The Teacher Educators' Journal

VACTE

Virginia Association of
Colleges and Teacher Educators

A Journal of the Virginia Association of Colleges and Teacher Educators

Fall 2022
Volume 15
Issue 2

Editorial Team

Holly Glaser
hglaser@gmu.edu
George Mason University

Kristien Zenkov
kzenkov@gmu.edu
George Mason University

Mark Helmsing
mhelmsin@gmu.edu
George Mason University

Michelle Lague
mlague@gmu.edu
George Mason University

Andrew Porter
aporter7@gmu.edu
George Mason University

Virginia Association of Colleges and Teacher Educators Executive Board

Copy Editor:
Andrew N. Porter

Fall 2022 Journal Reviewers:

Alyssa Whitford
Amanda L. Edgerton
Amanda Rudolph
Amy Mungur
Andrea L. Ridley
Andrea Tochelli-Ward
Angelica Blanchette
Ayah Issa
Benjamin Boche
Bernard Oliver
Brian Hibbs
Brittany Brewer
Brittany Jones
Canyon Lohnas
Caroline Sheffield
Casey Holmes
Catherine Howerter
Christopher Hart
Clara Hauth
Connie Bowman
Cori Hixon
Courtney Verbiest
Cristina Procaccino
Curt Nielsen
Deidre Cutter
Desmond McGlone
Eric Moffa
Gino D. Binkert
Gregory Samuels
Haley W. Sigler
Janine Davis
Jyminn Sanfords-DeShields
Jennie M. Baumann
Jessica Hiltabidel
Jessica Reed
John McCook
Judy Paulick
Kaitlynn Fraze
Karen Frantz-Fry
Kate Roscioli
Katherine Szocik
Kathleen J. Kraus-Zadrozny
Kelly M. Costner
Kianga Thomas
Kimberly Feldman
Kristen Haynor
Kristin Doherty
Kyle Chong
Lauren Laughlin
Leslie Ann Sena
Lindsey Allene Hall
Lisa Hawley
Lisa Pluska
Logan Rutten
Louis Warren
Luqing Zang
Marvana Bennett
Marvin Powell
Megan Lister
Meiheng Chen
Melanie M. McCormick
Melissa C. Jenkins
Mindy Gumpert
Nancy Riddell
Natalie Barbieri
Natalie Young
Norma Linda Gonzalez-Mattingly
Patricia Geyer
Patricia Nugent
Peter Nelson
Rachel Hammer Billman
Rachel Susanne Potter
Reagan Murnan
Robbie Higdon
Scott L. Roberts
Sheila Orr
Suha Gangopadhyay
Tammy Parlier
Vicki Luther
Vicki Taylor
Wendy Rodgers
Yasmine Bey

Editors' Welcome

Kristien Zenkov, Andrew Porter, Holly Glaser, Michelle Lague, and Mark Helmsing

When our editorial team began our term of service to *The Teacher Educators' Journal* (*TTEJ*), we hoped to "move the needle" a bit with this publication's reach, in terms of authorship, audience, and the relevance of the topics addressed. We imagine every scholarly author and editor aims to do the same. A year into our editorship—and represented by this issue—we can assert that we're making a bit of a unique *TTEJ* contribution, as we have already moved to publishing two issues of the journal per year. While part of the cause for this doubling of productivity was simply the result of the quantity and quality of the first set of submissions we received almost exactly one year ago, we now recognize this second annual issue as an opportunity to consider more pressing topics in the teacher education world and to even appeal to other teacher education scholars and practitioners to help determine particular themes for these special, second editions.

For this first of our second issues, authors address a range of these current concerns and questions. In Section I, the first three articles examine a still-new phenomena that has simultaneously upset and become the norm over the past almost three years: teaching and teacher education in virtual contexts. In "Innovations in Intern/Mentor Relationships and Conceptions of the Technological Pedagogical Content Knowledge (TPACK) Framework," scholars Wells, Irish, Peck, Davis, and Clayton offer us an examination of a technology/pedagogy framework in teacher education settings. They set the stage for the Bradford and Norman article, "'There Was a Lot Going on Behind Them': Student Teachers' Access to Children and Their Families During Virtual Student Teaching," which examines elementary preservice teacher candidates' understandings of how the context of virtual student teaching impacted the access between families and student teachers, how student teachers described the access, and how the student teachers believe the experience will impact their future family engagement effort. The opening article and its application of the TPACK framework also provide a useful framework for the third article in this issue ("Reimagining Online Teacher Education: A Collaborative Autoethnography"), in which Moody, Holtz, and Matthews deconstruct the social phenomena of teacher education in an online environment, and suggest that the virtual context may actually contribute to an enhanced focus on practice.

Section II opens with an article that spans boundaries both in terms of the manuscripts in this *TTEJ* issue and in terms of topics in the teacher education field. In "Talking About Race in Mathematics Teacher Education: An Analysis of Online Community Dialogues," authors Moldovan, Gonzalez, and Kaufman continue the exploration of virtual and online structures in educator preparation, while examining increasingly vital, race-related issues. And, in "'Mister What Time is it?': Preparing Teachers for Border Schools: The Case of the Arizona Borderlands," Kralovec, Orozco, Van Gorp, and Meyer extend this examination of "frontiers" and "confines," offering an account of how a traditional teacher education program in the Arizona borderlands evolved into an alternative certification program.

In Section III, we return to that notion of "moving the needle." Or, in our academic circles, offering compelling, scholarly perspectives that help us to see and, as a result, teach children and young people - and teachers - differently and better. In "Changing the Narrative on Rural Schools: Addressing Damaging Rural School Stereotypes through Teacher Education," Hartman, Yahn, and Brady answer the recent rise of criticism towards rural people and places, offering an historic and current look at rural schools and examining the role that critical

pedagogy of place and strong school-university partnerships might play in charting an initial path for teacher education programs in the hopes of changing the current narrative about rural schools. And we close this issue by returning to what is always at the center of our teacher education endeavors: the young people future teachers serve. Verbiest and Murnan share "Using Literature to Support Adolescent Identity Development: A Critical Perspective," in which they acknowledge the integral role that identity plays in adolescent literature and explore the sociocultural needs of adolescents, their challenges in today's society, and the ways that literature can support adolescent identity development to leverage, rather than deter, their reading skills.

The Teacher Educators' Journal

Published by the Virginia Association of Colleges and Teacher Educators

Table of Contents

Innovations in Intern/Mentor Relationships and Conceptions of the Technological Pedagogical Content Knowledge (TPACK) Framework 1

"There Was a Lot Going on Behind Them": Student Teachers' Access to Children and Their Families During Virtual Student Teaching 27

Reimagining Online Teacher Education: A Collaborative Autoethnography 53

Talking About Race in Mathematics Teacher Education: An Analysis of Online Community Dialogues 73

"Mister What Time is it?" Preparing Teachers for Border Schools: The Case of the Arizona Borderlands 94

Changing the Narrative on Rural Schools: Addressing Damaging Rural School Stereotypes through Teacher Education 111

Using Literature to Support Adolescent Identity Development: A Critical Perspective 131

Innovations in Intern/Mentor Relationships and Conceptions of the Technological Pedagogical Content Knowledge (TPACK) Framework

Melissa Summer Wells
University of Mary Washington

Christy K. Irish
University of Mary Washington

Kristina A. Peck
University of Mary Washington

Janine S. Davis
University of Mary Washington

Courtney Clayton
Francis Marion University

Abstract

The global COVID-19 pandemic has caused many adaptations to preservice teacher preparation, especially supporting completion of field-based internship experiences. This mixed methods research project utilized surveys to analyze the impact of virtual settings on (1) intern (n=14) and mentor teacher (n=5) experiences and relationships and (2) the use of instructional technology, specifically Technological Pedagogical Content Knowledge (TPACK). Key findings indicated (1) reversals of traditional mentor/intern relationships and (2) the role of technology as the foundation of instructional decision-making, resulting in challenges when adapting pedagogies of classroom management, assessment, and differentiation to virtual settings.

Keywords: clinical experiences, mentoring, TPACK, virtual instruction

For many preservice teachers, student teaching represents an exciting benchmark, bridging years of coursework and field experiences with the opportunity to become "real teachers" in their *own* classrooms. The internship, or student teaching, involves extended time shadowing a mentor teacher (henceforth, "mentor") in a classroom, assuming teaching responsibilities, and experiencing the realities of teaching. Often, preservice teachers anticipate the close relationships they will develop with their mentors and students as they gain valuable experience for their first teaching jobs.

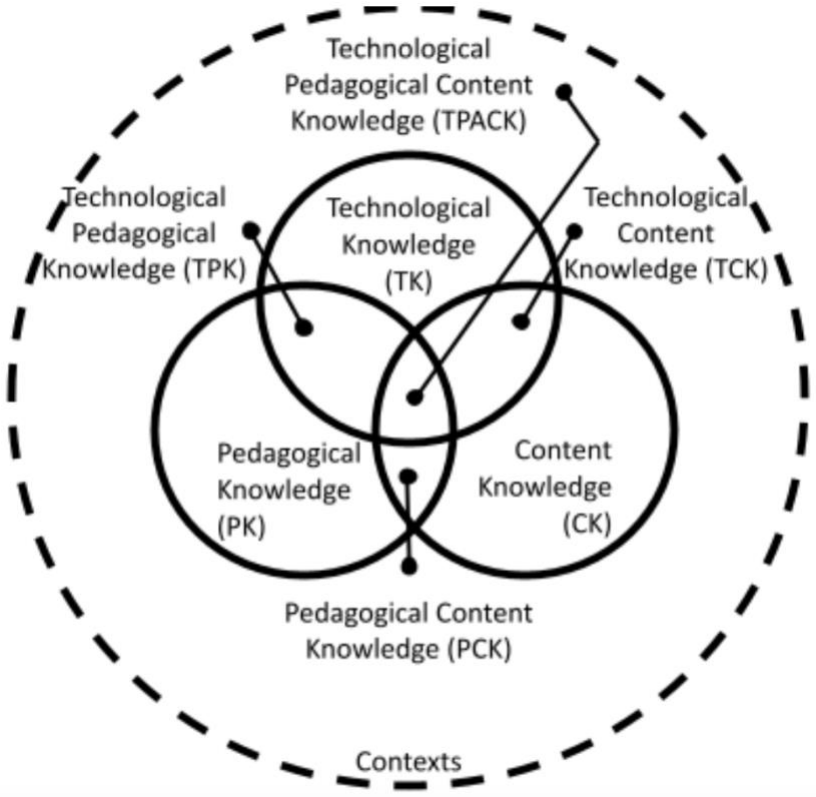
In Spring 2020, however, most of those traditional internship experiences disappeared as the COVID-19 pandemic paused in-person instruction and closed school buildings. A key component of the internship—extended time "in the field"—required innovations. As teacher educators at a teaching-focused institution in Virginia, we investigated how being in the field in Fall 2020 impacted intern and mentor experiences and interactions as well as their perceptions of instructional technology within the Technological Pedagogical Content Knowledge (TPACK) framework.

Conceptual Framework

Our conceptual framework incorporates Mishra and Koehler's (2006) TPACK framework and mentor/intern relationships. First, Mishra and Koehler's (2006) TPACK framework describes "what teachers need to know in order to appropriately incorporate technology into their teaching" (p. 1018) so that educator preparation programs (EPPs) could incorporate these skills into their programs. TPACK acknowledges that technology, pedagogy, and content knowledge all influence and limit each other, all within the context of the instructional setting (see Figure 1).

Figure 1

The TPACK Framework and Its Knowledge Components (Mishra & Koehler, 2006)



While content knowledge and pedagogy are at the foundation of instructional decision making, TPACK requires technology not be merely "added on"; instead, it should be balanced with pedagogy and content knowledge. Furthermore, TPACK incorporates the significant influence of context on the relationship among the varying knowledge components. Context may relate to varying issues of access, such as the devices and internet services available, or even which tools are allowed or blocked. Koehler, Mishra, and Cain (2013) highlight that context, while significant, is often overlooked, often resulting in a "one-size-fits-all approach to technology integration" (p. 14). When considering the intersection of pedagogy, content knowledge, and technology, therefore, individual contexts must be considered. Table 1 details all

seven domains within the TPACK framework, including acronyms that will be referenced throughout the article.

Table 1

Overview of TPACK Domains (Koehler, Mishra, & Cain, 2013)

Domain Name	Key Characteristics
Pedagogical Knowledge (PK)	"Teachers' knowledge about the subject matter to be learned or taught" (p. 14)
Content Knowledge (CK)	"Teachers' deep knowledge about the process and practices or methods of teaching and learning" (p. 15)
Pedagogical Content Knowledge (PCK)	"Knowledge of pedagogy that is applicable to teaching specific content" (p. 15)
Technological Knowledge (TK)	"Certain ways of thinking about, and working with, technology"; always in flux (p. 15)
Technological Content Knowledge (TCK)	"Understanding of the manner in which technology and content influence and constrain one another" (p. 16)
Technological Pedagogical Knowledge (TPK)	"Understanding of how teaching and learning can change when particular technologies are used in particular ways" (p. 16)
Technological Pedagogical Content Knowledge (TPACK)	"Understanding that emerges from interactions among content, pedagogy, and technology knowledge"; "the basis of effective teaching with technology" (p. 16)

The second aspect of our conceptual framework involves mentor/intern relationships. Mentors' pre-existing role expectations include the mentor as gatekeeper (Davis & Fantozzi, 2016); instructional coach or academic supporter; emotional or psychological supporter; and socializing agent (Butler & Cuenca, 2012; Koc, 2012). From the interns' perspective, their relationships with their mentors influence their identities as interns (Smagorinsky et al., 2004) and determine their perceptions of success in their internship (Maynard, 2010). The typical

expectations of these roles arise from the norm of an in-person mentoring relationship, where both parties share physical space. This study examined the intern/mentor relationship when that traditional physical space became virtual.

Literature Review

Focused on clinical partnerships and practice, the second standard from the Council for the Accreditation of Educator Preparation (CAEP) states in its rationale, "Education is a practice profession and preparation for careers in education must create nurturing opportunities for aspiring candidates to develop, practice, and demonstrate the content and pedagogical knowledge and skills that promote learning for all students" (CAEP, 2013, para. 1). Opportunities for practice-based preparation occur throughout EPPs, traditionally culminating in an immersive field-based placement. As the CAEP language notes, the focus tends to be on content and pedagogical knowledge, not technological knowledge; however, the pandemic centered technology in our interns' field experiences, with all our interns experiencing at least part of their field experience virtually. Two relevant themes in the literature include (1) virtual field experiences and mentoring and (2) TPACK with preservice and early-career teachers.

Virtual Field Experiences and Mentoring

Literature specifically applicable to virtual field experiences is somewhat limited. With respect to virtual field experiences, Hixon and So (2009) identified three categories of technology-enhanced field experiences: (1) Type I field experiences in traditional, physical classrooms, with technology used for supervision, reflection, or communication; (2) Type II field experiences, involving remote observations via videos or videoconferencing; and (3) Type III field experiences, which use fully virtual tools such as virtual reality and computer-enhanced simulations. Due to the pandemic, our interns experienced a unique blend of Type I and II field

experiences: they interacted with students both asynchronously and synchronously in a variety of modalities (physically present in the classroom, attending virtually, or a combination of both). Downs (2015) studied inservice K-12 teachers completing an internship in a virtual school for an online teaching endorsement. Positive responses to their virtual internship included the novelty of the learning environment, the flexibility of the location, and the possibilities of meeting evolving needs within the realm of teaching and learning. Negative responses included the large time investment to plan and teach online, the lack of student interaction, and difficulty assessing students: one participant explained effective formative assessment required "talking directly to them and asking live questions in order to gain insight of how they are thinking at the moment based on their gestures, voice tone, and other nonverbal behavior" (p. 194). If experienced inservice teachers completing a program designed for online teaching faced certain challenges in virtual environments, our novice preservice teachers would likely face these challenges and more.

Additional research explored the efficacy of technology-based mentoring. In their synthesis of studies on technology-based mentoring for inservice teachers, Gentry et al. (2008) noted generally positive experiences across studies, though these findings were frequently self-reported and lacked triangulation with direct observation. Reese (2016, 2017) studied mentoring of preservice elementary music teachers over Skype, with mentees teaching and recording their lessons in the physical classroom, while mentors watched the videos and Skyped with mentees to reflect and debrief. This virtual mentoring resulted in more equitable conversations between mentees and mentors, addressing general pedagogical information (37%), subject-specific pedagogical information (26%), or classroom management (19%), topics common with in-person mentoring. Mentor challenges included technological limitations, such as the restricted webcam

view; the lack of real-time interaction; and being less able to perceive dynamics in teacher/student interactions. Benefits included additional time for reflection and discussions with the intern and professional development from learning from interns. These findings indicated that our interns and mentors could possibly experience reconfigurations of mentoring that would be beneficial (such as being able to discuss instruction beyond the constraints of time and space) but also introduce unique challenges.

Finally, existing research on interns' and mentors' experiences during the pandemic was extremely limited as we began our study, since the pandemic began only a few months before. Barnhart (2020) noticed two key shifts during the pandemic: (1) an increased recognition of the skills and knowledge interns bring to the mentoring relationship, and (2) new possibilities to use co-teaching to build on interns' and mentors' respective strengths. Therefore, the novel context of the pandemic caused mentors to acknowledge the strengths interns brought with them into the classroom and to channel those strengths through co-teaching. Next, preservice and early-career teachers' experiences with TPACK will be explored.

TPACK with Preservice and Early-Career Teachers

TPACK involves a sophisticated balance among multiple pedagogical considerations: technology, pedagogy, and content knowledge, all bound within the context of individual classrooms. Therefore, it was important to explore literature documenting how novice preservice and inservice teachers incorporated TPACK in their instruction. Focusing on the technology component of TPACK, Joo et al. (2018) surveyed secondary preservice teachers and found (1) higher levels of TPACK correlated with increased self-efficacy, perceived ease of use, and perceived usefulness; (2) perceived ease of use also correlated with perceived usefulness (the easier a tool was to navigate, the more the preservice teachers envisioned using it in the future);

and (3) higher levels of self-efficacy, perceived ease of use, and perceived usefulness resulted in higher levels of intention to use technology. However, other research noted pedagogical and content knowledge domains of TPACK may be stronger than technology-focused domains. Schmid et al. (2021) compared secondary preservice teachers' self-reported TPACK with their use of instructional technology in lesson plans and found CK to be present the most and TCK to be present the least. Agustini et al. (2019) surveyed and interviewed early-career teachers and discovered CK and PCK had the greatest influence on their pedagogy, while TPK and TPACK had the lowest influence. Therefore, while confidence with technology increases the likelihood that it is used in instruction (Joo et al., 2018), novice teachers often struggle the most with the technology-based aspects of TPACK (i.e., Agustini et al., 2019; Schmid et al., 2021).

Furthermore, teachers' self-efficacy with TPACK decreased during the pandemic. In Spring 2020, Mourlam et al. (2021) asked inservice teachers to self-report TPACK during and before (retrospectively) the pandemic on a Likert scale. Results indicated that teacher knowledge decreased on all TPACK domains except for TK and TCK during the pandemic. PK, PCK, and TPACK dropped to the point that teachers *disagreed* that they had knowledge in these areas during the pandemic. Therefore, while teachers may acquire more knowledge about digital tools when forced to resume their teaching responsibilities virtually, we understood that our interns and mentors may struggle with applying these technologies in productive, pedagogically relevant ways.

In conclusion, the pandemic redefined the traditional field-based internship experience in unexpected ways. While previous research indicated that mentoring could flourish in virtual spaces (i.e., Gentry et al., 2008; Reese, 2016, 2017) and could lead to increased recognition of the skills interns bring to mentoring relationships (Barnhart, 2020), challenges included

navigating technological limitations (i.e., Reese, 2016, 2017), transcending the previously-existing versions of technology-enhanced field experiences (Hixon & So, 2009), and building TPACK confidence with technology-related areas for preservice and inservice teachers alike (i.e., Agustini et al., 2019; Schmid et al., 2021). Even in a traditional internship, the learning curve is steep; our survey of existing research confirmed that additional challenges of teaching and mentoring in a virtual space would define our interns' and mentors' experiences.

Methods

In this article, we considered two research questions: (1) How did virtual instruction impact the experiences and interactions of interns and mentor teachers in Fall 2020? (2) How did virtual instruction impact the role of instructional technology and TPACK in Fall 2020?

Participants and Context

Our EPP is a five-year, undergraduate/graduate program where students graduate with their bachelor's degree and then return for a one-year master's degree. During the fall of the graduate year, interns take courses and complete a part-time teaching internship. Elementary-licensure interns complete fieldwork in schools two full days a week; secondary and PK-12 licensure interns complete an intensive one-month part-time internship. During the part-time fall internship, interns are placed in one classroom with one mentor. Traditionally, interns are physically present in the mentor's classroom to observe, support students during lessons, write and teach lesson plans, receive feedback, co-teach, and attend meetings and other school events. During this part-time internship, the intern fills support roles alongside the mentor's primary leadership in preparation for the spring full-time internship. In Fall 2020, this part-time internship was fully or partially completed virtually.

For our mixed methods research, we recruited interns and mentors across programs and placement school districts; a total of 14 interns and five mentors participated in data collection. From the elementary level, there were 11 interns (79%) and three mentors (60%); secondary, one intern (7%) and two mentors (40%); and PK-12, two interns (14%) and no mentors. Participants came from three nearby school districts.

The modality of instruction varied by district. All three districts started the first quarter (August through early October) with 100% virtual instruction. In the second quarter (mid-October through December), districts varied in their instructional modality. Some offered hybrid instruction with an option for students to stay virtual; some remained fully online. Some teachers in hybrid districts had both in-person and online learners, either simultaneously or at alternating times (i.e., morning in-person students and afternoon online students), or they were assigned to fully online or in-person instruction. Therefore, intern and mentor experiences varied widely, even within the same district.

Data Collection

Interns and mentors answered similar questions on separate surveys. To ensure the survey's content reliability and construct validity, we designed questions rating self-confidence in areas that (1) aligned with our existing intern evaluation (developed in 2017 based on another Virginia institution's CAEP-approved instrument and then tested for reliability and validity); (2) anticipated areas that could be a challenge for interns and mentors in a virtual space, as evidenced by existing research findings; and (3) aligned with the ten Interstate Teacher Assessment and Support Consortium (InTASC) standards (CCSSO, 2013). For example, questions 2, 3, 9, and 12 all aligned with InTASC Standard 3, Learning Environment. Additional questions gathered demographic information, such as endorsement area and primary instructional

modality; sources of knowledge, such as trainings, courses, and interactions with peers/colleagues; and open-ended responses asking (1) “Will you be utilizing low tech or no tech learning activities in your internship/teaching/mentoring? Please explain” and (2) “Any other comments about completing your internship/being a mentor in a virtual space?” Pre-surveys were administered in October 2020 and post-surveys in December 2020.

Data Analysis

The data were analyzed using a mixed-methods approach. The intern and mentor survey data were analyzed separately using descriptive statistics in Excel. All open-ended survey questions were coded using constant comparative analysis (Corbin & Strauss, 1990). Due to the small sample size (especially with only five mentors) and the nature of the research, the findings from the analysis are exploratory and are not intended to be generalizable to a larger population; however, we gained valuable insights about our participants’ experiences in their specific context and recognize that findings may transfer to similar situations or populations.

Results

Appendix A contains pre- and post-survey results for the 16 Likert questions for interns and mentors. Scores ranged from strongly disagree (1) to strongly agree (5). The greatest growth in survey results was mentors’ belief that a virtual internship would prepare their intern for future teaching. Both interns and mentors also demonstrated growth in using technology as a tool for collaboration with families. Across both pre- and post-surveys, both interns and mentors felt comfortable with basic computer skills and intern/mentor communication. Interns felt more confident in their knowledge of instructional technology tools than their mentors. Mentors felt confident accessing a distraction-free environment for instruction and using technology to communicate with colleagues. Despite the high rankings overall, scores for intern/mentor

communication regressed for both interns and mentors between the pre- and post-surveys, as did their confidence with using technology to evaluate data and student growth. For mentors, two additional score regressions indicated decreasing confidence in both evaluating instructional technology tools and troubleshooting technological difficulties. For both interns and mentors on both surveys, meeting the specialized needs of learners was the weakest area. Next, open-ended responses from interns and mentors will be analyzed.

Interns' Experiences in a Virtual Space

On open-ended survey questions, interns mentioned benefits of a virtual internship. Some interns acknowledged this experience would prepare them to teach in both in-person and virtual settings, realizing certain skills—troubleshooting technology, refining instructional delivery skills, motivating students to participate with tools such as Class Dojo, and using technology to plan interactive lessons—were applicable to both environments. Some interns felt they had more communication with families due to virtual learning than they would in a face-to-face setting. Therefore, benefits included skills that transferred between in-person and virtual instruction as well as opportunities they would not have in a face-to-face setting, such as communicating with families in new ways.

The most common concern was that a virtual experience would not prepare them for "normal," in-person teaching. Some typical routines, classroom management, and other "daily life" elements of in-person teaching could not be replicated in an online environment. One intern felt they were "less involved" overall in sharing teaching responsibilities than they would have been in-person. Additionally, several interns noted challenges with assessment in a virtual environment. Some students simply were not participating, and some students received help from family members on assessments. Building connections with students also was harder for some

interns in a virtual environment. Therefore, elements of in-person teaching that could not be directly replicated online—classroom management, shared teaching responsibilities, assessment, and connecting with students—were the main challenges interns faced.

Mentors' Experiences in a Virtual Space

In open-ended survey questions, mentors mentioned benefits of mentoring in a virtual space. A recurring benefit was the reversal of traditional roles of the intern as novice and mentor as expert. One mentor observed this was a unique opportunity to see experienced teachers pivot, adapt, and be in the "first year teaching experience." Another mentor described the mutually beneficial nature of the mentoring relationship: "My intern has helped me learn about technology while I help her learn about teaching." Mentors noted that even in a virtual environment, certain skills were the same as in-person teaching: there was a consistent responsibility to teach an intern about instructional practices, communication with families, and assessment, while maintaining open communication with the intern. One mentor stated that classroom management was "easier" in a virtual setting. Therefore, benefits included role reversals that allowed interns to lead and mentors to learn and the consistent responsibility to deepen interns' knowledge about classroom teaching, even in a new and ever-changing setting.

More mentors identified challenges of mentoring in a virtual setting. The most consistent concerns included assessment, differentiation, and preparing the intern for "normal," in-person teaching. Mentors worried that the struggles of online engagement—having little power to "make" students attend class, complete work, or learn—meant differentiation also suffered and opportunity gaps widened. One mentor did not feel they were helping their intern, despite the intern asserting they were. In summary, challenges included assessment, differentiation, engagement, and supporting the intern.

Interns' Perceived Role of Instructional Technology

When using instructional technology, the first consideration appeared to be access to technology. While technology was necessary for virtual instruction, interns reported less accessibility once some students returned to in-person learning because there were few computers remaining in the school buildings. To increase accessibility to learning materials, one intern explained the use of paper packets:

> The school has a ...file cabinet for each grade level. The teachers print and put everything inside the cabinet for families to come and pick up. The cabinet is outside; therefore, families are able to go when it is most convenient for them. Some of the class resources that are printed on paper are also created…on Google Classroom.

However, even avoiding instructional technology did not always increase access to instruction: as one intern noted, they could not grade paper-based assignments during virtual instruction because they "can't expect the student to have supplies [at home]." Therefore, interns found there was not one configuration that met all students' needs; offering choices seemed to offer the greatest opportunities for equity.

Interns also discussed issues related to content knowledge and pedagogy. Within early childhood placements, young children sometimes were still developing literacy skills, including digital literacy, which required careful planning of how to teach the content so young learners would be successful. Finally, some interns recognized the importance of technology, no matter the context. One intern explained, "Even in a 'normal' scenario, I would be looking for ways to incorporate technology;" this comment indicated a commitment to using instructional technology, even beyond required virtual instruction during a pandemic.

Mentors' Perceived Role of Instructional Technology

Mentors also made decisions about instructional technology based on accessibility. One mentor highlighted funding: once the district purchased certain licenses, products, and equipment, then they were able to use more technology in their instruction. Another mentor reported adapting paper-based instructional activities, such as graphic organizers, to digital environments using platforms like Google Docs because hard copies were not accessible in a virtual learning environment.

Some mentors experienced flexible access to learning through technology. One teacher explained how they used the Smartboard during hybrid instruction, allowing in-person and virtual students to see it simultaneously. Despite students being in different locations, technology provided a common experience. Similarly, another mentor used simulations to replace in-person science labs, and they also recorded lessons on Zoom to re-watch later. Creating instructional videos that students could revisit as needed indicated a novel form of differentiation.

At times, mentors intentionally *excluded* instructional technology. One mentor reported using a "real" calendar, books, and other artifacts to show students during virtual instruction, and another responded, "K-2 students need hands-on, minds-on coupled with discussions, investigations, and experiential opportunities." In early childhood, some mentors found an over-reliance on technology did not meet pedagogical, content knowledge, or social/emotional goals. As one mentor explained, "[too many] platforms can distract from the learning and be an unnecessary source of frustration for students. The goal is for students to learn, not have to figure out how to get a website to work." Finally, some mentors seemed to equate an avoidance of technology with a return to "normal" instruction. One mentor looked forward to returning to "medium tech" once in-person learning resumed, and another hoped in-person students "will be

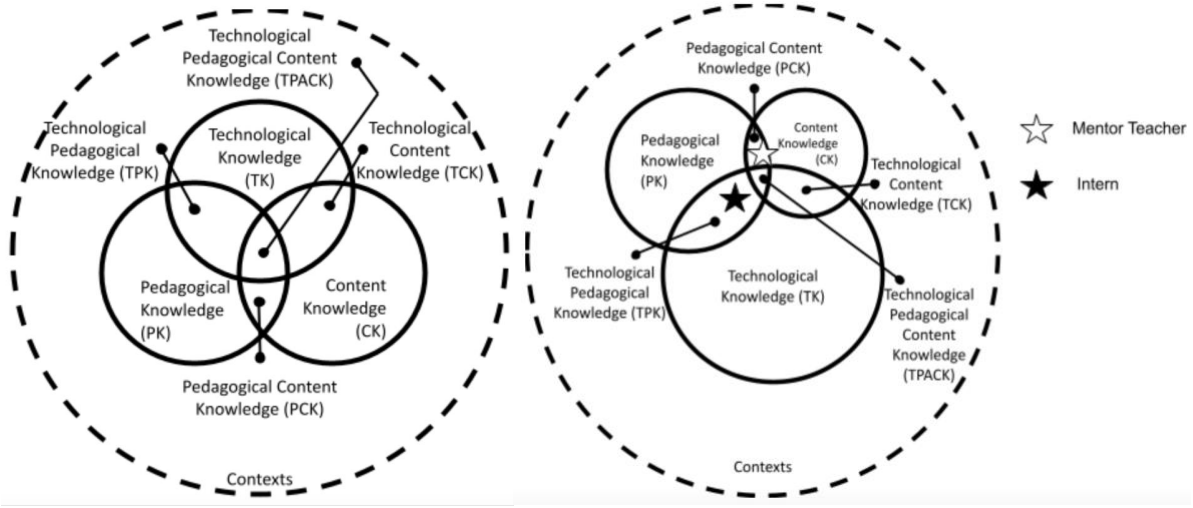
able to stay off their computers while in the classroom with me." Therefore, mentors at times felt that technology disrupted their students' learning and found or anticipated ways to avoid depending upon it.

Discussion

The results indicated the inversion of traditional roles in several contexts: first, the role reversals in mentor/intern relationships, and second, the role of technology in virtual instruction. These two findings suggested that our interns and mentors experienced a modified configuration of the TPACK framework (see Figure 3).

Figure 3

Configuration of TPACK (Mishra & Koehler, 2006) Based on Intern and Mentor Experiences



For our participants, the foundation and largest circle of TPACK became TK; CK became the smallest. The icons indicate apparent strengths and areas of focus for mentors (PCK) and interns (TPK).

Role Reversals in Mentor/Intern Relationships

TK led to role reversals between the mentor and intern. Traditionally, the mentor is the expert, and the intern is the novice, especially with PK and CK. However, interns emerged as TK experts: they were undergraduates when their own education suddenly pivoted to a virtual environment in Spring 2020, allowing them to see firsthand as students what did and did not work. Several mentors highlighted the benefits of increasing their own TK based on their interns' expertise. Similar role reversals arose in Reese's (2016) findings that mentors providing virtual feedback enjoyed learning from their intern, and Barnhart's (2020) findings highlighting the importance of recognizing the skills interns brought to the classroom.

Many mentors did not have deep and varied knowledge of TK. Some of their TK was outdated due to the quickly evolving nature of technology (Mishra & Koehler, 2006) and the time elapsed since earning their own teaching credentials. Mentors' surveys indicated decreasing confidence in troubleshooting technological difficulties the longer they spent in virtual instruction. These findings mirror Mourlam et al. (2021): teachers' self-ratings of five of seven TPACK domains decreased during the uncertainty of pandemic teaching. Therefore, mentors' lack of confidence with technology skills likely contributed to the role reversals that allowed interns to share their expertise in this area.

Role of Technology in Virtual Instruction

Whereas traditional approaches to in-person learning locate PCK as the core of teaching, learning, and assessment, thus driving the planning process (Koehler et al., 2013), teaching virtually meant technology was now the foundation of each lesson. Districts established expectations about which technology tools teachers could use in their classroom, and they had to fund LMS platforms, subscriptions, and equipment acquisition to ensure that all students had

access to devices and the internet. Next, students had to know how to use those tools, which related to TCK and TPK. Even skills as basic as teaching young children how to mute and unmute themselves on a Google Meet became part of the curriculum.

At times, technology seemed to interfere with TPK, PK, and PCK. Primary teachers noted the importance of hands-on learning with calendars, books, and other realia that could not be replicated through digital tools. Other mentors observed how technology could become overstimulating, distracting, and frustrating, interfering with students' learning. While interns felt some skills—adaptability, digital communication, and using technology to create interactive lessons—applied to both virtual and in-person teaching, other skills that were more comfortable in person—classroom management, building connections, instructional delivery, assessment, and differentiation—were entirely different in virtual spaces. Therefore, the weakest area for interns and mentors on both surveys related to meeting the specialized needs of learners. This finding was consistent with existing literature: Downs (2015) also found assessment and student connections were challenging in virtual internships for inservice teachers.

Finally, some interns and mentors demonstrated TPACK by acknowledging technology-infused learning's effectiveness in both in-person and virtual settings. Novel uses of technology aligning with TPACK included providing both in-person and virtual students with access to the same learning opportunities, regardless of location; presenting information in both digital and analog forms, such as having documents both on Google Classroom and in a filing cabinet outside the school; and recording lessons to watch later, allowing for re-learning. However, there were also indications that TPACK was not a regular practice during in-person learning, as indicated by mentors' comments anticipating the return of more familiar learning contexts, where technology was *not* the foundation of all learning and interactions.

Implications for EPPs

While the pandemic forced rapid innovations during our interns' experiences in Fall 2020, some findings from this study suggest ongoing innovations for EPPs. First, interns were able to serve as experts in virtual learning because of their previous experiences as students in virtual settings. Therefore, EPPs should prioritize opportunities for preservice teachers to experience meaningful instructional technology practices during coursework to build TPACK awareness and confidence, which may allow them to serve as technology experts in the intern/mentor relationship. Joo et al. (2018)'s findings that increased self-efficacy, perceived ease of use, and perceived usefulness result in higher levels of TPACK also support this recommendation.

EPPs should prepare both interns and mentors for shifting mentoring roles. Interns shared that they were able to share their expertise with technology, and mentors expressed gratitude for being able to learn from their intern. To redefine traditional intern/mentor roles with the intern as novice and mentor as expert, EPPs can coach interns and mentors to engage in respectful knowledge sharing, positioning themselves both as learners and leaders. More explicit support from EPPs with co-teaching also aligns with Barnhart (2020)'s findings. Continuing some virtual mentoring practices—such as following up on observations via video conferencing after a lesson—could free up mentors' time to learn from interns in more meaningful ways (Reese, 2016). Furthermore, EPPs could train mentors to provide feedback on all TPACK domains. Reese (2017) found that virtual mentoring conversations, like in-person mentoring, still focused largely on PK and CK. Several studies have shown that TCK, TPK, and TPACK tend to be the lowest areas of performance (Agustini et al., 2019; Schmid et al., 2021), and inservice teachers' confidence in several TPACK domains decreased during the pandemic (Mourlam et al., 2021).

Because higher levels of self-efficacy correlate with higher levels of TPACK (Joo et al., 2018), providing professional development for mentors on how to incorporate technology-centered TPACK domains into their teaching and into the feedback they provide their intern could prove beneficial for mentors and interns.

In the present study, differentiation and assessment in virtual spaces were also recurring weaknesses for interns and mentors. Downs (2015) also found that inservice teachers completing a virtual internship struggled with assessing students without in-person feedback. EPPs could support future teachers by featuring digital tools for providing synchronous and asynchronous feedback, such as using private chatting on a video conferencing platform to provide personalized feedback during virtual instruction.

Conclusion

In this study, survey data revealed that virtual instruction altered the experiences and interactions of interns and mentors and their use of instructional technology and TPACK. Interns' proficiency in TK led to role reversals in traditional intern/mentor relationships: both interns and mentors were situated as learners and experts at different times. During virtual instruction, technology became the foundation of every instructional experience. Not only did interns and mentors rely upon TK to choose and use instructional technology, but they also had to adapt for TCK (such as teaching students to mute themselves on Google Meet) and TPK (such as assessing and differentiating instruction in digital spaces). Interns and mentors alike struggled with adaptations of some elements of content and pedagogy—such as assessment, differentiation, classroom management, and relationships with students—in virtual spaces.

Beyond the ongoing pandemic, EPPs continue to redefine future opportunities for field-based experiences and explore possibilities for innovation. How can intern/mentor relationships

harness role-sharing as experts and novices? How can technology be leveraged to offer more responsive mentoring? How can TPACK be more meaningfully infused into EPP missions and coursework? While innovations for field-based internships emerged during the pandemic as emergency responses, taking these lessons forward allows for continual improvement of approaches to teacher education.

References

Agustini, K., Santyasa, I. W., & Ratminingsih, N. M. (2019). Analysis of competence on "TPACK": 21st century teacher professional development. *Journal of Physics: Conference Series, 1387*, 1-9. https://doi.org/10.1088/1742-6596/1387/1/012035

Barnhart, T. (2020). Co-innovating a paradigm shift from a pandemic. *Issues in Teacher Education, 29*(1-2), 122-131.

Butler, B. & Cuenca, A. (2012). Conceptualizing the roles of mentor teachers during student teaching. *Action in Teacher Education, 34*(4), 296-308. https://doi.org/10.1080/01626620.2012.717012

Corbin, J. & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology, 13*(1), 3-21.

Corbin, J., & Strauss, A. (2007). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Sage.

Council for the Accreditation of Educator Preparation [CAEP] (2013). *Standard 2: Clinical partnerships and practice, rationale.* http://caepnet.org/standards/2013/standard-2

Council of Chief State School Officers [CCSSO] (2013). *InTASC model core teaching standards and learning progressions for teachers 1.0: A resource for ongoing teacher development*. https://ccsso.org/sites/default/files/2017-12/2013_INTASC_Learning_Progressions_for_Teachers.pdf

Davis, J. S., & Fantozzi, V. B. (2016). What do student teachers want in mentor teachers?: Desired, expected, possible, and emerging roles. *Mentoring & Tutoring: Partnership in Learning, 24*(3), 250-266.

Downs, E. (2015, Oct. 1). *Preparing in-service teachers for K-12 online schools: A case study* [Paper]. European Conference on e-Learning, Kidmore End, U.K.

Gentry, L. B., Denton, C. A., & Kurz, T. (2008). Technology-based mentoring provided to teachers: A synthesis of the literature. *Journal of Technology and Teacher Education, 16*(3), 339-373.

Hixon, E., & So, H.-J. (2009). Technology's role in field experiences for preservice teacher training. *Educational Technology & Society, 12*(4), 294-304.

Joo, Y. J., Park, S., & Lim, E. (2018). Factors influencing preservice teachers' intention to use technology: TPACK, teacher self-efficacy, and technology acceptance model. *Educational Technology & Society, 21*(3), 48–59.

Koc, E. M. (2012). Idiographic roles of cooperating teachers as mentors in pre-service distance teacher education. *Teaching and Teacher Education, 28*(6), 818-826. https://doi.org/10.1016/j.tate.2012.03.007

Koehler, M. J., Mishra, P., & Cain, W. (2013). What is technological pedagogical content knowledge (TPACK)? *The Journal of Education, 193*(3), 13-19. https://doi.org/10.1177/002205741319300303

Maynard, T. (2010). Learning to teach or learning to manage mentors? Experiences of school-based teacher training. *Mentoring and Tutoring: Partnerships in Learning Journal, 8*(1), 17-30. https://doi.org/10.1080/713685510

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017–1054. https://doi.org/10.1111/j.1467-9620.2006.00684.x

Mourlam, D., Chesnut, S., Strouse, G., DeCino, D., Los, R., & Newland, L. (2021). Did they forget? Understanding teacher TPACK during the COVID-19 pandemic. In E. Langran & L. Archambault (Eds.), *Society for Information Technology & Teacher Education International Conference Online 2021* (pp. 1616-1622). Association for the Advancement of Computing in Education (AACE). https://www.learntechlib.org/p/219325/

Reese, J. (2016). Virtual mentoring of preservice teachers: Mentors' perceptions. *Journal of Music Teacher Education, 25*(3), 39-52. https://doi.org/10.1177/1057083715577793

Reese, J. (2017). An exploration of interactions between virtual mentors and preservice teachers. *Contributions to Music Education, 42*, 201-222.

Schmid, M., Brianza, E., Petko, D., (2021). Self-reported technological pedagogical content knowledge (TPACK) of pre-service teachers in relation to digital technology use in lesson plans. *Computers in Human Behavior, 115*, 1-12. https://doi.org/10.1016/j.chb.2020.106586

Smagorinsky, P., Cook, L., Moore, C., Jackson, A., & Fry, P. (2004). Tensions in learning to teach: Accommodation and development of a teaching identity. *Journal of Teacher Education, 55*(1), 8-24.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage.

Appendix A

Intern (n=14) and Mentor (n=5) Survey Results

Questions "I feel confident…"		Pre								Post								Mean Diff
		Frequency Distribution					Descriptive Statistics			Frequency Distribution					Descriptive Statistics			
		5	4	3	2	1	Mean	Median	Mode	5	4	3	2	1	Mean	Median	Mode	
Q1: …in my knowledge of basic computer skills (computers, the internet, emails, etc.). *InTASC Std. 4*	I	50%	50%	0%	0%	0%	4.5	4.5	4	79%	21%	0%	0%	0%	4.79	5	5	0.29
	M	20%	80%	0%	0%	0%	4.2	4	4	60%	40%	0%	0%	0%	4.6	5	5	0.4
Q2: …I have a distraction-free environment to deliver instruction to students. *InTASC Std. 3*	I	21%	50%	7%	21%	0%	3.71	4	4	21%	57%	7%	14%	0%	3.86	4	4	0.14
	M	40%	60%	0%	0%	0%	4.4	4	4	40%	60%	0%	0%	0%	4.4	4	4	0
Q3: …keeping students engaged in learning in a virtual space. *InTASC Std. 3*	I	0%	36%	36%	29%	0%	3.07	3	3	0%	36%	43%	21%	0%	3.14	3	3	0.07
	M	20%	0%	60%	20%	0%	3.2	3	3	20%	20%	60%	0%	0%	3.6	3	3	0.4
Q4: …about my knowledge of instructional technology tools. *InTASC Std. 4 & 7*	I	0%	71%	29%	0%	0%	3.71	4	4	29%	57%	14%	0%	0%	4.14	4	4	0.43
	M	20%	20%	20%	40%	0%	3.2	3	2	20%	20%	40%	20%	0%	3.4	3	3	0.2

Q5: …evaluating an instructional technology tool for use in my classroom. *InTASC Std. 4 & 8*	I	7%	50%	36%	7%	0%	3.57	4	4	14%	71%	14%	0%	0%	4	4	4	0.43
	M	20%	40%	40%	0%	0%	3.8	4	4	20%	0%	80%	0%	0%	3.4	3	3	-0.4
Q6: …integrating technology in my lesson that enhances student learning. *InTASC Std. 8*	I	29%	50%	21%	0%	0%	4.07	4	4	29%	64%	7%	0%	0%	4.21	4	4	0.14
	M	20%	40%	20%	20%	0	3.6	4	4	0%	60%	40%	0%	0%	3.6	4	4	0
Q7: …creating and administering assessments in a virtual space. *InTASC Std. 6*	I	21%	21%	29%	29%	0%	3.36	3	3	7%	57%	36%	0%	0%	3.71	4	4	0.36
	M	20%	20%	0%	60%	0%	3	2	2	20%	20%	60%	0%	0%	3.6	3	3	0.6
Q8: …using technology to evaluate student data to examine growth. *InTASC Std. 6*	I	14%	50%	36%	0%	0%	3.79	4	4	14%	50%	29%	7%	0%	3.71	4	4	-0.07
	M	20%	40%	20%	20%	0%	3.6	4	4	20%	0%	60%	20%	0%	3.2	3	3	-0.4
Q9: …meeting the specialized needs of learners in a virtual space. *InTASC Std. 1-3 & 7*	I	0%	7%	21%	57%	14%	2.21	2	2	7%	7%	29%	57%	0%	2.64	2	2	0.43
	M	0%	20%	0%	60%	20%	2.2	2	2	0%	0%	40%	60%	0%	2.4	2	2	0.2
Q10: …using technology as a tool for collaboration with colleagues.	I	29%	64%	7%	0%	0%	4.21	4	4	43%	57%	0%	0%	0%	4.43	4	4	0.21
	M	40%	40%	20%	0%	0%	4.2	4	4	40%	60%	0%	0%	0%	4.4	4	4	0.2

InTASC Std. 7 & 10																	
Q11: …using technology as a tool for collaboration with families. *InTASC Std. 10*	I	0%	50%	43%	7%	0%	3.43	3.5	4	29%	36%	36%	0%	0%	3.93	4	3	0.5
	M	40%	0%	40%	20%	0%	3.6	3	3	20%	80%	0%	0%	0%	4.2	4	4	0.6
Q12: …troubleshooting technology problems as needed. *InTASC Std. 3*	I	14%	57%	21%	7%	0%	3.79	4	4	29%	43%	29%	0%	0%	4	4	4	0.21
	M	20%	20%	20%	40%	0%	3.2	3	2	20%	0%	40%	40%	0%	3	3	3	-0.2
Q13: …teaching others to use technology. *InTASC Std. 8, 10*	I	14%	50%	21%	14%	0%	3.64	4	4	14%	71%	14%	0%	0%	4	4	4	0.36
	M	20%	0%	20%	60%	0%	2.8	2	2	20%	0%	60%	20%	0%	3.2	3	3	0.4
Q14: …this virtual internship experience will prepare me/my intern for my/their future teaching.	I	14%	36%	36%	14%	0%	3.5	3.5	3	21%	57%	7%	14%	0%	3.86	4	4	0.36
	M	0%	20%	60%	20%	0%	3	3	3	0%	80%	20%	0%	0%	3.8	4	4	0.8
Q15: …completing a virtual internship experience/serving as a mentor in a virtual space.	I	7%	36%	50%	7%	0%	3.43	3	3	14%	57%	14%	14%	0%	3.71	4	4	0.29
	M	20%	40%	20%	20%	0%	3.6	4	4	20%	40%	40%	0%	0%	3.8	4	3	0.2
Q16: I feel I have support and clear	I	71%	29%	0%	0%	0%	4.71	5	5	57%	43%	0%	0%	0%	4.57	5	5	-0.14

communication with/from my mentor/intern. *InTASC Std. 10*	M	60%	40%	0%	0%	0%	4.6	5	5	40%	60%	0%	0%	0%	4.4	4	4	-0.2

"There Was a Lot Going on Behind Them": Student Teachers' Access to Children and Their Families During Virtual Student Teaching

Chris Bradford
St. Norbert College

Patricia J. Norman
St. Norbert College

Abstract

Traditionally pre-service teachers are undersupported as they develop culturally sustaining family engagement strategies through teacher preparation programming. As COVID-19 forced teachers, and in turn student teachers, to teach virtually, we explored how this setting affects student teacher access to students' home lives and families and impacts their view of future family engagement and teaching. We interviewed six elementary preservice teacher candidates who completed a semester of virtual student teaching. The shift to virtual instruction gave student teachers unprecedented access to students' personal lives and also gave families access to student teachers' practices. This newly acquired access presented multiple opportunities, challenges, and implications for candidates' teaching and development. This study highlights the need for teacher preparation programs to leverage student teachers' experiences to elevate culturally sustaining family engagement practices in their curriculum.

Keywords: virtual student teaching, family engagement, pandemic clinical experience

Building strong, collaborative partnerships with families is essential work for teachers as they try to foster students' academic and social-emotional development. However, educator preparation programs have not historically supported preservice teachers to engage productively with students' families (de Bruïne et al., 2018). Pre-service teachers often lack confidence and the support to meaningfully connect with and understand students' families during in-person clinical experiences like student teaching (Willemse et al., 2017). This is especially true of short-term clinical settings and teacher education programs that do not provide candidates with culturally sustaining pedagogies or experiences (Carter Andrews et al., 2021; D'Haem & Griswold, 2017). It is not surprising then, that more than seven in ten educators believe that it is challenging to engage families in the service of student learning and cite a lack of preparation as

one of their greatest barriers to increased family engagement (National Association for Family, School, and Community Engagement, 2019).

Because many schools do not promote family engagement as a core teaching practice, they often limit interaction with families to traditional, school-sanctioned events such as Meet the Teacher Night, parent-teacher conferences, concerts, and sporting events. As Pushor (2010) notes, naming the opening school event Meet the Teacher instead of Meet the Family highlights a long-established "practice that centers the teacher as the focal point to schooling" (p. 4). Teachers who support pre-service candidates' field experiences and engage in such traditional forms of parent-teacher interaction may then reinforce schools as "marginalizing institutions that distort the interactions between teachers and parents in harmful ways… oftentimes reflect[ing], reinforc[ing], and reify[ing] the illness and inequity of the larger society" (Hong, 2019, p. 157).

What happens when such predictable forms of teacher-family collaboration and teacher preparation are disrupted by a pandemic? We know very little about how virtual settings—specifically online student-teaching contexts during a global pandemic—affect candidates' family engagement learning opportunities and practices. COVID-19 forced student teachers to dramatically alter their roles and responsibilities (Piccolo et al., 2021). While the transition from face-to-face to virtual student teaching stretched teacher preparation programs, candidates, and mentor teachers, these new virtual learning-to-teach settings "may also bring new perspectives and practices informed by their experiences, including an awareness of the equity issues raised by the pandemic" (Darling-Hammond & Hyler, 2020).

Through interviews with a cohort of six teacher candidates following their virtual student teaching experience, we examined the opportunities and challenges pre-service teachers experienced while engaging with families virtually. Specific research questions include: a)

Whether/to what extent did virtual student teaching settings impact access between families and student teachers? b) How did candidates describe opportunities to interact with families? and c) How did their student teaching experience impact their anticipated future family engagement effort?

Literature Review

In a recent report by the National Association for Family, School, and Community Engagement (2019), the authors highlight the importance of teacher education programs increasing candidates' ability to meaningfully engage with students' families in four specific areas: capabilities, connections, cognition, and confidence. The first component—developing teachers' capabilities—includes increasing human capital, skills, and knowledge of students, cultures, and families. Strengthening teachers' connections entails providing opportunities to build important relationships and networks (social capital) with their families and communities. Expanding cognition includes reflecting on and critiquing one's own assumptions, beliefs, and worldview, and fortifying teachers' confidence consists of individual levels of self-efficacy.

Walker (2019) further suggests that family engagement ought to be considered a "core practice" of teacher education programs requiring articulation, rehearsal, and critique of family engagement in authentic professional settings (Grossman et al., 2009). These suggestions are rooted in research that argues family engagement begins with teachers through genuine "invitations" (Anderson & Minke, 2007), and that extending more general invitations centered on activating social supports for families can be more effective than specific invitations centered on engaging families in home-based activities (Hill & Tyson, 2009).

Authentic family engagement requires candidates to establish culturally sustaining pedagogies (Paris, 2012). This includes: (a) understanding themselves as cultural beings with

multiple and intersecting identities; (b) examining the relationships between structural inequities in schools and communities; (c) understanding how activism and advocacy can disrupt inequities; (d) learning how to create inclusive, trusting, and equitable learning communities; and (e) building asset-based views not only of all students but also extending those strength-based views to families and communities (Paris & Alim, 2014). It further requires that teacher education programs center justice and consider if, how, and when "core practices" might mis/align with this commitment to justice (Philip et al., 2019).

The benefits of high-quality family engagement are well established. Family engagement has resulted in stronger student academic achievement and decreased dropout rates (Avvisati et al., 2014; Bhargava & Witherspoon, 2015). When teachers constructively engage families, students have better self-esteem, increased school attendance, and better behavior in school (Hirano & Rowe, 2016; Voorhis, 2011). In addition to student benefits, educators also benefit (Hornby & Lafaele, 2011) through "improved job satisfaction and morale" and the ability to "navigate through the curriculum with greater efficiency and ease" (DeSpain et al., 2018, p. 236).

While student academic success has been linked to specific family engagement strategies (Fan & Chen, 2001; Jeynes, 2010), research has also unearthed specific barriers to preparing teachers with these critical components of family engagement. These include: (a) teacher education curriculum, (b) the uneven nature of candidates' clinical experiences, (c) a growing cultural mismatch between candidates and the students and families they are likely to serve, and (d) the complexity of social interactions (de Bruïne et al., 2014; Evans, 2013).

While the pandemic has disrupted certain mechanisms teachers use to foster affinity, bonding, and relation with students and their families, new virtual spaces do have potential to

bring students and their families in to further a "pedagogy of connection and broaden the landscape of learning in teacher education" (Carter Andrews et. al., 2021, p. 269). This study provides some insight into both opportunities and challenges virtual learning-to-teach spaces presented student teachers.

Theoretical Framework

We view the process of learning-to-teach through a sociocultural lens which frames student teaching as a social activity situated in multiple contexts both cultural and historical (Lave & Wenger, 1991). Virtual student teaching settings further allow us to view potential "third spaces" using critical theory. The concept of third spaces was initially developed by critical theorist Homi Bhabha (1994) who argued that marginalized people can create new spaces within existing official spaces by negotiating "the first space of their traditional culture and the second space of the more powerful and imposed colonising culture" (Johnston et al., 2021, p. 360). In the context of teacher education, third spaces can build bridges across discourse communities and enhance "the education of youth whose experiences have not traditionally been valued in schools" by validating home and community discourses for use within the school and classroom (Moje et al., 2004, p. 48).

To understand the impact of virtual student teaching settings on candidates' interactions with students' families, we use the Deweyan framework of whether their experience was educative versus mis-educative. Dewey (1938) defined an experience as educative when it creates the conditions that lead to further growth. In other words, an experience is educative when it draws on past experience in order to modify the quality of future experience through the creation of helpful habits and emotional/intellectual attitudes as well as the ability to respond to present conditions. In contrast, Dewey posited that an experience is mis-educative if it hampers

further growth. He believed that a mis-educative experience leads to “callousness” or generates “a lack of sensitivity and responsiveness” later on (pp. 25-26).

Whether and how teacher preparation programs structure educative learning-to-teach opportunities for candidates remains an important question for researchers to address (Jenlink & Jenlink, 2019). Knowing how candidate experience family engagement in virtual contexts is key to helping them develop culturally responsive teaching practices.

Methodology

This section describes data collection and the participants for this study, and then outlines data analysis efforts.

Data Collection and Participants

We interviewed six senior undergraduate teacher candidates using a semi-structured interview protocol via Zoom. Our goal in using an interview study was not to develop broad theory or generalizable claims, but rather to better understand and communicate participants’ lived experiences by using and interpreting their own words as they describe and make sense of those experiences (Creswell, 2007). Each interview lasted approximately 75-90 minutes and both authors were present. Each interview was recorded and transcribed via Zoom. We also took detailed notes during the interviews and created transcripts using both those running notes and the Zoom transcription. The interview questions were organized in three categories. First, candidates were invited to describe their two student teaching placements, including a) when and how their learning-to-teach contexts became virtual and b) the structure of their student teaching responsibilities. Second, the participants were invited to describe whether/how their teaching practices changed in response to transitioning to virtual instruction. Finally, we asked candidates

to describe whether/how their interactions with children and their families were impacted by virtual learning-to-teach contexts.

The participants' demographics reflect those of most candidates in their teacher preparation program: white, female, middle class, and Midwestern. Each candidate experienced two placements, both nine weeks in duration, spanning the range of their teaching license. Five of the six participants were placed in the same large district serving more than 20,000 diverse students in terms of: (a) racial identity, 41.6% White, 30.5% Hispanic, 9.1% Black, 8.0% Asian, 7.2% two or more, 3.6% American Indian; (b) disability, 15.2%; (c) economically disadvantaged, 64.5%; and (d) English learners, 20.7%. Table 1 describes each participant's virtual placements.

Table 1

Participant Student Teaching Placement Information

Student Teacher	Desired Teaching License(s)	Virtual Placement 1	Virtual Placement 2
Sandra	Pre-K – 5th grade	kindergarten rural elementary	5th grade urban elementary
Jennifer	1st – 8th grade Spanish & general elementary/middle	1st-5th grade Spanish urban elementary	Spanish urban middle school
Ivy	1st – 8th grade ESL & general elementary/middle	2nd grade urban elementary	7th gr. ELA/Social Studies urban middle school
Erin	1st – 8th grade	7th/8th grade ELA urban middle school	1st grade urban elementary
Abby	1st – 8th grade	8th grade ELA urban middle school	2nd grade urban elementary
Audry	Pre-K – 5th grade	kindergarten urban elementary	4th grade urban elementary

Researchers

Both researchers teach at the same small private, Midwestern liberal arts institution in the education discipline. Both researchers are Midwestern, cisgender, white, middle-class teachers turned teacher educators. Researcher 1 identifies as male and previously instructed all six research participants in education courses he taught. He had served as three of the six participants' field supervisor during their pre-clinical experience two years prior to student teaching. Researcher 2 identifies as female and had no prior experience with the participants.

Data Analysis

Data analysis was conducted in multiple phases using a series of coding exercises and ongoing analytic memos (Miles et al., 2020). The initial phase included reviewing each transcript and developing descriptive analytic memos focused on each candidate's experience. Specifically, our first set of memos helped us clarify that all candidates discussed the unique opportunity and/or challenge presented by "seeing into their students' home lives." We then created a second set of transcripts that focused exclusively on that holistic code—comments made regarding children's home lives and interactions with students' families. After reading these condensed transcripts, we created analytic memos on each chunk of the six participants' data (Charmaz, 2006; Corbin & Straus, 2008). The memos included direct quotes from the transcripts followed by descriptive analysis of those quotes.

Looking across those analytic memos, we then engaged in focused coding (Saldaña, 2013) to identify overarching themes across participants' experiences with children's home lives and interactions with families. One theme that emerged was the notion that candidates' computers provided them all a virtual "window" into students' home lives. Drawing on that concept of window, we jointly identified the following eight codes (a) window as invitation, (b) window as mirror, (c) window as another lens, (d) window as access, (e) window as missed opportunity, (f) window as concern, (g) window as barrier, and (h) other. Each researcher then separately returned to the condensed transcripts, independently coding each chunk of text into one of those eight categories. During this phase, we engaged in "member checking" by reaching back out to participants for clarification or elaboration on their interview responses.

Finally, in reviewing our independent coding efforts, we identified significant overlap in several of our initial codes which focused on student teachers' sense making/action. In addition,

we explicitly coded for impact on family's interactions with student teachers given the virtual teaching context. Our final categories, reflected in the organization of the findings section below, include (a) candidate access as opportunity, (b) candidate access as challenge, (c) family access to candidate practice, and (d) impact on candidates' future teaching.

Findings

Candidates' virtual teaching settings provided them intimate access to students' lives. Whether they experienced those opportunities and challenges as educative or miseducative while virtually student teaching varied by participant. Remote instruction also provided families with unaccustomed access to the candidates' practice. This unprecedented access between candidates, students, and families had significant implications for candidates' ideas about their future instruction.

Candidate Access as Opportunity to Learn

Five of the six candidates discussed their appreciation for the unparalleled access that virtual student teaching afforded them to students' home lives and families. Audry, an early childhood candidate, appreciated seeing into students' private homes. She described her young students as "never sitting still," walking around their homes as they held their electronic devices. Ivy described this rare window as both "another way of understanding kids" and "another lens" to "see what is going on" with her elementary and middle school students. In contrast, she explained that "we don't see a lot of that with in-person teaching." Sandra, too, found that during synchronous online instruction, she "...definitely saw a lot of their lives which was great! Little brothers and sisters [would] run around in the back, the dogs were barking… [and] parents were trying to get [students] on and off the computer." Virtually seeing into students' lives allowed Sandra to get to know her elementary students and their families.

Abby, an elementary/middle school candidate, admitted that "being able to see where the parents and students were felt weird at first." Knowing what students' families were doing all day led her to "put more emphasis on building relationships" not only with students but also their families. Contrasting virtual student teaching where she interacted daily with students' families to a lack of such exchanges in previous pre-clinical placements, she explained,

> In [pre-student teaching], I knew it was important to communicate with parents, but it was hard to push myself to talk with and do more with parents. In virtual teaching, we were forced to do more. Students needed help to get on the computer. We'd be on the phone, texting families throughout the day.

In this sense, learning to teach virtually gave her important new experiences to engage with families. Appreciative of these new family relationship-building interactions, Abby also noted how much families appreciated her efforts to communicate with them.

Like Abby, Erin, an elementary/middle school candidate, felt that virtual student teaching gave her increased access to students' families, particularly when her younger students encountered technological difficulties or required redirection beyond what Erin herself could offer. She noted,

> I had a lot of contact with first grade families. Most students had a parent at home… If they were having issues or I needed to get a kid to come back to the screen, I would yell, 'Hey, I need them to come back!' or send an email. If they were having technical issues, families would send things through the chat.

Erin appreciated the real-time opportunity to interact with families when children encountered challenges.

Learning about students' home lives also enabled the candidates to empathize more fully with students and their families. Ivy, for example, gained new insights into just how difficult learning from home was for children and parents alike. She recognized, "They were going through tons of stuff" and marveled at how students and families managed to keep it together. Ivy explained,

> Kids [have] all these different backgrounds. It helps me know that even the students who don't appear to be struggling probably are… not just those with behavioral or academic issues. If students did not have trouble turning things in, there was still a lot going on behind them. I learned how resilient students are.

Although some students submitted assignments on time, Ivy's virtual access into their homes helped her realize that their ability to meet her expectations could not have been easy as children and families struggled through the pandemic. Ivy said of parents:

> I didn't know how intense it would be…I would have parents who would cry. I had parents who would yell. I had access to the raw emotion they shared. The parents were right there next to the kids… and some worked all day and had to leave their 8- or 10-year old at home alone all day because they didn't have another option… It was difficult and scary and hard, but I would have never been able to expose myself to it in a regular teaching situation.

Ivy appreciated and empathized with families, including the difficult decisions they faced each day as they expressed their emotions through the computer screen. Her virtual student teaching experience enriched her understanding of children's families in ways that Ivy doesn't believe would have happened otherwise.

Jennifer, too, deepened her empathy for students' families as she witnessed them supporting children's learning from home. An elementary/middle school generalist and Spanish teacher candidate, she recognized that families most likely felt inundated with information about how their children were expected to participate virtually, including multiple zoom links, learning management systems, and online assignments. She "didn't want to flood parents" who were already overwhelmed with school communications. As a foreign language teacher, she relied on homeroom teachers to directly communicate with students' families. That said, she "introduced" herself and told families "what their child was doing really well" whenever she had a chance to interact with them virtually.

Candidate Access as Challenge to Engage Students

While nearly all six student teachers viewed their virtual access to students' home lives as an opportunity, they also experienced this access as a challenge, including engaging students while in their home environments. All six student teachers had two separate placements, one with younger children and another with older students. They found that while younger students and their families were typically present during synchronous virtual instruction, candidates' access to students and families decreased as students' ages increased. Sandra, for example, explained that "student engagement was especially hard" with her fifth graders. She noted, "A lot of the kids have hard home lives without a lot of support. They were in charge of themselves, doing homework and getting it in on time." Erin, too, struggled to keep her middle schoolers engaged. Erin shared, "Going into student teaching, I thought it would have been my first graders who would struggle to stay in front of the camera, but it was my middle schoolers." She found that while first graders were sometimes distracted, as she explained,

> …middle schoolers' attention wasn't always on the screen. They might be logged in but have their camera and mic off. They might be somewhere else. They didn't have the best home life and didn't want us to see that which I totally understand.

In this sense, Erin empathized with her students, believing that those who did not turn their cameras or microphones on deliberately chose to do so to keep her from seeing their home lives. On the other hand, she seemed to suggest that middle schoolers "are just at that age," something she discussed with her university supervisor and peers during a weekly student teaching seminar.

Like Erin who felt challenged to provide virtual instruction when students kept their cameras and or mics off, Ivy also expressed concern about students who were less engaged virtually. She found that her older students "would play video games during the school day." Ivy was concerned by what she did see when they turned their camera on. She explained:

> I saw a lot more than I thought I'd ever see… That was sometimes harder because you see what they are going through and are compelled to feel bad for them. And you don't want to seem too empathetic and don't want to appear as though I'm focusing too much on their situation and see them for who they are. It's easier at school because we aren't in their bedroom or in their kitchen or with their sibling or parents. It's hard to see past it…

Although Ivy had earlier stated that she gained empathy for students' families by seeing into their home lives, she later felt bad about what she saw of their private lives. She wanted "to see past it" but struggled to know what to do with the information she gained virtually. Ivy explained, "It does create an opportunity to see what happens outside of school that we can't fix. We are presented with a lot more information which can be good and bad."

Ivy was not alone in feeling challenged by what she saw when students turned on their cameras and microphones. Audry did as well, explaining, “It was hard to see those home lives and be unsure [whether] they are getting everything they need.”

Audry voiced concerns about the level of noise and activity she witnessed in her students’ homes:

> I learned that their home lives are very noisy, like there’s constantly stuff going on in their lives... You can’t even hear them with all the other noise going on. I just can’t even imagine trying to learn in that type of environment. If this is what’s happening 24/7, how are they actually getting stuff done? I don’t think my eyes were open to that in [pre-clinical student teaching] and really understanding what went on at home.

Audry seemed to surface an assumption she had about learning, namely that it requires quiet. She viewed activity and noise in children’s homes as a barrier to students’ ability to focus and learn.

Candidate Access as Challenge to Meet Families’ Expectations and Needs

Just as the student teachers had unprecedented access to students’ home lives, they also recognized that families themselves had equally unprecedented access to instruction. Families continuously helped their child log in, log off, keep to the schedule, and complete assignments. As Audry explained, “In the same way that we were getting to see their life, they were getting to see ours. I had to be mindful of everything I said. Parents were always there, even if you could not see them.” Virtual student teaching provided a unique window into student teachers’ work lives to which families normally do not have access.

Because of this access to candidates’ teaching, some parents were positioned to advocate for their children in real time. Audry, for example, described a specific incident where a

grandparent voiced concern after her grandson had raised his hand several times but had not yet been called on. Even though Audry had two screens open to foster her virtual interaction with students, she had not been aware of the child's raised hand because she could not always see every child. She thanked the grandparent for bringing the child's desire to participate to her attention.

Audry was not the only one who felt mindful of family members' presence. Jennifer expressed deep appreciation that "parents got to be part of the classroom since the classroom was at home." Jennifer loved brief positive virtual interactions with families, including parents who would appear and wave to her in the background. Jennifer also started every third and fourth grade class with a song which parents looked forward to hearing. Her students' families seemed to enjoy Jennifer as well. One child's family told Jennifer's mentor, "I love listening to Spanish." That said, sometimes families' access to her practice felt "intimidating" to Jennifer and added "extra pressure." She felt it was "nerve wracking to see parents walking around. Do they think I'm doing a good job?" Jennifer clearly cared about what her teaching conveyed to students' families and how they interpreted what they observed as Jennifer supported students' learning. Abby also felt a sense of "vulnerability" while also believing that parents appreciated her efforts.

Impact on Future Teaching

All six participants anticipated that their access to students' home lives and families would impact their future practice. Three themes emerged as they described future goals: (a) establishing the classroom environment, (b) meeting students' social-emotional and academic needs, and (c) communicating with and engaging families.

Structure of Classroom Environment

As stated earlier, Audry was surprised and concerned by the noise level in some students' homes. As she considered her future classroom, however, she described her desire for "balance":

> I don't want their classroom environment to be so overstimulating, but I don't want it to be under-stimulating because if that's everything you are getting at home, if it's completely quiet [at school] that might just bug the heck out of you, and you can't actually focus in that [quiet]. I think that for noise, just to try to balance it. Music definitely helps… It shouldn't be quiet. It should still have some organization to it, but there should be collaboration and talking.

Audry's virtual student teaching experience where she witnessed high levels of noise in students' homes impacted the noise level and activity she hoped to maintain once in her own classroom. She wants to have "organized chaos" where music and student voices are continuously heard.

Meeting Students' Social-Emotional and Academic Needs

Three of the six participants discussed plans to adjust their expectations or differentiate instruction to meet students' varying needs given the window they were given into students' home lives. Audry noted, "I really want to try to understand their home life. I know I can do better. What I'm teaching is far less important, especially if they haven't gotten their needs met." Audry expressed a desire to remember that in addition to providing academic instruction, she also needed to meet the needs of the whole child.

Sandra, too, stated that virtual student teaching prepared her "to look beyond what you see in a classroom" and attend to the "well-being of students."

> They have a whole life outside of the classroom that I wouldn't have seen if I hadn't been invited to be in their homes every day. It opened me to what is on the inside of these children… Social-emotional learning is huge. I'm going to use it so often in my classroom. I have a better approach to understanding the well-being of students and taking it upon myself to make sure they are mentally and emotionally okay before taking on academics.

Like Audry, Sandra felt that her access to students' home lives deepened her understanding of difficulties students experienced beyond academic learning. She hoped to be attuned to future students' lives both in and beyond the classroom to better meet their social, emotional, and academic learning needs. As she stated later in the interview, she hoped to "have more of an understanding of students and why they are acting how they are, why they might be unmotivated one day and super motivated another." She further aspired to address their needs and challenges, be that by herself or through connecting them and their families to additional services. She really wants "greater understanding and acceptance of different situations students are dealing with." Ivy, too, felt that virtual student teaching helped her better understand messages that children's behavior communicates which in turn "helps me see if my students' needs are being met which impacts how they learn."

Jennifer also described her continued commitment to build classroom learning community to find out who her students are and use that knowledge to create engaging learning experiences. In one of Jennifer's placements, she spent the first five minutes in each of her Spanish classes checking in with students to "build and share personal connections" throughout class. Asking them what they had for dinner or what they had done the night before helped her "pay attention to what excited them." She then intentionally drew on her knowledge of students'

strengths and interests when designing Spanish lessons tailored to each individual class that she taught for 30 minutes once a week.

Communicating With and Engaging Families

Four of the six student teachers expressed a strong desire to continue communicating with and engaging students' families once in their own classrooms. Erin felt that her virtual student teaching experience had helped her "feel more comfortable talking to parents as that's so intimidating to do" and believed she would be more inclined to interact with future families. Abby committed to "breaking down what is happening in the classroom with parents." She described wanting to share weekly emails with families to help them stay informed. In addition, she hoped to "find ways that [families] can participate…or volunteer in the classroom." Jennifer, too, thought carefully about how she can continue to foster families' intimate involvement once students return to school. She wants families to feel "excited about what we are doing" and committed to providing families with opportunities to "come into the classroom in any way, shape, or form."

Ivy also described appreciating getting to know parents' feelings even though she did not always feel confident responding in real time to the emotions families shared. She recognized that "how parents are feeling can also really affect the children that I'm working with. I think it's important to build rapport with the families of my students and if they are having a hard time, how can I support them?" Ivy identified parents' impact on their children and hoped to support both her students and families once in her own classroom.

Discussion

This study builds understanding in two key areas. First, it provides teacher educators with hope that virtual learning-to-teach settings can create educative opportunities for candidates to

meaningfully engage children's lives and families. On the other hand, this same access provides teacher educators with caution that virtual family access can be miseducative, serving to reinforce candidates' underlying assumptions, beliefs, and world views of students and families if left unexamined.

For the six participants, their newfound virtual access to families had significant potential to deepen students' understanding of and empathy for students and their families. Since both candidates and students' families were "at home," the shared virtual space helped create a more neutral "third space" in which teacher candidates and families could engage (Johnston et. al., 2021). The virtual student teaching context created reciprocal access to one another's lives and work which seemed to lead to genuine appreciation of each other. Families could see the daily work of candidates' teaching. Further, student teachers viewed children as more than students. They got to see the family members who their students live with in real time, what their daily life was like, and what students might be challenged with and/or proud of outside of the classroom. This unprecedented access to students' home lives provided candidates with a more empathic view of children and families, and positively influenced their goals for future instruction and continued family engagement once in their own classrooms.

That said, this same access and interaction may also lead to miseducative learning opportunities. Participants' descriptions echoed what research already tells us, namely that candidates often feel ill-equipped to engage families in meaningful ways beyond sharing and/or imparting information (D'Haem & Griswold, 2017; National Association for Family, School, and Community Engagement, 2019). While virtual student teaching experiences created new opportunities to communicate with families, many of the participants felt uncertain how to respond in the moment when families initiated virtual interaction.

Only one participant spoke in concrete ways about how they built on knowledge gained from families to inform their instructional choices. A foundational tenet of meaningful family engagement is the ability to view students' lives outside of school as important "funds of knowledge" during instruction (Paris & Alim, 2017). Funds of knowledge refer to the ingenuity, languages, legacies, rich values, and sophisticated practices within children's families and communities. It was less clear how virtual student teaching helped candidates identify the families' funds of knowledge. This study serves as an important reminder that connections do not always lead to educator capabilities.

While it was beyond the scope of this study to determine whether and how teacher educators supported candidates in critically surfacing and evaluating their assumptions and sense-making during virtual student teaching, we know the potential for miseducative experiences—those that shut down further learning—is very real.

Implications

As more candidates experience virtual student teaching settings, teacher educators must investigate and make sense of how such virtual settings influence candidates' views of and interactions with children and families. Many of our participants' descriptions of their experiences revealed assumptions and beliefs they held regarding children's lives outside of school. The structure and level of noise in a child's home as well student and family needs were all issues that the candidates reckoned with, and in some cases, they were unable to push past a dominant culture interpretation of those beliefs. In this way, our findings reinforce calls for teacher education programs to increase the importance of family engagement curriculum to address gaps in teacher candidates' confidence, cognition, connections, and capabilities. Specifically, "cultural responsiveness and critical caring [is] foundational to elevating the human

aspects of teaching essential for developing and sustaining the types of relationships that teachers can and should have with students and families in these new learning contexts" (Carter Andrews et al., 2021).

Establishing clearly defined goals for candidate-family engagement and identifying professional standards by which programs can assess candidates' skills in doing so are important first steps (Walker, 2019). In addition, teacher preparation programs must also create educative experiences for candidates to learn about and partner with students' families. At Ball State University, for example, teacher candidates are paired with community and family members. Candidates might attend church or other community events with a family in order to identify the many ways that families support children's learning and growth outside of formal school settings. Candidates might also ask a family or community member to serve as a curriculum consultant for lessons they will soon teach (Zygmunt et al., 2016).

Programs also need to further develop candidates' historical understanding of the ways in which schools/teachers have misunderstood families (Marsh & Turner-Vorbeck, 2010) and examine how certain families have been traditionally marginalized in schools, including families feeling uncomfortable walking into a school or speaking with teachers (Lawrence-Lightfoot, 2003). Candidates also need educative, scaffolded opportunities to surface, evaluate, and potentially transform their own assumptions and beliefs about families (Gutiérrez & Vossoughi, 2010). Candidates can develop the confidence and capacity to disrupt marginalizing family engagement practices when their teacher preparation program integrates family engagement curriculum into foundational courses, uses text and multimedia representations of family engagement practices, and designs family engagement simulations for candidates to practice and foster skills (Walker, 2019).

Teacher education programs can help candidates view successful family engagement as an issue of educational equity, build connections that cultivate relationships and trust with all families, and invite meaningful two-way conversations where teachers emerge as collaborative leaders deeply invested in families and communities (Hong, 2019). In addition to strengthening family engagement strategies and curriculum in teacher education programs, next steps include continuing to identify and research teacher preparation programs that *do* focus on family engagement and determine whether and how they develop teacher candidates' confidence, cognition, connections, and capabilities.

References

Anderson, K. J., & Minke, K. M. (2007). Parent involvement in education: Toward an understanding of parents' decision making. *Journal of Educational Research, 100,* 311–323. https://doi.org/10.3200/JOER.100.5.311-323

Avvisati, F., Gurgand, M., Guyon, N., & Maurin, E. (2014). Getting parents involved: A field experiment in deprived schools. *Review of Economic Studies, 81*(1), 57–83. https://doi.org/10.1093/restud/rdt027

Bhabha, H. (1994). *The location of culture*. Routledge.

Bhargava, S., & Witherspoon, D. P. (2015). Parental involvement across middle and high school: Exploring contributions of individual and neighborhood characteristics. *Journal of Youth and Adolescence*, *44*(9), 1702–1719. https://doi.org/10.1007/s10964-015-0334-9

Carter Andrews, D. J., Richmond, G., & Marciano, J. E. (2021). The teacher support imperative: Teacher education and the pedagogy of connection. *Journal of Teacher Education, 72*(3), 267–270. https://doi.org/10.1177%2F00224871211005950

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* Sage.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Sage

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Sage.

Darling-Hammond, L., & Hyler, M. E. (2020). Preparing educators for the time of COVID… and beyond. *European Journal of Teacher Education, 43*(4), 457–465. https://doi.org/gg9354

de Bruïne, E., Willemse, T.M., Franssens, J., van Eynde, S., Vloeberghs L., & Vandermarliere, L. (2018). Small-scale curriculum changes for improving pre-service teachers' preparation for family-school partnerships, *Journal of Education for Teaching*, *44*(3), 381–396. https://doi.org/gmz847

DeSpain, S. N., Conderman, G., & Gerzel-Short, L. (2018). Fostering family engagement in middle and secondary schools. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *91*(6), 236–242. https://doi.org/d2vf

Dewey, J. (1938). *Experience and education*. Macmillan. de Bruïne, E. J., Willemse, T. M., D'Haem, J., Griswold, P., Vloeberghs, L., & Van Eynde, S. (2014). Preparing teacher candidates for family–school partnerships. *European Journal of Teacher Education*, *37*(4), 409–425. https://doi.org/gmbm5v

D'Haem, J., & Griswold, P. (2017). Teacher educators' and student teachers' beliefs about preparation for working with families including those from diverse socioeconomic and cultural backgrounds. *Education and Urban Society*, *49*(1), 81–109. https://doi.org/10.1177%2F0013124516630602

Evans, M. P. (2013). Educating preservice teachers for family, school, and community engagement. *Teaching Education*, *24*(2), 123–133. https://doi.org/gftr83

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, *13*(1), 1–22. https://doi.org/bxhg6g

Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. W. (2009). Teaching practice: A cross-professional perspective. *Teachers College Record*, *111*(9), 2055–2100. https://doi.org/10.1177%2F016146810911100905

Gutiérrez, K. D., & Vossoughi, S. (2010). Lifting off the ground to return anew: Mediated praxis, transformative learning, and social design experiments. *Journal of Teacher Education*, *61*(1-2), 100–117. https://doi.org/10.1177%2F0022487109347877

Hill N. E. & Tyson (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, *45*(3), 740–763.

Hirano, K. A., & Rowe, D. A. (2016). A conceptual model for parent involvement in secondary special education. *Journal of Disability Policy Studies*, *27*(1), 43–53. https://doi.org/10.1177%2F1044207315583901

Hong, S. (2019). *Natural allies: Hope and possibility in teacher-family partnerships*. Harvard Education Press.

Hornby, G., & Lafaele, R. (2011). Barriers to parental involvement in education: An explanatory model. *Educational Review*, *63*(1), 37–52. https://doi.org/c35dk4

Jenlink, P. M. & Jenlink, K. E. (2019). Examining educative versus mis-educative experiences in learning to teach. In C. L. Lowery & P. M. Jenlink (Eds.), *The Handbook of Dewey's Educational Theory and Practice* (pp. 155-173). Brill.

Johnston, D. H., Foy, K., Mulligan, A., & Shanks, R. (2021). Teaching in a third space during national COVID-19 lockdowns: in loco magister? *Irish Educational Studies*, *40*(2), 1–8. https://doi.org/10.1080/03323315.2021.1916563

Jeynes, W. (2010). *Parental involvement and academic success*. Routledge.

Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Lawrence-Lightfoot, S. (2003). *The essential conversation: What parents and teachers can learn from each other.* New York: Ballantine.

Marsh, M. M. & Turner-Vorbeck, T. (2010). *(Mis)understanding families: Learning from real families in our schools*. Teachers College Press.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). Sage.

Moje, E., Ciechanowski, K., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and discourse. *Reading Research Quarterly*, *39*(1), 38–70. https://www.jstor.org/stable/4151759

National Association for Family, School, and Community Engagement. (2019). *State of the States. Family, School, and Community Engagement within State Educator Licensure Requirements.* https://cdn.ymaws.com/nafsce.org/resource/resmgr/custompages/NAFSCE_States_Report_FINAL_0.pdf

Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, *41*(3), 93–97. https://doi.org/10.3102%2F0013189X12441244

Paris, D. & Alim, H. S. (2014). What are we seeking to sustain through culturally sustaining pedagogy? A loving critique forward. *Harvard Educational Review*, *84*(1), 85–100. https://doi.org/ftkm

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

Philip, T. M., Souto-Manning, M., Anderson, L., Horn, I., J. Carter Andrews, D., Stillman, J., & Varghese, M. (2019). Making justice peripheral by constructing practice as "core": How the increasing prominence of core practices challenges teacher education. *Journal of Teacher Education*, *70*(3), 251–264. https://doi.org/10.1177/0022487118798324

Piccolo, D. L, Livers, S. D., & Tipton, S. S. (2021). Adapting student teaching during the COVID-19 pandemic: A comparison of perspectives and experiences. *The Teacher Educator*, *56*(3), 229–249. https://doi.org/gj6mkx

Pushor, D. (2010). Are schools doing enough to learn about families? In M. M. Marsh & T. Turner-Vorbeck (Eds.), *(Mis)Understanding families: Learning from real families in schools* (pp. 4–18). Teachers College Press.

Saldaña, J. (2013). *The coding manual for qualitative researchers*. Sage.

Voorhis, F. L. V. (2011). Costs and benefits of family involvement in homework. *Journal of Advanced Academics*, *22*(2), 220-249. https://doi.org/10.1177%2F1932202X1102200203

Walker, J. M. T., (2019). Recognizing family engagement as a core practice: Using situated pedagogies to advance candidates' readiness to invite families. In S. B. Sheldon & T. A. Turner-Vorbeck (Eds.), *The Wiley Handbook of Family, School, and Community Relationships in Education* (pp. 623–646). John Wiley & Sons, Inc.

Willemse, T. M., de Bruïne, E. J., Griswold, P., D'Haem, J., Vloeberghs, L., & Van Eynde, S. (2017). Teacher candidates' opinions and experiences as input for teacher education curriculum development. *Journal of Curriculum Studies*, *49*(6), 782–801. https://doi.org/gj3v2x

Zygmunt, E., & Clark, P., with Clausen, J., Mucherah, W., & Tancock, S. (2016). *Transforming teacher education for social justice*. Teachers College Press.

Reimagining Online Teacher Education: A Collaborative Autoethnography

Stephanie M. Moody
Towson University

Emily Holtz
Towson University

Sharon D. Matthews
Towson University

Abstract

Over the past two years teacher education programs across the world have faced unprecedented and unexpected challenges that have led to a rapid reconfiguration of in-person teacher training to online formats. For many, this meant reimagining how practice-based teacher education could be envisioned in an online space and without field experiences in P-12 schools. This collaborative autoethnography critically examined how two teacher educators conceptualized the shift to online education, and their attempts to construct meaningful experiences. Our conclusions highlight virtual modeling and enactments as powerful tools to foster content and pedagogical knowledge, decomposition, collaboration, feedback, and reflection. We posit that carefully crafted practice-based learning opportunities, regardless of delivery mode, benefit preservice teachers.

Keywords: Teacher education, practice-based teacher education, preservice teachers, online learning

The circumstances of the past few years have led teacher education programs (TEPs) to seek alternative approaches to preservice teacher (PST) preparation. For many TEPs, this meant a rapid reconfiguration of in-person training to online formats, resulting in the use of "emergency" techniques (Bozkurt & Sharma, 2020; Murphy, 2020). However, as online instruction increasingly became the new normal, TEPs across the country were tasked with making program-wide adaptations that fulfill state and federal requirements for teacher preparation while simultaneously upholding stakeholder expectations for high-quality preparation (Flores & Gago, 2020). This meant envisioning how practice-based teacher education (PBTE), a widely-used approach that focuses on PST preparation for fundamental

teaching practices (Hurlbut & Krutka, 2020) grounded in advancing justice (Teaching Works, 2022), could be realized in an online space.

While a plethora of research has been conducted on online teacher education (see Carillo & Flores, 2020 for a review), little has sought to understand how TEPs implement PBTE in a virtual environment, despite the recent push for its use in teacher education (Vartuli et al., 2016). In the following collaborative autoethnography, two teacher educators from different institutions deconstruct the social phenomena of teacher education in an online environment, positing that a focus on practice may actually be enhanced in this setting.

Literature Review

The literature review below seeks to provide salient background information on the topic of PBTE, which is a relatively new phenomena in teacher education. In addition, this review will explore how teacher education is traditionally experienced online.

Practice-Based Teacher Education

The field of teacher education has long been criticized for its promotion of teaching practices that do not align with those used in schools (e.g., Green, 2014). In response, many TEPs have shifted towards PBTE, an approach that focuses on the *what* and *how* of PSTs' preparation (Forzani, 2014). A variety of practice-based frameworks have been proposed that center around core practices that are common across disciplines and grounded in advancing justice (McDonald et al., 2013; Teaching Works, 2022); for instance, when novice teachers are exposed to the core practice of "leading group discussions," they learn to position all students as valuable and capable scholars. While PBTE has great potential to advance justice and transform teacher education, few studies provide a coherent vision of its application to whole programs (Francis et al., 2018), and thus it is primarily implemented by individual teacher educators

without a shared language or framework (Grosser-Clarkson & Neel, 2020). One such framework, proposed by McDonald et al. (2013) for use across TEPs, includes the following stages: a) introducing and learning about the activities, b) preparing for and rehearsing the activity, c) enacting the activity with students, and d) analyzing enactment moving forward. They posit that this framework fosters a transfer of pedagogical skills across content areas, and facilitates the creation of a common language for teacher education.

While a host of studies have explored the development of PBTE frameworks across content areas (e.g., Peercy & Troyan, 2017), faculty experience of PBTE implementation (e.g., Hurlbut & Krutka, 2020), and its impact on PSTs (e.g., Vartuli et al., 2016), most of these studies are accompanied by field experiences in which PSTs enact learning. Few studies have explored how PBTE can be imagined without a face-to-face component, such as within online education.

PST Preparation in the Online Environment

Given what we know about effective face-to-face PBTE strategies, it is important to understand how preservice preparation has been conceptualized in an online environment. Carillo and Flores (2020) conducted a review of studies from the past two decades where they highlighted the essential characteristics of online PST preparation, including: a) collaboration and interaction between professors and students; b) co-construction of knowledge, with the professor as the facilitator; c) opportunities for critical and reflective thinking; d) sharing and deconstructing personal teaching experiences; e) videos of classroom practice; f) timely feedback from a variety of sources; g) assessment focused on everyday teaching practices and case stories; and h) use of appropriate and familiar technologies (Carillo & Flores, 2020). While these findings present a great starting point for online PST education, the authors highlighted the urgent need for more attention to specific online pedagogy rooted in equity and justice.

The quick shift to online learning has resulted in some specificity in online pedagogy, however it is still limited in scope. Moser et al. (2020) utilized a virtual reality program to allow PSTs to rehearse language use and instruction in a safe, online space, finding that the online rehearsals afforded PSTs the opportunity for reflection, feedback, and collaboration with peers. Similarly, Sullivan et al. (2020) engaged PSTs in simulated classroom situations centered around responses to student behaviors after which PSTs debriefed, reflected, and discussed their experiences. Both studies evidenced positive affordances of virtual PBTE; however, there is a need for more research rooted in online practices available to all teacher educators and not just those involving expensive simulation technology.

In sum, the reviewed literature suggests that little research has sought to understand how the scaffolding, modeling, and application of content and pedagogy can be applied to online teacher education. Thus, when teacher educators were forced to transition to online instruction, they did so with little evidence-based guidance. The present study seeks to deconstruct the experience of teacher education in an online environment.

Methods

Employing a collaborative autoethnographic approach (Chang, 2016; Chang et al., 2012), the present study critically examines how two teacher educators conceptualized the shift to online education and their attempts to make meaningful experiences despite the lack of in-person access. Autoethnography is a "highly personal" approach to research, in which the experiences of the researchers serve as primary data in order to "expand the understanding of social phenomena" (Chang, 2016, p. 91). Using a "full" collaborative approach, the researchers worked together from start to finish to gather and analyze data and write about the findings from their experiences (Chang, 2016).

Autoethnography is commonly used in teacher education to examine language identities (e.g., Banegas & Gerlach, 2020; Yazan, 2019) and social justice reforms (e.g., Navarro et al., 2020; Ohito, 2019). To our knowledge, no autoethnographies yet examine how teacher educators conceptualize preparation in an online setting. However, an understanding of the teacher educator experience within the online context allows for a deep understanding of social realities (Chang, 2016). The experiences of the two authors, who share scholar and teacher educator identities but are situated in different contexts with different goals, presents insights that may not be revealed in other methodologies. In this way, the autoethnographic approach provides a unique perspective on online teaching that has yet to be captured.

Researcher Reflexivity

Autoethnographies call for researchers to become the data source, meaning that the relationship between their particular perspective and the research is essential (Patton, 2015). In this section, we present the positionality of each author, both as practitioners and researchers.

Emily is both a graduate student studying Curriculum and Instruction at a large research university and an elementary Literacy Coach. In her dual role she provides coaching to in-service teachers and collaborates with university faculty on research and preparation. Stephanie is a new Assistant Professor of Early Childhood Education at a university known statewide for its focus on advancing justice through PBTE. Stephanie has a decade of public-school teaching and is an expert in literacy instruction for emergent bilinguals. The present study is situated around her experiences teaching an online Assessment in Early Childhood course. Sharon is a Clinical Associate Professor of Literacy Education at a large research university. She is an expert in literacy, an experienced faculty member, and a former public-school teacher. We situate her

experiences within a children's literature course in a hyflex format, which some students attended in person and others via Zoom.

Data Collection and the Autoethnographic Process

We began our autoethnographic exploration by reflecting on our online teaching experiences during Fall 2020. Over the course of two months, we met weekly to share stories about online instruction, which often included a review of course materials or anecdotal stories that emerged from classroom dialogue. Notes were kept of each meeting to record the discussion and document emergent themes. After several weeks, we began to triangulate (Patton, 2015) our data by synthesizing commonalities in experience. Using notes from each meeting and thematic analysis (Saldaña, 2015), Sharon and Stephanie wrote individually about their practices, then met with Emily to read and revise each section for coherence and to decompose our shared social experiences. In the following section, we present our collaborative autoethnography that chronicles our endeavors as teacher educators struggling to redesign our practice to meet the increasingly present force of online teacher preparation.

Findings

The past two years have brought with them many changes, one of which is the reality that online instruction may play a more prevalent role in teacher education than it has previously. Through the autoethnographic process, Sharon and Stephanie discuss the social nature of their move to online teacher education and their shift from survival mode into authentic, high-quality teacher preparation.

Uncertainty in a New World

When presented with the prospect of teaching online, we almost immediately realized that we shared a level of uncertainty about how to approach teacher education in this context. In her first semester as a professor, Stephanie's primary worry was that her instruction would suffer without access to real, live children; it is well-established that hands-on field experiences are the most influential part of any teacher education program (e.g., Brown et al., 2015), and two of her three courses were to contain an accompanying field experience around which many assignments were built. Her new university also highly emphasized PBTE, in which "enacting the activity" is a central component. After she learned that field experiences would not be possible, she feared that her PSTs would fail to make critical connections between the underlying theories of education and their enactment in classrooms (Peercy & Troyan, 2017). She also feared that the virtual world would not prepare PSTs for the complexity of teaching, including issues of equity in the classroom (Grosser-Clarkson & Neel, 2020).

Sharon also faced uncertainties, despite being a seasoned Clinical Associate Professor who was very familiar with the courses she was slated to teach. Her worries were centered around the disruption to the well-established rhythm of her courses, particularly that of her favorite course, Teaching Reading Through Children's Literature. This class relies heavily on teacher modeling of the read-aloud process, and Sharon devotes much attention to modeling book selection techniques and the fundamental components of a read-aloud. She employs a gradual release model (Pearson & Gallagher, 1983) to her instruction, so her PSTs typically engaged in fishbowls, group work, and independent enactment of read-alouds, tasks harder to accomplish in the digital world. Sharon was also worried about the loss of community-building and a "togetherness mindset" that is facilitated by collaborative read-aloud practice (Bates &

Morgan, 2018; Tschannen-Moran & Johnson, 2011) and that is central to the development of reflective and critical educators (Baker & Rozendal, 2019). Sharon feared she would be unable to translate the interactive elements of her course into virtual activities.

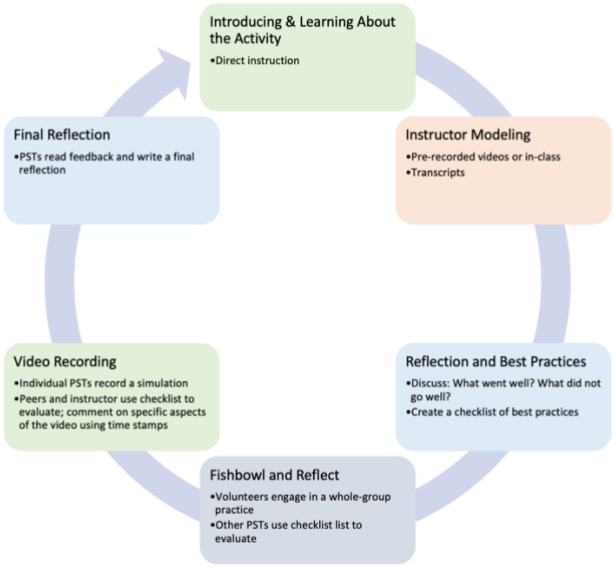
As we looked through the notes from our conversations, we realized that the trepidation we felt was not actually related to any real, insurmountable obstacles; in actuality, we were either too fearful –or possibly too stuck in our own boxes– to step outside and think creatively. With this realization, our perception of teacher education in the virtual world began to shift.

Creative Thinking

Creative thinking meant that Stephanie needed to repurpose assignments and lessons that relied on in-person field experiences, and Sharon would have to build a digital classroom community. Stephanie began by scouring teaching resources and pestering colleagues for supplemental hands-on methods that would still maintain the integrity of PBTE, to no avail. This led Stephanie to realize that she would have to strengthen the other three areas of PBTE to make the lack of "enacting the activity" less harmful to PST development. To facilitate this, Stephanie designed her own online PBTE framework (see Figure 1).

Figure 1.

A Framework for Practice-Based Teacher Education in the Online Environment



The steps embedded in this framework are considered essential PBTE elements that promote the development of teacher knowledge and advance understanding of inequity in schools (McDonald et al., 2013; Teaching Works, 2022). They also meet what Carillo and Flores (2020) found to be best practices in virtual teacher education, which emphasizes the co-construction of knowledge with the teacher educator as facilitator. Despite this, Stephanie still faced a bit of uncertainty about building her courses and assignments from the ground up.

In revisiting her "old reliable" syllabi, Sharon realized that she would have to completely change her approach. She began by chunking her instruction into smaller segments to cultivate close reading attention to literary elements and illustrations and to support guided selection of stopping points and questions. She, rather uncomfortably, decided to use breakout rooms to engage students in peer rehearsals and to have students record read-alouds via FlipGrid, a video recording app. Our conversations revealed that Sharon was quite obviously not sold on the

efficacy of the new techniques that she had somewhat forcibly adopted. We both virtually walked into the semester on a hope and a prayer, vowing to report on our experiences.

Facing the Virtual World

As the semester ended and we conversed about its successes and challenges, it was evident that our attitudes about virtual instruction had shifted significantly. In the following paragraphs we will provide examples of two specific assignments, one from Stephanie's course and one from Sharon's course, in order to share ideas with other teacher educators and to provide concrete examples of the two assignments that made the greatest impact on our attitudes toward online instruction. This process of sharing specific experiences ensures that the "brilliance of individual stories" is maintained, a central part of any autoethnography (Chang, 2016, p. 94).

Stephanie's attitude toward online instruction began to change as she saw the cycle she designed come to life in her Assessment in Early Childhood Education course, where PSTs were learning how to conduct equitable conferences with diverse families. She first introduced the idea of communicating to families through a series of questions about engagement, families' role in education, and power relationships between family members and teachers. Following this, her PSTs viewed videos where she role-played a mother-teacher conference with family members from a variety of backgrounds and communication styles (Cheatham & Santos, 2011). These recordings were played for the whole class, after which they analyzed the video transcripts in breakout groups and created a checklist of best practices. The second part of this activity took part during the following class period. Using the checklist they had created, her class engaged in a fishbowl simulation of a family-teacher conference. As they took turns, PSTs in the 'audience' evaluated their actions against the created checklist. Then, in an out-of-class assignment, PSTs used a video platform called Swivl to role-play a conference. Stephanie and classmates used

Swivl to leave time-stamped comments on their enactment. The final step required PSTs to read through the comments, re-watch their videos, and write a reflection on the process: what they learned about successful communication, what they would change, and continuing areas of challenge.

Stephanie found the Swivl video recordings, feedback, and reflection to be the most impactful piece of the cycle because her PSTs were able to view their own practice, including how they responded to simulations of individuals from diverse backgrounds, in a way that would not be possible in typical field experience. These videos also led the PSTs to engage in deep reflection (Byrd, 2010), something Stephanie had previously struggled to cultivate. Additionally, Stephanie had the rare experience of being able to directly see how PSTs applied the knowledge that they had learned in class (McDonald et al., 2013). Stephanie realized that her creative thinking about the PBTE cycle had become an absolute necessity to future courses.

Likewise, Sharon's attitude began to shift as her PSTs completed the FlipGrid read-aloud assignment that she had modified for her Teaching Reading Through Children's Literature course. For this assignment the PSTs were asked to select a high-quality children's text, record a FlipGrid video of themselves enacting a read aloud, and then provide peer feedback based on the tenets of a successful read aloud discussed in class. Sharon revealed that she was somewhat shocked, and certainly pleased, to see that the assignment "buy-in" was greater than usual and peer feedback had improved. In previous semesters, when the assignment had been completed face-to-face, peer feedback tended to lack depth. The FlipGrid recordings fostered detailed recommendations about how to improve prosody, different questions that could be asked, and a variety of other topics.

The next step of Sharon's assignment was to have PSTs create action plans that incorporated instructor and peer feedback before the next round of recording. Sharon found that even though the protocol did not require a detailed reflection, most PSTs did so anyway; they noted how a miscue in oral reading disrupted meaning for listeners, how prosody could be enhanced to convey meaning, and suggested stopping points for new questions or student engagement. The abundance of pedagogical thinking far exceeded typical responses and showed that PSTs engaged in real-time reflection as they watched their videos, noted areas for improvement, and decided to re-record based on their findings. She marveled at how their final videos revealed discernable differences in prosodic proficiency, fluid integration of questions, distinct think-aloud segments, and a smoother overall presentation than was commonly realized. Sharon began to see how use of video recordings naturally cultivated deep, authentic reflection, which fostered a higher level of PST buy-in. She also wondered if this practice should become commonplace in her course, regardless of medium of delivery.

Discussion

The collaborative autoethnographic process allowed us to reflect on the social phenomena of adapting our practices to an online environment. We realized that, while situated within different contexts with different goals, we shared a similar fear about operating entirely online that was overcome when we witnessed the multiple affordances of a virtual setting. Specifically, we realized that key elements of successful teacher education were possible and potentially superior in the online environment. Each of these affordances will be discussed below.

Virtual Enactments

Though we began the semester with feelings of trepidation about the effectiveness of our instruction without a face-to-face component, we eventually solved this issue through the use of video simulations. What we did not expect was how powerful this tool would be; specifically, that virtual enactments produced higher-quality feedback, enabling PSTs to gain a deeper understanding of their own practice and how their practice positions students and families in their classroom.

Stephanie was able to give specific and targeted feedback on videos in a way that would not have been possible if the PSTs had been working in the field; in these situations, feedback comes primarily from mentor teachers and is typically non-specific (McLeod, 2019). Some mentor teachers feel uncomfortable providing even constructive criticism (Tigert & Peercy, 2018), and the goals of the TEP may be unknown to the mentor teacher (Tigert & Peercy, 2018), and thus feedback might not align with the goals of the program. For feedback to be effective, it must be specific and provided within context by a consistent and knowledgeable source (McLeod, 2019). The virtual enactments allowed Stephanie to give rich feedback, thus resulting in PSTs who were more efficacious about communicating effectively and equitably with diverse families (Knoblauch & Woolfolk Hoy, 2008).

For Sharon, her FlipGrid read-aloud assignment afforded PSTs the opportunity to safely provide peer feedback, an essential component of successful online courses (Carillo & Flores, 2020). She reflected on the contrast with in-person read-alouds, where PSTs tended to garner only surface-level feedback from peers that limited their ability to adjust and engage in high-quality reflection of their technique. The FlipGrid read-alouds, on the other hand, eliminated the abundance of generic comments and allowed peers to focus on specific elements, such as

prosody, in a way that allowed PSTs to see more clearly how the practice could be improved (Byrd, 2010).

As we have both transitioned back to face-to-face instruction, virtual enactments continue to influence our instruction and course assignments. Other teacher educators can use virtual enactments with their student teachers in field placements, to highlight both their pedagogy and their interactions with students. This may be particularly beneficial for addressing issues of justice and equity, for which PSTs may require tangible evidence to see and understand patterns. Likewise, in methods courses where PSTs are learning to enact core practices, video simulations with peers and/or avatar students have the potential to address misunderstandings and areas of need before PSTs enter the classroom.

Virtual Modeling

Along with the affordances of video recording, we also realized the benefits of video modeling, which allowed our PSTs to see and deconstruct context-specific examples of high-quality practices, thus building their own understandings of the subtle nuances that make up good pedagogy. Watching videos of teaching has been identified as a key component of PBTE (Hurlbut & Krutka, 2020), but most research has focused on teachers' viewing their own practice instead of how videos situated to particular contexts created by experts (like education faculty) or peers may impact the development of content and pedagogical knowledge. We found this practice to be highly effective because we were able to tailor the use of video to the specific needs of our teachers and the goals of our programs.

Decompositions of practice are widely suggested for fine-tuning teaching skills in PBTE programs (Grossman, 2011), and they typically take the form of transcript analysis of teacher videos (McDonald et al., 2013). In Stephanie's course, her PSTs analyzed transcripts to focus on

their individual interactions with diverse families, through which they reframed their understanding of effective communication and developed a philosophy for equitable teacher-family communication that they later applied to their own practice (Byrd, 2010). Thus, the PSTs were able to actively construct their own knowledge through video modeling (Desimone & Pak, 2017; McDonald et al., 2013) and later apply this learning to their own simulated interactions. Similarly, Sharon found that her PSTs considered each component part of the read aloud before recording for their peers' feedback. Rather than viewing the read aloud as a whole, PSTs decomposed the objective of the task to determine the most impactful points of their piece of literature. This decomposition allowed for deep consideration of stopping points, questioning, and topics of discussion that PSTs may later use in their own classrooms. In our two classes, the decomposition of skills provided a unique space for meaningful reflection.

Continuous teacher reflection is essential and distinguishes great from average teachers, particularly for those who work in diverse classrooms or with families from backgrounds different than their own (Byrd, 2010; Baker & Rozendal, 2019; Gelfuso, 2016). Baker and Rozendal (2019) contend that PSTs have differential abilities to be reflective, so instruction targeting the development of reflective skills is critical. While not the primary focus of our assignments, our PSTs expertly applied their professional knowledge to evaluate their recordings. Stephanie's PSTs noticed nuances in their communication such as body language, eye contact, facial expressions, and language use and reflected on how these nuances would impact families. Sharon's PSTs noted prosody, text introduction, and book handling. Research suggests that PSTs rarely have the opportunities to experience the nuances of teaching prior to their first year of teaching, meaning that they seldom have the requisite professional knowledge to successfully reflect (Gelfuso, 2016; Johnson & Dabney, 2018). Virtual modeling provided our

PSTs with the opportunity to construct their professional knowledge, then reflect on and apply their prior learning within the context of their own practice.

An unexpected benefit of the virtual enactments was how they provided a space for rich discussions as all PSTs were witnessing the same representation of practice. This contrasts with mentor modeling during real-time field experiences, in which no two PSTs share the same representation of teaching. PSTs may not pick up on their mentor teacher's application of pedagogical moves taught in their TEP (Gelfuso, 2016), or they may be placed in classrooms with mentor teachers who are unaware of the pedagogical goals of the TEP or who may not exhibit best practices (Darling-Hammond, 2014), thus preventing them from engaging in rich collaborative discussions. Given that our PSTs had access to the same recorded materials, this facilitated a shared experience and centered their discussions on specific pedagogical content.

Virtual modeling as shared experiences are incredibly powerful, and now that face-to-face instruction has resumed, we have both continued to use them in our courses. For instance, Stephanie had her PSTs deconstruct and reflect on a video of a kindergarten teacher whose group discussion privileged white students. Teacher educators across content areas can engage PSTs in similar virtual modeling to highlight essential teaching moves and provide targeted goals that cultivate deep reflection.

Conclusions

Through this collaborative autoethnography, we sought to deconstruct the social phenomena of online PST education by sharing the experiences of two teacher educators situated in different contexts. For both, the move to online instruction garnered similar reactions, with the ultimate realization that virtual modeling and enactments are powerful tools to foster content and pedagogical knowledge, decomposition, collaboration, feedback, and reflection. We recognized

that carefully crafted practice-based learning opportunities are the most important element, regardless of delivery mode.

As we now return to in-person learning, we have continued to implement a blended approach to PBTE. PSTs spend a portion of the semester using virtual enactments and virtual modeling as a means to build their pedagogical knowledge before enacting practice in a high-stakes environment such as the classroom. We stress that the opportunities that recordings afford should not be negated simply because PSTs are returning to in-person learning. In considering future research, examining the impact and effectiveness of a blended model of PBTE may be worthwhile, particularly as it relates to issues of justice and equity.

There are several limitations present in this autoethnography. First, our experiences are unique to our individual milieus. While we believe that our findings are applicable to the larger field of teacher education, our methods are unlikely to be replicated exactly. Additionally, our experiences reflect those of teacher educators in the United States and may not be generalizable to TEPs in other countries. Finally, while we have attempted to triangulate our experiences, the nature of autoethnography means that the work is rooted in personal experiences.

To conclude, we encourage our colleagues to engage in the autoethnographic process, particularly when attempting new teaching methods or contexts. Autoethnography provides us with a lens to reflect on our instructional experiences, leading to a rich base for future research, pedagogical improvements, and perhaps even policy-change. As researchers, our scholarly identities provide us with a unique perspective to frame the social realities of teacher education, and thus transform the entire process (Chang, 2016).

References

Baker, E. B. A., & Rozendal, M. S. (2019). Cognitive-based rubrics: Examining the development of reflection among preservice teachers. *Teacher Education Quarterly*, *46*(2), 58-80.

Banegas, D. L., & Gerlach, D. (2021). Critical language teacher education: A duoethnography of teacher educators' identities and agency. *System*, *98.* https://doi.org/10.1016/j.system.2021.102474

Bates, C. C., & Morgan, D. N. (2018). Seven elements of effective professional development. *The Reading Teacher, 71*(5), 623-626. https://doi-org.proxy-tu.researchport.umd.edu/10.1002/trtr.1674

Bozkurt, A. & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to coronavirus pandemic. *Asian Journal of Distance Education, 15*(1), i-vi.

Brown, A. L., Lee, J., & Collins, D. (2015). Does student teaching matter? Investigating pre-service teachers' sense of efficacy and preparedness. *Teaching Education, 26*(1), 77–93. https://doi-org.proxy-tu.researchport.umd.edu/10.1080/10476210.2014.957666

Byrd, D. R. (2010). Framing, reflecting on and attending to a rationale of teaching of writing in the second language classroom via journaling: A case study. *System: An International Journal of Educational Technology and Applied Linguistics,* 38(2), 200-210. https://doi-org.proxy-tu.researchport.umd.edu/10.1016/j.system.2010.03.002

Carillo, C., & Flores, M. A. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. *European Journal of Teacher Education, 43*(4), 466-487. https://doi-org.proxy-tu.researchport.umd.edu/10.1080/02619768.2020.1821184

Chang, H. (2016). Individual and collaborative autoethnography as method: A social scientist's perspective. In S. L. Holman Jones, T. E. Adams, & C. Ellis (Eds.), *Handbook of autoethnography*. Routledge.

Chang, H., Ngunjiri, F., & Hernandez, K.-A. C. (2012). *Collaborative autoethnography*. Taylor & Francis Group.

Cheatham, G. A., & Santos, R. M. (2011). Collaborating with families from diverse cultural and linguistic backgrounds. *YC Young Children, 66*(5), 76.

Darling-Hammond, L. (2014). Strengthening clinical preparation: The holy grail of teacher education. *Peabody Journal of Education, 89*(4), 547-561. https://doi.org/10.1080/0161956X.2014.939009

Desimone, L.M., & Pak, K. (2017). Instructional coaching as high-quality professional development. *Theory Into Practice, 56*, 3-12. https://doi-org.proxy-tu.researchport.umd.edu/10.1080/00405841.2016.1241947

Flores, M. A., & Gago, M. (2020). Teacher education in times of COVID-19 pandemic in Portugal: National, institutional, and pedagogical responses. *Journal of Education for Teaching*, *46*(4). https://doi-org.proxy-tu.researchport.umd.edu/10.1080/02607476.2020.1799709

Forzani, F. M. (2014). Understanding “core practices” and “practice-based” teacher education: Learning from the past. *Journal of Teacher Education, 65*(4), 357–368. https://doi.org/10.1177/0022487114533800

Francis, A. T., Olson, M., Weinberg, P. J., & Stearns-Pfeiffer, A. (2018). Not just for novices: The programmatic impact of practice-based teacher education. *Action in Teacher Education*, *40*(2), 119-132. https://doi.org/10.1080/01626620.2018.1424053

Gelfuso, A. (2016). A framework for facilitating video-mediated reflection: Supporting preservice teachers as they create ‘warranted assertabilities’ about literacy teaching and learning. *Teaching and Teacher Education, 58,* 68-79. https://doi-org.proxy-tu.researchport.umd.edu/10.1016/j.tate.2016.04.003

Green, E. (2014). *Building a better teacher: How teaching works (and how to teach it to everyone).* W.W. Norton & Company.

Grosser-Clarkson, D., & Neel, M. A. (2020). Contrast, commonality, and a call for clarity: A review of the use of core practices in teacher education. *Journal of Teacher Education, 71*(4), 464-476. https://doi.org/10.1177/0022487119880162

Grossman, P. (2011). Framework for teaching practice: A brief history of an idea. *Teachers College Record*, *113*(12), 2836-2843. https://doi.org/10.1177/016146811111301205

Hurlbut, A., & Krutka, D. G. (2020). Where do we start?: Initiating a practice-based teacher education program around high-leverage practices. *Journal of Teacher Education and Educators*, *9*(2), 169-199.

Johnson, T. N., & Dabney, K. P. (2018). Voices from the field: Constraints encountered by early career elementary science teachers. *School Science and Mathematics, 118*(6), 244-256. https://doi-org.proxy-tu.researchport.umd.edu/10.1111/ssm.12290

Knoblauch, D., & Woolfolk Hoy, A. W. (2008). “Maybe I can teach those kids.” The influence of contextual factors on student teachers’ efficacy beliefs. *Teaching and Teacher Education, 24*(1), 166-179. https://doi-org.proxy-tu.researchport.umd.edu/10.1016/j.tate.2007.05.005

McDonald, M., Kazemi, E., & Kavanagh, S. S. (2013). Core practices and pedagogies of teacher education: A call for a common language and collective activity. *Journal of Teacher Education*, *64*(5), 378-386. https://doi.org/10.1177/0022487113493807

McLeod, R. H. (2020). Supporting preservice teachers to implement systematic instruction through video review, reflection, and performance feedback. *Early Childhood Education Journal*, *48*(3), 337-343. https://doi.org/10.1007/s10643-019-01001-y

Moser, K., Chambless, K., & Miller, N. (2020). Creating a virtual space in world language teacher preparation? Considerations for practice-based rehearsals. *Journal of Technology and Teacher Education, 28*(4), 613-638.

Murphy, M. P. A. (2020). COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemporary Security Policy, 41*(3), 492-505. https://doi-org.proxy-tu.researchport.umd.edu/10.1080/13523260.2020.1761749

Navarro, O., Shah, J. K., Valdez, C., Dover, A. G., & Henning, N. (2020). Fighting on all fronts: The push, pull, and persistence of social justice educators and the move to reimagine teacher preparation. *Teacher Education Quarterly, 47*(3), 9-31.

Ohito, E. O. (2019). Thinking through the flesh: A critical autoethnography of racial body politics in urban teacher education. *Race Ethnicity and Education, 22*(2), 250-268. http://dx.doi.org.proxy-tu.researchport.umd.edu/10.1080/13613324.2017.1294568

Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage Publications.

Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology, 8*(3), 317–344. https://doi.org/10.1016/0361-476X(83)90019-X

Peercy, M. M., & Troyan, F. J. (2017). Making transparent the challenges of developing a practice-based pedagogy of teacher education. *Teaching and Teacher Education, 61*, 26-36. https://doi-org.proxy-tu.researchport.umd.edu/10.1016/j.tate.2016.10.005

Saldaña, J. (2015). *The coding manual for qualitative researchers*. Sage Publishing.

Sullivan, F.R., Hillaire, G., Larke, L., & Reich, J. (2020). Using teacher moments during the COVID-19 pivot. *Journal of Technology and Teacher Education, 28*(2), 303-313.

Teaching Works. (2022). *High leverage practices*. https://library.teachingworks.org/curriculum-resources/high-leverage-practices/

Tigert, J. M., & Peercy, M. M. (2018). Preparing to teach both content and language: Four ESOL teacher candidates' experiences. *TESOL Journal, 9*(3), 542-556. https://doi-org.proxy-tu.researchport.umd.edu/10.1002/tesj.358

Tschannen-Moran, M., & Johnson, D. (2011). Exploring literacy teachers' self-efficacy beliefs: Potential sources at play. *Teaching and Teacher Education, 27*(4), 751-761. https://doi-org.proxy-tu.researchport.umd.edu/10.1016/j.tate.2010.12.005

Vartuli, S., Snider, K., & Holley, M. (2016). Making it real: A practice-based early childhood teacher education program. *Early Childhood Education Journal, 44*(5), 503-514. https://doi-org.proxy-tu.researchport.umd.edu/10.1007/s10643-015-0733-2

Yazan, B. (2019). An autoethnography of a language teacher educator: Wrestling with ideologies and identity positions. *Teacher Education Quarterly, 46*(3), 34-56.

Talking About Race in Mathematics Teacher Education: An Analysis of Online Community Dialogues

Alesia Mickle Moldavan
Georgia Southern University

Monica Lyn Gonzalez
East Carolina University

Bailey Anne Kaufman
Fordham University

Abstract

This study reports on a race-focused case designed for use in online mathematics methods courses to encourage preservice teachers to talk about race, including the racial injustice observed in an authentic mathematics classroom situation and how a teacher might respond. Using the theoretical lens of Racial Noticing alongside the 8S Framework for Race Talk, findings indicate that preservice teachers, when prompted with the case, were able to recognize racial phenomena and identify both verbal and practice-based responses they would make as the teacher. Navigating online community dialogues also presented unique benefits and tensions in how to engage in conversations about racial noticing competencies. We argue that preservice teachers must be prepared to notice racial phenomena and develop skills for responding and that mathematics methods courses, regardless of the in-person, online, or hybrid setting, need to provide intentional activities that call attention to race and racism in mathematics classrooms.

Keywords: Mathematics teacher education, race, technology

Talking about race can be messy, emotional, and uncomfortable. The context in which race is discussed also adds another layer of complexity. Mathematics teacher educators (MTEs) must not feel reluctant to raise topics of race and racism in methods courses when preparing preservice teachers (PTs) for their classrooms. Research suggests that PTs who engage in such conversations begin to critically reflect on issues of race, including their own racial identities and ideologies in mathematics education, and use racial noticings to examine the lived experiences of students of color (Martin et al., 2017; Shah & Coles, 2020). Furthermore, PTs can use conversations about race and educational inequities to challenge oppression and create equitable

practices in the mathematics classroom (Association of Mathematics Teacher Educators, 2017; National Council of Teachers of Mathematics, 2020)

MTEs can provide opportunities for PTs to talk about race using case-based instruction, a pedagogical approach where real-life situations can be analyzed to bridge theory into practice (Gorski & Pothini, 2018). Particular emphasis on race-focused cases can be used to prompt discussions that explore race and racial injustice in the mathematics classroom (Gonzalez & Moldavan, 2021; Kavanagh, 2020; Moldavan & Franks, 2021). Due to COVID-19, the context of these discussions has had to evolve in response to remote learning spaces. Where one could once engage in conversations about race in person, many MTEs and PTs have had to rethink how they facilitate and participate in such conversations through digital platforms (e.g., asynchronous modules, discussion boards).

This study reports on how two MTEs designed a race-focused case for use in online mathematics methods courses to encourage PTs to discuss racial phenomena within a mathematics classroom situation. We use the theoretical lens of Racial Noticing (Shah & Coles, 2020) alongside the 8S Framework for Race Talk (Murray-Johnson, 2019) to examine the following research questions:

1. How do PTs talk about race using case-based instruction in mathematics methods courses?
2. What are the benefits and tensions experienced by PTs and MTEs engaged in online community dialogues addressing race-related issues?

We argue that PTs must be prepared to recognize and respond to racial phenomena in mathematics classrooms and that mathematics methods courses, regardless of the in-person, online, or hybrid setting, need to provide opportunities to do this work.

Literature Review

To conceptualize race in the mathematics classroom, one must first see race as socially constructed in institutional and structural forces that impact oneself and how one learns (Larnell et al., 2016; Ridgeway & McGee, 2018). Understanding that classrooms are highly racialized spaces evokes awareness of the influence such learning spaces have on the development of students' mathematical identities and how these identities are co-constructed with students' racial identities (Martin, 2006). MTEs can help PTs learn about the sociopolitical and sociohistorical contexts that have positioned racial groups in a hierarchy of mathematical abilities, beliefs, and opportunities (Martin, 2009). When PTs are able to notice the racialized nature of such a hierarchy, they can begin to examine the systemic inequities experienced by students of color and explore counterstories that dismiss rather than reinforce deficit-oriented ideologies.

For PTs to notice race and conceptualize racialized inequities within the context of mathematics learning, MTEs must assist PTs in developing their racial noticing competencies. We define racial noticing competencies as the skills and dispositions needed to notice and analyze racial phenomena for purposes of confronting racism in oneself and one's environment. Analyzing equity issues in mathematics classrooms is well-rooted in teacher noticing research (see Hand, 2012; Louie, 2018; Wager, 2014). However, pedagogy targeting race-focused noticing that can support PTs' development of racial noticing competencies is limited.

Case-based instruction is frequently used in teacher education to inform professional practice and develop competencies by positioning PTs in authentic classroom situations for collaborative discussion and reflection (Decker & Pazey, 2017; Heitzmann, 2008). For instance, Safford and Bales (2011) examined teacher educators during introductory teaching courses who

used case-based instruction to help PTs examine their beliefs about children who do not look like themselves. The teacher educators reported that through case-based instruction, their PTs developed an increased awareness of the complexities in teachers' pedagogical decisions. Findings from Safford and Bales' (2011) study, as well as others, provide insight into the benefits of case-based instruction to target reflection on, for example, beliefs and assumptions about marginalized groups of students.

A major factor that must be considered in facilitating case-based instruction is the context in which it occurs. In response to COVID-19, MTEs were forced to rethink their instructional strategies in online settings (Moldavan, 2021). The use of asynchronous and synchronous remote learning required innovation to "replicate" PTs' in-person experiences. For asynchronous remote learning, many MTEs turned to modules and discussion boards to initiate conversations and reflection. While there are benefits to using discussion boards, like flexibility in making contributions and opportunity for deeper exploration of topics (Aloni & Harrington, 2018), there are also challenges, such as low participation (Caspi et al., 2006) and feelings of "digital" anxiety (Abdous, 2019). Possible solutions to these challenges include leveraging online spaces to consider different perspectives, set clear expectations, and increase guided feedback (Bliss & Lawrence, 2009). Detailed directions and prompts can be used to guide participation in online community dialogues. Additionally, instructors can influence participation through strategic monitoring to encourage reflection (Gasell et al., 2021). When MTEs are aware of the benefits and tensions from engaging in race talk in online contexts, they can prepare strategies to

facilitate and support student learning and participation.

Theoretical Framework

Informing race-related educational research through a lens of critical theories of race allows for issues of race and racism to be critiqued to understand school inequity (Ladson-Billings & Tate, 1995). Such theories can serve as theoretically grounded approaches for researchers to explore areas of racial inequities by examining the experienced discrimination of people of color, eradicating racial subjugation, and telling counterstories that undermine deficit narratives (Creswell & Poth, 2018). Research that builds on these theories recognizes that race is a contrived system for categorizing people based on observable physical traits and that there is a need to allow marginalized voices to contribute knowledge based on their experiences with racism (Bryant et al., 2015; Jett, 2012). There is also awareness of the intersectionality of various oppressions (e.g., gender, sexual orientation, language) that contributes to the dynamics of exclusion (Carter & Vavrus, 2018). In this study, we reference the theoretical lens of Racial Noticing (Shah & Coles, 2020) alongside the 8S Framework for Race Talk (Murray-Johnson, 2019) to understand the racial experiences of students who have been marginalized in the mathematics classroom and assist PTs in uncovering racial biases to inform their professional practice.

Racial Noticing

Teacher noticing is an established framework that refers to how teachers attend to and interpret ongoing information presented during instruction and then respond to that information through intentional planning (Sherin et al., 2011). Shah and Coles (2020) extend teacher noticing through the lens of Racial Noticing to attend to the various ways in which teachers perceive,

make sense of, and react to moments where race and racism occur during instruction. For the purpose of this study, we focus on the interpreting and responding components of the framework.

Shah and Coles (2020) specify three types of racial interpretations in their framework. First, deficit/dismissive interpretations ignore or downplay the significance of racial phenomena. This may look like PTs attributing racial phenomena to something other than race or talking around race without specifically calling out racism. The second interpretation is recognizing indexed racial narratives, which includes identifying the racial narrative and making links between such narratives across multiple racial groups. The last interpretation addresses understanding the implications for racially minoritized students. These implications may include the suffering and disengagement of racially minoritized students and their reduced access to learning opportunities in the classroom.

While a teacher's awareness of racial phenomena is important, it is insufficient if there is no follow-up response. Racial Noticing also attends to teachers' verbal and practice-based responses. Verbal responses can either be public by means of whole class conversations or private with one-on-one conversations that are designed to challenge or undermine racist narratives. Practice-based responses are those that modify the classroom environment or teaching practices to positively impact racially minoritized students in the classroom.

8S Framework for Race Talk

Student resistance and instructor tensions can impede potentially rich conversations related to racial noticing that are essential for developing racial literacy, cross-cultural understanding, and learning experiences concerning racial injustice (Sue, 2013). The 8S Framework for Race Talk (Murray-Johnson, 2019) was developed as a tool for use before, during, and after classroom dialogues that evoke race-related discourse, such as discourse related

to racial noticings (Shah & Coles, 2020). It encompasses eight elements that work in tandem: self-awareness, sensitivity, sanctuary, solid relationships, speech, separation, shedding, and sacrifice. Self-awareness is knowing oneself in the context of the discourse and committing to continual reflection while maintaining sensitivity to others' needs. Sanctuary is the safe space in which individuals can communicate their ideas (speech) to be affirmed or respectfully challenged. To do this work, solid relationships that are diverse and intersectional can aid individuals in learning more about themselves and the world around them. Separation is the realization that some people may make stronger connections to the dialogue than others and that personal perspectives may have limitations. Shedding addresses the intentional decision to unlearn previously held beliefs that may impede race talk. The last element, sacrifice, involves the risk of being uncomfortable to engage in the needed conversations. This framework is used in this study to not only guide student reflection and strengthen instructors' facilitation of difficult conversations but also to inform the benefits and tensions of race-focused online community dialogues.

Research Methods

We conducted a qualitative case study (Yin, 2014) that consisted of four online mathematics methods courses at two universities during the Fall 2020 semester. The bounded case provided insights into how PTs at varying settings preparing to teach at various grade levels talk about race, thereby highlighting the benefits and tensions of online community dialogues exploring racial phenomena within a case. Moldavan taught two of the online mathematics methods courses, one focused on elementary PTs and the other focused on secondary PTs, at a university situated in an urban setting in the Northeast United States. Each course was offered online with asynchronous and synchronous components. Gonzalez taught the other two

asynchronous online elementary mathematics methods courses at a rural university in the Southeast United States. Of the PTs enrolled across the courses, a total of 80 PTs participated in the study, 32 PTs from the urban setting and 48 PTs from the rural setting. Most of the PTs self-reported as female, White, and seeking elementary certification (see Table 1). Moldavan and Gonzalez, the MTEs, identify as females from ethnically diverse families, and the other researcher, Kaufman, identifies as a White female.

Table 1

Characteristics of Preservice Teachers

Characteristics	**n**	**%**
Gender		
Female	71	88.75
Male	9	11.25
Race/Ethnicity		
Asian	3	3.75
Black	13	16.25
Hispanic/Latinx	10	12.50
White	54	67.50
Area of Focus		
Elementary	73	91.25
Secondary	7	8.75

Note. N=80; PTs self-reported their data.

Data Collection

This study utilized a written case since racial phenomena are less frequently captured on video (Shah & Coles, 2020). This case, *A Seat at the Table* (Appendix A), provided a

concentrated focus on racial injustice that occurred within a mathematics classroom interaction between students. In this case, it is the first day of school and the mathematics teacher wants to begin with a collaborative mathematics task. The students are randomly assigned to small groups, but Dominique is excluded by her group. Susan (a White girl) in the group says that she needs to stay away from people like Dominique (a Black girl). This case leverages noticings of Dominique's outward appearance of race and how one's racial background could deny access to a collaborative group activity, explained by Featherstone and colleagues' (2011) as status interactions within groups. The case's open-ended nature and prompt-based discussions elicited opportunities for PTs to examine how racial injustice finds its way into the mathematics classroom and the role of the teacher within the situation to ensure all students can participate in mathematics learning.

Given the online settings of the mathematics methods courses, the case was facilitated using a discussion board to generate an online community dialogue. All PTs were asked to read the case and post their initial response to the prompts on the discussion board by a specified due date. Following the due date, PTs were asked to respond to at least two peers' initial posts and reply to peers who responded to their own posts by another deadline. Moldavan followed up with a synchronous debrief with her whole class.

The data for this study includes all PTs' posts on the discussion board, the PTs' reflections shared during the synchronous debrief, and the emails that were sent to the MTEs regarding this case. We also analyzed the MTEs' reflections on the implementation of the case and their reactions to the PTs' posts and emails.

Data Analysis

We looked for specific evidence of Racial Noticing (Shah & Coles, 2020) within the PTs' discussion board posts. To inform the first research question, we noted two themes that pertained to recognizing racial phenomena and the teacher's response. The MTEs individually coded the discussion board posts using descriptive and in vivo coding techniques to maintain the PTs' language (Saldaña, 2016). Similarly coded data were grouped together into categories by shared characteristics. We came to a consensus on the responses that were difficult to place within the original categories to establish inter-rater reliability. Then, we conducted a second cycle of coding with Kaufman to confirm the appropriateness of the categories and themes to ensure the trustworthiness and validity of the findings (Grbich, 2013; Saldaña, 2016). Table 2 shows the codes, categories, and themes used.

Table 2

Codes from Preservice Teachers' Discussion Board Posts

Themes	**Recognizing and Interpreting Racism in the Mathematics Classroom**		**Teachers' Roles in Taking Action**	
Categories	Racial Exclusion	Social Exclusion	Verbal Responses	Practice-Based Responses
Codes	People of color	Different	Private	Broadening Representation
	Color of skin	Absence of race	Dominique	Books
	Black		Susan	History
	White		Pull aside	Posters
			Private	Building Relationships
			Public	Norms/rules
			Environment	Get to know each other
			Class	Showing respect
			Lesson	Teamwork

For the second research question, the reflections from both PTs and MTEs were systematically evaluated using the 8S Framework for Race Talk (Murray-Johnson, 2019). We individually and then collectively looked for evidence of the eight elements. Memos were made throughout the individual analysis and then discussed during collaborative analysis among all authors. We interpreted those memos using Kvale's (1996) meaning-making methods to capture the shared perspectives across the PTs and MTEs.

Findings

The findings are reported in response to the two research questions. First, we examine how PTs talk about race using case-based instruction in mathematics methods courses. Then, we assess the benefits and tensions experienced by PTs and MTEs engaged in online community dialogues addressing race-related issues.

Preservice Teachers' Racial Noticing

Using Shah and Coles' (2020) framework, the PTs' online community dialogues about the racial phenomena presented in the race-focused case were categorized into two themes. The first theme addressed how the PTs recognized and interpreted the racial phenomena within the case, and the second theme noted how the PTs would respond if they were the teacher.

Recognizing and Interpreting Racism in the Mathematics Classroom

After reviewing the race-focused case, the PTs responded to prompts about their racial noticing competencies. Specifically, the PTs were asked why Susan might exclude Dominique from the small group to see how they would recognize the racial exclusion or dismiss it as social exclusion.

Racial Exclusion. Most of the PTs (n=73; 91.25%) explicitly identified the racial phenomena within the case. An example of one PT's response is, "Susan obviously made a

prejudiced statement about Dominique based on the color of her skin." Some PTs also demonstrated an understanding of the implications of this racial exclusion by stating, for example, "Susan has pushed false and negative stereotypes towards people of color, hurting Dominique in the process." The impact on Dominique is essential to recognize since racial discrimination against Black females is related to negative psychological outcomes (Chavous et al., 2008).

Social Exclusion. Only 7 PTs (8.75%) described the social exclusion of Dominique without an explicit mention of race, thus ignoring or downplaying the significance of the racial phenomena. One PT wrote, "Susan would say those things because of what she has been taught by her parents or by what she has been falsely informed of through the media." This example could be interpreted as referencing the racial phenomena related to the unjust killing of Black people covered in news outlets. However, this PT did not explicitly call out the racism that occurred. Another PT described their frustration with the case by writing, "Why can't you just present a scenario of: How would you reply to a student being excluded for being perceived as different in some way?" This PT stated the case was "offensive" and "agenda pushing" and that it should not mention race at all.

Teachers' Roles in Taking Action

Most of the PTs did recognize and call out the racial phenomena addressed within this case. Shah and Coles (2020) state that "awareness is important but insufficient" (p. 586) and that teacher education should also help PTs develop tools and approaches for diminishing racial inequity within their future classrooms. The PTs were asked about what they would do if they were the teacher and how they would build a safe mathematics classroom environment. Their responses were categorized into two groups: verbal and practice-based responses.

Verbal Responses. Verbal responses refer to the teacher's immediate intervention once the racial phenomena were recognized either through private conversations or through a public discussion with the whole class. There were 55 PTs (68.75%) who wrote that the teacher should pull Dominique and Susan aside for a private conversation. Pulling Dominique aside was mentioned to prevent her from further embarrassment or to reassure her that the statements Susan made were false. These explanations addressed protecting Dominique and making her feel "safe and like [her] physical and emotional needs will be taken care of in the classroom." The rationale for pulling Susan aside for a conversation ranged from providing "consequences for Susan's behavior" to providing Susan with an explanation for how her actions and words could hurt others. Of those 55 PTs who described the need for a private conversation with Susan, 18 (32.73%) PTs also stated that they would ask Susan to "apologize" to Dominique.

On the other hand, 7 PTs (8.75%) wrote that there should be an immediate conversation with the whole class to de-escalate the situation by "shutting down what Susan said" since the class was "a witness to the event." One PT wrote, "It is important to let your class know from day one that this type of behavior is unacceptable." Setting up classroom norms and expectations for how students should interact with one another is a way to equalize the effects of status within the classroom (Featherstone et al., 2011). There were also 18 PTs (22.5%) who described using a combination of both public and private verbal responses that started with public declarations shutting down the behavior followed by private conversations with Dominique and Susan.

Practice-Based Responses. Practice-based responses are those that "focus on modifying teaching practices or changing structures that comprise learning environments" (Shah & Coles, 2020, p. 587). Specifically, the PTs focused on broadening diverse representation within the classroom or building relationships among students through purposeful interactions. Broadening

representation of diverse groups of people accounted for 5% (n=4) of the PTs' responses and included ideas like "hanging diversity posters on the wall," reading "diverse children's books," and talking about "history as a whole instead of just White history." Most of the PTs (n=62; 77.5%) described structures for establishing classroom norms for students to "show respect" to one another and "get to know each other." Overall, there were 14 PTs (17.5%) who described a combination of both broadening representation while also setting expectations for student interactions. Although these responses focused on norms for how students should interact with each other, they lacked consideration for how students should participate in mathematics learning during collaborative group work (Featherstone et al., 2011). They also lacked an understanding of the sociopolitical and sociohistorical contexts that positioned racial groups in a hierarchy of mathematical abilities, beliefs, and opportunities (Martin, 2009).

Online Community Racial Dialogue

The 8S Framework for Race Talk (Murray-Johnson, 2019) was used to identify the benefits and tensions experienced by PTs and MTEs during the online community dialogues of the racial phenomena within a case. The following details the nature of self-reflecting as well as sharing and interpreting race-focused responses in an online format.

Benefits

The PTs and MTEs experienced benefits of using online discussion boards to actively talk about race and racial injustice. PTs shared how they had the opportunity to deeply reflect on what they planned to communicate in response to the prompts. The PTs could write a response and revise it before it was reviewed by both their peers and the instructor. This extra time to process a response demonstrated the element of sanctuary (Murray-Johnson, 2019) because it offered critical reflection in a self-paced space that was more comfortable than having to

communicate thoughts in real-time, particularly about a topic that elicits strong emotions within themselves and others.

Similarly, the MTEs noted that the online format encouraged participation from every PT without the worry of negotiating in-person time constraints and participation structures (sanctuary). As one MTE noted, “There is no place to hide, which helps mitigate feelings of being silenced or urges to take a backseat because others will dominate the conversation.” As with any conversation, there are participants who talk more and those who listen more. Balancing the element of speech (Murray-Johnson, 2019) encourages diverse perspectives and reflection on others’ responses. As PTs considered new perspectives, MTEs encouraged them to revise and elaborate on their thinking (shedding) to develop new understandings of racialized experiences in mathematics classrooms. Thus, online community dialogues provided PTs with opportunities to engage in the elements of sanctuary and shedding, all while the MTEs balanced the element of speech within the group.

Tensions

There also arose tensions in these online racial dialogues. One tension witnessed was the miscommunication between group members in online settings, particularly related to the elements of speech and solid relationships (Murray-Johnson, 2019). Since the PTs never had in-person opportunities to build trust and solid relationships among each other and with the instructor, some PTs expressed feelings of unease sharing their perspectives about race. One PT emailed the MTE to say, “It was uncomfortable for me to answer that question and begin to justify words or thought patterns of that sort without parameters.” Another PT felt as though their post was misinterpreted by their peers, which demonstrates what Abdous (2019) describes as “digital anxiety.” When the instructor shared that the participant’s post upset a classmate, they

responded, “I don’t make things personal internally. I simply make my point and people can interpret or respond to it any way they want. If I had a MAJOR issue with something I would address it with you.”

The asynchronous nature of the conversation meant PTs posted their responses to peers on their own time. While the flexibility can be beneficial (Aloni & Harrington, 2018), it can also be difficult for MTEs to cultivate and maintain sanctuary and intervene in a timely manner when needed so that the perspectives of PTs of color are considered. As one MTE noted,

> When teaching online, I need to give up some of the control of the conservation and know that argumentation might take place among the PTs. I know PTs can benefit from the argumentation, but I feel as though I have to continuously check the conversation to ensure it is productive and inclusive.

The MTEs also noted the need to clearly state the intentions of the activity and provide more relationship building opportunities before beginning such conversations in the future.

Discussion and Implications

Online community dialogues about race are possible using case-based instruction. Furthermore, these conversations are crucial in helping PTs recognize how race operates in the mathematics classroom and the important role a teacher plays in responding to those situations. Most of the PTs in this study did recognize and explicitly call out the racial phenomena within the case, but recognition is not solely sufficient in helping PTs develop tools for responding to those situations (Shah & Coles, 2020). Prompt-based discussions and peer feedback can guide reflections on racial noticing competencies and how to respond.

This study helped us recognize that our PTs need to continue to develop strategies for responding to racial phenomena so they can implement verbal and practice-based responses that

challenge deficit views of students who have been marginalized in the mathematics classroom. We argue that MTEs must be intentional in centering issues of race at the forefront of mathematics methods courses, even when those courses may be online. Both a race-focused case and knowledge of the 8S Framework for Race Talk (Murray-Johnson, 2019) can serve as stepping-stones to get PTs talking about race and its implications for students' mathematics-related learning and identities. Nevertheless, we acknowledge that case-based instruction is one of many tools to do this work, and race-focused dialogues should be sustained throughout teacher education programs. We encourage future research that extends beyond methods courses to explore how PTs respond to racial situations during field experiences and examine what MTE support is needed in these new contexts. Mathematics teacher education must help PTs notice racial phenomena so they can not only develop skills to respond to race and racism in the mathematics classroom but also advocate for antiracist pedagogy.

References

Abdous, M. (2019). Influence of satisfaction and preparedness on online students' feelings of anxiety. *The Internet and Higher Education*, *41*, 34–44. https://doi.org/10.1016/j.iheduc.2019.01.001

Aloni, M., & Harrington, C. (2018). Research based practices for improving the effectiveness of asynchronous online discussion boards. *Scholarship of Teaching and Learning in Psychology*, *4*(4), 271–289. https://doi.org/10.1037/stl0000121

Association of Mathematics Teacher Educators. (2017). *Standards for preparing teachers of mathematics*. https://amte.net/standards

Bliss, C. A., & Lawrence, B. (2009). From posts to patterns: A metric to characterize discussion board activity in online courses. *Journal of Asynchronous Learning Network*, *13*(2), 15–32. https://doi.org/10.24059/olj.v13i2.1665

Bryant, L. C., Moss, G., & Boudreau, A. Z. (2015). Race dialogues in teacher preparation: Beginning the conversation. *International Journal of Critical Pedagogy*, *6*(2), 43–59.

Carter, N. P., & Vavrus, M. (2018). *Intersectionality of race, ethnicity, class, and gender in teaching and teacher education: Movement toward equity in education*. Brill.

Caspi, A., Chajut, E., Saporta, K., & Beyth-Marom, R. (2006). The influence of personality on social participation in learning environments. *Learning & Individual Differences*, *16*(2), 129–144. https://doi.org/10.1016/j.lindif.2005.07.003

Chavous, T. M., Rivas-Drake, D., Smalls, C., Griffin, T., & Cogburn, C. (2008). Gender matters, too: The influences of school racial discrimination and racial identity on academic engagement outcomes among African American adolescents. *Developmental Psychology*, *44*(3), 637–654. https://doi.org/10.1037/0012-1649.44.3.637

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.

Decker, J. R., & Pazey, B. L. (2017). Case-based instruction to teach educators about the legal parameters surrounding the discipline of students with disabilities. *Action in Teacher Education, 39*(3), 255–273. https://doi.org/10.1080/01626620.2017.1292160

Featherstone, H., Crespo, S., Jilk, L. M., Oslund, J. A., Parks, A. N., & Wood, M. B. (2011). *Smarter together! Collaboration and equity in the elementary math classroom.* National Council of Teachers of Mathematics.

Gasell, C., Lowenthal, P. R., Uribe-Flórez, L. J., & Ching, Y. H. (2021). Interaction in asynchronous discussion boards: A campus-wide analysis to better understand regular and substantive interaction. *Education and Information Technologies*, *27*, 3421–3445. https://doi.org/10.1007/s10639-021-10745-3

Gonzalez, M., & Moldavan, A. M. (2021). Leveraging prospective teachers' reflections to challenge spaces of marginality. *Journal of Education for Teaching*, *47*(4), 621–623. https://doi.org/10.1080/02607476.2021.1941813

Gorski, P. C., & Pothini, S. G. (2018). *Case studies on diversity and social justice education* (2nd ed.). Routledge. https://doi.org/10.4324/9781351142526

Grbich, C. (2013). *Qualitative data analysis: An introduction* (2nd ed.). SAGE.

Hand, V. (2012). Seeing culture and power in mathematical learning: Toward a model of equitable instruction. *Educational Studies in Mathematics, 80*(1), 233–247. https://doi.org/10.1007/s10649-012-9387-9

Heitzmann, R. (2008). Case study instruction in teacher education: Opportunity to develop students' critical thinking, school smarts and decision making. *Education, 128*(4), 523–542.

Jett, C. C. (2012). Critical race theory interwoven with mathematics education research. *Journal of Urban Mathematics Education*, *5*(1), 21–30. https://doi.org/10.21423/jume-v5i1a163

Kavanagh, K. M. (2020). Bridging social justice-oriented theories to practice in teacher education utilizing ethical reasoning in action and case-based teaching. In C. K. Clausen

& S. R. Logan (Eds.), *Integrating social justice education in teacher preparation programs* (pp. 185–207). IGI Global. https://doi.org/10.3102%2F0002831219848691

Kvale, S. (1996). *An introduction to qualitative research interviewing*. SAGE.

Ladson-Billings, G., & Tate, W. F., IV. (1995). Toward a critical race theory of education. *Teachers College Record*, *97*(1), 47–68. https://doi.org/10.1177/016146819509700104

Larnell, G. V., Bullock, E. C., & Jett, C. C. (2016). Rethinking teaching and learning mathematics for social justice from a critical race perspective. *The Journal of Education, 196*(1), 19–29. https://doi.org/10.1177/002205741619600104

Louie, N. L. (2018). Culture and ideology in mathematics teacher noticing. *Educational Studies in Mathematics*, *97*(1), 55–69. https://doi.org/10.1007/s10649-017-9775-2

Martin, D. B. (2006). Mathematics learning and participation as racialized forms of experience: African American parents speak on the struggle for mathematics literacy. *Mathematical Thinking and Learning*, *8*, 197–229. https://doi.org/10.1207/s15327833mtl0803_2

Martin, D. B. (2009). Researching race in mathematics education. *Teachers College Record, 111*(2), 295–338. https://doi.org/10.1177/016146810911100208

Martin, D. B., Anderson, C. R., & Shah, N. (2017). Race and mathematics education. In J. Cai (Ed.), *Compendium for research in mathematics education* (pp. 607–636). National Council of Teachers of Mathematics.

Moldavan, A. M. (2021). Navigating digital innovation and inequities in education amid the COVID-19 pandemic. *NORRAG*, *6*, 58–61.

Moldavan, A. M., & Franks, A. (2021). Critical reflections on digital race dialogues in teacher education. *New York Academy of Public Education Research Journal*, *10*(1), 33–38.

Murray-Johnson, K. (2019). (En)gauging self: Toward a practical framework for race talk. *Adult Learning*, *30*(1), 4–14. https://doi.org/10.1177%2F1045159518805890

National Council of Teachers of Mathematics (NCTM). (2020). *Catalyzing change in early childhood and elementary mathematics: Initiating critical conversations*. NCTM.

Ridgeway, M. L., & McGee, E. O. (2018). Black mathematics educators: Researching toward racial emancipation of black students. *The Urban Review*, *50*(2), 301–322. https://doi.org/10.1007/s11256-018-0452-2

Safford, F., & Bales, B. (2011). Radical initiatives with case studies in the preparation of multicultural teachers. *Journal of Urban Learning, Teaching, and Research*, *7*, 4–17.

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). SAGE.

Shah, N., & Coles, J. A. (2020). Preparing teachers to notice race in classrooms: Conceptualizing the competencies of preservice teachers within antiracist inclinations. *Journal of Teacher Education*, *71*(5), 584–599. https://doi.org/10.1177%2F0022487119900204

Sherin, M. G., Jacobs, V. R., & Philipp, R. A. (2011). *Mathematics teacher noticing: Seeing through teachers' eyes.* Routledge.

Sue, D. (2013). Race talk: The psychology of racial dialogues. *American Psychologist, 68*, 663–672. https://doi.org/10.1037/a0033681

Wager, A. A. (2014). Noticing children's participation: Insights into teacher positionality toward equitable mathematics pedagogy. *Journal for Research in Mathematics Education, 45*(3), 312–350. https://doi.org/10.5951/jresematheduc.45.3.0312

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). SAGE.

Appendix A

A Seat at the Table

On the first day of school, Ms. Taylor wants to build a classroom community with her students, so she randomly assigns their seats to work in small groups on a mathematics task. As the students enter the classroom, she notices that Dominique, a Black girl, has not sat down and looks upset. Ms. Taylor walks over to the group of girls, who are all White except for Dominique, and asks them why Dominique is not joining the group. Susan, one of the girls in the group, says, “We don’t want someone like her at our table.” Ms. Taylor responds, “What do you mean?” Then Susan says, “My parents said that I need to stay away from people like her.”

Discussion Board Prompts

1. Susan states that she does not want to work with Dominique. Why do you think Susan would exclude Dominique from the group? What has happened outside of the mathematics classroom that may have influenced that perspective?
2. How would Susan’s words affect Dominique’s experiences on her first day of school? How would it impact her mathematics identity and learning?
3. What impact could a teacher’s response have in a situation like this? What could Ms. Taylor say to Susan and Dominique?
4. What would you do in this situation to build a safe mathematics classroom community for every student in your class?

"Mister What Time is it?" Preparing Teachers for Border Schools: The Case of the Arizona Borderlands

Etta Kralovec
University of Arizona

Richard Orozco
University of Arizona

Alison Van Gorp
University of Arizona

Eric Meyer
University of Arizona

Abstract

"Mister, what time is it?" is an account of the evolution of a traditional teacher education program into an alternative certification program in the Arizona borderlands, outlining the theoretical frameworks that shaped the program redesign, program design elements, and challenges encountered along the way. We found many of the perennial problems of teacher education: the disconnect between schools and the university; the challenges of finding critically conscious teachers in rural schools to serve as mentors; and the difficulty of embedding teacher dispositions in observation tools (Zeichner, 2017). The redesign of the program led to two awards from the NSF Noyce program. Early-entry or teacher residency programs have been on the rise in the past two decades addressing the urgent needs of urban schools. Our work adds the rural context to this ongoing, teacher preparation reform movement (Zeichner, 2017).

*Keywords***:** Context-specific teacher education, education issues on the border, Mexico/Arizona educational issues

In the borderlands of Southern Arizona, twenty-six percent of children under eighteen live in poverty. Schools along the border have a migrant population whose bilingual and bicultural students oftentimes have confusing immigration status. Student scores in border schools in Texas, New Mexico, and Arizona are consistently lower than scores in the rest of the state (McRobbie & Villegas, 2004). There are an estimated 12 million people living along the U.S./Mexico border, yet little is known about the ways to best recruit and retain teachers for these communities (Cline & Necochea, 2006). The challenges facing teachers in schools where

many students cross the border each day to attend school are enormous and complex, both culturally and politically (De la Piedra & Araujo, 2012). Many students spend part of their schooling in Mexico and part in Arizona. Yet, Arizona and Mexico do not have reciprocal agreements to share student records, which means as students move back and forth across the border, they do so without formal school records. Many students spend long weekends and holidays with their families in Mexico and return to U.S. schools where their lives in Mexico are all but excluded.

Schools on the border share challenges typical of most Title 1 schools: poverty; poor student performance on state tests; teacher and administrator attrition, and low teacher salaries. To make matters worse, an Arizona ban on bilingual education has made it more difficult to meet the needs of the large percentage of English Language Learners in the region. In some of our partner schools, 97% of students are Latinx. Additionally, Arizona ranks last in the nation in school spending, leading to dilapidated school facilities, boarded up and bent lockers, and broken clocks and bell systems. As one math teacher notes, “The most common question I get in my Algebra 1 class is: ‘Mister, what time is it?’”

In 2008, the Arizona Department of Education, recognizing the looming teacher shortage crisis, encouraged teacher preparation programs to offer alternative certification tracks, placing teachers in the classroom as they completed their certification programs. Program approval for these new tracks was dependent on the development of consortiums of schools and a teacher preparation program that worked to establish new course work that addressed the needs of teachers placed in classrooms as they were in their training period. Thus, the Borderlands Consortium was established in 2008 with 13 partner districts. Thereafter, in 2009, the state approved our alternative certification track and our district partners established a design team

that collaborated with us on a Department of Education, Transition to Teaching (TTT) grant which was awarded in 2010 (#U350A110033). This grant allowed us to spend four years in an iterative design process that is outlined below.

Theoretical frameworks informing program redesign

In redesigning our program, we deliberately selected frameworks that speak directly to the needs of new teachers on the border. These frameworks, woven together, provided the theoretical foundations for the work of program redesign. In keeping with the emerging context-specific teacher education framework, we believed that we should be preparing teachers for work in border schools, rather than preparing teachers for *any school, any place* (Haberman & Post, 1996; Matsko & Hammerness, 2014). Ground-breaking work over the past 20 years has clarified our understandings of the importance of teachers being self-aware, culturally proficient, and flexible (Hollins, 2012; McAllister & Irvine, 2000; Nieto, 2000; Zeichner, 2010). Culturally sustaining pedagogy grew out of this work and includes a set of pedagogical strategies that prepare teachers to understand local students, cultures, and geographies (Ladson-Billings,1994 Paris & Alim, 2014; Valenzuela, 2016). Ethnic Studies programs around the country are a prime example of the best of these pedagogical practices.

There are growing calls for teacher education to become more grounded in practice (Ball & Forzani, 2009; Grossman et.al., 2009; Zeichner 2017). Urban teacher education programs and teacher residency programs have pioneered attempts to more fully integrate preparation into specific urban school sites (Matsko & Hammerness, 2014). The increasing calls for embedding teacher education in school sites sounds good in theory, yet the problems of the *two worlds* Norman and Feinman-Nemser (2005) identify makes a transition to this model challenging. Disconnect between the culture and norms of the university and the culture of schools remains a

barrier to more fully integrating preparation in schools (Zeichner, 2010). In the rural context, this challenge is amplified by the need to work with multiple districts, each with their own culture that our program had to navigate. This central and perennial disconnect in the field of teacher preparation presented the greatest challenge to building a mentor network that had to operate across institutional boundaries and school cultures.

The theoretical framework provided by the concept of funds of knowledge and the analysis of the Latinx student experience that it is based on helped shape the development of context-specific content for border teachers (Gonzalez et al., 2006; Lopez, 2018; Rippberger & Staudt, 2003;). Our initial study of four districts was driven by the need to provide new teachers with an in-depth understanding of communities they were serving and the funds of knowledge that students bring with them into class. Equity Literacy (EL), as developed by Gorski (2013) became the conceptual framework that drove the program re-design work. In Gorski's view, equity literacy is the ability to recognize inequities, to respond skillfully to inequities, to redress inequities by understanding the institutional roots of inequity, and to actively cultivate equity and the ability to sustain equity efforts in the face of opposition. The EL framework was introduced in the first course students enrolled in and woven into all course work. We are still in the process of designing classroom observation tools that incorporate observations of EL principles.

Teacher education program design elements were built on conceptualizations by Zeichner (2010) and his idea of a *third space*, which calls for the creation of new spaces where teachers, community members, and teachers in training work together for the benefit of particular students in particular schools. To this end, the *Sin Fronteras* programming opened up our work to the community as an attempt to create a third space that is neither the school nor university. The National Latino/a Education Research and Policy Project (NLERAP) shaped our thinking about

the importance of the concept of a *grow your own* teacher preparation program and power of participant action research projects for new teachers. We also adopted continuous interrogation of teacher identity and positionality (Valenzuela, 2016), as advocated by NLERAP

Finally, the importance of mentoring in the development of new teachers was an initial design principle in our program. Recent findings on the correlation between mentoring and teacher retention were particularly compelling as we moved forward with our design. The mentoring framework for the project was developed in collaboration with a psychology professor who drew on mentoring literature that was grounded in aligned theoretical principles.

Program Development

The core components of the TTT project were set out in the initial proposal and were based on theoretical frameworks and research on teacher education as well as the needs identified by our 13 partner districts. These components included:

- A robust mentor network to support the work of new teachers on intern certificates.
- A central focus on cultural issues facing border teachers.
- Tightening the alignment between M.Ed. coursework and fieldwork.

As we began the implementation of the TTT program, we spent a year getting systems, protocols, and structures in place. Additionally, we worked with our partner schools to establish working relations and communication networks.

In the first year, the design team acknowledged the need to provide new teachers with in-depth knowledge of partner communities to uncover the funds of knowledge that exist in school communities they were serving (Gonzalez et al., 2006; Ladson-Billings, 1994; Murrell, 2001; Valenzuela, 2016). Four high schools were selected as sites for in-depth case studies. The schools were selected based on district commitment to participate. Undergraduates from these

communities collected data using multiple methods including focus groups, eco-mapping, school data analysis, student and community stakeholder interviews and surveys, and photo documentation. The team constructed in-depth case studies from the data collected in partner schools that participated, which were shared with district partners and incoming students. The case studies were most important because they resulted in profiles of the schools for incoming TTT Fellows. Most of the TTT Fellows were not from the border area and the profiles helped them learn about the schools they were about to enter as teachers. These in-depth profiles delineated core elements of life in our partner communities:

- The importance of community and family.
- The strong student motivation to learn.
- A belief in the importance of giving back and being a part of the communities.
- The high level of teacher motivation for professional growth.
- The central role schools play in rural communities.

Our analysis of these four sites also uncovered disconnects in the following areas:

- The contrast between students' and teachers' cultural backgrounds.
- The lack of available, up to date, working technology in the schools.
- The physical distance between schools and the university that presented challenges relative to scheduling professional development programming.

Findings from this initial investigation helped shape changes to program design that took advantage of the strengths in these communities. As we made these changes, we worked to minimize the impact of the challenges faced by the school communities.

Program redesign work took place over a five-year period and was driven by a continuous improvement model using participant evaluations of pilot projects. In addition, we

conducted informal and formal evaluations with partner school administrators and community partners. During the first three years, we struggled with the site-based mentor model we had designed. Consequently, we moved to a university-based coaching model that has been much more successful. The details of the challenge of site-based mentors are discussed below.

Our first cohort was very small, leading us to understand the need for a recruiter, as suggested and approved by our Department of Education program officer. Once we had the recruiter in place, our enrollment numbers increased. In addition, the relationship with our partner districts improved because the recruiter began working with the human resources departments in districts and linked district needs to the targets of his recruiting. Importantly, the recruiter we brought in was bilingual and from a border community. These characteristics were crucial in establishing relationships we sought to establish.

We have been tracking new teacher retention data since the award of the TTT grant 2011. Of the 98 STEM teachers that completed the program, 69% are still teaching. Additionally, another 6% have moved to other roles in education, allowing for an overall retention rate of 75% for our graduates (Unpublished annual NSF report). The program retention rate is even more impressive given the fact that Arizona has the highest annual teacher turnover rate in the nation at 19%, compared to 8% nationally (Education Resource Strategies, 2018). In conversations with administrators from partnering districts, we often heard that our TTT trained teachers were not part of the revolving door of teachers that has plagued their rural districts. We continue to track our graduates to keep these numbers updated and will do follow-up studies with them as part of our on-going work. We attribute the program re-design to our strong retention numbers and the award of two NSF Noyce grants. In 2015, an NSF Noyce grant (NSF #1557396) supported the preparation of STEM teachers for border schools, and in 2019 another NSF Noyce grant (NSF

#1950129) was awarded to prepare teacher leaders. In that cohort of 13 STEM teachers, three are teachers trained during our TTT grant.

The development of a teacher education seminar learning community, called *Sin Fronteras*, evolved over time to integrate coursework into a *third space* of monthly gatherings for teachers. Funding from the TTT grant allowed us to develop the annual *Living and Learning on the Border Symposium*, which brings leading research scholars to the border to work with teachers from across the region. It is important to note that whenever we bring teachers together, we provide a free lunch, believing this is one small way to honor the work that teachers do.

One piece of unfinished business has been the re-design of our observation tools to align more fully with our new EL conceptual framework. Since mentors were responsible for bi-monthly observations of TTT Fellows, we worked to refine an observation tool that was appropriate to the border context and aligned with the equity literacy conceptual framework of the program. We had initially thought that we would use a variant of a teacher observation form used in one of our partner schools for the purpose of evaluation; however, we soon found that each district used a different teacher observation form. We also learned that many observation tools, like Danielson (2006), identified teacher behaviors that, "while associated with achievement for the non-Hispanic sample; …the teacher behaviors did not generalize to the Hispanic sample" (López, 2014). Initial efforts to create a classroom observation tool measuring EL, the Equity Literacy Observation Protocol for Secondary School Teachers (ELOPSST), included developing items and testing for inter-rater reliability. However, we recognized the challenges associated with creating the ELOPSST since, as Gorski (2020) makes clear, EL is not a set of classroom activities. Instead, it is a developed ideology that is committed to recognizing, responding to, and creating and sustaining equity. Thus, our overarching question was, how do

we observe and measure our teaching Fellows' EL? Reflecting upon our analyses and discussions from initial field tests using the ELOPSST, it became increasingly clear that, as Gorski (2020) cautioned, EL is not a set of classroom practices and that EL skills and abilities are not clearly visible through classroom observation. Rather, any attempt to assess teachers' EL would need to include discussion and analyses of the ways teachers conceive of their classroom pedagogies and activities.

Lessons Learned

Our work uncovered aspects of learning how to teach on the border that have profound implications for the further development of early-entry, context-based teacher preparation program theory and practice. Our initial study of four districts reported above was key in supporting new teachers' understanding of the context of their work. Our project wove together the move from mentoring to robust coaching, curricular changes to address equity issues and culturally sustaining pedagogy (Paris & Alim, 2014), and a context-specific preparation program that links university course work and practice together more tightly. All these moves address perennial challenges in teacher education.

From Mentoring to Coaching

Research over the past 20 years indicates that mentoring has a strong and powerful impact on new teachers (Callahan, 2016; Devos, 2010). However, the nature of that mentoring and how to train and support new mentors has been a challenge to the field of teacher education (Zeichner, 2017). This challenge is primarily the result of the unintentional consequences that result when mentors reinforce the status quo in schools rather than drive innovation (Kralovec & Lunsford, 2015). We found that teachers in our mentor network were great 'cheerleaders' for their schools. However, we also found, as Zeichner (2010) has reported, that teachers were often

unwilling to look critically at student data and were thus disconnected from the reality of student achievement in their own school. We often heard from Fellows in surveys that they wished "[We] all spoke with one voice," highlighting for us the distance between what they were told by mentors and what was communicated in coursework.

Our shift from a site-based mentor to a coaching model was driven by our inability to find mentors in our partner schools who could support the conceptual framework of our program and who could help our students understand their students. In surveys completed by our initial mentors over a two-year period, we were shocked by one particular finding. When asked how their students identify themselves, 2/3 of our mentors could not indicate how their students self-identify. The disconnect between students' and teachers' cultural backgrounds, uncovered in our initial community surveys, was borne by the limited cultural understandings of our mentors. This supported our decision to develop a different model for supporting new teachers. Ultimately, in the last two years of our TTT grant, we hired a full-time coach to work with our TTT Fellows. Our coach, an expert science teacher, has aligned his coaching work in schools with the conceptual framework of our program and serves as a leader in the professional learning community.

M.Ed. Program Curricular Changes

One of the key areas where we knew changes were needed was in the very traditional curriculum in the M.Ed. program. Arizona's teacher crisis, fueled by the lowest teacher salaries in the country meant most districts were desperate for teachers on intern certificates. Yet, we knew that the preparation of these teachers on intern certificates needed to be different from a traditional, student-teaching approach to teacher preparation. In the first year of the program, students were enrolled in the same online courses as students in the traditional M.Ed. track. The

first major change we made was to have students complete the program over 24 months instead of 15 months, with heavy coursework during the summers. We soon realized that the existing M.Ed. courses were generic in nature and designed to prepare teachers for schools that were *nowhere* in particular. We were able to hire a new faculty member who engages critical race theory, critical whiteness studies, and critical discourse analysis in his investigations. He brought the framework of Equity Literacy to our early discussions, and this became the new conceptual framework for the program. His participation in developing the M.Ed. program and curriculum in this direction led to the need to integrate the EL framework into all classes.

University policy allows course changes up to 40% of course content without review. Changes beyond the 40% threshold must go through approvals at both the university and state levels which can take years. This was important because we needed to align program coursework more closely to the immediate needs of first year teachers in border schools. For example, we changed a course in multicultural education to an Equity Literacy course and methods and management classes underwent revisions to both content and instructors. To teach these courses, we approached a few mentors who shared our philosophy, were clear about what these courses needed to cover, and who worked side by side with our Fellows. Because none of the mentor teachers held doctorates, we had to work closely with the Dean of Graduate Studies to obtain permission to use them as instructors in graduate-level courses. Finding ways around these kinds of institutional regulations is time consuming, often frustrating, and illustrative of the ways universities can become barriers to changes needed in the teacher preparation process. Several of our courses were taught by adjuncts and faculty in fields other than teacher education, with many not welcoming the modifications we were working toward. Thus, to ensure course revisions rooted in the Latinx student experience (Cabrera et al., 2011; López, 2018) and inclusion of the

EL conceptual framework, we enlisted a professor of Latinx identity and achievement (López, 2018). Ultimately, we were successful in overcoming the challenges that restricted our ability to connect our academic program more directly to our Fellow's work in their classrooms.

Culturally Sustaining Pedagogy

According to Paris and Alim (2014), "Culturally Sustaining Pedagogy (CSP) seeks to perpetuate and foster—to sustain—linguistic, literate, and cultural pluralism as part of the democratic project of schooling" (p. 88). Paris and Alim advance Ladson-Billings' (1994) notion of culturally relevant pedagogy and roots CSP in our understandings of the cultural wealth students bring with them to school (Gonzalez et.al., 2006; López, 2018).

This sort of teaching practice was evident in the now-outlawed Mexican American Studies programs in Tucson, Arizona, where the integration of Mexican and Mexican American history and literature broadened and deepened the existing curriculum in these areas (Arce, 2020). Perhaps most importantly, this curriculum spoke directly to students (Arce, 2020; López, 2018; Paris & Alim, 2014). However, most new teachers cannot develop their own understandings of the kind of integration needed, given their own narrow educational background in the area of Mexican and Mexican American history and culture. We found that new border teachers need a broadened education in Mexican/Mexican American/Latinx studies. The inclusion of this content should be part of any program preparing teachers for border schools, and given the Latinx population growth in this country, all teachers should know more about the cultural history of these students.

While strong and conceptually aligned programming and classroom support are essential to the growth of new teachers anywhere, without cultural understandings of *place,* new teachers on the border are perplexed (Romo & Chavez, 2006). The rise of urban teacher residency

programs has given the field a model for context-specific teacher education (Matsko & Hammerness, 2014). However, the rural, border context provides unique challenges. In Arizona, the challenges are compounded by the intense politicization of the immigration debate and the militarization of the border. Many of our students are spouses of members of the border patrol and carry the fear and suspicion with which border patrol are trained into their classrooms. Silencing this fear has become another continuing challenge for us.

Context-Specific Teacher Education

Many universities hold classes in public schools to make their program more embedded in clinical sites, but often these classes are isolated from the daily work in schools. The degree of context-specific teacher preparation we were striving for is evident in urban teacher residency programs (Matsko & Hammerness, 2014; Solomon, 2009; Taylor & Klein, 2015; Zeichner, 2010). Developing these kinds of partnerships in urban areas typically occurs between one large school district and the university. In our rural area, we had to develop these relationships with 13 school districts, each with their own unique culture.

Implications and Conclusions

The program reported on here was time-consuming and expensive to build. It challenged institutional boundaries and *Sin Fronteras* created new spaces for teachers to come together. When COVID-19 caused the closure of schools in 2020, the world and teacher education changed. Faculty in colleges of education had difficulty understanding what was happening to teachers in classrooms, unless they had children enrolled in schools. Teachers suddenly had to rely on each other to figure out how to teach in this new world, since most university faculty knew little about the online platforms teachers had to learn (Kralovec et al., 2021a, 2021b). While most educators hope for a return to normal, the COVID-19 pandemic provided teachers

with opportunities to work collaboratively and to be innovative. These conditions alert us to the possibility that, perhaps, teachers might be the best trainers of teachers.

We believe the efforts described here adds to the body of theoretical work in teacher education that calls for a greater emphasis on early-entry, context-specific teacher preparation. While extant work has been focused primarily on urban schools, our endeavor adds a rural, U.S.-Mexico border context to this developing framework (Andrews, 2009; Freedman & Appleman, 2009; Matsko & Hammerness, 2014; Schultz et.al. 2008).

References

Andrews. (2009). The construction of Black high-achiever identities in a predominantly white high school. *Anthropology & Education Quarterly*, *40*(3), 297–317. https://doi.org/10.1111/j.1548-1492.2009.01046.x

Arce, M. (2020). "They tried to bury us, but they didn't know we were seeds." "Trataron de enterrarnos, pero no sabían que éramos semillas" - The Mexican American/Raza Studies political and legal struggle: A content analysis. (Doctoral dissertation, The University of Arizona).

Ball, L. & Forzani, F. M., (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, *60*(5), 497–511. https://doi.org/10.1177/0022487109348479

Cabrera, Villarruel, Fitzgerald, Cabrera, Natasha J, Villarruel, Francisco, Fitzgerald, Hiram E, EBSCOhost. (2011). *Latina and Latino children's mental health*. Praeger/ABC-CLIO.

Callahan, J. (2016). Encouraging retention of new teachers through mentoring strategies. *Delta Kappa Gamma Bulletin*, *83*(1), 6.

Cline, & Necochea, J. (2006). Teacher dispositions for effective education in the Borderlands. *The Educational Forum, 70*(3), 268–282. https://doi.org/10.1080/00131720608984902

Danielson. (2006). *Teacher leadership that strengthens professional practice*. Association for Supervision and Curriculum Development.

De la Piedra, M., & Araujo, B. (2012). Literacies crossing borders: Transfronterizo literacy practices of students in a dual language program on the USA-Mexico border. *Language and Intercultural Communication, 12*(3), 214–229. https://doi.org/10.1080/14708477.2012.667416

Devos. (2010). New teachers, mentoring and the discursive formation of professional identity. *Teaching and Teacher Education*, *26*(5), 1219–1223. https://doi.org/10.1016/j.tate.2010.03.001

Feinman-Nemser, S., Tamir, E., & Hammerness, K. (2014). *Inspiring teaching*. Harvard University Press.

Freedman, & Appleman, D. (2009). In it for the long haul. *Journal of Teacher Education*. *60*(3), 323–337. https://doi.org/10.1177/0022487109336181

Gorski, P. (2013). *Reaching and teaching students in poverty: Strategies for erasing the opportunity gap*. New York: Teachers College Press.

Gorski, & Dalton, K. (2020). Striving for critical reflection in multicultural and social justice teacher education: Introducing a typology of reflection approaches. *Journal of Teacher Education, 71*(3), 357–368. https://doi.org/10.1177/0022487119883545

Gonzalez, Moll, L. C., & Amanti, C. (2005). *Funds of knowledge*. Erlbaum https://doi.org/10.4324/9781410613462

Haberman, & Post, L., (1998). Teachers for multicultural schools: The power of selection. *Theory into Practice*, *37*(2), 96–104. https://doi.org/10.1080/00405849809543792

Hollins, E., (2012). *Learning to teach in urban schools*. Routledge.

Kralovec, Callejas, K., Gomez, T., Miller, H., Lee, C., & Blair, J. (2021). The pandemic is a portal. *Schools: Studies in Education 18*(1), 50–68. https://doi.org/10.1086/713611

Kralovec, Johnston, M., Mehl, W., Rickel, J., Barrington, J., Encinas, G., Ortiz, K., & Duffy, C. (2021). The value of a teacher's life. *Schools: Studies in Education 18*(1), 69–85. https://doi.org/10.1086/713612

Kralovec, E., & Lunsford, L. (2015). Crossing borders on the border: Implementation of a mentoring network. In Best Practices in Mentoring for Teacher and Leader Development. Information Age Publishing.

Ladson-Billings, G., (1994). *The dreamkeepers: successful teachers of African American Children* (1st ed.). Jossey-Bass Publishers.

Lofthouse, R. M. (2016). Best practices in mentoring for teacher and leader development, *International Journal of Mentoring and Coaching in Education, 5*(2), 158–159. Emerald Group Publishing Limited. https://doi.org/10.1108/IJMCE-03-2016-0020

Lopez, L., (2011). The nongeneralizability of classroom dynamics as predictors of achievement for Hispanic students in upper elementary grades. *Hispanic Journal of Behavioral Sciences*, *33*(3), 350–376. https://doi.org/10.1177/0739986311415222

López L., (2017). *Asset pedagogies in Latino youth identity and achievement.* Taylor and Francis. https://doi.org/10.4324/9781315692715

MacAllister, & Irvine, J. J. (2000). Cross cultural competency and multicultural teacher education. *Review of Educational Research, 70(1), 3–24.* https://doi.org/10.3102/00346543070001003

Matsko, K., & Hammerness, K. (2014). Unpacking the "urban" in urban teacher education. *Journal of Teacher Education, 65*(2), 128–144 https://doi.org/10.1177/0022487113511645

McRobbie, J., & Villegas, M. (2004). *La frontera: Challenges and opportunities for improving education along the U.S. Mexico border.* WestEd Research Center. https://www2.wested.org/www-static/online_pubs/frnt-04-01.pdf

Murrell, P., (2001). *The community teacher: a new framework for effective urban teaching.* Teachers College Press.

Nieto, S., (2000). *Affirming diversity: the sociopolitical context of multicultural education* (3rd ed.). Longman.

Norman, & Feiman-Nemser, S. (2005). Mind activity in teaching and mentoring. *Teaching and Teacher Education, 21*(6), 679–697. https://doi.org/10.1016/j.tate.2005.05.006

Paris, & Alim, H. S. (2014). What are we seeking to sustain through culturally sustaining pedagogy? A loving critique forward. *Harvard Educational Review, 84*(1), 85–100. https://doi.org/10.17763/haer.84.1.982l873k2ht16m77

Rippberger, & Staudt, K. A. (2003). *Pledging Allegiance*. Routledge. https://doi.org/10.4324/9780203616697

Romo, & Chavez, C. (2006). Border Pedagogy: A study of preservice teacher transformation. *The Educational Forum, 70*(2), 142–153. https://doi.org/10.1080/00131720608984885

Schultz, Jones-Walker, C. E., & Chikkatur, A. P. (2008). Listening to students, negotiating beliefs: Preparing teachers for urban classrooms. *Curriculum Inquiry, 38(2),* 155–187. https://doi.org/10.1111/j.1467-873X.2007.00404.x

Solomon, J. (2009). The Boston teacher residency: District-based teacher education. *Journal of Teacher Education, 60*(5), 478–488. https://doi.org/10.1177/0022487109349915

Taylor, & Klein, E. J. (2015). *A year in the life of a third space urban teacher residency.* Birkhäuser Boston. https://doi.org/10.1007/978-94-6300-253-0

Valenzuela, A. (2016). *Growing critically conscious teachers: A social justice curriculum for educators of Latino/a youth.* Teachers College Press.

Zeichner. (2009). *Teacher education and the struggle for social justice.* Taylor and Francis. https://doi.org/10.4324/9780203878767

Zeichner. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education, 61*(1-2), 89–99. https://doi.org/10.1177/0022487109347671

Zeichner, K. (2014). Democratizing teacher education. *Journal of Teacher Education, 66*(2), 122-135.

Zeichner, K., Payne, K. A., & Brayko, K. (2015). Democratizing teacher education. *Journal of Teacher Education, 66*(2), 122–135. https://doi-org.ezproxy2.library.arizona.edu/10.1177/0022487114560908

Zeichner. K.M. (2017). *The struggle for the soul of teacher education*. Taylor and Francis. https://doi.org/10.4324/9781315098074

Changing the Narrative on Rural Schools: Addressing Damaging Rural School Stereotypes through Teacher Education

Sara L. Hartman
Ohio University

Jacqueline Yahn
Ohio University

Brian Brady
Ohio University

Abstract

In the wake of recent political events, rural people and places experience unfiltered and uncensored criticism. For the approximately 20% of America's children who are growing up in rural places, these stereotyped narratives are damaging and dehumanizing. To ensure the well-being of rural children across the United States, teacher education programs must prepare teacher candidates to view rural schools from a strengths-based perspective. To do this, teacher education programs must consider the importance of critical pedagogy of place and the essential role of strong school-university partnerships. This article provides a historic and current look at rural schools, discusses the impact of rural stereotypes, and charts an initial path for teacher education programs to change the current narrative about rural schools. Perspectives that address rural stereotypes through a critical lens are essential for all educational stakeholders, no matter their locale.

Keywords: Rural education, teacher preparation, school-university partnerships

In the weeks and months following the 2016 presidential election that resulted in Donald Trump assuming the power of the Oval Office, many journalists, scholars, politicians, and political analysts saw red (Howley & Howley, 2018; Victor, 2016). Using the electoral map to gather coordinates, they centered this anger on rural America (Leonard, 2017). Now, in the wake of the 2020 election and the January 6, 2021 attack on the nation's capital, it has become commonplace for rural people and places to experience unfiltered criticism with pejorative phrases to describe rural people and places considered acceptable practice amongst the

mainstream media. This scrutiny is felt across rural places and by the people, including children, who live there. As rural education researchers and advocates, we worry about the approximately 20% of America's children who are growing up in these rural areas and under the gaze of this nationwide view (Showalter et al., 2019). Identity formation begins at a young age, and rural children are continually faced with messages that are both demeaning and dehumanizing (Theobald & Wood, 2010; Tieken & Williams, 2021). We fear the consequences of a generation of rural children's identities being shaped by the negative rhetoric that surrounds rural people and places. Additionally, after more than two years of teaching during the Covid-19 pandemic, teachers in all settings are leaving the profession in droves (Carver-Thomas, et al., 2021; Singer, 2021). Nowhere is this more of a concern than in rural schools, where teacher recruitment and retention is an historical challenge (Monk, 2007). Concerningly, new teachers entering the field with a deficit mindset regarding rural people are likely to further harmful rural stereotypes. With these pressing issues in mind, we assert that it is imperative for teacher preparation programs to acknowledge and address the damaging rural stereotypes that have become mainstream in American culture and we ask, what strengths-based strategies should be employed by teacher preparation programs to prepare teachers who are ready to meet the needs of rural children and their families?

Rural schools and communities make it their mission to cultivate positive self-images in children (Howley & Redding, 2021), but they cannot combat negative stereotypes alone. It will take a collective effort to positively center rural children's experiences in both rural and non-rural classrooms, an effort teacher educators and their institutions must join. Hearteningly, teacher preparation programs across the United States are responding to recent events by empowering teacher candidates to address hard histories head on, to recognize and call out

prejudice, and to center anti-racist pedagogies at the heart of teaching practices. Importantly, this work must include addressing rural stereotypes through thoughtful and intentional teacher preparation practices that center rural strengths through a critical pedagogy of place (Azano et al., 2021; Gruenewald, 2003) and strong school-university partnerships (AACTE, 2018; NCATE 2010). In the section that immediately follows, we briefly outline the history and current status of rural schools. Next, we describe the evolution of rural education research and the impact that research and mainstream media has in impacting rural stereotypes. Finally, we invite readers to engage in changing the narrative about rural schools, concluding with initial steps of building strong school-university partnerships that offer promise for addressing damaging rural stereotypes through a critical pedagogy of place.

Background

Why Rural Matters indicates that nationwide approximately 9.3 million students attend rural schools (Showalter et al., 2019). Despite the false narrative of rural places as all white, the report illustrates that if a teacher randomly selected a rural school to begin their employment they would have a 32% chance of teaching in a racially diverse environment, and their new students are less likely to have been transient in the last year. The teacher is also likely to work in a district that receives higher shares of state funding to offset place-specific costs attributed to rural schools. Student poverty and academic achievement will vary significantly depending on the geographic locale of the school (i.e., high student poverty is concentrated in the Southwest as well as parts of the Mid-South, Southeast, and Appalachia), but rural teachers nationwide will see approximately 88% of rural students graduate from high school (Showalter et al., 2019). This walkthrough is illustrative of the data we draw from to understand rural schools across the nation.

Troublingly, the history of rural schools is that they have always been on the margins and outskirts, both geographically and, importantly, in terms of educational policy (Theobald & Campbell, 2014; Tyack, 1974; Ravitch, 2010). Historically, rural schools have been subject to the idea of the "one best system" which is an intentionally urban centric approach to public education that was perfected in the latter 20th century (Tyack, 1974). Leaders of this movement depicted what they saw as the "rural school problem" and suggested it required an urban-centric approach focused on fiscal efficiency, organizational continuity, and standardized curriculum, all of which were often realized through the efforts of school consolidation. Some of the official reasons for closure/consolidation are cost efficiency and the possibility of providing a better education for students elsewhere (Tieken & Auldridge-Reveles, 2019). With consolidation, the "rural school problem" vanished for some districts because rural schools lost their recognition as a unique educational sphere. In 1919, the United States had "more than 270,000 [rural] schools" and by 2010 "less than 100,000" (Tieken & Auldridge-Reveles, 2019, p. 920). As a result, the problems rural schools faced "became subsumed in a larger discourse of education as an institutional phenomenon, rather than as a community-based, highly contextual one" (Biddle & Azano, 2016, p. 308). School consolidation remains a contentious issue in 21st century rural America.

Unique aspects of rural communities are simply not accounted for in most curricula in teacher education, or for that matter in rural schools due to metro-centric, blanket-style educational reforms. For example, funding in rural schools has never accounted for unique rural considerations (e.g., transportation and broadband connectivity), leaving fewer available resources to implement large scale reforms such as the Common Core State Standards (CCSS) (Brenner, 2018; Timar & Carter, 2017). This leads to a conflict of values between rural schools

and their students (Hardré & Hennessey, 2010). The current neoliberal regime that writes educational policy renders students and parents as consumers in a market economy, rather than members of a community (Seelig, 2017). Because rural schools and communities simply contain less people than urban areas, and therefore receive less federal funding, their ability to advocate for themselves is compromised (Franzak et al., 2019). To complicate this further, some states underdeliver even on this promise by providing less funding to rural school districts than they should (Showalter et al., 2019). Ultimately, rural places are often rendered as failed economies rather than struggling communities.

However, there is strength to be found in the environmental resilience of rural schools and communities, yet this component of rural life is often not acknowledged, and, worse, may be sabotaged by metro-centric educational policy. A salient example is the tendency for high school curriculum to prioritize individual social capital and upward mobility but dismisses the value in leveraging social capital to build more systemic community wide viability (Petrin et al., 2014). In this way policymakers dismiss the importance community plays in the rural lifeworld. This metro-centric narrative also unfortunately compels students and individuals from rural places to conceptualize their resilience as being able to survive and persist in their rural environment until they are able to relocate to a more urban environment (McMahon, 2015). The pejorative narrative of "rural brain drain" or the outmigration of youth from rural areas ignores the relational aspects of the rural and urban and suburban -- there are those from non-rural areas that do decide to move and live in them (Azano & Stewart, 2016). Acknowledging the intersections between rural, urban, and suburban, rather than reifying their boundaries, represents a first step in addressing the current narrative surrounding rural places and people. This narrative is closely connected to rural education research and the portrayal of rurality in mainstream media.

Rural Education Research and Media Portrayal

More than 25 years ago, DeYoung reported, "Rural American schools still educate almost 28% of the nation's children, but only educational historians and rural sociologists have paid much attention to issues and dynamics of such places" (1995, p. 168). Indeed, the scarcity of research on rural schools was noted in comprehensive literature reviews throughout the 20th century and first decade of the 21st century (Arnold et al., 2005; Kannapel & DeYoung, 1999; Stapel & DeYoung, 2011). During this time period, non-rural schools were the focus of most research efforts, and imperfect comparisons were frequently made between urban and rural locales. These comparisons failed to identify both challenges and strengths that are unique to rural schools. Often, research was reported as unique to rural schools when in fact the research was merely conducted in a rural school with no mention of considerations that differentiate rural schools from other contexts.

In recent decades, specific attention to rural education research has seen improvement. Beginning in 2002, The Rural School and Community Trust began releasing *Why Rural Matters*, a biennial report that highlights the state of rural education in each of the 50 states and calls attention to challenges and successes in rural schools (Showalter et al., 2019). Additionally, in an effort to seek rural research in specific areas that were particularly missing, the National Rural Education Association (NREA) released the *Rural Research Agenda - 2016-2021* (NREA, 2016). The Rural Research Agenda outlined research priorities focused on building rural research capacity and addressing rural students' educational attainment (NREA, 2016). Most recently, NREA released a new rural research agenda for 2022-2027 that centers spatial and education equity with five other interconnected themes (Hartman et al., 2022; NREA 2022).

Despite these concerted efforts to increase the amount and quality of rural education

research, authentic rural perspectives continue to be missing in mainstream research literature, and portrayals of rural people and places in the national conversation are dominated by deficit-driven, stereotype-laden portrayals (Biddle et al., 2019). Most recently, despite rural education scholars collectively denouncing the deficit-based Appalachian perspectives presented in J.D. Vance's *Hillbilly Elegy* (see especially *What You're Getting Wrong About Appalachia* for a counter narrative), in 2020, it was made into a movie directed by Ron Howard. Even more recently, *The New York Times* published an education piece titled, "The Tragedy of America's Rural Schools" (Parks, 2021). This article once again continues the harmful narrative that rural schools are failed institutions. The article neglects to recognize the federal and state policy decisions that contribute to rural school challenges, and, most importantly, the article completely ignores the many ways that rural schools support and sustain rural communities. These troubling characterizations continue to dominate portrayals of rural people and places across media outlets (Tieken & Williams, 2021).

One solution to these tensions is the expansive body of peer-reviewed work inside the field of rural studies that aptly highlights educational initiatives that benefit rural communities and the children learning within them (Azano et al., 2021; Azano and Biddle, 2019). These initiatives are at their best when they position schools, communities, and universities to partner together. Rural places draw their strength from community and thrive from learning systems and partnerships that draw from this rather than taking the urban-centric approach of focusing on the individual (Azano, 2015; Biddle & Azano, 2016). Teacher preparation programs have the ability to contribute to this partnership work in synergistic and mutually beneficial ways.

Critical Pedagogy of Place and Teacher Preparation

The preparation of rural school teachers has been largely ignored in educator preparation, and, for rural-focused institutions who did acknowledge the importance of place and its influence on the development of teacher candidates, resources that specifically prepared teacher candidates to teach in rural settings are limited (Mehta, 2013; Theobald, 2015; Tyack, 1972; Tye, 2000). Given this, rural teacher preparation continues to be a critical area of study for those engaged and invested in the vitality and well-being of rural people and places. To address the historic and continuing marginalization of rural people and places, Azano et al. (2021) advocate for a critical pedagogy of place which, "prioritizes learning connections between the local, regional, national, and global contexts, while also considering power and privilege" (p. 48). Founded on the work of Gruenewald (2003), critical pedagogy of place combines the principles of place-based learning, which prioritizes developing an understanding of rural places in order to increase a "sense of place," with an understanding of a region's history of oppression and marginalization of land and/or people. Critical pedagogy of place was not developed specifically for rural contexts, however, given the strong attachment to place that characterizes rural people and the history of marginalization of rural places and people, the theory is particularly well suited for application in rural contexts. Often used as a theory for understanding the exploitation of land and resources in rural places (Greenwood, 2013; Huffling et al., 2017), critical pedagogy of place is also well suited to teacher preparation as a way to enable teacher candidates to gain a deeper understanding of rural issues that have shaped a rural community's past and present and which contribute to persistent rural stereotypes.

School-University Partnerships in Rural Schools

At the heart of preparing teacher candidates to confront rural stereotypes is an emphasis on the importance of sustained and embedded clinical experiences in rural settings (AACTE, 2018; NCATE 2010). Despite the need to develop and sustain strong P-12 school partnerships in all locales, we posit that this is especially important in rural school settings. With the release of the National Council for Accreditation of Teacher Education's (NCATE) Blue Ribbon report in 2010 and reaffirmed by the American Association for Colleges of Teacher Education (AACTE) in 2018, an upside-down model of teacher preparation has been promoted. This clinically-based model of teacher preparation promotes intensive, sustained, and collaborative field experiences throughout the teacher preparation program and is widely recognized for equity-focused teacher preparation practices that are essential for effectively preparing teacher candidates in all settings (AACTE, 2018; NCATE, 2010).

Traditional power structures that place a university's needs above those of P-12 partners are a concern in the development of all school-university partnerships (Zeichner, 2018). However, this is especially true in rural settings, which have a long history of being marginalized by individuals or entities with more power and/or influence (Azano et al., 2021). Too often, rural schools' experiences with universities have been limited to one-and-done research activities or drive-by clinical experiences for teacher candidates. When teacher candidates begin clinical experiences in rural schools, they often view the rural school or region from one of two narrow perspectives: 1) From a deficit-based, savior-focused perspective or 2) As bucolic places where people exist in perfect harmony with each other and nature (Azano et al., 2021; Azano & Stewart, 2016; Biddle & Azano, 2016). In a quest to develop a deep and holistic understanding of rural settings, both stereotypical viewpoints are damaging (Howley & Redding, 2021). With

this in mind, it is imperative that all stakeholders who are engaged in preparing teacher candidates work to change the damaging stereotypes that rural schools experience. Such narratives are dangerous across locales and have broad reach outside of rural contexts.

Changing the Narrative

For a shift in the rural school narrative to be successful, specific attention to identifying and valuing rural school strengths must occur in conjunction with recognizing and calling out harmful rural school stereotypes. At the heart of this work in teacher preparation should be a commitment to pursuing strong school-university partnerships.

Identifying and Valuing Rural School Strengths

Rural schools, more so than their suburban and urban counterparts, function as hubs that create close connections to support rural communities (Azano et al., 2021; Biddle & Azano, 2016; Tieken & Auldridge-Reveles, 2019; Wille et al., 2019). However, simply labeling rural schools as community hubs underscores the importance of these schools in the life and psyche of the local community. Rural schools also tend to have smaller class sizes that allow for more personalized relationships with students and the community (Azano & Stewart, 2016; Tran et al., 2020). Indeed, Mara Tieken opens her book, *Why Rural Schools Matter* (2014), with such a sentiment saying “I couldn’t have avoided knowing my students if I wanted to” (p. 4). This sentiment also extends towards the narratives of rural school teachers that have abided so long as a figure in the community as to have taught the children of former students (Azano & Biddle, 2019). Rural schools have also been suggested to have less bureaucratic red tape around the particulars of classroom practice, allowing for greater teacher agency and autonomy in the classroom (Tran et al., 2020). This understated aspect of rural teaching also extends to life beyond the classroom. Since rural teachers often have a stronger sense of place in the community

than other areas, their voice and influence reach farther within the school system and rural community at large (Eppley, 2015).

These distinctions are important, as they help to frame rural schools and communities from a strengths-based perspective. In order to reframe deficit perspectives of rurality, our conceptions of rural *and* the ostensible "opposites" of rural (i.e., urban and suburban) must change. To label or conceptualize rurality and the research of rurality as being part of the margins or distinct from the norm ignores how much rural spaces, places and people are a part of the world, not living on some other planet (Azano & Stewart, 2016). Change must start by addressing and dismantling this "other" narrative and the stereotypes associated with it. Simply put, rural education is not a one-size-fits-all proposition and rural places and people are much more diverse than many people realize.

Addressing and Calling Out Harmful Stereotypes

National media outlets received JD Vance's (2016) work as an explanation for Trump era politics (see e.g., Rothman, 2016; Senior, 2016), while cosmopolitan-focused academia assigned it as required reading in university classrooms (Catte, 2019). Worse, Vance became a spokesperson and his book a primer for rural policy in prominent political circles (Harkins & McCarroll, 2019). Vance managed to influence the professionalization of rural workers in the region, while more broadly influencing policy directed to Appalachia (Catte, 2018). In other words, Vance and authors like him have profiteered and gained national influence from their narratives at the same time Appalachian people and natural resources continue to be exported from the region (Catte, 2018). This form of influence illustrates the danger of allowing accessible narratives grounded in personal experience but lacking empirical roots to shape policy, and, worse, curriculum and instruction inside rural schools. To counter this, rural researchers,

educators, and policy makers must continue to respond to and challenge the dangerous stereotyped narratives that are propagated by mainstream media outlets.

Acknowledging that damaging stereotypes about rural people, places, and schools are mainstream, we also strongly advise those who are new to rural schools and communities against allowing the counsel of those attempting to generalize the politics, economics, and cultural norms of rural places to inform the structure of partnerships with rural schools and communities. Consider, for example, how the perpetuation of the myth that rural America is "all white" brings irreparable harm to the many children of color growing up in rural places as it serves to erase them from the landscape. Critical pedagogy of place is one theory that can be utilized in rural teacher preparation to address this (Azano et al., 2021; Gruenewald, 2003). When applied to rural school contexts, this pedagogical theory centers rural experiences around an understanding of critical issues and place-based instruction. For teacher preparation programs, critical pedagogy of place should become central to the work of developing and sustaining strong school-university partnerships in rural school settings, leading to strong implications for recruiting and retaining rural school teachers.

Creating and Sustaining Strong School-University Partnerships

The importance of clinically-based teacher preparation is essential in all settings (AACTE, 2018; NCATE, 2010), and supportive clinical structures are at the heart of the development of strong school-university partnerships, especially in rural settings. Recruiting and retaining teachers in rural settings continues to be a challenge for rural schools (Nguyen, 2020), one that is further exacerbated by the Covid-19 pandemic (Singer, 2021). Teacher candidates need a diversity of clinical experiences in multiple settings (AACTE, 2018). However, for teacher candidates who attend universities in metropolitan or suburban settings, too often

sustained and authentic clinical experiences in rural settings are absent or inadequate. Teacher candidates who attend universities in rural areas work closely with rural school communities, spending considerable time in rural school settings, yet they often grew up in non-rural settings and have very little experience in and understanding of rural contexts. For teacher candidates who did grow up in rural schools, differences in individual experiences may often still lead to differing definitions of rural (Moffa & McHenry-Sorber, 2018). Given these challenges, developing a truly nuanced and critical understanding of rural schools and communities presents challenges for teacher preparation programs in all locales. Building strong school-university partnerships with an emphasis on critical pedagogy of place is at the heart of effectively addressing these challenges. It is through partnerships between schools and universities that prospective teachers are prepared not only to feel empowered to confront damaging rural stereotypes but also to seek opportunities to teach and contribute to rural schools and communities.

Although clinical structures such as Professional Development School partnerships (NAPDS, 2008, 2021) provide research-based models for developing school-university partnerships, in rural settings, too often drive-by or single day experiences are still common. These experiences do nothing to eschew the negative stereotypes that are prevalent in political rhetoric and popular culture portrayals that surround rural people and places. Instead, schools must seek prolonged and embedded experiences in rural settings for their teacher candidates, and these experiences must be founded on strengths-based perspectives. In particular, it is essential that teacher candidates understand and value rural schools and communities and are given multiple opportunities to engage meaningfully with rural school communities. An understanding of their students' culture and community allows for richer experiences in clinical field

placements, yet this understanding must be grounded in understanding both the strengths of a rural region and the inequities that have shaped its history. Adopting a critical pedagogy of place is one important way to aid teacher candidates in understanding the inequities that have shaped a rural region while also focusing on its strengths (Azano et al., 2021). A teacher candidate's decision to teach in a rural setting after graduation may be impacted by these experiences. Even if a teacher candidate does not choose to teach in a rural school, that candidate's awareness of the strengths and challenges of rural schools is an important way to address the negative rural stereotypes that are prevalent across settings.

Finally, creating and sustaining strong school-university partnerships in rural schools must be founded on developing trust and mutual respect between partners. Since universities have traditionally wielded their power inequitably, the university partner must take the lead in developing trust by engaging in open and frequent communication, being actively present in schools, and by showing school partners that their voices are valued and heard. As in all effective collaborative endeavors, each partner brings strengths that may be unique to their prior experiences. These strengths should be recognized and nurtured with all partners focused on a shared goal of positively benefiting student learning. Now, more than ever, with a global pandemic impacting the nature of clinical experiences in all settings, the importance of establishing strong rural school-university partnerships is illuminated.

Final Thoughts

It has become increasingly clear that rural America is pivotal to the United States confronting nationwide uncertainty about key government services and structures and coming to terms with climate change. Teacher education is the place where P-12 practitioners formalize their understanding of the structure and organization of public education, but also the

relationship between school-community viability. Now is the time to teach the next generation of educators that rural schools educate students who live in connected communities that are stewards of the natural resources the nation relies on for food and energy, as well as the spaces we go to for respite and recreation. Rural children deserve opportunities to inform the way the world sees them – to have their voices heard - as opposed to being formed by rhetoric that seeks to diminish their potential within the broader American society. Teachers in rural schools have a powerful opportunity to encourage rural students to imagine a just transition for not only their own communities, but also for the nation at large.

In our research on justice and equity in rural schools, a fundamental argument that emerges is that rural children need to be empowered to change the policy and politics that hollow out their communities, inflame hate speech and actions, and degrade their local environments. It is impossible to imagine this empowerment taking hold in the absence of informed teachers and purposefully designed curriculum. Importantly, we consistently advise colleagues new to rural schools and communities against looking to the counsel of those attempting to generalize the politics, economics, and cultural norms of rural places to inform the structure of partnerships with rural schools and communities.

Too often, teacher candidates do not have the opportunity to learn how rural schools are discrete from metropolitan and suburban schools. Rural places across the United States are remote--beyond that the easy comparisons end. We urge educator preparation programs to design their preparation programs, and especially their clinical experiences, through a lens of critical pedagogy of place that strives to acknowledge the ongoing marginalization of rural people and places while simultaneously recognizing their strengths. It is through sustained and supportive school-university partnerships that teacher preparation programs have an opportunity to change

the stereotyped viewpoints that teacher candidates often enter their preparation programs predisposed to believe. Teacher education programs have an obligation to actively engage in this discussion, both for the well-being of rural children and their school communities and for the nation as a whole.

References

American Association of Colleges for Teacher Education (AACTE). (2018). *A pivot toward clinical practice, its lexicon, and the renewal of educator preparation: A report of the AACTE Clinical Practice Commission*. https://aacte.org/resources/clinical-practice-commission

Arnold, M. L., Newman, J. H., Gaddy, B. B., & Dean, C. B. (2005). A look at the condition of rural education research: Setting a direction for future research. *Journal of Research in Rural Education, 20*(6), 1-25. https://eric.ed.gov/?id=EJ683823

Azano, A. P. (2015). Addressing the Rural Context in Literacies Research: A Call to Action. *Journal of Adolescent and Adult Literacy*, *59*(3), 267–269. https://doi.org/10.1002/jaal.480

Azano, A.P. & Biddle C. (2019). Disrupting dichotomous traps and rethinking problem formation for rural education. *The Rural Educator, 40*(2), 4-11. https://doi.org/10.35608/ruraled.v40i2.845

Azano, A.P., Brenner, D., Downey, J., Epply, K., & Schulte, A.K. (2021). *Teaching in rural places: Thriving in classrooms, schools, and communities*. Routledge.

Azano, A. P., & Stewart, T. T. (2015). Exploring place and practicing justice: Preparing pre-service teachers for success in rural schools. *Journal of Research in Rural Education, 30*(9), 1-12. https://jrre.psu.edu/sites/default/files/2019-08/30-9.pdf

Azano, A. P., & Stewart, T. T. (2016). Confronting challenges at the intersection of rurality, place, and teacher preparation: Improving efforts in teacher education to staff rural schools. *Global Education Review*, *3*(1), 108–128. https://doaj.org/article/79009ab21efa480dbe50fda327c3aef7

Biddle, C., & Azano, A. P. (2016). Constructing and reconstructing the "rural school problem": A century of rural education research. *Review of Research in Education*, *40*(1), 298–325. https://doi.org/10.3102/0091732X16667700

Biddle, C., Sutherland, D.H., & McHenry-Sorber, E. (2019). On resisting "awayness" and being a good insider: Early career scholars revisit Coladarci's swan song a decade later. *Journal of Research in Rural Education, 35*(7), 1-16. https://doi.org/10.26209/jrre3507

Brenner, D. (2018). Rural educator policy brief: Rural education and the every student succeeds act. *The Rural Educator, 37*(2). https://doi.org/10.35608/ruraled.v37i2.271

Carver-Thomas, D., Leung, M., Burns, D. (2021). *California teachers and covid-19: How the pandemic is impacting the teacher workforce*. Learning Policy Institute. https://learningpolicyinstitute.org/product/california-covid-19-teacher-workforce-report

Catte, E. (2018). *What you are getting wrong about Appalachia*. Belt Publishing.

Catte, E. (2019). Stereotypes on the syllabus: Exploring *Hillbilly Elegy's* use as an instructional text at colleges and universities. In A. Harkins and M. McCarroll (Eds.) *Appalachian reckoning: A region responds to 'Hillbilly Elegy'* (pp. 60-79). West Virginia University Press.

DeYoung, A.J. (1995). Constructing and staffing the cultural bridge: The school as change agent in rural Appalachia. *Anthropology & Education Quarterly*, *26*(2), 168-192. https://www.academia.edu/29563455

Eppley, K. (2015). "Hey, I saw your grandparents at Walmart": Teacher education for rural schools and communities. *The Teacher Educator, 50*(1), 67–86. https://doi.org/10.1080/08878730.2014.975061

Franzak, J. K., Porter, H. D., & Harned, C. (2019). "We're rural not dumb": An examination of literacy sponsorship. *Journal of Language and Literacy Education, 15*(2), 1-22. https://files.eric.ed.gov/fulltext/EJ1235180.pdf

Greenwood, D.A. (2013). A critical theory of place-conscious education. In R.B. Stevenson, M. Brody, J., Dillon, & A.E.J. Wals (Eds.), *International handbook of research on environmental education* (pp. 93-100). Routledge.

Gruenewald, D. A. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher, 32(4)*, 3–12. doi:10.3102/0013189X032004003

Hartman, S., Roberts, J.K, Schmitt-Wilson, S., McHenry-Sorber, E., Buffington, P. J., & Biddle, C. (2022). National Rural Education Association research agenda–2022-2027: A closer look at the research priorities. The Rural Educator, 43(3), 59-66. https://doi.org/10.55533/2643-9662.1349

Hardré, P. L., & Hennessey, M. N. (2010). Two rural worlds: Differences of rural high school students' motivational profiles in Indiana and Colorado. *Journal of Research in Rural Education*, *25*(8), 1–32. http://jrre.psu.edu/articles/25-8.pdf

Harkins, A. & McCarroll, M. (2019). Introduction: Why this book?. In A. Harkins and M. McCarroll (Eds.) *Appalachian reckoning: A region responds to 'Hillbilly Elegy'* (pp. 1-15). West Virginia University Press.

Huffling, L.D., Carlone, H.B., Benavides, A. (2017). Re-inhabiting place in contemporary rural communities: Moving toward a critical pedagogy of place. *Cultural Studies of Science Education*, 12(1), 33-43. doi: 10.1007/s11422-016-9756-2

Howley, C. & Redding, S. (2021). *Cultivating rural education: A people-focused approach for states*. Information Age Publishing, Inc.

Howley, C. B., & Howley, A. (2018). How blue was my valley? Invited paper for the AERA

Special Interest Group on Rural Education. *Journal of Research in Rural Education,* 33(4), 1-10. https://doi.org/10.18113/P8JRRE3304

Kannapel, P.J. & DeYoung, A.J. (1999). The rural school problem in 1999: A review and critique of the literature. *Journal of Research in Rural Education*, *15*(2), 67-79. https://eric.ed.gov/?id=EJ600047

Leonard, R. (2017, January 5) Why rural America voted for Trump. *The New York Times*. https://www.nytimes.com/2017/01/05/opinion/why-rural-america-voted-for-trump.html

McMahon, B. (2015). Seeing strengths in a rural school: Educators' conceptions of individual and environmental resilience factors. *Journal for Critical Education Policy Studies, 13*(1), 238–267. http://www.jceps.com/wp-content/uploads/2015/07/13-1-11.pdf

Mehta, J. (2013). *The allure of order: High hopes, dashed expectations, and the troubled quest to remake American schooling.* Oxford University Press.

Moffa, E.D. & McHenry-Sorber, E. (2018). Learning to be rural: Lessons about being rural in teacher education programs. *The Rural Educator*, *39*(1), 26-40. https://files.eric.ed.gov/fulltext/EJ1225175.pdf

Monk, D. H. (2007). Recruiting and retaining high-quality teachers in rural areas. *Future of Children, 17*(1), 155-174. https://files.eric.ed.gov/fulltext/EJ795884.pdf

National Association of Professional Development Schools (NAPDS). (2008). *What it means to be a professional development school?* http://www.napds.org/9%20Essentials/statement.pdf

National Association for Professional Development Schools (NAPDS). (2021). *What it means to be a professional development school* (2nd ed.). https://3atjfr1bmy981egf6x3utg20-wpengine.netdna-ssl.com/wp-content/uploads/2021/05/What-it-Means-to-be-a-PDS-Second-Edition-2021-Final.pdf

National Council for Accreditation of Teacher Education (NCATE). (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Report of the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning. http://www.ncate.org/LinkClick.aspx?fileticket=zzeiB1OoqPk%3D&tabid=7

National Rural Education Association. (2022). National Rural Education Association research agenda – 2022-2027. *The Rural Educator, 37*(3), v-vii. https://journals.library.msstate.edu/index.php/ruraled/article/view/236/220

National Rural Education Association. (2016). National Rural Education Association research agenda – 2016-2021. *The Rural Educator, 37*(3), v-vii. https://journals.library.msstate.edu/index.php/ruraled/article/view/236/220

Nguyen, T. D. (2020). Examining the teacher labor market in different rural contexts: variations by urbanicity and rural states. *AERA Open, 6*(4), 1-24. https://doi.org/10.1177/2332858420966336

Parks, C. (2021, September 7). The tragedy of America's rural schools. *The New York Times*.

https://www.nytimes.com/2021/09/07/magazine/rural-public-education.html

Petrin, R. A., Schafft K.A., Meece, J.L. (2014). Educational sorting and residential aspirations among rural high school students: What are the contributions of schools and educators to the rural brain drain? *American Educational Research Association Journal*, *51*(2), 294-326. https://www-jstor-org.proxy.library.ohio.edu/stable/24546689

Seelig, J.L. (2017). Battling declining enrollment in the upper midwestern United States: Rural schools in a competitive society. *Australian and International Journal of Rural Education*, *27*(2), 77-92. https://search.informit.org/doi/epdf/10.3316/informit.270109256175454

Senior, J. (2016, August 10). Review: In 'Hillbilly Elegy,' a tough love analysis of the poor who back Trump. *The New York Times*. https://www.nytimes.com/2016/08/11/books/review-in-hillbilly-elegy-a-compassionate-analysis-of-the-poor-who-love-trump.html

Showalter, D., Hartman, S.L., Johnson, J., Klein, R. (2019). *Why rural matters 2018-19: The Time is Now*. The Rural School and Community Trust. http://www.ruraledu.org/WhyRuralMatters.pdf

Singer, N. (2021, January 19). Pandemic teacher shortages imperil in-person schooling. *The New York Times*. https://www.nytimes.com/2021/01/19/us/pandemic-substitute-teacher-shortages.html

Stapel, C. J., & DeYoung, A. J. (2011). Toward a transdisciplinary rural education research agenda. *The Rural Educator, 32*(3), 27-35. https://files.eric.ed.gov/fulltext/EJ987610.pdf

Ravitch, D. (2010). *The death and life of the great American school: How testing and choice are undermining education.* Basic Books.

Rothman, J. (2016, September). The lives of poor white people. *The New Yorker*. from https://www.newyorker.com/culture/cultural-comment/the-lives-of-poor-white-people

Theobald, P. (2015). *Education now: How rethinking America's past can change its future*. Routledge.

Theobald, P., & Campbell, C. (2014). The fate of rural communities and schools in a corporation-dominated political economy: A historical interpretation. In C. B. Howley, A. Howley, & J. D. Johnson (Eds.), *Dynamics of social class, race, and place in rural education* (pp. 95-107). Information Age Publishing.

Theobald, P., & Wood, K. (2010). Learning to be rural: Identity lessons from history, schooling, and the US corporate media. In K. Schafft & A. Youngblood Jackson (Eds.), *Rural education for the Twenty-First Century* (pp. 17-33). The Pennsylvania State University Press.

Tieken, M. C. (2014). *Why rural schools matter*. University of North Carolina Press.

Tieken, M. C. & Auldridge-Reveles, T.R. (2019). Rethinking the school closure research: School closure as spatial injustice. *Review of Educational Research, 89*(6), 917-953. https://doi:10.3102/0034654319877151

Tieken, M., & Williams, S. (2021). Commentary: Times article on rural school misses half the story—educational success. *The Rural Educator*, *42*(3), 72-73. https://doi.org/10.35608/ruraled.v42i3.1289

Timar, T., & Carter, A. (2017). Surprising strengths and substantial needs: Rural district implementation of common core state standards. *Policy Analysis for California Education, June*, 1–19. https://files.eric.ed.gov/fulltext/ED574815.pdf

Tran, H., Hardie, S., Gause, S., Moyi, P., & Ylimaki, R. (2020). Leveraging the perspectives of rural educators to develop realistic job previews for rural teacher recruitment and retention. *The Rural Educator, 41*(2), 31–46. https://doi.org/10.35608/ruraled.v41i2.866

Tyack, D. (1974). *The one best system: A history of American urban education.* Harvard University Press.

Tye, B. (2000). *Hard truths: Uncovering the deep structure of schooling.* Teacher College Press.

Vance, J.D. (2016). *Hillbilly elegy: A memoir of a family and culture in crisis*. HarperCollins.

Victor, D. (2016, November 9). Trump's victory, on front pages worldwide. *The New York Times*. https://www.nytimes.com/2016/11/10/business/media/trumps-victory-on-front-pages-worldwide.html

Wille, A. M., Maher, M. K., Cornell, S. R., Kim, A. C., Reimers, B., & Hess, R. S. (2019). It starts with us: Including refugees in rural schools and communities. *The Rural Educator*, *40*(2), 33–42. https://doi.org/10.35608/ruraled.v40i2.850

Zeichner, K. (2018). *The struggle for the soul of teacher education*. Routledge.

Using Literature to Support Adolescent Identity Development: A Critical Perspective

Courtney Verbiest
George Mason University

Reagan Murnan
Wichita State University

Abstract

Adolescent literature has the power to positively impact and support the identity development of all adolescents, regardless of ability, gender, race, cultural, or linguistic background. Yet, we contend that this is only possible through the intentional, purposeful, and cognizant selection of texts that accurately and respectfully portray characters with whom students can relate and connect. To that end, this article explores the sociocultural needs of adolescents, their challenges in today's society, and the ways that literature can support their adolescent identity development to leverage rather than deter their reading skills.

Keywords: adolescent, literacy, identity

Presently, the world is watching the devastating turmoil unfold within the United States amidst the ongoing and pervasive issues of social justice. These issues are underscored by both systemic racism and implicit bias toward Black, Asian American, Muslim, immigrant, and other groups of color that differ from the Eurocentric Western values historically upheld by many in the majority population. Sadly, our nation's adolescents are watching, too. While some American adolescents struggle to understand current events from safe spaces, many are exposed to overt acts of hatred, explicit hate speech, and prime examples of systemic racism within our very schools. As Malcom X (1970) once stated, education is a powerful means of moving forward, for uplifting communities, and for preparing our youth to make positive contributions to society. As such, literacy is arguably the core gift meant to facilitate this transition.

Yet, many questions arise when particularly considering the literacy instruction, practices, and corresponding texts provided to American adolescents in their public schools:

What messages are our adolescents receiving about their identities through their public education system? How are their unique social and cultural identities being supported through their reading instruction, if at all? And, what implicit messages may we be sending by way of the very texts that they hold in their impressionable hands in classrooms across the country at this very moment? The purpose of this literature review is to acknowledge the integral role of identity in adolescent literature, briefly explore the social and cultural needs of diverse adolescent learners and ways to support their identity development, and to highlight the compelling need for adolescents to have access to books that serve as mirrors, windows, and doors (Bishop, 1990), thereby offering them the opportunity to see themselves reflected, to see into the cultures of others, and to step into others' experiences.

Positionality Statement

We believe that understanding a researcher's positionality is essential to understanding the core essence of their research, appreciating their methodological approach, and in promoting authentic transparency. To that end, the first author of this review is a Puerto Rican first-generation college graduate, an early childhood educator, a Hispanic doctoral candidate of literacy, and the mother of an interracial child. The second author is a White female who subscribes to the dominant Christian religion, a special educator, and an assistant professor of special education. Together, we believe that identifying ways to best support students from all backgrounds and ability levels within an inclusive environment is paramount. This paper represents our perspectives on the intersection between research on today's adolescents, adolescent literacy instruction, issues of diversity and ability, and the profound importance of literature in order to support the identity development of our most important stakeholders in education: the students. To set the stage for the current issues that adolescents face in their

literacy development, the sociocultural aspects of the identities of today's students will first be explored.

A Changing Portrait of Adolescence

As the American standards of literacy achievement change and evolve, so too do the adolescents that enter middle school and high school classrooms each day. Today's youth are increasingly aware of social justice issues (Fine et al., 2003; Flood, 2016), sophisticated in their use of technology to combat issues of inequity (Stornaiuolo & Thomas, 2017), and demonstrate creativity in addressing and implementing social change (Flood, 2016). The potential for fostering diverse, positive adolescent identities through literacy experiences is boundless, yet there appears to be a profound disconnect between the current portrait of today's diverse adolescents (Moje et al., 2020; Shalaby, 2017), foundational literacy research and suggested texts (Paige, 2011), and the current predominantly White, female teaching demographic (Ball, 2000; Cowhey, 2006).

In order to capture an accurate understanding of today's youth, one must first consider the adolescent experience. Elliott and Feldman (1990) describe adolescence as a unique period in human development distinctly separate from childhood and adulthood. Meanwhile, Alexander and Fox (2011) rather view this period as a more flexible transition between the two. Regardless of the interpretations imposed on this period, Elliott and Feldman (1990) and Wigfield and colleagues (2006) highlight four core aspects of adolescence: cognitive development, physical development, changing contexts, and evolving self and social relationships, marking this time as one of the most challenging for many students. By extension, Moje (2015) asserts that all research on adolescent literacy should highlight these domains, including the social practices, cultural practices, emotional considerations, and norms within the period of adolescence. As

such, the following sections address each of those areas in turn within the context of today's portrait of adolescence.

Social and Community Issues

In today's society, many adolescents are currently experiencing incomparable levels of trauma and anxiety, particularly in communities where economic growth is slow and drugs, guns, and instances of youth targeted by police are rampant (Fine et al., 2003; Morsy & Rothstein, 2019). Relatedly, community trauma surrounding gentrification, housing insecurity, the potential reality of homelessness, hunger, and inhumane living conditions continue to affect the students and teachers who live in them (Dutro, 2019; World Health Statistics, 2017). Students from higher socioeconomic backgrounds are not immune to the current pressures of adolescent life and are currently subject to the mounting stressors of sexual harassment, bullying, and noxious political conflicts, many of which are often mitigated through social media (Shalaby, 2017). Adolescent girls are particularly vulnerable to the societal pressures depicted in beauty magazines, amplifying the significant connection between reading material, body image, and risky health choices (Thomsen et al., 2002). Further, adolescents from all socioeconomic backgrounds may be exploring unique intersections within their identities, such as those navigating the Black, queer, and hip hop communities (Love, 2017).

Additionally, the immense focus on high-stakes testing and the dehumanization of students and teachers to equate a test score with achievement, particularly for students of color and/or from marginalized groups (such as the rising LGBTQ+ community), has become insufferable (Moje et al., 2020). Lastly, as educational professionals are encouraged to focus on instructional goals and skills for students with disabilities, the complex problems associated with students with a dis/ability are reduced to a medical model of a "cure," "rehabilitation," or

"fixing" (Mueller, 2019). Such environments are arguably a threat to any adolescent's positive identity development and can inevitably inhibit academic achievement rather than support it.

The Adolescent Literacy Dilemma

The period of adolescence is particularly unique when considering the profound development of cognitive processing that occurs to support literacy development, which may incorporate elements of not only maturation but an overall increase in exposure to literacy experiences (Alexander & Fox, 2011). This development allows adolescents to make meaning of literacy experiences in a more sophisticated manner than young children, enabling them to think both hypothetically and abstractly, as well as the ability to use a wider array of literacy strategies (Keating, 1990). Despite the profound biological and experiential changes that allow adolescents to better access literacy experiences and create deeper meaning in texts, a dilemma exists when considering the literacy skills of today's youth.

Historically, standardized testing data have been used to capture nationwide attention and highlight the belief that adolescents are consistently lacking proficiency in the literacy skills needed to demonstrate proficient and/or advanced literacy achievement (Grigg et al., 2007). Even more striking is the requirement of proficient reading as a critical element for educational advancement and community engagement, with deficits in literacy negatively impacting the quality of life of people, most notably those with disabilities (Erickson, 2006). Yet, it appears that the field of literacy often places an urgent focus on finding a one-size-fits-all solution to the literacy dilemma, while simultaneously avoiding the need to critically analyze some of the core underlying causes for poor literacy achievement, particularly among adolescents of color (Paige, 2011) and those with disabilities (Chai et al., 2015). Conversely, DiAngelo and Sensoy (2010) remind us that there is no singular correct way to teach multicultural education, but rather that

quick fixes may only serve to further perpetuate stereotypes. By extension, Yon (1994) asserted that stereotyping by dominant groups, systemic racism, and discriminatory practices by teachers, administrators, and classmates are directly related to student achievement, while numerous other studies have demonstrated how racism and discrimination can affect the learning of students (Gougis, 2020; Steele, 1997; Walters, 1994).

While we believe an overhaul of the nation's literacy instruction and assessment in public education is needed, adolescents are demonstrating that they do indeed often have the skills necessary for successful engagement with literacy practices. For instance, researchers have found that adolescents participating in literacy experiences outside of school, including those identified as "struggling," often demonstrate some level of proficiency with complex texts (Alvermann et al., 1999; Mahiri, 2003; Moje, 2000). Likewise, the advent of new literacies has highlighted the importance of integrating digital and media texts alongside their traditional counterparts as notable resources for promoting students' identity development (Alvermann, 2012; Dezuanni, 2010). To that end, Moje and colleagues (2000) assert that all reading acts are the culminating outcome of sociocultural and disciplinary contexts, the reader's knowledge and interest, and the text itself.

The Teacher/Student Disconnect

The aforementioned circumstances surrounding the current portrait of American adolescents and their subsequent reading achievement are particularly concerning when considering the profound contrasts between our increasingly diverse student population and consistently homogenous teacher population (Ball, 2000; Cowhey, 2006), specifically in regard to the role of literacy in adolescents' lives. As Moje et al. (2020) describe, "The contrast between the racial, cultural, and linguistic backgrounds of predominantly monolingual, white, female

teachers and their plurilingual, racialized, religiously and culturally diverse student populations is a game changer" (p. 5). This point is particularly evident in the observation that reading research and instruction can carry assumptions of ubiquitous childhood experiences (Bloch et al., 2006; Dumas & Nelson, 2016) and access to equitable educational environments. Teachers' perceptions may therefore influence their use of diverse and/or contemporary literature in schools, including the privileging of certain mainstream educational and cultural capital (Gangi, 2008). Additionally, many teachers express that they lack the confidence to address issues of diversity in their classrooms, while others intentionally employ a color-blind attitude (Cushner, 2011). To that end, Moje and colleagues. (2020) have called for advocates for reading research and practices that purposefully support diversity, honoring these individuals with the title of "game changers -- [influences] that demand reading researchers do a better job of closing gaps" (p. 5).

Intersectional Identities

Of equal concern is the lack of access to educational opportunities of those with intersectional identities, particularly students of color and with dis/abilities, which nourish intellectual growth (Annamma & Morrison, 2018). The majority of inclusive education research and efforts have predominantly focused on ability differences (e.g., including students with dis/abilities in the general education classrooms), while overlooking the historical and troubling intersections of race, language, and dis/ability (Gonzales et al., 2017). Therefore, inclusive education efforts have yielded positive impacts for some students, but not all.

The intersectional identities of today's adolescents have led to an overrepresentation of students from racial and language minority backgrounds in special education (Skiba et al., 2008). Despite decades of efforts and research to combat this equity issue, data from the Office of

Special Education Programs suggest racially and linguistically marginalized students continue to be placed in more segregated settings than their White peers with the same dis/ability determination (U.S Department of Education, 2014). This phenomenon is further exacerbated for such students who are economically disadvantaged (LeRoy & Kulik, 2004). Although the factors that have sustained disproportionality are complex and not fully understood, it is necessary to critically examine how educational professionals participate in institutional practices that, left unexamined, reinforce a status quo that maintains race-and ability-based hierarchies (Skiba, 2008). The first step to understanding the aforementioned phenomenon is to attempt to understand the students themselves. As such, in the following section, the sociocultural needs of diverse adolescent readers will be explored.

The Sociocultural Needs of Diverse Adolescent Readers

Culture is the shared heart of human existence, yet many diverse students are implicitly taught to separate their home culture from their Eurocentric educational experience through the framing of their cultural, racial, linguistic, and other identities as obstacles and/or deficits to authentic learning (Lee, 2006; Moll & Gonzalez, 1994; Orellana & Gutiérrez, 2006; Skerrett, 2015; Valencia, 1997). By extension, there is a historic avoidance of curricula that honors students' diverse experiences and potential for learning (Lee, 1997, 2007; Moll & Gonzalez, 1994). When attempts are made to acknowledge diversity, district policies, classroom instruction, and teacher practices rarely go beyond the surface to unlock the full potential of students' cultural capital, privileging instead a Eurocentric approach to discourse about the topic (Heath, 1983; Lee, 2006, 2007; Reese et al., 2012). Yet, the importance of sociocultural learning for all students is paramount. As Ladson-Billings (2014) explains "In our attempt to ensure that those who have been previously disadvantaged by schooling receive quality education, we also

want those in the mainstream to develop the kinds of skills that will allow them to critique the very basis of their privilege and advantage" (p. 83).

Theoretical Framework

Several theoretical frameworks and a multitude of empirically-based research highlight the influential social and cultural components influencing reading progress (Cole, 1996; Heath, 1983; Lee, 1997, 2007; Moll & Gonzalez, 1994; Moll, 2014; Scribner & Cole, 1978; Street, 1984), while seminal studies have enriched this foundation to explore reading instruction and subsequent learning gains (e.g., Ivey & Johnston, 2013; Lee, 1997, 2007; Moll, 2014; Skerrett, 2012; Tatum, 2014). Particularly, Street (2012) leverages the framework in alignment with Freire (1990) in the power of supporting students' ability to read both the word and the world, shedding light on the immense need for literacy instruction to "embrace both the everyday aspect of learning and that to be found in more formal educational institutions… the two fields… instead of being polar opposites, might embrace and build on the strengths of each other" (pp. 225–226). While this harmony has yet to come to fruition when considering the aforementioned avoidance of honoring adolescents' sociocultural needs in their learning in favor of a focus on high-stakes testing that privileges a middle class, Eurocentric construct of knowledge (Au, 2009; Darling-Hammond, 2007), some literacy scholars have prioritized marginalized groups in a push for a revolutionary sociocultural advent in the field (Cole, 1996; Heath, 1983; Moll & Gonzalez, 1994; Scribner & Cole, 1978; Street, 1984). Thus, it is evident that the sociocultural needs of all adolescents must be considered when designing quality literacy instruction to adequately support their identity development.

Using Literature to Support Adolescent Identity Development

Through the previous analysis of the sociocultural needs of adolescents, as well as the recognition of the profound mismatch between the diverse student population and their mainstream public-school experiences, it is clear that ways of bridging the literacy gap for youth and providing authentic opportunities for literacy learning are sorely needed. In recognition of the need for such opportunities, Alexander and Fox (2011) notably acknowledge the relationship between the identity of adolescents and the sociocultural implications of the texts that they read, sharing that there are reciprocal relationships between the identity of adolescents, their reading engagement, and their social roles, as well as cultural implications around what is read and how adolescents' self-perceptions are developed. To that end, one strategy for supporting the identity development of adolescents and their subsequent reading skills is the integration of high-quality literature that accurately and positively portrays the diverse adolescent population.

Text Considerations to Support Identity Development

To provide adolescents with texts that serve as mirrors, windows, and doors (Bishop, 1990) that best support their identity development, it is essential to incorporate a wide variety of positive character portrayals. Several text considerations must be taken into account, including the date of publication (D'Angelo, 1989) and refreshing the core canon (Jogie, 2015), opportunities for discussion (Marsh & Stolle, 2006; Stewart, 2017), representation of marginalized groups (Stewart, 2017), and the need to challenge gender stereotypes (Carnell, 2005; Neilsen, 2006). Table 1 provides an overview of the aforementioned text considerations, including recommendations of selected texts and attention to potential pitfalls that may occur during implementation.

Table 1

Using Literature to Support Adolescent Identity in the Classroom

Teaching Tip	Look For	Caution
Refreshing the Canon Consider how contemporary novels can be used as a counter-argument and/or or provide a fresh take on the historical lens often presented within the canon texts.	*Brown Girl Dreaming* (Jacqueline Woodson) *Aristotle and Dante Discover the Secrets of the Universe* (Benjamin Alire Sáenz) *The Song of Achilles* (Madeline Miller) *Some People, Some Other Place* (J. California Cooper)	Some schools may prohibit the revision of canon text lists. If current curriculum guidelines mandate the use of a canon, examine how to uphold their place in instruction while also intentionally dismantling outdated stereotypes.
Book Clubs Consider conducting informal book talks to introduce students to the selection of books for book clubs. At the conclusion of the book clubs, students can create book trailers that will advertise or showcase the book for the next class of students	Look for books with a variety of reading difficulty that include not only diverse cultural representation, but varied text genres as well. *Alvin Ho* (Lenore Look) *This Promise of Change: One Girl's Story in the Fight for School Equality* (Jo Ann Allen Boyce and Debbie Levy) *The Hate U Give* (Angie Thomas) Consider books that can also be found in an audio version to ensure access for all.	Some texts may inadvertently distort cultures, reinforce stereotypes, or uncover cultural nuances that are not meant to be shared (Gultekin & May, 2020). Be sure to preview texts to be offered to students and consult diverse book resources like socialjusticebooks.org for anti-bias texts.

Marginalized Adolescents Be mindful of the unique identities and experiences of the students within their classrooms. Encourage students to read within and extend beyond their own cultures.	*American Born Chinese* (Gene Luen Yang) *Alejandria Fights Back!* (Leticia Hernández-Linares) *Born Confused* (Tanuja Desai Hidier)	Students' identities and experiences are complex; remind students that one person should not be expected to speak as a representative for an entire group. Instead, invite (but do not require) students to share as a model of an experience.
Challenge Gender Stereotypes Within teacher education classrooms, discuss the traditional gender stereotypes and roles that were present in U.S. history. Invite preservice teachers to consider how this history is the same or different from other cultures' history.	*This is Your Brain on Stereotypes* (Tanya Lloyd Kyi) *The Servant* (Fatima Sharafeddine) *Wandering Son* (Shimura Takako)	Encourage students to be sensitive towards individuals who may not fit into binary gender roles or who may have changing gender identity roles.
Fanfiction Explore nontraditional texts, such as fanfiction. The existence of choice, such as the creation of cartoons, plays, comics, books, narratives, etc., in fanfiction product creation is of paramount importance in the development of motivation and engagement among students (Magnifico, 2010).	*The Fanfiction Reader: Folktales for the Digital Age* (Francesca Coppa) Fanfiction.net Archiveofourown.org/fan-fiction/ Wattpad.com/fanfiction/ Quotev.com/fanfiction/-stories/	Present clear expectations for students providing respectful feedback to peers. Consider using self-contained discussion media such as Wikispaces or private discussion boards to allow students to provide each other with feedback in a safe, controlled space (Mathew & Adams, 2009)

Publication Date and Refreshing the Canon

Through a content analysis of award-winning young adult novels, D'Angelo (1989) identified ten American novels likely to be used in classrooms that highlighted the role of a female lead character, noting a shift in the portrayal of the female character toward increased

intellect, body acceptance, and emotional independence according to publication date. This slow, yet significant social shift in the portrayal of females represented through texts has the potential to better support today's adolescent females seeking to develop these traits themselves. It stands to reason that the same shift may apply to other social constructs as well, including gender stereotypes and cultural representations. As such, educators should logically consider the publication dates of texts in their literature canon (including award-winners), recognizing the connection between period social norms and character portrayals within.

Relatedly, many curriculums worldwide incorporate a core canon of texts that encompass the required reading for adolescents, with the intention of teaching students about their own culture and the culture of others (Jogie, 2015). Yet, the publication dates of these texts are rarely taken into account either, with the canon list rarely changed or updated to reflect contemporary and/or diverse perspectives. The outdated texts provided may be one of the greatest barriers to student curricular outcomes, causing disengagement and/or an inability for students to relate to the characters portrayed, with teachers thereby losing valuable opportunities to support their students in identity development, engagement, and subsequent building of literacy skills. Thus, continuous updates to curricular reading lists to include contemporary and diverse titles should logically be at the forefront of curriculum development.

Opportunities for Identity Development and Discussion

Educators can use texts to propel literacy and identity development within their classrooms, which can be facilitated through the use of book clubs, the use of texts that include marginalized adolescents and those that challenge gender stereotypes, and through the use of fanfiction. These dynamic character portrayals have the potential to negotiate positive literacy

experiences that help adolescents through their academic and social development (Chamberlain, 2005).

Book Clubs. Further research on adolescent girls by Marsh and Stolle (2006) took an ethnographic approach to identity development through book club discussions, facilitating discussions with adolescent females that allowed them to analyze, validate, and reconstruct their social and cultural identities, including their perceptions of gender and stereotypes. Interestingly, participants described their identities as a self-selected personal choice with little regard to the social implications of forming identity, demonstrating that many adolescents may be unaware of the social ramifications imposed on them. The discussion portion of the study allowed researchers to gain insight into how adolescents build their identities through texts in a way that may be hidden in many classrooms. In addition, in a yearlong experience within a New York City public school, Francois (2015) observed that book clubs can serve as powerful mechanisms for facilitating adolescents' reading motivation. Specifically, "a school can shape students' motivation to read in the classroom in ways that have positive effects on their reading identity, efficacy in reading, and ability to read well" (p. 68).

Marginalized Adolescents. Although studying adolescents' responses to relevant young adult novels and award-winning texts certainly lends insight into their identity development, there is also a pressing need for diverse texts and portrayals of characters from marginalized backgrounds. In Stewart's (2017) single case study of a female multilingual adolescent refugee from Burma, a reader response model was implemented to determine how the participant used her lived experiences to make meaning from a text portraying a relatable character. Findings indicated that the diverse text introduced to the student was pivotal in fostering her identity development and providing an authentic opportunity for engagement with a text, while

meaningful discussion with the researchers allowed for deeper connection and understanding. It may be logical to surmise, therefore, that educators and parents must be cognizant of providing adolescents with quality texts that contain a wide variety of positive portrayals of groups as the texts that adolescents read, the portrayals depicted within, and opportunities to discuss such texts play an integral role in implicit identity development.

Challenging Gender Stereotypes. Additionally, Carnell (2005) sought to understand the identity development of adolescent boys through a literacy intervention magazine that sought to promote reading, highlight role models, and promote positive decision-making. Interestingly, survey results indicated that girls read the magazine as much as boys did, though boys shared that reading material other than the magazine in public was a social challenge, shedding light on the challenges of gender roles and stereotypes within their reading identities. Furthermore, Neilsen (2006) conducted thorough interviews of 11th-grade female and male students regarding the characters portrayed through mainstream texts, noting that these texts allowed opportunities for adolescents to temporarily take on the roles of the characters, their character traits, and their attributes by immersing themselves in the text. Thus, reading is not only a productive way for students to overcome social obstacles, but one that has the potential to facilitate the breakdown of negative stereotypes for adolescents of all genders and allow them to try on the identity of others.

Fanfiction. Fanfiction, broadly described, is a piece of fictional writing or a story that is written in an amateur and unauthorized manner based on an already existing fictional work and published universe. Young adult literature and media are ideal for the creation of fanfiction because the texts include “real” problems that mirror the experiences of adolescents (Bean & Moni, 2003). Because the nature of fanfiction draws heavily on source texts for inspiration, it can

seamlessly be adapted for any target audience, preference, or ideation. For example, adolescents may choose to rewrite popular texts, such as *The Hunger Games* or take characters from *Harry Potter* and create entirely new narratives. As such, fanfiction is a space that is recognized for the creation, exploration, and communication of identity. Additionally, fans, or consumers of popular texts, may interpret narratives or characters differently based on their own identities and meanings, which holds the potential for activating critical conversations while offering a catalyst for diverse communities. The usage of fanfiction provides a place for students to honor their own identities while also fulfilling their desire for community (Waggoner, 2012). This community not only provides a space for fans to explore not only their own identities, but also the identities that are not often explored within typical texts. Scholars of fan communities and fanfiction have recognized fanfiction as a medium of exploring gender (Bury, 2005), sexuality (Willis, 2006), literacy (Black, 2013), and dis/ability (Raw, 2013) identities.

Particularly, the internet offers a space for members of the fanfiction community to interact, including popular websites such as Fanfiction.net. This platform serves as a vehicle for not only creating, but also reading and decoding meanings and identities. This follows what Henry Jenkins (1989) considers to be a participatory culture, in which a multitude of outlets for exploration is provided. Labeling and classification in dis/ability communities are often associated with medicalization, stereotyping, and the curtailing of individuality. Tagging, or the archiving and creative identification of characters, objects, and events in fanfiction, provides a communicative scheme between authors and readers. The tagging functions of fanfiction serve as an inclusive and normalizing force, despite the problematic and demeaning role of labeling in disability communities.

Potential Benefits of Supporting Identity through Literature

Agosto (2007) posited that texts that portray the cultural background of students can lead to increased self-esteem and learning receptivity. Likewise, students who are able to relate to and engage with the characters depicted in a text are increasingly likely to engage with the text itself (Neilsen, 2006), allowing the book to serve as an entry-point text in their reading development (Zambo & Brozo, 2009; Brozo, 2006). Furthermore, Lee (1997; 2006; 2007) designed a cultural framework through her work with African American students, fostering students' existing reading abilities by engaging them in authentic cultural texts from their everyday lives. With this support and honoring of their African American language dialect, students increased their sophistication in analyzing challenging texts, including such texts that schools have historically privileged within the curricula. Sadly, despite the valuable qualitative research highlighted within this paper, Alexander and Fox (2011) agree that while high-quality and well-crafted texts do indeed have the power to support students' identity development, the empirically-based benefits of diverse texts for adolescents remain understudied and more research is needed to capitalize on the full potential of such powerful tools – a call that is still relevant today. Meanwhile, educators and researchers alike must take precautions with the texts that are currently available. These text precautions will subsequently be explored.

Text Precautions

While the premise of this paper is built upon the importance of providing adolescents with texts that serve as mirrors, windows, and doors (Bishop, 1990), there are also several text precautions that must be considered. In response to Bishop's (1990) metaphorical comparison of literature, Gultekin and May (2020) remind us that texts can also serve as fun-house mirrors, blind spots, and curtains, distorting students' identities through misrepresentation, overlooking

marginalized or lesser-known cultural groups, or providing insights into cultures that were never meant to be revealed to a wider audience. Such texts may therefore perpetuate what Chimamanda Adichie (2009) would describe as a "single story," one that "creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are incomplete. They make one story become the only story." Thus, while we should be seeking to provide all adolescents with access to the most authentic and relatable texts possible, we must also be selective, intentional, and diligent in ensuring that said texts are accurate and respectful. As Maharah-Sandhu (1995) once shared, "if the child feels alienated, and cannot see his/her world view represented in the school experience, it is unlikely that there will be equality of educational outcome" (p. 16), thereby defeating the purpose of literature in the first place.

Conclusion

The research presented in this literature review provides an overview of the role of identity in adolescent literature, the sociocultural needs of diverse learners, and ways to support adolescents' identity and literacy development. Findings demonstrate that adolescent literature has the power to positively impact and support the identity development of all young people, regardless of gender, race, cultural, dis/ability or linguistic background (Carnell, 2005; Marsh & Stolle, 2006; Neilsen, 2006; Stewart, 2017). Specifically, students from diverse backgrounds benefit from literacy instruction that recognizes and affirms their multiple and intersecting identities (Francois, 2015; Ivey & Johnston, 2013). In particular, reading instruction that is significant to adolescents, recognizes students' out-of-school lives, and values their literacy practices is likely to increase literacy performance and close the achievement gap (Perry, 2012).

There is an urgent call for educators to take a sociocultural approach to the construction of identity in relation to the specific literacy skills and disciplines that adolescents are learning.

One strategy to meet this call is through the intentional, purposeful, and cognizant selection of texts that accurately and respectfully portray characters with which students can relate and connect to (Jogie, 2015). To that end, we must seek to fully understand the sociocultural needs of adolescents, their challenges in today's society, and their unique circumstances and contributions to society rather than forcing mainstream texts upon them, while simultaneously providing opportunities for authentic discussion (Marsh & Stolle, 2006; Stewart, 2017).

Literacy practices within a sociocultural perspective acknowledge that the transformative nature of texts are mediated by and established within social systems and cultural norms (Heath, 1983; Street, 1984). Teachers of reading should be cognizant of the sociocultural capital that adolescents bring to the classroom and consider community, engagement, and diversity as pedagogical virtues (Yoder, 2016). Instructional practices should interweave the individual social and cultural perspectives of students with the individual understanding – reconciling social and individual perspectives as a mutual relationship between individual knowledge and cultural traditions (Bartlett & Bartlett, 1995; Good & Lavigne, 2017). All of these factors can be leveraged to subsequently build students' reading skills as well as their identity development. As Stewart (2017) powerfully states, "far more important than new programs or strategies… youths need access to relevant literature and authentic meaning-making for educators to most effectively nurture their literacy, language, and identity development" (p. 239).

References

Adichie, C. N. (2009, July). *The danger of a single story* [Video]. TED Conferences. https://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story/up-next

Agosto, D. E. (2007). Building a multicultural school library: Issues and challenges.*Teacher Librarian, 34*(3), 27.

Alexander, P. A., & Fox, E. (2011). Adolescents as readers. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. P. Afflerbach (Eds.), *Handbook of reading research* (Vol. IV, pp. 157-176). Routledge.

Alvermann, D. E., Young, J. P., Green, C., & Wisenbaker, J. M. (1999). Adolescents' perceptions and negotiations of literacy practices in after-school read and talk clubs. American *Educational Research Journal, 36*(2), 221–264. https://doi.org/10.3102/00028312036002221

Alvermann, D. E., Marshall, J. D., McLean, C. A., Huddleston, A. P., Joaquin, J., & Bishop, J. (2012). Adolescents' web-based literacies, identity construction, and skill development. *Literacy Research and Instruction, 51*(3), 179-195. https://10.1080/19388071.2010.523135

Annamma, S., & Morrison, D. (2018). Identifying dysfunctional education ecologies: A DisCrit analysis of bias in the classroom. *Equity & Excellence in Education, 51*(2), 114-131. https://doi.org/10.1080/10665684.2018.1496047

Au, W. W. (2009). High-stakes testing and discursive control: The triple bind for non-standard student identities. *Multicultural Perspectives, 11*(2), 65-71. https://doi.org/10.1080/15210960903028727

Ball, A. F. (2000). Empowering pedagogies that enhance the learning of multicultural students. *Teachers College Record, 10*(6), 1006-1035. https://doi.org/10.1111/0161-4681.00090

Bartlett, F. C., & Bartlett, F. C. (1995). *Remembering: A study in experimental and social psychology*. Cambridge University Press.

Bean, T., & Moni, K. (2003). Developing students' critical literacy: Exploring identity construction in young adult fiction. *Journal of Adolescent & Adult Literacy, 46*(8), 638-648. http://www.jstor.org/stable/40017169

Bishop, R. S. (1990, March). Windows and mirrors: Children's books and parallel cultures. In *California State University reading conference: 14th annual conference proceedings* (pp. 3-12).

Black, R. (2013). Language, Culture and Identity in Fan Fiction. In C. Lankshear & M. Knobel (Eds.), *A New Literacies Reader: Educational Perspectives*. Peter Lang.

Bloch, M., Kennedy, D., Lightfoot, T., & Weyenberg, D. (2006). *The child in the world/the world in the child: Education and the configuration of a universal, modern, and globalized childhood*. Palgrave Macmillan US.

Boyce, J. A. A., & Levy, D. (2019). *This promise of change: One girl's story in the fight for school equality*. Bloomsbury Publishing USA.

Brozo, W. G. (2006). Bridges to literacy for boys. *Educational Leadership, 64*(1), 71.

Bury, R. (2005). *Cyberspaces of their own: Female fandoms online* (Vol. 25). Peter Lang.

Carnell, E. (2005). Boys and their reading: Conceptions of young people about the success of the "Full On" magazine. *The Curriculum Journal, 16*(3), 363–389. https://doi.org/10.1080/09585170500256461

Chai, Z., Vail, C. O., & Ayres, K. M. (2015). Using an iPad application to promote early literacy development in young children with disabilities. *The Journal of Special Education, 48*(4), 268-278. https://doi.org/10.1177/0022466913517554

Chamberlain, S. P. (2005). Recognizing and responding to cultural differences in the education of culturally and linguistically diverse learners. *Intervention in School and Clinic, 40*(4), 195-211. https://doi.org/10.1177/10534512050400040101

Cole, M. (1996). *Cultural psychology: A once and future discipline*. Harvard University Press.

Cooper, J. C. (2004). *Some people, some other place*. Anchor

Coppa, F. (Ed.). (2017). *The Fanfiction Reader: Folk tales for the digital age*. University of Michigan Press.

Cowhey, M. (2006). *Black ants and Buddhists: Thinking critically and teaching differently in the primary grades*. Stenhouse Publishers.

Cushner, K. (2011). Intercultural research in teacher education: An essential intersection in the preparation of globally competent teachers. *Action in Teacher Education, 33*(5-6), 601-614. https://doi.org/10.1080/01626620.2011.627306

D'Angelo, D. A. (1989). Developmental tasks in literature for adolescents: Has the adolescent female protagonist changed? *Child Study Journal, 19*(3), 219–238.

Dezuanni, M. (2010). Digital media literacy: Connecting young people's identities, creative production and learning about video games. In D. E. Alvermann (Ed.), *Adolescents' online literacies: Connecting classrooms, digital media, and popular culture* (pp. 125–143). Peter Lang.

DiAngelo, R., & Sensoy, Ö. (2010). "OK, I get it! Now tell me how to do it!": Why we can't just tell you how to do critical multicultural education. *Multicultural Perspectives, 12*(2), 97-102. https://doi.org/10.1080/15210960.2010.481199

Dumas, M. J., & Nelson, J. D. (2016). (Re)imagining black boyhood: Toward a critical framework for educational research. *Harvard Educational Review, 86*(1), 27–47. https://doi.org/10.17763/0017-8055.86.1.27

Dutro, E. (2019). *The vulnerable heart of literacy: Centering trauma as powerful pedagogy*. Teachers College Press.

Elliott, G. R., & Feldman, S. S. (1990). Capturing the adolescent experience. In S. S. Feldman & G. R. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 1–13). Cambridge, MA: Harvard University Press

Erickson, K. (2006). Literacy and persons with developmental disabilities: Why and how. *paper commissioned for the EFA Global Monitoring Report, 2006*.

Fine, M., Freudenberg, N., Payne, Y., Perkins, T., Smith, K., & Wanzer, K. (2003). "Anything can happen with police around": Urban youth evaluate strategies of surveillance in public places. *Journal of Social Issues, 59*(1), 141-158. https://doi.org/10.1111/1540-4560.t01-1-00009

Flood, A. (2016, February 16). Girl's drive to find 1000 "black girl books" hits target with outpouring of donations. *The Guardian*. Retrieved from www.theguardian.com/books/2016/feb/09/marley-dias-1000-blackgirl-books-hits-target-with-outpouring-ofdonations.

Francois, C. (2015). An urban school shapes young adolescents' motivation to read. *Voices from the Middle, 23*(1), 68–72.

Gangi, J. M. (2008). The unbearable whiteness of literacy instruction: Realizing the implications of the proficient reader research. *Multicultural Review, 17*(1), 30–35.

Gonzalez, T. E., Hernandez-Saca, D. I., & Artiles, A. J. (2017). In search of voice: Theory and methods in K-12 student voice research in the US, 1990–2010. *Educational Review, 69*(4), 451-473. https://doi.org/10.1080/00131911.2016.1231661

Good, T. L., & Lavigne, A. L. (2017). *Looking in classrooms*. Routledge.

Gougis, R. A. (2020). The effects of prejudice and stress on the academic performance of Black-Americans. In *The school achievement of minority children* (pp. 145-158). Routledge.

Grigg, W., Donahue, P., & Dion, G. (2007). The nation's report card: 12th-grade reading and Mathematics 2005 (NCES 2007-468). U.S. Department of Education, National Center for Education Statistics. Washington, D. C.: U.S. Government Printing Office.

Gultekin, M., & May, L. (2020). Children's literature as fun-house mirrors, blind spots, and curtains. *The Reading Teacher, 73*(5), 627-635. https://doi.org/10.1002/tete.1867

Heath, S. B. (1983). *Ways with words: Language, life and work in communities and classrooms*. Cambridge University Press.

Hernández-Linares, A. (2021). *Alejandria fights back!* Feminist Press at CUNY.

Hidier, T. D. (2010). *Born confused*. Scholastic Inc.

Ivey, G., & Johnston, P. H. (2013). Engaging with young adult literature: Outcomes and processes. *Reading Research Quarterly, 428*(3), 255–275. https://www.doi.org/10.1002/rrq.46

Jenkins III, H. (1988). Star Trek rerun, reread, rewritten: Fan writing as textual poaching. *Critical Studies in Media Communication, 5*(2), 85-107. https://doi.org/10.1080/15295038809366691

Jogie, M. R. (2015). Too pale and stale: prescribed texts used for teaching culturally diverse students in Australia and England. *Oxford Review of Education, 41*(3), 287–309. https://doi.org/10.1080/03054985.2015.1009826

Keating, D. P. (1990). Adolescent thinking. In S. S. Feldman & G. R. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 54–89). Harvard University Press.

Kyi, T. L. (2020). *This is your brain on stereotypes: How science is tackling unconscious bias*. Kids Can Press Ltd.

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.k.a. the remix. *Harvard Educational Review, 84*(1), 74-84.

Lee, C. D. (1997). Bridging home and school literacies: A model of culturally responsive teaching. In J. Flood, S. B. Heath, & D. Lapp (Eds.), *A handbook for literacy educators: Research on teaching the communicative and visual arts* (pp. 330–341). McMillan.

Lee, C. D. (2006). Every good-bye ain't gone: Analyzing the cultural underpinnings of classroom talk. *International Journal of Qualitative Studies in Education, 19*(3), 305–327. https://doi.org/10.1080/09518390600696729

Lee, C. D. (2007). *Culture, literacy, and learning: Blooming in the midst of the whirlwind*. Teachers College Press.

LeRoy, B., & Kulik, N. (2004). The demographics of inclusion: Final report materials for US Department of Education Office of Special Education. *Detroit, MI: Wayne State University*.

Look, L. (2009). *Alvin Ho.* Penguin Random House.

Look, L. (2009). *Alvin Ho: Allergic to girls, school, and other scary things*. Yearling Books.

Love, B. L. (2017). A ratchet lens: Black queer youth, agency, hip hop, and the Black ratchet imagination. *Educational Researcher, 46*(9), 539–547. https://doi.org/10.3102/0013189X17736520

Magnifico, A. M. (2010). Writing for whom? Cognition, motivation, and a writer's audience. *Educational Psychologist, 45*(3), 167-184. https://doi.org/10.1080/00461520.2010.493470

Maharah-Sandhu (1995) Anti-racist curriculum in an ethnocentric society. *Multiculturalism, 16*(1), 14–16.

Mahiri, J. (Ed.). (2003). *What they don't learn in school: Literacy in the lives of urban youth.* Peter Lang.

Marsh, J. P., & Stolle, E. P. (2006). Re/constructing identities: A tale of two adolescents. In D. E. Alvermann, K. A. Hinchman, D. W. Moore, S. F. Phelps, & D. R. Waff (Eds.), *Reconceptualizing the literacies in adolescents' lives* (2nd ed., pp. 47–63). Erlbaum.

Mathew, K., & Adams, C. (2009). I love your book, but I love my version more: Fanfiction in the English language arts classroom. *The Alan Review, 36*(3), 1-7. https://doi.org/10.21061/alan.v36i3.a.5

Miller, M. (2021). *The Song of Achilles*. Bloomsbury Publishing.

Moje, E., Afflerbach, P., Enciso, P., Lesaux, N., & Kwok, M. (2020). *Handbook of reading research. Volume V*. Routledge.

Moje, E. B. (2015). Doing and teaching disciplinary literacy with adolescent learners: A social and cultural enterprise. *Harvard Educational Review, 85*(2), 254-301. https://doi.org/10.17763/0017-8055.85.2.254

Moje, E. B., Dillon, D. R., & O'Brien, D. G. (2000). Reexamining the roles of the learner, the text, and the context in secondary literacy. *Journal of Educational Research, 93*, 165–180. https://doi.org/10.1080/002206700009598705

Moll, L. C. (2014). L. S. *Vygotsky and education*. Routledge.

Moll, L. C., & Gonzalez, N. (1994). Lessons from research with language-minority children. *Journal of Reading Behavior, 26*(4), 439–456.

Morsy, L., & Rothstein, R. (2019). *Toxic stress and children's outcomes African American children growing up poor are at greater risk of disrupted physiological functioning and depressed academic achievement*. Washington, DC: Education Policy Institute. Retrieved from www.epi.org/files/pdf/164823.pdf

Mueller, C. (2019). Adolescent understandings of disability labels and social stigma in school. *International Journal of Qualitative Studies in Education*, *32*(3), 263-281. https://doi.org/10.1080/09518398.2019.1576940

Neilsen, L. (2006). Playing for real: Texts and the performance of identity. In D. E. Alvermann, K. A. Hinchman, D. W. Moore, S. F. Phelps, & D. R. Waff (Eds.), *Reconceptualizing the literacies in adolescents' lives* (2nd ed., pp. 5–27). Erlbaum.

Orellana, M. F., & Gutiérrez, K. D. (2006). What's the problem? Constructing "different" genres for the study of English learners. *Research in the Teaching of English, 41*(1), 118–123. https://jstor.org/stable/40171719

Paige, D. D. (2011). Engaging struggling adolescent readers through situational interest: A model proposing the relationships among extrinsic motivation, oral reading proficiency, comprehension, and academic achievement. *Reading Psychology, 32*(5), 395-425. https://doi.org/10.1080/02702711.2010.495633

Perry, K. H. (2012). What is literacy? --A critical overview of sociocultural perspectives. *Journal of Language and Literacy Education*, *8*(1), 50-71.

Raw, A. E. (2019). Normalizing disability: Tagging and disability identity construction through Marvel Cinematic Universe Fanfiction. *Canadian Journal of Disability Studies*, *8*(2), 185-200. https://doi.org/10.15353/cjds.v8i2.498

Reese, L., Arauz, R. M., & Bazan, A. R. (2012). Mexican parents' and teachers' literacy perspectives and practices: Construction of cultural capital. *International Journal Of Qualitative Studies In Education, 25*(8), 983–1003. https://doi.org/10.1080/09518398.2011.594818

Sáenz, B. A. (2012). *Aristotle and Dante discover the secrets of the universe* (Vol. 1). Simon and Schuster.

Scribner, S., & Cole, M. (1978). Literacy without schooling: Testing for intellectual effects. *Harvard Educational Review, 48*(4), 448–461. https://doi.org/10.17763/haer.48.4.f44403u05172x375

Shalaby, C. (2017). Troublemakers: Lessons in freedom from young children at school. The New Press.

Sharafeddine, F. (2013). *The servant*. Groundwood Books

Skerrett, A. (2015). *Teaching transnational youth: Literacy and education in a changing world*. Teachers College Press.

Skerrett, A. (2012). "We hatched in this class": Repositioning of identity in and beyond a reading classroom. *The High School Journal, 95*(3), 62–75. https://doi.org/10.1353/hsj.2012.0008

Skiba, R. J., Simmons, A. B., Ritter, S., Gibb, A. C., Rausch, M. K., Cuadrado, J., & Chung, C. G. (2008). Achieving equity in special education: History, status, and current challenges. *Exceptional Children, 74*(3), 264-288. https://doi.org/10.1177/001440290807400301

Steele, C. M. (1997) A threat in the air: how stereotypes shape intellectual identity and Performance. *American Psychologist, 52*(6), 613–629. https://doi.org/10.1037/0003-066X.52.6.613

Stewart, M. A. (2017). "I love this book because that's like me!" A multilingual refugee/adolescent girl responds from her homeplace. *International Multilingual Research Journal, 11*(4), 239–254. https://doi.org/10.1080/19313152.2016.1246900

Stornaiuolo, A., & Thomas, E. E. (2017). Disrupting educational inequalities through youth digital activism. *Review of Research in Education, 41*(1), 337–357. https://doi.org/10.3102/0091732X16687973

Street, B. V. (1984). *Literacy in theory and practice*. Cambridge University Press.

Street, B. V. (2012). Society reschooling. *Reading Research Quarterly, 47*(2), 216–227. https://doi.org/10.1002/RRQ.017

Shimura, T. (2011). *Wandering son*. Fantagraphics.

Tatum, A. W. (2014). Orienting African American male adolescents toward meaningful literacy exchanges with texts. *Journal of Education, 194*(1), 35–47. https://doi.org/10.1177/002205741419400106

Thomas, A. (2017). *The hate u give*. Gyldendal A/S.

Thomsen, S. R., Weber, M. W., & Brown, L. B. (2002). The relationship between reading beauty and fashion magazines and the use of pathogenic dieting methods among adolescent females. *Adolescence, 37*(145), 1-18.

U.S. Department of Education (2014). *36th annual report to congress on the Individuals with Disabilities Education Act, 2014*. Washington, DC: Author.

Valencia, R. (1997). Conceptualizing the notion of deficit thinking. In R. Valencia (Ed.), *The evolution of deficit thinking* (pp. 1–12). Falmer Press.

Waggoner, E. B. (2012). *Television and fanfiction online: finding identity, meaning, and community*. Gonzaga University.

Walters, T. S. (1994) Multicultural literacy: Mental scripts for elementary, secondary, and college teachers. *Equity and Excellence in Education*, *27*(2), 45-52. https://doi.org/10.1080/1066568940270209

Wigfield, A., Byrnes, J. P., & Eccles, J. S. (2006). Development during early and middle adolescence. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (2nd ed., pp. 87–113). Erlbaum.

Willis, Ika. (2006). Keeping Promises to Queer Children: Making Space (for Mary Sue) at Hogwarts. In K. Hellekson & K. Busse (Eds.), *Fan Fiction and Fan Communities in the Age of the Internet*. Mcfarland and Company.

Woodson, J. (2016). *Brown girl dreaming*. Penguin.

World Health Statistics. (2017). Monitoring Health for the SDGs, Sustainable Development Goals.

X, M. & Breitman, G. (1970). *By any means necessary: Speeches, interviews, and a letter*. Pathfinder Press.

Yang, G. L., & Yang, G. (2006). *American Born Chinese*. Macmillan.

Yoder, S. D. (2016). Pragmatism, Pedagogy, and Community Service Learning. *Michigan Journal of Community Service Learning*, *22*(2), 5-15.

Yon, D. (1994) The educational experiences of Caribbean youth, in: F. Henry, *The Caribbean Diaspora in Toronto: learning to live with racism*, pp. 120–147 (Toronto, University of Toronto Press).

Zambo, D., & Brozo, W.G. (2009*). Bright beginnings for boys: Engaging young boys in active literacy*. International Reading Association.