of these dangers, and nodded gravely when I asked whether he worried about his health. Nancy had praised his hard work and diligence in achieving significant progress in learning English, especially given the short amount of time since his arrival in the United States but from interacting with him as he worked, it was also clear that he had a sense of how much further he had to go, given his frustration in communicating his ideas when he spoke in English. On another day, I was struck by the realization of the importance of freedom of speech for Denpo when he contrasted his freedom to say and write about political initiatives regardless of whether or not he was in support of them while in the United States when compared to what was permitted in his country of birth. I had initially attempted to steer him toward one of the other themes that had been listed as possible topics for the written component at the bottom of the page, not understanding that his choice to write about freedom of speech in the United States was borne of his own experiences living in a place where his family members did not have the same freedom to do so.

There were other ways in which details about the students' lives provided a glimpse of tensions associated with advocating for equity and social justice when these terms are wrought with uncertainty about how they are understood in a school context even as they had significant implications in the out-of-school lives of the students. Issues of equity and social justice may be obvious for James, who wore a thin hoodie without a coat to school despite freezing winter temperatures, for example, but associated complexities become more apparent when teachers realized the extent to which he was adamant about not accepting a coat from the school, despite the fact that these resources had been established specifically to assist students in this regard. Similarly, school attendance is considered critical in supporting academic success, and as such, it would seem to be an obvious example of an equity and social justice

issue if a student were to inform her teacher that she would be missing nearly an entire month of school. When Yara stayed behind following class one afternoon to ask whether Nancy could give her work that would be covered while she was away in Mexico during the month of December, Nancy appreciated Yara's initiative in being a responsible student. Her teacher recognized the value of time spent with family members, surrounded by Mexican culture during the holiday season but also expressed that missing a month of classes was a lot of material even if she was completing work while she was away. Issues of access to an equitable school context also arose with other students, in different ways as well.

Tom: 'Why Do People Think That All Asian People Are the Same?'

One day, Nancy referred to an incident that had occurred the previous afternoon, just as she finished taking attendance and was about to begin the lesson. She described how she had been torn for a moment about how best to respond to her student, Tom, when he exclaimed, 'Why do people think that all Asian people are the same?' In a school such as Midwest High with so much social and cultural diversity within the student population, where students take classes with others from a wide range of cultural, social, language, religious, SES, and ethnic backgrounds, addressing Tom's question might have yielded interesting insights of relevance to many of the students. But in that moment, rather than delving into a potentially thorny discussion about racial identity, discrimination, and stereotypes, although Nancy believed that her students would benefit from a discussion about complexities of diversity, she instead felt pressure to fulfill teaching responsibilities by using her limited instructional time to focus on preparation for testing. At a time when high stakes standardized testing was scheduled within a mere few weeks away, Nancy was committed to completing a final round of writing prompts in preparation for their upcoming WGDE testing that was required for high school graduation. She could not spare the instruction time. These moments might be interpreted as instances when Nancy was torn between the passion of wanting to cultivate her classroom as a community where learning included opportunities to support students in their development as culturally sensitive classmates and future members of an increasingly diverse society. At the same time, she also felt the pressure to responsibly prepare her students for high-stakes testing that would determine whether or not they would be able to graduate from high school and proceed to higher education. The tensions experienced as she attempted to balance recognition of the importance of engaging her students in curriculum that acknowledges the complexities of their lives outside of school while also striving to fulfill her professional responsibility to prepare them for standardized testing might be understood as hovering between passion and responsibility.

I wondered about the reason behind Tom's question, asked with seeming irritation. There is a large body of existing literature debunking the notion of the model minority that attributes academic success and ease in adapting to various aspects of North American society to Asian students by nature of their race. Lee (1994) ethnographic study in a diverse high school outlined four distinctly different groups of Asian students within the school community. There were: high-achieving Asian students who studied hard to succeed, some of whom were motivated to integrate into the larger society by connecting with White, American peers; low-achieving Asian students who struggled with English proficiency and remained among their Asian peers; 'new waver' Asian students who 'liked to party,' often skipped class, and did not seem to be motivated by the goal of academic success; and those who struggled significantly in school but resisted seeking assistance in order to avoid bringing shame to their families. Only the first group could be described using the criteria of the 'model minority' stereotype and even within this group there was much variation among the students. These distinctions dispel the notion of a 'model minority' and highlighted the importance of recognizing extreme differences within groups of Asian students in the same way that any other group of students would include students with different goals. Li (2002) ethnographic research examining the experiences of academic and entrepreneurial Chinese families, and Lew (2004) work with Korean American high school dropouts offer a glimpse into challenges that Asian students may encounter as they strive toward school success without the advantage of parental support or prior knowledge of North American school systems, provides further evidence to dispel the notion of a uniform group implied in the label of a 'model minority.' Even from this limited snapshot of research focused on Asian American students, it is obvious there is much variation within this group. Yet from Tom's question in Nancy's English class, the notion of the 'model minority' continues to be perpetuated, even within his diverse high school community where variation among the Asian students would seem to be apparent. Issues of social justice and equity may play out differently for students like Tom but this interaction highlights the need to learn more about students' experiences of the school community.

Joey: 'The Luckiest Person I Know...'

Student experiences were highlighted in preparations for standardized testing on other occasions as well. Nancy and I reflected upon issues that arose during writing conferences that were conducted with students individually, to discuss their responses to writing prompts completed for test preparation. On this day, students were asked to write about "the luckiest person you know, and why." Following grading of the responses, we met individually with the students to encourage them to elaborate upon details of their stories as a way of enriching their writing.

Nancy spoke about how Joey, from her sixth period afternoon class, had written about his girlfriend, who he believed to be the luckiest person he knew, because she had a home in which she lived with people who looked after her by preparing her meals and washing her clothes, and where there was money to buy the food and clothes that she needed. Joey spoke about how he does not have a family who looks after him in this way, nor did he have a home like the one where his girlfriend lives. In contrast, he described how he uses a cardboard box rather than a dresser or other piece of furniture in which to store his

clothes and belongings, because he often needs to move on short notice, and a cardboard box is portable and more easily moved than a piece of furniture. Joey was among the few juniors in Nancy's English 10 classes. We knew a little about reasons for which he was behind his same-aged peers in school, because he had written in a paper earlier in the year about how he had spent his sixth grade year in Mexico living in a house next to where his relatives lived, without attending school, rather than repeating fifth grade as he had been advised to do by his teacher that year. Following his return to the United States, he continued on to seventh grade, in accordance with his age, despite not having adequately covering fifth grade curriculum material or having completed sixth grade. Not surprisingly, he described schoolwork as 'difficult' and struggled academically; at the age of 16, he was among students at Midwest High who met regularly with guidance counselors who monitored their regular attendance in school.

Potential of Standardized Testing to Build Connections With Students

I was struck by how, despite much criticism about ways in which standardized testing has impacted negatively on curriculum and school learning (Anagnostopoulos, 2005; Taubman, 2009; Au, 2010), a seemingly disconnected series of prompts intended to help prepare students for testing contributed to helping their teacher to build connections with them, and yielded such rich, and moving, accounts of aspects of the students' lives. The writing highlighted ways in which being open to the potential of prescribed curriculum as a means for engaging students in academic discussions, might also yield extraordinary opportunities to learn about students' lives and to connect with them in important ways.

Details shared in student writing offered insights into ways in which issues of equity and social justice may be experienced in their lives in and out of school. Students described experiences in school where they found the content difficult and events and interactions both in and out of school that they found challenging, and even heartbreaking. The students' work highlighted the importance for their teachers to reach to find ways to build connections with them and to support them. Hearing about details of students' experiences such as those featured here further reinforced the importance of teachers reaching beyond their own experiences in an attempt to understand those that their students might be living in their home and school communities in order to better support their learning. This support is important for all students but was all the more important for some of the students featured here because they lived challenging home and community circumstances.

DISCUSSION: NUANCES OF EQUITY AND SOCIAL JUSTICE FROM A TEACHER PERSPECTIVE

The examples included here featuring Nancy's experiences of working with her students in her English 10 classes might be

understood in terms of equity and social justice. Based on the small number of examples of interactions and incidents presented here to illustrate ways in which social justice and equity might arise in a high school classroom, we can appreciate the complexity of issues involved. The stories provide us with a glimpse of ways in which the students' access to the curriculum may be understood as less than equitable for some of her students, whether due to financial, political, academic, or language challenges that may hinder their ability to perform optimally, when compared to some of their English-speaking, American-born, middle class peers whose parents are able to assist them in navigating their school responsibilities.

There were many ways in which students might not be able to perform optimally on academic tasks. For Dempo and Minh who had both immigrated to the United States within the last 5 years, their still-developing proficiency in English - the language of instruction and communication within the school community - would render academic tasks that were conducted in this language more difficult. For Yara, and perhaps even Joey, differences in cultural expectations of schooling in relation to home and family responsibilities may come into play, and for Tom and Jordan, the influence of culture in shaping their sense of identity might introduce subtle but important influences that may intersect with expectations of them in school. As suggested by the stories featured here, and countless others at Midwest High and likely at other diverse high schools, the ways in which their access and ability to focus on schooling and school curriculum might be described as unjust or unequal are highly nuanced. Their circumstances might be described as difficult or otherwise 'at risk' of academic failure and early school leaving. The fact that all of the students featured here also identified as members of a minority group added further complexity to their school participation. For some of the students, the added weight of their status as students of diverse background may be likened to the notion of the backpack that McIntosh (1998) refers to when describing the challenges that immigrant and minority students often carry in addition to the usual responsibilities and work of a student.

Influence of Schooling in Shaping Students' Sense of Identity

There is much work confirming the important role of schooling in shaping a sense of ethnic identity of students from immigrant and minority backgrounds (Wong-Fillmore, 1991; Cummins, 2001; Cummins et al., 2005; Chan, 2006), much of it advocating for the recognition of diverse cultures in the curricula and practices as a way of welcoming diversity into the school community and as a way of learning about diversity. Ways in which teachers may acknowledge or accept diversity in their practices and curriculum enactment, however, is less clear. Questions as foundational as the following remain to be resolved – What are effective ways of acknowledging students' cultural and language backgrounds in school? How can teachers approach this work while also recognizing that different students may prefer different ways of acknowledging their diversity? Findings of this study highlighted tensions that may arise

in a classroom for a teacher and her students, and revealed further complexities in the design and implementation of school curriculum and school-based activities that may contribute to shaping students' sense of ethnic identity from an equity and social justice lens.

A Narrative Inquiry Approach: Understanding Social Justice and Equity as Experience

As I learned about the stories featured here, I began to think it would be appropriate to understand social justice and equity as experience, from the stance of students who bring with them their prior experience of schooling and life in their homes and community, whether in United States suburbs, urban neighborhoods, immigrant homes and communities or from their lives prior to arrival in the United States, and more specifically, into their current school communities. Students like Denpo, who still carried with him memories of the refugee camp to where he escaped after leaving his home country where his family were limited in what they could say about government initiatives, or his classmate Nate who refers to the hurtful comments he overheard from many foster parents before describing the relief of being adopted by his current adoptive parents, to the many questions arising from witnessing Jordan's angry departure from English class during a lesson intended to be sensitive to his needs, it is obvious that there remains much that we need to learn.

All of these examples can be interpreted as examples of social justice and equity that might impact upon the ability of a student to engage in academic endeavors and achieve school success, although they are often not the stories that come to mind initially when we think about issues of social justice and equity in school. As teachers and teacher educators, keeping in mind ways to broaden understandings of these terms will serve future and practicing teachers well in helping them to more easily connect with their students, especially as increasing numbers of students and their families have arrived as immigrants (United States Census Bureau and American Community Survey, 2010; United States Census Bureau, 2011) from places and experiences unknown to their teachers.

The stories featured in this study may be understood as a way to bridge the space between "knowledge of teachers" (Clandinin and Connelly, 1996) and "teachers' knowledge" (Clandinin and Connelly, 1996). Teachers draw from both knowledge gained through their own personal and professional experiences -"teachers' knowledge" (Clandinin and Connelly, 1996) as well as knowledge gained through 'expert' sources such as textbooks, curriculum documents, professional development, knowledge gained from experienced colleagues - "knowledge of teachers" (Clandinin and Connelly, 1996). Hearing and reading about the experiences of other teachers with their students through oral and written accounts, such as some of the ones included here, offers a means for teachers to discuss nuances in teaching. These stories are important for all teachers, but especially those who are at the beginning of their teaching careers, when they are still building a repertoire of practices from which they might draw.

A narrative approach provided as a means for preservice and practicing teachers to deepen understanding of complexities inherent to teaching an increasingly diverse student population, through opportunities to reflect upon ways in which issues raised for discussion might arise in one's own school context. So many of these stories may be interpreted as 'inconclusive' (Pinnegar and Hamilton, 2012), yet knowledge gained through this research informs the development of curriculum and practices for diverse school settings, while also contributing further resources for preservice and practicing teachers to learn about the experiences of students of diverse backgrounds. These "stories of experience" (Connelly and Clandinin, 1990) then become a way to build their body of professional knowledge by drawing from stories of experience to extend the development of teacher knowledge to include experiences that an individual may not have personally but that they can access through the stories shared and discussed by others.

Finding Ways to Connect With Students

The importance of finding ways to connect with the students is an important component of building teacher knowledge, and helping teachers to learn to support their students, cannot be overlooked in these stories. Over the course of the year, Nancy and I found ourselves unpacking and discussing events and incidents as they unfolded, and referring back to our own experiences in school, in an attempt to better understand her students' perspectives. Without intentions for comparison, we were nonetheless reminded on a number of occasions of striking differences between her own high school experiences in a rural, western part of the state where she grew up in a small, close-knit community with family nearby, to oftentimes isolated experiences of some of her students whose families had settled into this community far from other family members. Some of the students' families struggled financially, and some lived in communities where drug or alcohol abuse, poverty, violence, and teenage pregnancy were among challenges experienced in the family. I also referred to events and incidents from my own childhood in Canada as a child growing up in an immigrant Chinese family to better understand the students' experiences. This move for teachers to draw from their own experiences to inform their work with their students, despite differences in the contexts in which their experiences unfolded, is a natural tendency, especially when lacking experience from which to draw in similar contexts. In this way, teachers may build their body of professional knowledge to inform their teaching by drawing from their own experiences to inform work in still-unfamiliar circumstances. That said, it is obvious from examining these stories that there remains much that we do not know about the students' experiences, or about how their teachers and school staff may better support them in school. With this recognition, it is important to acknowledge a deep need to actively learn about the students' experience and to be wary of making assumptions about what we think we know about the students. Nancy incorporated activities such as individual interviews and assignments requiring more detailed writing about aspects of their lives, into her lessons, such that even those focused on test preparation, offered an opportunity for her to learn more about

her students, and for students to share aspects of their lives with their peers if they chose.

CONCLUSION

Findings from this study highlighted further complexities of ways in which equity and social justice might unfold in a school context. Nancy's experiences at Midwest High might be described as an example of the notion of "multicultural education-inaction," described by Schlein and Chan (2013) whereby multiple influences intersect, such that an ongoing process of negotiation among teachers, students, and others, including their friends, peers, school counselors, and other staff is needed in order to support students' adaptation in a diverse school community.

Examining these experiences offers a glimpse of the complexities of: (1) students' experiences of curriculum and school practices; (2) teachers' work as they learn about their students' experiences and draw from their own prior experiences to inform their understanding of equity and social justice in the school experiences of their students; and (3) a narrative inquiry approach as a way to inform our understanding of nuances of equity and social justice in school contexts. Considering equity and social justice as experience may help us to better understand the nuanced complexities of how equity and social justice may arise in a classroom context. Findings of this study reinforce the need for a deeper understanding of the "complexity of teaching" (Cochran-Smith, 2003), and urge us to consider teacher education as a structure or framework through which some of these complexities may be highlighted and examined.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by University of Nebraska-Lincoln. Written informed consent to participate in this study was provided by the participants' legal guardian/next of kin.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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Early-Career Teachers Living on School Landscapes Shaped by Equity Policies and Practices: Helena's and Kristin's Stories

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Ross VD, Chaseley T, Mocanu RG and Zhang Y (2022) Early-Career Teachers Living on School Landscapes Shaped by Equity Policies and Practices: Helena's and Kristin's Stories. Front. Educ. 7:850526. doi: 10.3389/feduc.2022.850526 Before moving beyond the beginning stages of becoming a teacher, one of every two teachers leaves the profession. Hence, for several decades, the recruitment, development, and retention of teachers has been a pernicious problem facing districts, schools, administrators, and school personnel. A productive line of narrative inquiry research has focused on teacher education and development. Additionally, narrative inquiries have focused on teacher retention and attrition. For example, several researchers have narratively inquired into the processes of transitioning out of the profession. In the present investigation, we asked an overarching question, what do beginning teachers need in order to tell stories of staying? And, relatedly, in schools working toward addressing questions of equity, what are the experiences of early-career teachers? And, what can be done to develop and sustain them in their professional commitments? Two novice teachers, Helena and Kristin, both of whom took initial positions in the same district, which had a commitment to promoting equity for children, were interviewed to gather perspectives on their early-career experiences. Both participants shared tension-filled stories from their beginning years as a teacher that created a sense of disequilibrium connected to their developing sense of self. The data analysis pointed to the value that the concept of the best-loved self may have in helping teachers construct their sense of identity. As in the case of Helena and Kristin, this sense of the best-loved self may develop early and can shift over time. For teacher educators, this aspect provides an opening for exploring philosophical commitments within preparations programs with teacher candidates. For teachers and administrators in schools who are intaking beginning teachers, understanding these nascent facets of best-loved teacher self may provide a window into these novice teachers' motivations. And, these practices may prompt the reconnection to philosophical commitments and aspirations in the day-to-day tug at the fabric of teacher identity.

Keywords: early-career teacher experiences, diversity, equity, best-loved self, narrative inquiry

INTRODUCTION

Vignettes, snippets of stories, told by two early-career teachers introduce the present study. Helena shared a story from her first year, during which she was teaching sixth-grade. Kristin recounts an experience in her second year as an educator. At the time, she was beginning the school year as a first-grade teacher. Kristin was new to this grade-level. These slices of stories highlight identity construction processes in which these early-career teachers are engaged.

STORIED STARTING POINTS: EARLY TEACHING EXPERIENCES THAT TUG AT THE FABRIC OF THE BEST-LOVED SELF

These two vignettes fit within Helena's and Kristin's narratives of experience (Connelly and Clandinin, 1988). The stories are nested in interview data collected during this study of early-career teacher retention. These snippets hint at the disequilibrium beginning teachers may feel between their experiences living and working on school landscapes (Clandinin and Connelly, 1996) and embracing their best-loved selves (Craig, 2013, 2017, 2020).

Grieving a Ruptured Relationship: A Teacher Story From Helena's First Weeks

And, before he could come back – before I could tell him, "I still love you. I'm going to have a hard time trusting you. You have to earn that back. But, you're still Joseph." Before that could happen, he withdrew. I never even got to see him after – everything that happened. And, those are things that not every first-year teacher would have to deal with. I went to a school where that was a possibility. It was. . .it took a while. . .I was very upset after the whole thing. And, those are things that not every first-year teacher would have to deal with, but there are things that college cannot have prepared you for.

Helena (fieldnote recording)

Classroom Shambles and Self-Doubt: Kristin's Story of First-Grade Teaching

I left crying that day because he left my class in shambles....both my teammates called me. And, they were like, "Kristin, it's not you. Because I said that same thing. Like, I never thought that I would have the kid that I can't control."

Kristin (fieldnote recording)

STATEMENT OF THE PROBLEM

Before moving beyond a beginner's stage, one of every two teachers leaves the profession (Ingersoll, 2001; Ingersoll and Kralik, 2004; Ingersoll and Merrill, 2010; Ingersoll and Perda, 2010a,b). The recruitment, development, and retention of teachers is a pernicious problem facing districts, schools, administrators, and school personnel. A productive line of narrative inquiry research focuses on this issue and explores

processes of transitioning out of the profession (Craig, 2013; Schaefer, 2013; Schaefer et al., 2014; Clandinin et al., 2015). In the present investigation, we asked an overarching question, what do beginning teachers need in order to tell stories of staying? Relatedly, in schools working toward addressing questions of equity, what are the experiences of early-career teachers? And, what can be done to develop and sustain them in their professional commitments? Two early-career teachers, Helena and Kristin were interviewed to gather perspectives on their early-career experiences.

CONTEXTUALIZING THE PROBLEM

In the fields of teacher preparation and education, oftentimes, teachers' first years' classroom experiences are portrayed as stories of survival (Lundeen, 2004; Street, 2004). For example, practical guides for first year teachers are known as survival guides (e.g., Thomson, J. The first-year teacher's survival guide: Ready-to use strategies, tools, and activities for meeting the challenges of each school day, 4th edition). Tales of beginning teachers are represented as exponentially more challenging when working in schools with greater levels of students with elevated levels of need (Isenberg et al., 2013). Those vulnerabilities may arise from language acquisition (Batt, 2008), cultural differences to those of a majority (Gay, 2002; Villegas and Lucas, 2007) - whether that majority is national or more localized - growing up in poverty (Simon and Johnson, 2015), and experiences of homelessness (Rafferty, 1997; Chow et al., 2015), transience, and/or hunger (Gehrke, 2005). Additionally, schools typically serving high needs populations are more likely to fit within categories of failing to meet student achievement goals (Bainbridege and Lasley, 2002). This failure may incur the imposition of structural, administrative, and financial penalties ("What happens when a school fails to make adequate yearly progress goals?" 2016). Challenges arising from these sets of circumstances fit under an umbrella of equity issues in education. Getting and keeping a cadre of talented teachers to meet the needs of children in schools addressing equity concerns drives recruitment in districts nationwide (Darling-Hammond, 2010).

DEWEY'S PHILOSOPHY OF EXPERIENCE AS A FOUNDATION

Experience of early-career teachers working in a context of equity policies and practices is at the core of the present investigation, and therefore, Dewey's (1938) philosophy was chosen as a framework (Connelly and Clandinin, 1988; Clandinin and Caine, 2013). Intertwining concepts of interaction, situation, and continuity in experience grounds the methodological decisions shaping this research focused on teachers' early-career experiences. Also, an interrelated set of terms and concepts allows for the experiences of Helena and Kristin to be juxtaposed into the narrative inquiry three-dimensional space (Clandinin and Connelly, 1992, 2002; Clandinin and Rosiek, 2007). Dewey's

criteria of experience map onto the narrative inquiry terms: temporality, sociality, and spatiality. These narrative inquiry concepts figure prominently in narrative understandings of identity. And, further, Craig's conceptualization of the best-loved self figures prominently in grounding this investigation into early-career teachers' classroom stories (Craig, 2013, 2017, 2020).

Intersecting Concepts: Dewey's Criteria of Experience and Narrative Inquiry

Because of its central focus, conceptually, narrative inquiry is structured on the criteria of experience as outlined, defined, and explained by Dewey (1938): continuity, situation, interaction. From these ideas come the narrative terms of temporality, personal and social dialectic (sociality), and place (spatiality). Temporality, from this perspective, refers to the individual history of person shaped over time, expressed in their present, and propelling them into a future. Sociality encompasses the complex interplay between an individual and the societal/cultural influences in which they are constructing meaning of their experiences over time. Place, in a narrative inquiry view, takes into account external conditions of experience, the situation, in which a person engages their existing set of constructed understandings the "attitudes, habits, and dispositions" (Dewey, 1938) built from previous experiences - in the goings-on of new experiences.

Locating interconnections between Dewey's philosophy of experience and narrative inquiry highlights the role of experience in learning and the construction and reconstruction of knowledge through story. Further, linkages between experience, knowledge, and identity are discernable within stories composed, lived, and shared. Finally, attending to the shaping influence social context plays in the construction of knowledge and identity provides opportunity to explore policy agendas as lived experience. Common ground between the conceptual frameworks of Dewey's philosophy of experience and narrative inquiry provides the impetus for the study of story in the life and work of teachers.

Narrative Inquiry and Stories of Teachers as a Rationale for This Research

Story is understood as a human endeavor to make meaning and share understandings of experience (Bruner, 1990). Working with story has shaped narrative research methodologies for decades. Narrative inquiry approaches allow researchers to "listen closely to teachers and to the stories they live out in their classrooms" (Clandinin and Connelly, 1992, p. 393). In the present investigation, the stories that Helena and Kristin compose and share of their early years as teachers are explored. Both bring into their new contexts of practice, personal histories and unique sets of knowledge constructed from experience. These epistemological, ontological, and axiological elements of identity interact with the professional world in which they construct understandings of what it means to be a teacher.

Teacher's Best-Loved Self: Bridging Between Narrative Inquiry and Identity

The concept of a teacher's best-loved self, as developed by Craig (2013) builds on two lines. First, she grounds this concept in a broad reading and deep review of Schwab's writings, and particularly ties this concept to Eros and Education (Schwab, 1954/1978) and connecting with the teacher commonplace (Schwab, 1973). At the same time, Craig links this notion to Connelly and Clandinin's metaphor of teacher as curriculum-maker (Connelly and Clandinin, 1988; Craig and Ross, 2008). This approach involves axiological, epistemological, and ontological aspects of the self. The conceptualization of the best-loved self involves the individual in developing or coming to an understanding of a sense of themselves as teachers, their commitments and convictions that shape those identities, and how they desire to engage in the curriculum process, broadly speaking. Schwab argued that actualizing the best-loved self involves self-education and, perhaps, necessary push back on training, as manifested in the imposition of methods that may be inconsistent with teachers' visions of themselves and their curriculum commitments.

The best-loved self, as a conceptualization linked to teacher identity, has implications for teacher education (Craig, 2013). Likewise, applications for teacher professional development abound. In the present study, the concept of the best-loved self is used as a mechanism to understand curriculum and teaching situations, from the perspective of the teacher commonplace. In this examination of Helena's and Kristin's stories of experience, the metaphor of tugging at the fabric of the best-loved self intimates the fabric woven to create a teacher identity. That weave can change over time and through self-education become more developed, through multiple layers of situations, and in relation to individuals and contexts of practice.

Juxtapositions Between Teacher Identity Concepts and the Best-Loved Self

According to Van Lankveld et al. (2017), human beings are natural storytellers, and they do so in many forms (i.e., traditional folktales, works of literature, and daily conversations). People, naturally, develop and share stories about themselves constructed from details about their lives. In current psychology literature, composing accounts that interpret lived experience is known as narrative identity, and this concept allows for imagining the future while also reconstructing the autobiographical past (Van Lankveld et al., 2017). McAdams (1985) early proposed this concept and outlined a research agenda examining the content of life stories. From this perspective, narrative identity is a continually evolving story of self composed and shared in order to make meaning of life. As with Van Lankveld et al. (2017), McAdams's view presents story as an autobiographical account built on individual's past and a projection of a future self. In sharing their story, cultural norms and social context influence. Hence, teachers' identities may be understood as an ongoing process of re/construction wherein people internalize conditions shaping their communities of practice (Beijaard et al., 2004). A sense of disequilibrium may emerge when a fissure develops

between teachers' inner worlds and their external worlds that may contribute to conflicts or struggle between whom they desire to be (Darvin and Norton, 2015) and a designated identity ascribed by external bodies. Within this concept of the identity constructed in present and future desires and aspirations, are ideas that parallel with the best-loved self as described by Craig (2013). Sfard and Prusak contend that stories constructed and shared within a particular context may be either told or enacted (Tan et al., 2013). A distinction is made between stories as representations of identity rather than equating stories as identity or an expression of identity (Sfard and Prusak, 2005). They further delineate actual identity, representing stories composed in the present, from designated identity, which is more focused on a self to be assumed at a later point and is based on projections for the future.

Stories about identity are mainly told in a dialogical process, through interaction, or as defined by Lave and Wenger (1991), they represent people engaged in different social practices over different periods of time; therefore, these stories are representations of the self or "the set of meanings we hold for ourselves, our inferences about who we are, based on how others act toward us, our wishes and desires, and our evaluations of ourselves" (Stets and Burke, 2000, p. 130) in relation to a certain social context. As storied by Helena and Kristin, some teacher experiences may tug at that fabric of self; situations that snag threads of the fabric when slid over the commitments and convictions teachers may hold - elemental contributors to the best-loved self. A disequilibrium may develop between the vision of self and the lived experience in classroom life. Deep rifts between may be difficult to hold in tension and could nudge teachers out of the profession. Nevertheless, teachers, to some extent, exercise agency (Beijaard et al., 2004) when negotiating their relational positions (Bucholtz and Hall, 2005) within a community of practice (Lave and Wenger, 1991). Thus, navigating, pushing through, and/or embracing the disequilibrium of a vision of self and the lived experience in classroom life is the heart of this study.

Early-Career Teachers Experiences at the Intersection With Teacher Identity Concepts

The first years of practice for teachers may be challenging as they navigate new situations, a variety of difficulties, and work to develop instructional skills and strategies. Transitioning from teacher education programs to the profession can be a fraught time in the lives of early-career teachers. Beauchamp and Thomas (2011) note feelings of isolation were common amongst beginning teachers as they entered the profession. However, upon completion of the first year as teachers, these practitioners develop a new sense of belonging, as they are immersed in the teaching community. Furthermore, teachers find "a growing sense of agency" (p. 12), which the authors attribute to the contextual influence of the teaching community. Consequently, in order to assume new identities as teachers, individuals need to feel they are part of a community, and develop a sense of belonging through active engagement in their professional communities.

While integration within the teaching community represents a key factor in early-career teachers' identity development, many elements may be in play. Identity is not static, nor an end product, but a dynamic process (Akkerman and Meijer, 2011) in which the self is constantly negotiated (Linell, 2009). According to the Dialogical Self Theory (Hermans et al., 1992; Hermans and Kempen, 1993), the self consists of different I-positions that an individual uses to express themselves. Each I-position connects to experiences and relationships. In a study conducted with a beginning teacher, Stenberg and Maaranen (2021) found early in the school year, a teacher may struggle with conflicting I-positions (I as a person; I as a teacher). By the halfway point in the first semester, the new teacher may have harmonized the internal conflict within their I-positions. Stenberg and Maaranen (2021) highlight that in the development of earlycareer teachers, the focus should be brought to these interactions within and among the I-positions, and not exclusively on professional performance.

Early-Career Teachers' Beliefs About Equity Within Teacher Identity Literature

Studies focusing on the transition between students in teacher education programs and becoming an early-career professionals, find that individuals undergo a shift in identity as their beliefs transform (Huang et al., 2021). Beliefs are considered core to a teacher's identity (Pajares, 1992). There are underlying assumptions that beliefs guide practices, influence decision making and guide the manner of interactions with students (Davis and Andrzejewski, 2009). Beliefs impact a teacher's pedagogy, assessment, and may be an impediment to reaching equity goals. Beliefs are personal and represent intrinsic constructs and an ongoing, critical review and analysis may be useful in considering ways teacher beliefs intersect and shape student learning.

RATIONALE FOR USING NARRATIVE INQUIRY METHODOLOGY

Narrative Inquiry as a Methodology

In broad terms, narrative inquiry is described as both a phenomenon and a method (Clandinin and Huber, 2002); at once an individual's way of sharing an experience with others, and also, a way of studying and understanding human experience through stories. Human beings are meaning-making creatures, and story (Bruner, 1990; Clandinin and Connelly, 1992) is a fundamental tool used to interpret experience. In addition to being both a phenomenon and a method, narrative inquiry is a relational form of research, co-constructed by researcher and researched, and based in trust (Clandinin and Connelly, 2002; Craig and Huber, 2007; Boniface, 2020).

More specific to this study, stories the participants share are understood as first-level interpretations of experience, a telling of what meaning they make of becoming and being teachers in a district facing head-on equity issues. Their knowledge constructions are, thus and then, conveyed through story.

Subsequently, we study these stories by thinking narratively (Murphy et al., 2012) with and through Helena's and Kristin's stories. Arguably, because of the relational qualities of narrative research, what may come to be understood more deeply about experiences of early-career teachers may be linked intimately, inexorably, to interconnections between Helena, Kristin, and ourselves, as researchers.

Narrative inquiry methodology (Connelly and Clandinin, 1988; Clandinin and Connelly, 2000) is used in this fine-grained examination of experiences of two early-career teachers' experience in schools shaped by equity policies and practices. The introductory slivers of stories capture moments of internal and internalized disequilibrium in the construction of teacher identity. We conceptualize Helena's and Kristin's experiences as their individual vision of their best-loved self (Craig, 2013) in tension with the practices of becoming and being a teacher.

Study Context: External Conditions/Situational Factors/Equity Policies and Practices

The district and school contexts in which Helena and Kristin began their teaching careers, in Deweyian terms aspects of the situations of these two teachers' experiences, are shaped in part by equity policies and practices. Kristin began as a special education teacher in one school located within the district, while Helena's position was as a sixth-grade teacher in another of this district's elementary schools. Kristin shifted to a first-grade classroom at the beginning of her second year.

The district is one of many in a large metropolitan area in the Southwest. Ten thousand students attend the elementary schools with this district's catchment area. These students represent the construct of a minority-majority context. At the various school sites, the students are between 10 and 25% Spanish-speaking, and the schools themselves are culturally- and linguistically diverse. All schools in the district have Title 1 designation indicating a high-level of students receiving free or reduced lunch.

Historically, in the 1980s, to counter the emergence of the construct of at-risk youth, members of the community and a local Boys and Girls Club adopted the idea of Kids at Hope. The mission statement of this organization is "that every child is afforded the belief, guidance and encouragement that creates a sense of hope and optimism, supported by a course of action needed to experience success at life's four major destinations: Home & Family; Education & Career; Community & Service; and Hobbies &. Recreation" (Maintenance mode, n.d.). This approach to meeting the diverse needs of students has inroads in 18 states. Specific to this study, the district Superintendent, decades earlier, committed to Kids at Hope. From the district office and personnel to school administration and teachers an ethos shaped by policy and practice addressed equity issues and challenges infused the two schools in which Helena and Kristin became first-year teachers.

The two participants first encountered the Kids at Hope philosophy during school-based practicum experiences. They, along with us (their teacher educators and practicum supervisors) were observers and participants in the equity practices shaped by district-wide policies based on Kids at Hope philosophy. Early one morning, we arrived in time for the Kids at Hope pledge. During another visit, we attended a school assembly celebrating students' successes and being recognized by the caring adults in their lives. The positive, caring school environment built on meeting the diverse needs of learners is what drew Helena and Kristin to this district. For Helena and Kristin, this approach to embracing equity needs of schools was a potent recruitment tool for this district.

Participant Selection

Two young women, between 21 and 23 years of age, are the focus of this investigation. Helena and Kristin are both white, middle-class, females. They are native English speakers. In the several years of interactions, their gender identities were not a topic included in conversations. They both completed their teacher education in one of the nation's largest elementary education teacher preparation programs. Helena and Kristin fulfilled requirements for elementary and special education dual certifications as part of a cohort requiring more than one hundred hours of school-based field experiences for the three semesters, during which teacher candidates engage in methods courses with corresponding classroom practicum blocks, and, then, they have two semesters of student teaching. One placement qualifies teacher candidates for elementary school teaching positions, while the second placement prepares candidates for certification in special education in Grades K-12. Application for this program is competitive. Helena and Kristin graduated with high marks and equally effusive praise from their teacher educators within the program. These two students were members of a cohort we taught over the course of their three semesters. As mentioned above, we shared classroom experiences, programmatic challenges, and supervised practicums. Upon completion, these two beginning teachers were recruited by districts across the state and elsewhere, and they had their pick of teaching positions.

Both Helena and Kristin are from families in which teaching is a known profession. Helena's mother is a teacher, and Kristin's sister is a teacher. The work, challenges, and rewards of teaching were understood. Likewise, both benefited from familial support structures as they began their work in the classroom.

These two participants were chosen because they both accepted their first teaching positions in the same district upon completion of their teacher education program. They began teaching in different schools in the district. Helena took a sixth-grade position, and Kristin started as a special education teacher responsible for primary grades. Because of the longstanding commitments of the district to meeting the needs of children related to equity issues through policies and practices, these two participants were recruited, and they accepted the invitation to share their experiences.

Situating This Study of Two Early-Career Teachers Within a Broader and Longitudinal Investigation

This study, which focuses on Helena and Kristin, is enveloped within a study involving several other early-career teachers. That broader study provides a more longitudinal perspective of a cohort of teachers who were teacher candidates within

a program in which we, the researchers, were also teacher educators. As students, Helena and Kristin participated in a narrative inquiry examining their developing sense of self as teachers through their coursework and practicum work in schools (Ross and Prior, 2012).

EARLY-CAREER TEACHER STORIES FOLDED INTO LONGITUDINAL AND CONTEXTUAL DATA: ANALYSIS, AND DISCUSSION

The data set for the present study consists predominantly of transcribed interviews with two participants. While interviews collected Helena's and Kristin's replies to specific questions, their individual responses provided a plotline of experience stepping into the teaching profession. Once these stories were situated at the heart of this inquiry, the accounts were enveloped within the participants' continuities of experience (Dewey, 1938; Clandinin and Caine, 2013). In addition to these early-career teacher stories, data collected through writings from a previous narrative study (Ross and Prior, 2012) are used to situate the participants' recounting of experience with a wider and deeper view of identity development for Helena and Kristin. This contextualizing move makes possible tracing lines of identity construction. The construction and reconstruction processes track through past, present, and future elements of experience. Their narratives of experience (Connelly and Clandinin, 1988) can be understood as a construction of identity, both professional and personal. Additionally, situating these stories temporally, spatially, and socially allows for narratively thinking with and through their stories. Thinking narratively (Murphy et al., 2012) with their stories and about their conceptions of their best-loved selves (Craig, 2013, 2017, 2020) enabled the laying Helena's and Kristin's candidate stories alongside their early-career teachers' accounts. Narrative methods of analysis of burrowing and broadening (Keyes and Craig, 2012) digs deeply into participants' experiences and contextualizes those experiences in the field-atlarge. Finally, by positioning Helena's and Kristin's stories within a field of relevant narrative inquiries and within the field of teacher preparation, retention and attrition, more broadly, these two teachers' stories of experience take on deeper meaning for these fields of study.

For the present investigation, the experiences of Helena and Kristin are forefronted because they both accepted their first teaching positions in the same district. The interviews were conducted individually, after school, at a local Mexican restaurant known to be frequented by teachers within the district that is featured in this research. Several questions were used to build and focus semi-structured interviews. The actual conversations were free-flowing and wide-ranging. The audio of these interviews was transcribed and data was organized in a MAXQDA system. The examination of these data was multi-perspectival. The stories forming the core of this research were selected for two reasons. First, these stories were shared early in the conversation in connection

to Helena's and Kristin's meaning-making efforts. In addition to the immediacy of the sharing, secondly, these stories were related with high emotional intensity. These factors, immediacy and intensity, were interpreted as indicating the import of these stories in the lives and work of these two early-career teachers.

In concluding this discussion of philosophical and methodological touchstones shaping the present study, Helena's vignette is pieced into the fuller story she shared over nachos one afternoon.

Helena: A Teaching Story From Her First-Year

A kid stole my phone. Took it off my desk. It's my third week of teaching, cop comes up to me and says, "Are you pressing charges?"

I'm looking at my principal. I'm like,I had no idea that I would be asked this question at all, much less in the first few weeks. "What do you think?" She was trying to stay out of it.

It's funny because as the cop is talking, "Well, we won't be able to do anything. We won't be able to get restitution. Well, you know, we can get him, maybe like, community service and like some therapy. I mean he wouldn't really have some punishment for it because he's too young."

My principal finally just says, "Press charges." I love her, my principal. But, oh my gosh, he's just making her more and more mad.

I got the letter a couple of weeks ago. He has to go to a probation hearing. If he agrees that he did it; he gets therapy and is having to do community service, which is obviously what he needs. And, it was really hard because he had a suspension after that. I didn't see him after. He was in the office that day, but I was like, I'm not gonna talk to him right now. I'm not going to talk to his parents and say, "Hey, I'm the woman pressing charges against your 11-year-old."

And, before he could come back – before I could tell him, "I still love you. I'm gonna have a hard time trusting you. You have to earn that back, but you're still Joseph." Before that could happen, he withdrew. I never even got to see him after – everything that happened. And, those are the things that not every first-year teacher would have to deal with. I went to a school where that was a possibility. It was. . . . It took a while. I was very upset after the whole thing. Especially with the withdrawing because, just with the out of school suspension and everything, I told people around me, I'm like, "You're gonna have to remind me, this is for his own good."

They're like, "Yes, it is."

I'm like, "If I ever look like I need a reminder, feel free to tell me."

I honestly haven't even thought about that for a long time. Teaching keeps moving forward. And, those are things that not every first-year teacher would have to deal with, but there are things that college cannot have prepared you for.

Before embarking upon process of meaning-making with Helena's story, Kristin's vignette is folded Into the original story she shared over enchiladas.

Teaching First-Grade: Kristin's Story

Well, we were having a class birthday party. And, (in speech) then, once he was in the thinking chair, he was slamming against the wall and kicking and screaming so none of the other kids get any of their speech work done. . . . And, the speech teacher walked him back, and she had her hair all sorts of messed up. . . It happened in speech, and he didn't get his consequence until he got back to my classroom. And, I said, "I'm really sorry, but because of the choices that you made in speech, you will not be able to participate in our birthday party." And, so, I took a cupcake off his desk.

And, the, he threw his desk at me.

And, the, it was dismissal. I opened the door: all my kids went. They ran into my teammates' rooms. And, he just started throwing chairs all across the room. . . He went like this across my desk and put everything on the floor. Chairs everywhere.

And, I'm trying to call administration. Nobody's answering. And, he just having a field day in there. And, when I finally got hold of administration. ...this is the new vice-principal, and she came in and was like, "Whoa!" Like, it was the first time she had ever seen anything like this before too. Like, this was my first time seeing anything like this, but this should not be your first time seeing anything like this.

I left crying that day because he left my class in shambles. And, I had to go to swim practice. I didn't have a choice. So, I knew that meant an extra early morning for me the next day.

And, like, my vice-principal came in and was like, "Start cleaning this up. . ." and, like made him start putting things away. But, like, he's six. He's not going to clean it up. He's not going to do it the way I wanted it. So, I left crying that night. . . .Both my teammates called me, and they were like, Kristin, it is not you. Because I aid that same thing. Like, I never thought that I would have the kid that I can't control.

Continuities in the Mix: Identities Under Construction

Because these two participants engaged in earlier research projects during their teacher candidacy, contextualizing the stories they shared during their early careers within a more temporal perspective coalescing around emerging visions of their best-loved teacher selves was possible. Nubs of a developing vision of themselves as the type of teacher each would most like to become are, then, laid alongside the dilemmas tugging at their teacher identity constructions of the present-day temporality. Tensions surface in the bumping between their respective sense of their best-loved selves and the exigencies of lived experience in classrooms and schools.

Helena's Emerging Best-Loved Teacher Self

During her teacher candidacy, Helena shared that she had always wanted to be a teacher.

My desire to be an educator has been present as far back as I can remember. I believe all began because of my older sister, whom I worshipped and adored. She wanted to be a teacher, so naturally, I did too! It helped that I loved school, as a student, and would often take the roll, as a teacher, with my stuffed animals.

When I went to college. I found myself as an underdeclared major with my course load all over the place – astronomy, art history, anthropology, French, and physics. I want to experience all before deciding. I also found myself right in the middle of a dormitory learning community for education communities. As I met and interacted with the girls on my hall, all fervent and excited education majors, I soon realized that, despite my wandering thoughts, education had always been at the back of my head for a reason. Shortly after I made this discovery, I quickly declared an elementary education (and subsequently a dual certification in special education), and I have never looked back.

Helena conceptualizes in this history, how she developed a sense of self as teacher. First, as an elementary school student taking on the play role of teacher and becoming more solidified as she prepared for her professional life. As is true of many teacher candidates, what it means to be a teacher is shaped by experiences of school as a student. These two participants' perspectives were influenced, also, be watching close family member/s engage in the work of teaching.

In sharing a sense of her best-loved self, Helena described how hers began to take more shape as she worked with students during her classroom practica.

I have spent three semesters of my college career in six different educational settings. There's one particular story that cemented why this is the profession for me.

In the behavior support room I was placed in, they took frequent field trips into the outdoors....One day, as we were hiking back from a leisurely trip to [a local geological site], a fourth-grade student of mine and I were having a conversation about the plants all around us. This student, a fourth-grader with mild cognitive intellectual disability disorder, was in love with the outdoors. After telling me that one plat "must be a species," he looked up at me. Ever so earnestly, he asked me, "Are you a boy or a girl?" Keep in mind I had just cut most of my hair short, and I had been in this classroom for three weeks already. When I answered that I was a girl, but that I understood that my hair was short like most boys....That simple answer was enough to satiate his curiosity.

The fact that in the three weeks I had spent so far in that room, I had managed to build a relationship with him where he was comfortable enough to ask me this question said it all. Putting on an engaging lesson and managing behaviors, is all well and good, but my favorite part of the job is the relationship I have the privilege to make with these students.

Helena's best-loved self as a teacher was taking shape around the idea that relationships with students are the most rewarding part of the job. She is arguing in this statement that the relationships teachers build and maintain are core to her bestloved self as a teacher.

Kristin's Emerging Best-Loved Teacher Self

Kristin told a story about a child who deeply impacted her. Gordon had Asperger's Syndrome, and he was in her swimming class.

All through high school and for most of my freshman year, I was convinced that I wanted to be a high school English teacher. I had a great English teacher my junior year of school who sparked

my interest in the subject. However, over summer break, I began giving private lessons to s seven-year-old named Gordon.

Ever since I was 15, I have been giving swim lessons over the summer to children ages two-12. Gordon was special though. The first day that I met Gordon he would not talk to me. He was scared to get in the water, swim, and trust me even in the slightest. I worked with him twice a week for the entire summer in half-hour increments, and slowly we began to make progress. By the end of the summer, I had Gordon swimming with confidence across the pool all by himself.

Gordon has Asperger's Syndrome, and because I worked so closely with him and was able to treat him like any other student who I would work with, I fell in love. Gordon is the reason I chose elementary and special education. I hope that I can make a difference in my students' lives and watch their eyes light up when they learn something new.

Gordon plays a role in the development of Kristin's best-loved self. Kristin talks about falling in love; an affair with her emerging teacher identity. An ability to excite students about learning and being a trustworthy adult in the lives of children are central to her best-loved self.

Kristin recollected another experience during her practica during which this desire to excite students' motivation to learn and this story reinforces this element of her best-loved self.

There was one lesson in particular that I taught that made me realize that primary teaching was exactly where I needed to be. It was the last week in my first-grade general education placement...and, I was teaching a lesson in math. I knew right away that I wanted to make it a hands-on lesson because my first graders did so well with getting up and moving around. Just watching their little faces light up when they were working collaboratively with each other and getting all the answers while learning kinesthetically was amazing. It was in that moment when I knew that I had the energy, the ability, and the drive to teach primary grades. It was in that moment that I knew I wanted to bring my energy to young grades and get those students as excited about learning as I was as a student.

These stories expose points of impact in the construction of a sense of a best-loved self. These particular interactions between particular preservice teachers with particular children (Ross and Chan, 2008) may provide the grist for examining philosophical and professional commitments as they are being incorporated into best-loved selves and carried forward into the first classrooms as early-career teachers.

Positioning Helena's and Kristin's Early Career Experiences Within Narrative Research Literature

Narrative research (e.g., Clandinin et al., 2013), for example, provides insights into the complex and nuanced ways that teachers make sense of their contexts of practice and the role autobiographical needs play in leaving the profession. In the narrative research literature regarding teacher retention and attrition, the process of leaving teaching may be perceived as a set of experiences that build on one another and hue a path upon which teachers to walk away. An awareness of

small details seeping from the stories portrayed in this research hint at a tugging at the fabric of teacher identity. In another narrative inquiry, Beaton (2014) focuses on dissonance teachers may feel as they encounter school milieus. In both Helena's and Kristin's experiences, dissonance is an element, but the tensions seem less located in taking professional risks. Rather, the rub emanates between the image constructed of their bestloved selves and the day-to-day lives of teachers. Perhaps, a more germane explanation can be found in the research with beginning teachers and their desire for compliance conducted by Flores and Day (2006). Elements of compliance may be extracted from Helena's and Kristin's early teaching stories. In Helena's case, the principal's response to just press charges, could be interpreted as a command to the early-career teacher who, then, complies. In Kristin's case, the pressure is more implicit. The speech therapist came to Kristin's classroom with a student who had been disruptive and, then, escalated through ineffective management strategies. This colleague's showing up is an unspoken demand that the classroom teacher, Kristin, take action with this child, to hold him accountable for behavior outside of the classroom. The act of compliance with others' expectations may be partially involved in the dissonance these two early-career teachers may have felt between lived experiences and their best-loved selves. One other burrowing into stories and broadening into the narrative inquiry research literature exposes the role that administrators have in the work of earlycareer teachers. In Helena's story, she expresses the feeling that she appreciates her principal with the words, "I just love her." Kristin's story is quite the opposite. She finds her viceprincipal's response lack-luster. The two leave the experiences having felt quite different levels of support as they reconstruct their developing sense of who they are as teachers.

Experience Criteria as an Analytic Tool: An Inquiring Into Stories of Early-Career Teachers

Helena and Kristin, within their early-career contexts of practice, engage with and in challenges arising from work in schools shaped by equity issues. Helena's story, in which a bond with her student is broken, tugs at her best-loved self's commitment to relationship to her developing teacher identity. Through Kristin's cupcake incident, and the ensuing loss of control in her classroom, a different facet of equity is highlighted. In her storying of this experience, evidence of re/construction as she pieces together her teacher identity may be heard.

Helena: Becoming and Being a Teacher Amidst Equity Contexts

In recounting this story, Helena notes that she could have taken a job elsewhere: in a school where the challenges connected to high-level of student need and interconnected equity issues. She explains that teaching in this district was appealing to her. Helena had visited this school, had become familiar with its culture. A sense of strong alignment between the school's equity policies and practices and her own personal commitments prompted Helena to accept this position. A compelling interconnection

between temporal elements of continuity emerges in this explanation. Helena's attitudes, habits, and dispositions – her identity – prompt her to visit the school and recognize the connections between the personal and the social. In taking her first teaching job in this school, in accepting this position, she is, in fact, driving her story forward temporally – she is constructing a future.

Within the initial weeks of her first year, Helena found herself caught up in an unfolding experience in which she must choose whether or not to involve her sixth-grade student with the legal/justice system. Here, then, Helena is caught a situation – a collection of external factors with which she must interact. "Are you going to press charges?" This question is a complicated dilemma with no clear right answer. Helena's story portrays this experience as one fraught with emotion. Her best-loved self centers on the primacy of creating and maintaining relationships with students. A construction of knowledge and identity coming out of this experience likely sets up a disequilibrium. In instructing her colleagues to remind her, when troubled with memories of this experience, that this was for Joseph's own good. A sense of self-doubt tinges these words and lingers in what might be construed as a miseducative experience for all involved.

Within her first month, Helena met a challenge for which she felt unprepared. She intimated that not every first-year teacher would encounter such an experience. She stated that these are situations that college does not, cannot, prepare you to meet. In this moment, she relied on her school administrator for guidance and her school colleagues for support, highlighting the significance of relationship-building. Lower teacher turnover is associated with supportive school leadership, and leaders influence early career teachers' perceptions of school culture (Kraft et al., 2016; Burkhauser, 2017; Rothmann and Fouché, 2018; as cited in Van den Borre et al., 2021). As she grieves this relationship with Joseph, she re/constructs meaning from this experience and continues the work of weaving the fabric of her teacher identity.

Kristin: Becoming and Being a Teacher Amidst Equity Contexts

Kristin's story highlights issues of equity as they entwine amongst children with special needs. In the initial stages of this experiences in which the first-grader returns to his classroom from an intervention setting where he has had some challenges with his behavior. The consequences implemented by the speech teacher were ineffective. Both she and the student returned to Kristin's room escalated. Here, Kristin finds herself tangled in a situation not of her making. The interaction of her identity within the situation is within her control. However, her sense of herself as a teacher with exceptional management skills pushes her into an action that blows oxygen onto the fire. The distressed, angry, and emotional child lashes out at a consequence exacted in a context outside of the original misbehaviors.

In follow-up conversations with Kristin, her teammates reference the first-grader's disability as a factor in the child's response to the consequence delivered to the child upon his return for his disruptive behavior during speech. In their affirming message for Kristin, "that it was not her," they attribute the outburst as part of his individual internal conditions.

Kristin, as a teacher candidate, completed course work and practicum experiences for a special education certification with her general education qualifications. She completed a year as a primary grades special education teacher before she moved to her first-grade elementary classroom. She brings a commitment to working with children with special needs and accepted a job in a district and school meeting Title 1 criteria. She works with a minority-majority student demographic. These are elements of her continuity, bits and pieces of past experiences, that are being cobbled together in a teacher identity, shaping her knowledge of herself, her students, and what it is to be a teacher.

This cupcake confrontation escalated and caught her up in self-doubt. Her words that she never thought she would be the teacher with an out-of-control child conveys the depth of disappointment, disequilibrium, and distrust she felt. The distrust lays at the doorstep of her administrative support. The disequilibrium bores into her self-doubt. And her disappointment is leveled at herself, evidenced in the assuaging of these emotional strains left to her teammates and her self-reflections. The re-constructions of self that impact interactions with individuals in forward looking stories.

Teaching is a profession of making moment-to-moment decisions, the results of which may not be predictable and not what was intended. Teachers' inner world and working environment are interwoven and construct an overabundance of factors associated with teacher retention (Zavelevsky and Lishchinsky, 2020). Teaching is a series of interconnected, complicated, complex, and nuanced interactions of continuities and shifting situations.

CONCLUSION

According to Carver-Thomas and Darling-Hammond (2017) "the severity of (teacher) turnover varies markedly" (p. v) across the United States. Statistically, for teachers working in contexts similar to Helena and Kristin, 16.7% of teachers leave the profession. For teachers working in Title 1 schools, the number increases to 70%. For those teaching in schools with a high percentage of students of color, similarly, 70% of teachers leave their positions. Our two participants, who are weathering their early-career years while remaining in teaching, seem to have prospects of staying in the field. We propose that their commitments to equity and teacher preparation that exposed them to contexts of positively addressing complex and challenging venues of practice may have provided them with resources to withstand the day-to-day tugging at their teacher identity. Certainly, within their school sites, they found teachers (in the case of Kristin and Helena) and administrators (in the case of Helena) who provided encouragement and guidance which may have enabled these two early-career teachers to compose stories in which they see themselves as staying in the profession.

We believe the concept of the best-loved self has value in helping teachers construct their sense of identity. Their vision of their best-loved self may strengthen them to stay in teaching long enough to develop professional knowledge, skills, and dispositions. The concept of the best-loved self may prompt the reconnection to philosophical commitments and

aspirations that brought them to teaching. The best-loved self may provide a counterbalance to the challenges a sense of teacher identity may encounter in the everyday tumble of lives lived in classrooms and schools.

As was the case for Helena and Kristin, this sense of the best-loved self may develop early and can shift over time. For teacher educators, this aspect of identity construction may provide openings for exploring philosophical commitments within preparations programs with teacher candidates. Teacher education programs that focus on the complexities of the demands on professional deliberations teachers face, may find the concept of the best-loved self an entry point into these discussions.

For teachers and administrators in schools who are intaking beginning teachers, understanding these nascent facets of best-loved teacher self may provide a window into these early-career teachers' motivations. Schools "characterized by mutual respect, collaborative cultures, and common educational objectives are more successful in retaining early career teachers" (Long et al., 2012, as cited in Van den Borre et al., 2021, p. 5). Perhaps, narrative inquiries with new teachers might open discussions with a focus on schools meeting challenges with high levels of need among their student populations.

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DATA AVAILABILITY STATEMENT

The datasets presented in this article are not readily available because these data are not available to others than the approved researchers. Requests to access the datasets should be directed to VR, vicki.ross@nau.edu.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Northern Arizona University. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

VR collected the data for this study. VR and TC analyzed the data and were involved in the initial writing of the manuscript. RM and YZ expertise were required to complete major portions of the requested revisions. All authors have been involved in the final augmentation, revisions, and editing of the manuscript.

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