Pennsylvania Teacher Educator

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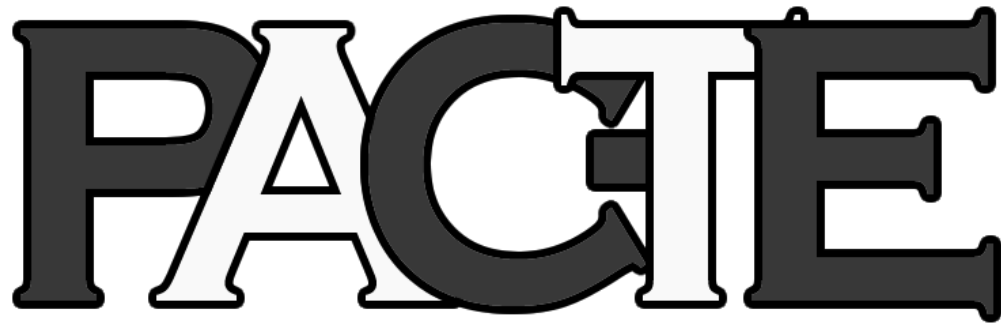## COLLEGES OF DISTINCTION

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Call for Manuscript Reviewers

The *Pennsylvania Teacher Educator* is looking for teacher educators who are interested in becoming reviewers for the journal. Each manuscript that is submitted to the journal undergoes a blind-review process from three peer reviewers. Consequently, we are always in need of good reviewers who return manuscripts to the editors in a timely fashion. **Members who are interested in becoming a reviewer should contact** pacte.journal@sru.edu.

Call for Papers

Fall Issue manuscripts due February 20
Spring Issue manuscripts due September 20

The Pennsylvania Association of Colleges and Teacher Educators publishes a peer-reviewed journal — the *Pennsylvania Teacher Educator*. Our journal is intended to provide PAC-TE members with a venue to capture current research that makes use of quantitative, qualitative, and/or mixed-methods approaches, as well as rigorous theoretical works that capture current research, advances, and changes in the emerging directions of teacher education. Publication decisions are made following a blind-review process. Starting in 2021, the *Pennsylvania Teacher Educator* will move to publishing two issues per year, allowing more flexibility for writers to conduct and to report their research throughout the academic year.

<u>Submission Guidelines</u>

· Manuscripts should be no more than 12 pages of narrative (exclusive of references, tables, and appendices), using the latest APA style, and double-spaced with one-inch margins.

· Manuscripts should be submitted as an e-mail attachment, sent to PA Teacher Educator at pacte.journal@sru.edu.

· A cover page should include the title of the article, a brief (no more than 50-word) abstract, the name, position, place of employment, mailing address, phone number, e-mail address, and a 2-3 sentence description of background and experience of each author.

· The title of the article should also appear on page 1 of the manuscript, but do not include the name(s) of the author(s) on page 1.

· Pages should be numbered consecutively, including the bibliography, but the author's name should not appear on the manuscript itself.

· Charts or illustrative material will be accepted if space permits. Such materials must be camera-ready. Photographs will usually not be used, unless they are black and white and of high quality.

· Authors are expected to take full responsibility for the accuracy of the content in their articles, including references, quotations, tables, and figures. The editorial board reserves the right to edit articles accepted for publication.

· Authors of manuscripts accepted for publication are asked to sign a copyright release to PAC-TE. This allows PAC-TE to publish the information in the *Pennsylvania Teacher Educator*, to publish the information in future PAC-TE publications, and to grant permission to persons or organizations that formally request the right to reprint the material in whole or in part.

· Authors of manuscripts accepted for publication are also expected to make a presentation about their article at the PAC-TE Teacher Education Assembly in the fall or spring.

There is no remuneration for articles accepted for publication, but a complimentary copy of the journal will be mailed to each author. There is no fee for the review of the manuscript.

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On behalf of the other editors of the fall 2023 issue of the *Pennsylvania Teacher Educator*, Tom Conway and Jason Hilton, I would like to thank you for reading our publication. As a teacher educator, administrator associated with teacher education, retired teacher educator, aspiring teacher educator, or practicing educator you likely seek answers, act, and move forward in this profession. That is who we are and that is what the authors of the articles within this issue have done. The articles that follow advance the conversation and build upon your knowledge of racial literacy, cultural responsiveness, behavior specific praise, transition planning, and just-in-time learning. The editors are grateful for the labor put forth by the authors for our benefit. Please consider contributing your own work to the next issue of the *Pennsylvania Teacher Educator* so we all can advance in an area that excites you.

"This is Us": Educators Rooted in Inquiry, Action, and Progress is the theme of the Fall 2023 Teacher Education Assembly (TEA) for the Pennsylvania Association of Colleges and Teacher Educators (PAC-TE). The Fall TEA for PAC-TE has always been an incubator of collaboration, insight, inquiry, action, and progress. Now more than ever, there is a need to advance teacher education within the Commonwealth of Pennsylvania as the traditional pool of future educators is shrinking but the need for well-trained educators grows. A podcast host that I regularly listen to often ends his interviews with, "Is there a question I failed to ask?" I like the question and it is one that often stumps the interviewee. I believe a similar line of inquiry would serve our profession well. What questions have we failed to ask? Who have we not invited into the discussion? How can we take this line of inquiry, turn it into action, and progress as a profession?

Thank you to all of those who submitted their manuscripts for review as your work, even if not published, helps us grow. Thank you to our associate editors and reviewers who are listed on page ii and page iii, respectively. Without their actions, this issue of the *Pennsylvania Teacher Educator* would not be possible. A great deal of gratitude needs extended to Janet McNellis from Holy Family University and Richard Mehrenberg from Millersville University of Pennsylvania. Janet and Richard have been associate editors of the *Pennsylvania Teacher Educator* for over six years. As associate editors they reviewed a half dozen or more manuscripts each year. They assisted the editors in the final selection of manuscripts and the authors with feedback on their submission. If you enjoyed an article in PTE or had one published in that last 6 years, Janet or Richard likely had their hands, or more specifically their eyes, on that article. Thank you, Janet and Richard, for helping our publication and teacher education in Pennsylvania progress over the recent years. Finally, junior education major at SRU, Grace Donnelly, prepared the cover for this issue and assisted with my communications with the authors. I am extremely grateful for her contribution of time and talent.

Yours in education,
Jim Preston, Managing Editor

Doubling Down: Collective Racial Literacy Development

Jen Bradley
Edwin Mayorga

Abstract: This paper chronicles the journey of how our educational studies department answered student demands for change and engaged in a departmental inquiry into antiracism and abolition that continues to this day. We conceptualize what emerged over this three-year journey as a framework and process for Collective Racial Literacy Development (CRLD).

About the Authors: *Jen Bradley (she/her/hers) is an Assistant Professor of Educational Studies at Swarthmore College. Edwin Mayorga (he/him/his) is a parent-educator-activist-scholar, and Associate Professor of Educational Studies and Latin American/Latino Studies at Swarthmore College (PA).*

As the protracted anti-Black attack on all things Critical Race Theory (CRT) has continued to shape the national and state context, the question of how teacher education should be preparing teacher candidates to navigate these tumultuous conditions remains an enduring challenge. In a time when picture books are being removed from classrooms (Friedman & Johnson, 2022) and the curriculum is being gutted to support a racist conservative agenda, K-12 teachers now find themselves teaching in the public spotlight. Yet less often discussed are the teacher educators who must also navigate these untenable conditions and prepare student teachers to go out into the field.

In the midst of these attacks, the Pennsylvania teacher education community remained focused on mobilizing to enact groundbreaking statewide competencies for *Culturally Responsive and Sustaining Education (*CR-SE), an amendment to Title 22, Chapter 49 of the Pennsylvania Code. Now official, these competencies require teacher candidates to reflect upon their own cultural lens, identify biases, and adopt practices rooted in equity, antiracism, and cultural responsiveness. The ideological tension between anti-CRT and anti-racist education has created an era of racial policy whiplash (Mayorga & Bradley, 2023) where educators at all levels are being pulled in opposing directions. We argue that in response to this moment, we as teacher educators must collectively double down on our antiracist and abolitionist pedagogies in the pursuit of justice.

This paper shares the story of how, in the wake of George Floyd's killing in 2020 and the centering of Black voices that arose in the aftermath, our department[1] at a small liberal arts college in Pennsylvania responded to our students' pain and call to action by engaging in a process of what we describe as Collective Racial Literacy Development (CRLD) that is driven by abolition as the aspirational "North Star." Our conceptualization of CRLD builds upon the literature on racial literacy and presents a collective process wherein we, as teacher educators, develop the skills needed to examine and combat racism, first within our own department and then with our students against broader systems of power.

Moreover, we contend that our approach to CRLD is shaped and propelled by our commitment to antiracist and abolitionist practices. Based on data we collected as part of a departmental self-study, we identify five elements at play during our emerging CRLD process. We then discuss how we moved from making changes in our own classrooms to engaging in broader advocacy efforts, and reflect on why we, as a department, are seeking to 'double down' rather than cowering in fear. In sharing our story, we offer one approach to grounding collective work as a department of teacher educators in antiracist and abolitionist praxis.

Background: @BlackAtSwat[2]

Although critical pedagogy has anchored our department since its inception, in the final days of summer 2020, faculty in our department saw posts on the student-run @BlackAtSwat Instagram account naming the painful experience of several BIPOC and first-generation students in our most popular departmental course. Pedagogy & Power:

[1] The co-authors identify as parent-educator-scholar-activists; one tenured male associate professor of Color and one non-Hispanic white, female (contingent) assistant professor who have each taught in the department together for 9 years.
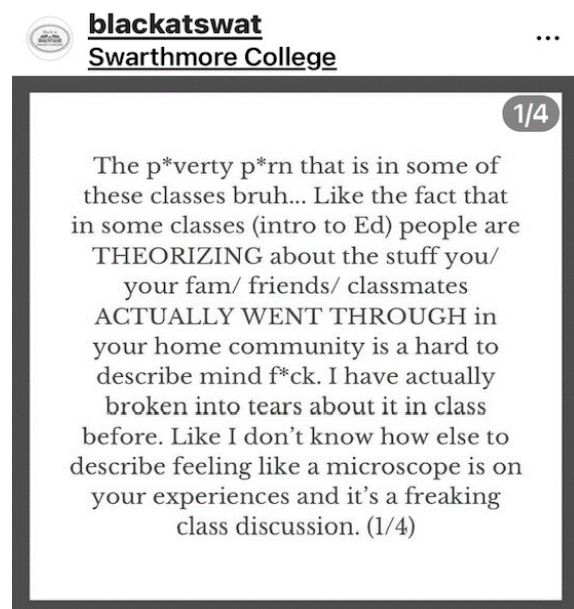
[2] Narratives from the @BlackAtSwat history & response have previously appeared in another publication.

Introduction to Education is a course designed to engage students in thinking about the intersectional injustices of the U.S. educational system, the limitations and promise of curriculum, the power of both people and policy, and the multiple perspectives that shape our experiences within and around education. It is a course that brings students from diverse backgrounds into our department, and it is a reason why many of them continue on into Educational Studies.

Yet when the @BlackAtSwat posts about the course appeared, we saw the pain, power, and truth in their words, because white supremacy is like that. It's constant work to uncover the layers, to fight against the bias of 'expertise,' and to really see the harm that even 'good intentions' cause. Even in collaborating with a wonderfully skilled and racially diverse group of colleagues over the course of several years, none of our recent investigations into the course led to what students so powerfully named in those social media posts (Figures 1 & 2).

Figures 1 & 2
Original @BlackAtSwat post, slides 1 & 2

blackatswat
Swarthmore College

1/4

The p*verty p*rn that is in some of these classes bruh... Like the fact that in some classes (intro to Ed) people are THEORIZING about the stuff you/ your fam/ friends/ classmates ACTUALLY WENT THROUGH in your home community is a hard to describe mind f*ck. I have actually broken into tears about it in class before. Like I don't know how else to describe feeling like a microscope is on your experiences and it's a freaking class discussion. (1/4)

blackatswat
Swarthmore College

...

With that, I understand that learning about the realities of what other people go through outside of what you have known is part of continuous awakening, or at least that has been my experience in times when I was privileged rather than oppressed. I have mixed feelings because these kids NEED TO KNOW the realities if they are gonna go into the world to be in positions of power. (2/4)

These @BlackAtSwat posts are representative of how our students, our Black, indigenous and other students of color in particular, had experienced their own form of racial policy whiplash through the classroom, the institution, and larger society. As these students pointed out, as constructed, this course was an "aha" experience where students learned about the ways in which the educational system that most of them grew up in revolves around a hidden curriculum of systemic and daily injustices. For (mostly white, privileged) students who benefit from that system, this can be a powerful and long-lasting awakening. And yet, for students who are directly harmed by that system (mostly BIPOC, first generation students, rapidly increasing in numbers at the college), seeing their experiences laid out, researched, theorized, discussed, and positioned as an object lesson for others was, as the post suggests, a "hard to describe mind f*ck."

We gathered data for our department and found that the percentage of students who identify as Hispanic American, African American, American Indian/Native Alaskan,

and Hawaiian/Pacific Islander American students at the college has ranged between 21-25% over the last five years, and the percentage of these "underrepresented minority" students in our department in some of these same years was nearly twice that of the college. Yet the whiplash created from the contradictions of centering BIPOC experiences in our coursework while sustaining the exploitation of "black suffering" (Dumas 2014) produced deeply problematic learning conditions.

While we remain accountable to harmful conditions within our classrooms, we also want to situate these posts and the experiences behind them in a larger historical moment. As the *Black Lives Matter* movement spread across and through summer of 2020, the @BlackAtSwat Instagram page was one of many Black@_____ pages created by students around the country, motivated by the need for Black students to document and share the institutional harm they had been navigating over the years, which often ran contrary to institutional self-depictions as inclusive and justice-centered spaces. In short, the racio-cutural backdrop in which our story takes place was the primary reason that we as a department felt required to take coordinated and collective, rather than individual, actions towards change.

Theory: Collective Racial Literacy Development & Abolition

Stevenson (2014) reminds us that "overcoming racism in schools requires more than rhetoric" (p.1); it requires direct action. As Stevenson states in his book on racial literacy, "while racial conflicts can be resolved, they cannot be resolved without knowledge or skill. The skill sets to resolve these conflicts constitute a literacy level of practice, but they can be taught within school curricula and family conversations"

(p.4). Price-Dennis et al. (2021) also consider a need for educators themselves to become 'racially literate.' They define racial literacy as "a skill practiced when individuals are able to probe the existence of racism and examine the effects of race as it intersects with institutionalized systems" (p.13). In our framing of 'collective racial literacy,' we borrow the terminology of racial literacy as well as the power of both conversation and the collective in constructing it. We contend that the very practice of working together as teacher educators to become antiracist or abolitionist is powerful, because even though we all hold different identities and positionality within this work, the strength of the collective at times helps us to be what Vygotsky (1967) refers to as "a head taller" than we might be as individuals.

Yet one of the questions that continued throughout our departmental work was, "how do we engage in the work of antiracism and abolition together without creating more damage?" How do we center the experiences, healing, and joy of BIPOC students and faculty who have been most impacted by curricular violence (Ighodaro & Wiggan, 2010) and white supremacy culture (Okun, 1999) while attending to the learning and unlearning that their white peers and colleagues need to do? In their critical investigation into white zones of proximal development, Leonardo & Manning (2015), grapple with similar tensions.

> "For people of color who are relegated to the 'zone of non-being' (Fanon 1967), which is ultimately a white tool of exclusion, and who are already ahead developmentally of whites when it pertains to race understanding, another kind of violation takes place. Their ZPD is not what drives mainstream pedagogy, and they are not challenged in the

process. To their sensibilities, it is insufficiently radical" (p. 10)

How do we hold this tension between varying experiences of power, race, and racial literacy as we engage in this antiracist departmental work across both race and generations?

CRT is helpful here, as it demands that we shift our focus beyond interpersonal notions of racism and antiracism and look to the impact of the systems at play. We understand CRT as an academic field of "scholarship and praxis" (Stovall, 2005 p. 198) that evolved out of critical legal scholarship and radical feminism during the late 1970s (Alemán & Alemán, 2010). Central to CRT scholarship is the understanding that racism is endemic, institutional, and systemic, a regenerative and overarching force maintaining all social constructs (Bell, 1980; Harris, 1993; Valdes et al., 2002); and, central to CRT praxis is a commitment to "deconstruct laws, ordinances, and policies that work to re-inscribe racism and deny people their full rights" (Ladson-Billings, 2013).

Our definition of CRT uncovers the ways in which the anti-CRT movement intentionally misrepresents CRT as a radical agenda "forcing white students to see themselves as oppressors" and contributes to "tearing people apart" (Honea et al., 2021). Paradoxically, this misrepresentation has only further fomented fear, erasing diversity and the realities of racial and social inequality. Just as antiracist diversity/equity initiatives and abolitionist movements emerged in the wake of the murder of George Floyd, politically and socially conservative organizations were advancing a series of local and state-level "anti-CRT" bills and laws that would restrict teachers from discussing racism, sexism, and other controversial issues (Schwartz, 2021). These "anti-CRT bills," position CRT as a

boogeyman that foments fear around engaging students in conversations about inequity and oppression, both historically and today. Many teachers and schools assert that they are "not even teaching CRT" in their classrooms (McCausland, 2021), which is important to consider. However, we see this as a defensive position that does not disrupt the misrepresentation of CRT. Instead, we assert that CRT aims to support student understanding of the sources and effects of structural racism in ways that are historically accurate as a means to working toward a more just society. To us, CRT is an essential tool for pedagogical practices that facilitate democracy and justice for all students.

In thinking of collective racial literacy development, looking at things more systematically, rather than at a solely personal level, CRT helps to stretch the individual (and thus collective). Chang and Viesca (2022) conclude that: teacher education researchers should focus on critical research that engages with a systems analysis, acknowledges the contextual complexities of learning to teach, and utilizes critical reflexivity to move toward a stronger practice/conceptualization of culturally sustaining pedagogy (Alim et al., 2020) that strives to "disrupt the inequitable status quo rather than reify it." (p. 29).

To disrupt the racially unjust status quo and enact a culturally sustaining pedagogy requires that we view ourselves as learners engaged in a shared struggle. Yet there is a deep paradox around how often we in the academy so often avoid positioning ourselves as learners. As we worked to develop our collective racial literacy, we found that antiracist and abolitionist learning required a shared commitment, because abolitionist work is about world-building with people while holding relationships at the core. Though everyone in our department held a personal commitment to

antiracism in the abstract, engaging with the sustained struggle together across three years has meant really pushing at the edges as we continue to peel back the layers of both collective and individual harm (Rienke Miller & Glass 2021).

Figure 3
Dimensions of Collective Racial Literacy Development

One of the things we are working to learn as a department is, "Where is our collective north star?" And then, "how do we get there together?" We are all headed in the same direction, yet we acknowledge that whether by way of identity, academic knowledge, lived experience, or a combination of all of the above, we are individually in different places. Our excavation of both self and program highlighted the reality that doing this work as a collective was both challenging and essential, and intentionally examining our collective work against both anti-racist and abolitionist lenses was instructive in understanding what it might mean for us as a

department to 'double down.' In our case, 'doubling down' on antiracism and abolition led to the emergence of a CRLD process (Figure 3) that includes five dimensions: Committing to Action; Keeping our Ear to the Ground; Aligning Curriculum, Teaching & Assessment; Exploring Joy & Healing; and Organizing for Change. We explore each of these dimensions in more detail in the next section of the paper.

Dimension One: 'Owning it' and Committing to Sustained Action

As faculty members, our immediate reaction to the @BlackAtSwat posts was

deep sadness and feelings of guilt that we had caused our students harm in this way. For some of our faculty members of color, it was a reminder of the "changing same" (Baraka, 1966) that some of us have felt in our relationships to higher education and teacher preparation, and that we too are continually implicated in maintaining institutional whiteness. We realized that due in part to the omnipresence of whiteness that occludes our capacities to see racism clearly, we had missed the very things we thought we were working to disrupt. Yet guilt is not restorative; we moved on to making amends, holding ourselves accountable, and committing to doing better. We (the co-authors) began by responding to the posts themselves (Figures 4 & 5), publicly acknowledging the pain and the harm and promising to address it as a department.

Figures 4 & 5
@BlackAtSwat Instagram responses from co-authors
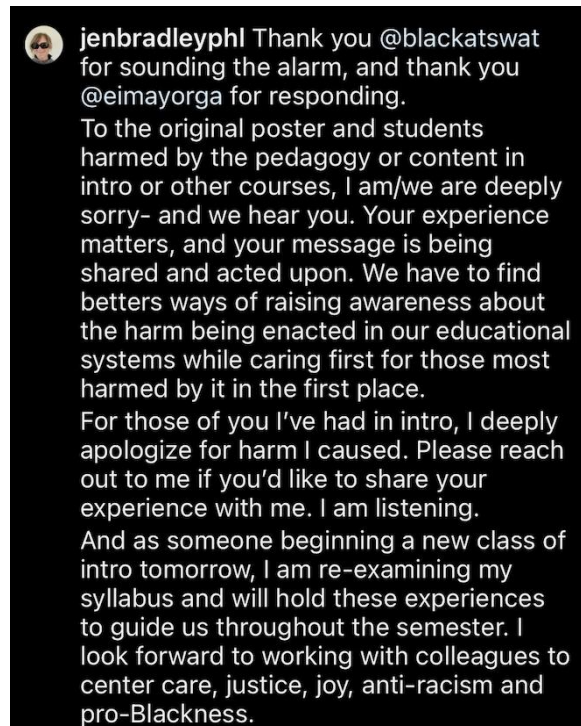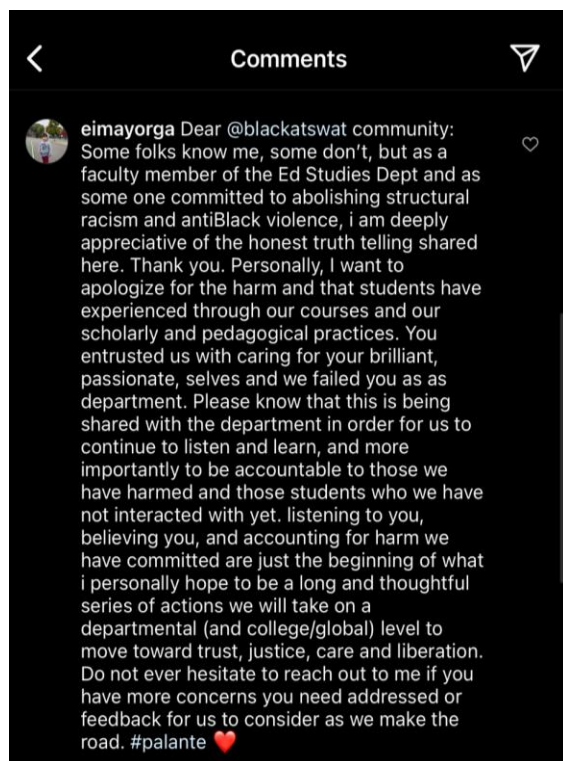
As we were called to account for the harm, we as a department had caused, we realized some important things while we worked towards repair. Our students taught us that if we are not actively working to see, think, and dismantle white supremacy, we will fall back onto what we have always known.

One example comes in the re-writing of our departmental goals. While these goals had been revised by our faculty just two years before, using a more systemic and race-conscious lens, we could see how they could easily be read as race-evasive. Our existing program overview and learning goals (which our syllabi are aligned to support) were steeped in criticality and praxis, yet there was no mention of justice or race. As we met to examine them with a more race-conscious approach in the fall of 2021, we made our language, and therefore our work, more explicitly anti-racist.

"The Department of Educational Studies is committed to anti-racism, social justice, and sustainability in the pursuit

of liberation for all people. We believe children and youth deserve educational environments where they can experience joy as learners and thrive. Our mission exists in partnership with broader global struggles against anti-Blackness, anti-immigrant policy and practice, as well as structural racism and other intersecting systems of oppression. As a community of students, faculty, and staff, we aim to be reflective, innovative and collaborative in how we contribute to a more just and equitable world." (Educational Studies Department Website)

"Learning Goal #2: Students will be able to use antiracist, liberatory, disability studies and critical race theory frameworks (among others) to think critically and generatively about key concepts in the field." (Educational Studies Department Website)

These steps are at once both small and large. Small, as they were long overdue and can be seen as incremental changes. Yet at the same time, we know they are larger than they appear. We are collectively shifting the stance of the department, naming the unnamed, and centering justice and antiracism. This shift is structural, getting at the root of where the departmental work with students is grounded; it commits us to sustained and focused action that will serve as a baseline for where we orient our syllabi, our fieldwork, and our partnerships.

In the tradition of both critical race praxis (Stovall, 2005; Yamamoto, 1997), accountability, and abolition, during the #ScholarStrike on September 8-9 in fall of 2020, one of the co-authors offered the opportunity to meet with teacher certification students to discuss student harm named in the @BackAtSwat posts. Henry and Riddick were recent alums and current student teachers who had already raised some of the issues they and other Black students experienced along the way, but they felt strongly that their concerns had not been fully addressed by the instructors or the department. They came to the meeting armed with receipts! Their departmental call to action was multi-faceted and ranged across courses, but specifically within the Power and Pedagogy course, they demanded that we address issues around how Blackness, bias, racism, and privilege were positioned within the course (Henry & Riddick, 2020).

Their work, paired with the #BlackAtSwat social media posts and the 2020 resurgence of the *Black Lives Matter* movement, sparked departmental conversations that led to a self-study and journey that is now a regular part of our departmental structure. For the next two years, our department spent two meetings per month working through the questions raised, the suggestions put forth, our orientation towards equity and racial justice, and how we've been complicit in sustaining precisely what we are trying to dismantle. The @BlackAtSwat Instagram posts and Henry & Riddick's detailed notes served as guideposts for early discussions that lie at the heart of revised goals, syllabi, and mission statement in the department. We are incredibly grateful to our students for sounding the alarm, and we have a renewed agreement that this work must be explicit, collective, prioritized, and ongoing. These intentional and focused conversations about antiracist and culturally sustaining practices are now baked into our departmental structure. And now as we have moved into a third year of this process, we have turned our attention to better knowing and understanding student's collective racial literacy development and finding ways to sustain the collective self-study work we've continued to accomplish as a department.

Dimension Two: Listening/Keeping our Ear to the Ground

Some form of our department has existed at the College for over 50 years now, and one of our most indelible characteristics has been our commitment to "keeping our ear to the ground" being attuned to the larger social context and to emerging scholars who can help us navigate it by way of developing theories and practices that help us understand and respond to social reality. Our commitment to antiracism, and feeling the pull of abolitionist teaching, as we have articulated in our mission, did not come solely as a response to student Instagram posts. Rather our departmental stance is part of an ongoing process of attending to evolving social realities. The brutal killings of Trayvon Martin in 2012 and Mike Brown 2014 were unfortunate harbingers of antiBlack violence, and the emerging Black-led protest, including *Black Lives Matter*, in the years that followed. While teacher education has, at best, been uneven in responding to changing social circumstances, our department sought to introduce new materials through our courses and that eventually led to introducing the work of scholar-changemakers like Love (2019), Muhammad (2020) and Baker-Bell (2020) into both courses and our curriculum and methods course for our student teachers. With our collective ear to the ground, listening to both our students and the larger movements fueling their activism helped to shape our pedagogy and syllabi.

Dimension Three: Aligning Curriculum, Teaching & Assessment

As we worked together as a department to examine our own practice and align our curricula and teaching with our antiracist work, we collectively reviewed

syllabi, assigned anchor texts throughout coursework, re-focused our student teaching seminar, and administered an antiracist concept inventory. These tools and practices allowed us to move beyond department meeting discussions and demonstrate our commitments in our work with students. What follows is a brief description of this work:

Syllabus Review

During the 2021-22 year we turned our attention to examining our course syllabi and our instructional practice and began preparation for our assessment of student learning that we are conducting in the 2022-23 academic year (Year Three). In order to examine our syllabi, we developed a set of guiding questions to examine our syllabi focused on our antiracist approach to review syllabi of a number of courses we offered during the academic year. During department meetings over the course of the year, we had faculty members present one or two of their syllabi to the group. Included in the presentation was discussion of three areas: course goals, the selection and organization of course content, and pedagogy and practice. The latter included assignments and field experiences. Following the presentations, we would use the guiding questions to collectively reflect on how the syllabi aligns with the mission statement and learning goals and discuss how different aspects of the syllabi might be modified to better align with our expanding antiracist approach and how changes in our syllabi would impact student learning.

Texts

As a collective of teacher education scholars, we began our work together by using texts to spark departmental discussions. While our first 'texts' in these conversations were the social media posts and feedback from students, we brought in

shared readings to guide our discussions. We have explored the characteristics of white supremacy culture (Okun, 1999), and read and discussed Kohli & Pizzarro's (2022) article on The Layered Toll of Racism in Teacher Education on Teacher Educators of Color, and these authors remind us that there is so much work to be done to undo and disrupt harm for both students and faculty of color. We plan to explore tools such as the "archeology of the self" (Sealey-Ruiz 2020) and "education journey mapping" (Annamma, 2018) in the future as ways to explore and acknowledge our positionality while helping us move together as a collective.

In addition to our work together as colleagues, one student-facing strategy has been to weave core texts throughout our teacher education courses. Love's *Abolitionist Teaching* is definitely an anchor text that appears throughout our department and program. Students first read chapter five in our *Power and Pedagogy*: Introduction to education course, but other chapters (or the whole text) are used in many other courses. Our program has also adopted Muhammad's *Cultivating Genius* (2020) as another core text across several teacher education courses. Rooted in the Black intellectual tradition, Muhammad's framework of skills, intellectualism, identity, criticality (and now joy) have helped both students and professors enact antiracist and abolitionist practices in the classroom. This revisiting and diving deeply into frameworks has shifted the foundation of our teacher education program: Muhammad's five elements serve as constant guiding questions for everything from classroom observations to lesson planning in our teacher education program. In addition to Love and Muhammad, teacher magazines such as *Learning for Justice* and *Rethinking Schools* and practitioner texts such as *Textured Teaching* (Germán, 2021), E*n Communidad*

(España, et al., (2020), *Lessons in Liberation: An Abolitionist Toolkit* (2021) and others are used throughout teacher education courses and have helped students make connections between antiracist and abolitionist theory and practice.

Refocused Student Teaching

In summer of 2022, one of the co-authors collaborated with a colleague at a nearby SLAC to co-design and revamp our student teaching (and their pre-student teaching) seminar. Our goal was two-fold: to anchor our syllabi in abolition and antiracist teaching and to connect our students to real-world examples of what those things look like in practice. In addition to using many videos, curricular materials, and texts mentioned above, we also curated a speaker series for our combined classes. Over the course of the semester, we invited Ismael Jimenez from the School District of Philadelphia to speak about Resistance through the Black Historical Consciousness. We also hosted a panel of teacher-activists across the grades and parent and student panels from a diverse range of students and families. This allowed our students to make connections with leaders, educators, and students who were asking similar questions about what it means to be antiracist and abolitionist practitioners. We also challenged our student teachers to design 'Radical Morning Meetings' to teach and share with their peers. They were asked to bring back theories from earlier classwork that resonated with them and find ways to engage their peers with activities that could be used with their own K-12 students. Their meetings included a bilingual lesson on *Mad at School* (Price, 2010), an indigenous investigation into *Red Pedagogy* (Grande, 2004) and sense of place/connection to land, and a vision board activity connecting to *PAR EntreMundos* (Ayala, 2018), among others.

Concept Inventories

We have developed and administered "Antiracism Concept and Practice Inventory (ACPI)" to help us examine student and student-teacher understanding of racism and antiracist practices. Often used in the Natural Sciences, Concept inventories (CIs) "are multiple-choice assessment tests ideally designed for two learner-focused purposes… to diagnose areas of conceptual difficulty prior to instruction, and evaluate changes in conceptual understanding related to a specific intervention" (Libarkin, 2008, p. 1). In our case we have piloted pre- and post-versions of our ACPI with our Pedagogy & Power: Introduction to Education students and our student teachers, where we ask them to respond to a series of questions to assess their understanding of the effects of structural racism on society and the classroom, and their perspectives on antiracist pedagogical practices in the classroom.

Taken together, the concept inventory, refocused coursework, texts, and syllabus reviews allowed us as colleagues to align our work with our antiracist goals and to do what we routinely ask of our students: put theory into practice.

Dimension Four: Exploring Joy & Healing

When we, the co-authors, first began teaching Pedagogy & Power: Introduction to Education nine years ago, one of the first additions we made to the first-class session was a viewing of Adichie's *Danger of a Single Story* (2009). In her Ted Talk, Adichie warns that when we tell only narrow versions of a group, we "rob people of dignity." Shifting her lens to the classroom, Hoover (2021) echoes Adichie's concerns, reminding us that, "It is imperative for children to know that Black

people experienced joy at every point in history." Student feedback let us know that we were falling short of our goal of telling more complete (his)stories of marginalized groups in the U.S. educational system, and one area we came to identify as needing more attention was: joy.

In the early months of the pandemic and shortly after the 2020 release of *Cultivating Genius,* Muhammad began using her social media platform to add a fifth pursuit: joy. In response to both the need and the pursuits, we have asked students (and ourselves) to consider what it means to plan for both criticality and joy. In a program steeped in critical pedagogy, our students quickly embraced the identity and criticality as pursuits they felt skilled in designing curriculum around. And yet, though we all loved the idea of joy as a pursuit, they- and we- found it more difficult to pin down, to plan for, to 'implement' when we asked them to consider the 5 pursuits for unit and lesson planning. We wondered if it was because joy is more difficult to plan for, or if it was because we didn't yet understand what joy means within the work of curriculum.

At the beginning of the fall semester of 2022 our student teachers did a jigsaw exercise using articles from the *Rethinking Schools* summer issue on Teaching for Joy. The editors quote Love and situate joy as part of the Black freedom struggle, noting that "joy is not an escape from the hard realities of our world, but a dive into them" (Recommitting, 2022 p. 5). We read these articles, pulling at the threads of the relationship between joy and struggle. We reflected on what brought us joy throughout our own education. Yet as student teachers planned throughout the semester, they frequently asked "is there joy here?" They admitted being unsure of how to capture something so 'felt.' Which is why, at the time of this writing, the co-authors feel

genuinely joyful to be able to browse the newly released Unearthing Joy (Muhammad, 2023). Like Love, Muhammad situates joy in relation to abolition and makes a case for why our search for joy is often so elusive. She argues that joy must be unearthed from systems and policies and curriculum that have been built to bury it, and we can feel this shift as we consider the framing of unearthing vs implementing joy. We see Muhammad's call to 'unearth joy' as a next step in our antiracism journey, learning- and feeling joy- alongside our students, and we plan to incorporate it as a departmental read during the summer 2023.

While joy is essential, learning about educational harm and injustice often feels anything but joyful. Teaching about educational fugitivity (Givens 2021), and resistance does help us to right the narrative a bit, but our students reminded us of the need for healing and care in teaching and learning at all levels. The second set of Instagram posts (Figures 6 & 7) was a very clear demand for more support for students whose personal and familial experiences are so often mirrored when we dive into the inequities and injustices of the educational system.

Figures 6 & 7
Original @BlackAtSwat post, slides 3&4

blackatswat
Swarthmore College

Idk what I want exactly because this is just a reminder that black trauma, raw exposure to how systemic oppression and anti blackness still effs with black ppl around the world is a catalyst for so many peoples "awakenings" (or at least that's how it seems when ppl talk about how an Ed or sociology class changed their whole perspective). Idk what I want exactly, but I know that WE NEED TO DO BETTER TO SUPPORT those who beEEEEeeen knowing these things bc they lived and/ or witnessed them firsthand. (4/4)

blackatswat
Swarthmore College

But also there needs to be mental health care and support baked into these classes for kids where this isn't just an just an educational experience. It actually brings feelings of pain that you can put faces and names and memories to. (3/4)

As a department, our antiracist inquiry led us towards healing and somatic practices as ways to care not only for our students and their students, but also for ourselves. While our student teaching institute had long included a session on

trauma-informed instruction, in 2022, we piloted a more healing centered and somatic approach. We invited Nia Eubanks Dixon from Creative Praxis to work with the student teachers, but we also invited Nia in to work with us as a department. Under Nia's care, the focus shifted from a predominantly academic understanding of trauma-informed practice to a much more grounded experience in how the self, artifacts, and feeling we bring into the classroom deeply shapes the experience of all students, but particularly Black and Brown students. We took note that our students strongly requested (and received) more work with Nia in this area, and how our BIPOC students in particular reported feeling seen, nourished, and excited to apply what they learned in their own classrooms. We are learning how these embodied practices, so often absent, are so essential to authentic antiracist teacher preparation.

Dimension Five: Organizing for Change

Another one of the simple yet powerful results of this work has been the realization that even as we (or especially because we) are situated within academia, working towards abolition requires that we think of ourselves as not just a department, but as a collective. We consider this work we do together as not 'just' teaching, but as organizing for change. That shift has emerged as a slow realization over several years. It's one we have yet to fully lean into, but both our public-facing work with students and our internal work as departmental colleagues is more intentionally and increasingly situated within larger movements and organizing.

In broadening our identity as a collective, we have built strong connections with the Sanctuary Movement, the *Black Lives Matter* movement, the ethnic studies movement, social justice union/teacher

education organizers, local teacher networks, and racial and disability justice collectives. We are active participants in the *Pennsylvania Educator Diversity Consortium* and the CR-SE Community of Practice, and we have convened a Building Antiracist White Educators (BAR-WE) faculty group at our college. We have nurtured these connections, and we are blurring the lines between our work as activists outside of the college and our work as teacher educators inside of it. This work in turn impacts the work we do and how we move together as a department. We view organizing as critical to both antiracist and abolitionist education, and we believe the same is true for the field of teacher education as a whole. We know that we cannot affect systemic change in isolation; it must be done in solidarity with others.

Conclusion: How and why we stay teaching

Given the sustained attacks on CRT and the untenability of teaching within this context of racial policy whiplash, the question of how we stay teaching is central to answering the call to 'double down'. As record numbers of teachers leave the field, the sustainability of the job is critical. In her reflections on *Emergent Strategy* (2017), Brown contends that "small is good, small is all. The large is a reflection of the small." In this context, we take that to mean that what happens in our classrooms- both at the college and in the prek-12 classrooms we are working to support- IS both the work and the world. Classrooms, schools, and even colleges allow us to create smaller universes where we can live into the world we are hoping to see. As Shalaby (2017) reminds us, "school shouldn't be preparation for life. For young people, it is life" (p. 207). This is equally true for their teachers and professors as well. Holding each other with

care while holding each other accountable, learning and building together, is essential for our continued work. The north star is not just about realizing abolition, but that we live together right now, in the in-between, in ways that are both free and freeing.

What does this look like? It means that we "cast down our bucket where we are" and attend to solidarity building communities and practices within our teacher education programs that center joy, imagination, healing, freedom-dreaming and co-conspiracy (Washington, 1895, paragraph 7). As we reflect on our evolving and emerging framework, we see how committing to action, keeping our ear to the ground, aligning curriculum, teaching and assessment, exploring joy and healing, and organizing for change helped us to collectively grow 'a head taller.'

We envision next steps on our departmental journey as ones where we circle back again with our students, more deeply unearth joy, explore the 'archeology of self' (Sealey-Ruiz, 2020), and closely examine and enact disability justice. We remind ourselves that while we are mostly directly accountable to our current students, our alums, and the students they have or will teach, we are also accountable to each other and to the larger historical struggle for justice. This requires that we work not just within the structures and syllabi of our teacher education program, but that we wade into the policy waters swirling around both preK-12 education and teacher education in this toxic moment. While it takes a lot of humility to sit with the fact that we are unlikely to experience the changes we have worked for, it is critically important to see the bigger arc of racial justice and our part within that. As Mayorga poignantly noted in our departmental review:

"I might not see abolition in my lifetime in the way that I imagine it in the world, but I think we can still contribute. I'm deeply committed to contributing to creating the spaces for some of those abolitionist freedom dreams to take shape, whether it be in the classroom with my students, in my own life and my family and our collective dreams, or my own individual ones. I'm committed to continuing to create and help cultivate those spaces so that maybe not my generation, but maybe my sons, my 12- and two-year-olds, will see it, and if not them, that you all continue this work as well, long after I'm gone."

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Stretching Experiences to Build Cultural Responsiveness of Pre-Service Teachers

Melinda Burchard

Abstract: This study investigated interactions of pre-service teachers' experiences and self-efficacy for teaching students with disabilities using culturally responsive practices. Extending a previous study, this study investigated what happens with intentional instructional changes. Pre-service teachers participated in courses about inclusion of students with disabilities, with embedded content related to cultural responsiveness. Students self-rated frequency and intensity of previous experiences plus the amount of professional development needed in components of culturally responsive practices in teaching children with disabilities. Analysis of Co-Variance (ANCOVA) revealed that variance in experiences explained over a third of the variance in the future teachers' self-efficacy to teach children with disabilities using culturally responsive practices. Furthermore, results demonstrated that with small instructional changes, future teachers grew significantly in culturally responsive experiences (d=.86, large) and their self-efficacy for teaching with culturally responsive practices (d=1.07, very large).

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Interactions and Gains in Cultural Responsiveness in Pre-Service Educators

Background

Teachers, regardless of specific certification areas or grade ranges, must design environments and employ pedagogy that welcome all their students. For the purposes of this study, "culturally responsive teaching means using students' customs, characteristics, experience, and perspectives as tools for better classroom instruction" (Will & Najarro, 2022). That means that pre-service teachers need opportunities to grow in experiences and an array of culturally responsive practices. This is especially important when teaching children with interacting identities or needs, such as disability intersecting with poverty, historically marginalized race or ethnicity, or linguistic diversity.

Rationale for the Study

The researcher identified a need to improve components of special education courses taken by all pre-service teachers. This specific study investigated interactions and student gains specifically related to teaching children with disabilities with additional marginalizing identities.

Building Teacher Self-Efficacy.

Self-efficacy in general is a type of confidence to set goals and achieve them, to anticipate positive outcomes (Woolfolk Hoy, 2007). Specific to teachers, self-efficacy predicts success and retention in the field of teaching. Self-efficacy is sensitive to interventions and grows in response to experiences and timely specific feedback, (Erdem & Demirel, 2007). Therefore, quality teacher preparation programs do not just impart information, but prioritize building experiences with engaging practices and field experiences and share feedback so future teachers grow in skills

and in their confidence, or self-efficacy to use those skills.

Competencies for Cultural Responsiveness across Teaching Disciplines

Many frameworks or standards for teachers include expected competencies related to cultural responsiveness. One of those, *The Framework for Teaching* (Danielson, 2013) is a framework used in many states and school districts. Specific subdomains of that framework promote and/or rate teachers' responsiveness to home culture or language, or interactions with diverse families (for examples, subdomains 1b, 1c, 2a, 2d, 3e, and 4c). Such competencies apply regardless of a teacher's certification expertise.

One state implementing related competencies is Pennsylvania. That state now requires professional development in schools and accountability in teacher preparation programs so teachers are prepared to meet nine competencies of *Culturally Relevant and Sustaining Education* (Pennsylvania Department of Education, 2022). Those competencies start with self-awareness of bias and perspectives and build to advocacy and actions toward change in personal practices and systems.

Cultural Responsiveness Specific to Teaching Children with Disabilities

When applying a lens of cultural responsiveness, the researcher explored how pedagogy differed when contextualized in teaching pre-service teachers to teach children with disabilities. For so many years, data revealed disparities in learning outcomes for students with disabilities by race, ethnicity, income, etc. A 2018 synthesis study revealed continued disproportionality in eligibility for specific learning disabilities by race and ethnicity,

and disparities in graduation rates when disability intersects with race (McFarland, et al., 2018).

The Council for Exceptional Children, the leading international organization for special education, publishes standards for initial practice (Berlinger & McLaughlin, 2022). Those standards include multiple competencies of cultural responsiveness, such as designing environments and experiences that support belonging for all students, selecting culturally appropriate assessments with limited bias, and improving the learning outcomes of diverse children with disabilities.

Broughton, et al. (2022) proposed a model when making instructional decisions to meet unique needs of students with disabilities who are also bilingual or multi-lingual. In the preparation phase of their Critical Consciousness Decision-Making Model (CCDM), the team starts with reflection upon teacher ideologies, then review of information, then analysis of context factors that might interact with delivery of a Free Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE). In the practice phase of the CCDM, teachers then design a culturally and linguistically appropriate plan, partner with families and communities, and practice and advocate for the unique needs of that student.

Osipova and Lao (2022) summarize pedagogy into three broad recommended practices for teacher preparation to teach culturally and linguistically diverse children with disabilities. Those recommendations included faculty collaboration in related teaching and scholarship, student collaborations such as co-teaching in field experiences, and university-school partnerships specifically aimed at enhanced culturally rich teaching experiences.

Scott, et al. (2014) implemented a model for improving pre-service special education programs, starting first with analysis of syllabi and documented evidences of where and how cultural responsiveness is being addressed within courses, then redesigning courses with specific content or tasks. Results from multiple surveys showed small gains in culturally and linguistically responsive practices, but emphasized importance of individual teachers taking ownership of personal culturally responsive practice beyond pre-service instruction. Furthermore, these researchers emphasized that future research examine "…students' attitudes and beliefs, knowledge and skills about multicultural competence with diverse populations within special education populations" (Scott, et al., 2014, 88).

More recently, Williams, et al. (2021) intentionally redesigned teacher preparation curriculum with frameworks of cultural responsiveness. Costa, et al. (2021) showed the importance of prompts to build shared vocabulary, thinking through and persisting with challenging questions, and practicing empathetic listening. Jones (2021) proposed similar emphasis on building a climate in which it is safe to process bias and solve problems collaboratively.

Specifically focusing upon cultural responsiveness within special education, Kelly and Barrio (2021) supported teachers through routines of repeated reflection. Layering lenses, McCall, et al. (2014) examined teacher perspectives concerning diverse identities paired with disability. Their study revealed the importance of authentic engagement with this intersection of need.

One set of scholars layered the lens of culturally responsive teaching to evidence-based practices such as teaching math or writing. They discussed options for implementation of specific evidence-based

practices to serve diverse students with learning disabilities (Freeman-Green, et al., 2021).

Students of one teacher preparation program completed pre and post surveys about both experiences and their self-efficacy to teach children with disabilities who are also linguistically or culturally diverse. Results demonstrated that variance in experiences explained nearly half of self-efficacy for such teaching practices. Contextualized in a university theme-year of reconciliation, those pre-service teachers made very large significant gains in both experiences and self-efficacy specific to teaching diverse children with disabilities (Burchard, 2022).

Certainly, special educators, and of course all teachers serving children with disabilities in regular education settings need to apply the lens of self-awareness of bias, and employ practices that support all learners, especially those who experience both disabilities and any other type of marginalization by race, ethnicity, religion, linguistic diversity, poverty, etc. Therefore, such intersecting identities add layers of complexity to teaching and thus require nuanced skills of cultural responsiveness.

Purposes of this Study

The purpose of this study was to investigate interactions and gains of pre-service teachers, specific to cultural responsiveness in teaching children with disabilities. Specifically, this study explored the interactions between experiences and self-efficacy as well as impact of instructional changes in one specific junior-level course taken by all pre-service teachers.

Methods

Participants

The research recruited participants from a mid-sized private university in the northeastern region of the United States. That faith-based university offers bachelors, masters and doctoral degrees, with approximately 2,500 students registered as degree-seeking undergraduates in the fall semester of 2022 (Messiah University, 2022). The researcher recruited participants from pre-service teachers enrolled in the junior-level courses about teaching students with high incidence disabilities. Though the university campus is rural, concurrent teaching experiences range from rural to suburban to urban settings.

The researcher applied strict inclusion and exclusion criteria. Inclusion criteria required students to be pursuing teacher certification, enrolled in a course about inclusion of learners with high incidence disabilities, and enrolled in a concurrent field experience. Exclusion criteria eliminated students who did not consent for their data to be included, or those who took courses as an elective, or who did not complete all instruments. Choosing not to complete all instruments was interpreted as one way of withdrawing from the study.

Application of inclusion and exclusion criteria resulted in 46 pre-service teachers. Demographic details include two students of historically marginalized race or ethnicity, four who disclosed disabilities, 11 males and 35 females. Participants included pre-service teachers pursuing varied types of teacher certifications (elementary grades; middle grades 4-8; secondary content grades 7-8; across grades content such as Family and Consumer Science, Health and Physical Education, Music Education, Art Education, and Special Education).

Instructional Methods

While the gains results of the previous study were impressively significant, those took place during a year in which the university theme of reconciliation included multiple campus events and speakers. That study revealed the importance of culturally responsive experiences toward building culturally responsive self-efficacy.

Therefore, for this academic year, the instructor reorganized two courses, one of which is required for all juniors proceeding toward teacher certification, both of which covers inclusion of students with disabilities. In each of those courses, the instructor encouraged participation in culturally diverse campus events; included specific lessons on cultural days; required reading about cultural responsiveness; provided explicit instruction about disparities and frameworks of cultural responsiveness to teach children with disabilities who are also diverse in poverty, language, race, or ethnicity; and engaged students in critiques, reflections, and discussions.

Course Credit for Campus Events

A good number of campus events related to diversity and even intersections of diverse identities. The course instructor reinforced participation in targeted diversity events through course credit, such as earning a weekly quiz score by uploading a selfie as proof of attendance.

Observance of Cultural Days

Course participants observed some cultural days, such as *Ruby Bridges Walk to School Day*, an observance of desegregation of schools (Ruby Bridges Walk to School Day, 2021). For *Indigenous People's Day*, a community member who previously taught on an Indian Reservation, read a children's book, *Stolen Words* (Florence, 2017), shared her experiences teaching on a reservation, taught some indigenous vocabulary words, and sang a traditional song. The instructor provided students with a calendar of holidays and cultural observances, which could be used in planning culturally responsive lessons.

Explicit Lessons

The course instructor updated research and data in delivery of lessons specifically about how disability interacts with other marginalizing identities. All students enrolled in one of the two courses and received the same amount of content and instruction specifically related to cultural responsiveness in teaching children with disabilities, nine hours of explicit lessons, with reflection questions embedded throughout other units of instruction, approximately three additional hours, 12 hours total.

In one three-day module, the instructor shared data and prompted reflection. Data addressed disability risks in poverty; increased risks of sexual abuse in certain disability categories; disproportionate disability eligibility by race, ethnicity, or poverty; disproportionate degrees of restrictive environments by race; the links to prison through disability and race; complexities in identifying disabilities for children who are linguistically diverse; biases against immigrants and refugees that may inhibit accessing special education; and disparities in the impact of a pandemic. To help students process how teachers might respond differently to various challenges of cultural responsiveness for learners with disabilities, the instructor first introduced those lessons with students sharing perspectives about their own personalities and ways they like to engage, then referencing state competencies for Culturally Relevant and Sustaining Education (Pennsylvania Department of

Education, 2022). On the third day, students wrote written responses to reflection questions. Then volunteers role-played an administrator interviewing teacher candidates about their plans to implement culturally responsive practices, especially as they relate to intersections with disability.

Critique of Children's Books about Disability and Race or Ethnicity

For a few class sessions, the instructor designed station activities to critique and discuss reflection prompts using children's picture books. The pre-service teachers used the *Finding Belonging through Children's Books Rating Scale* (Burchard, 2022a) to analyze interactions of race and ethnicity with disability using three sets of books. The first set featured main characters of diverse races or ethnicities who did not have disabilities. The second set featured children with disabilities of varied races. A third set of picture books featured main character children with black or brown skin who had disabilities of learning, behavior or communication. In small discussion groups, pre-service teachers analyzed representations of children with black or brown skin with disabilities, including with which types of disabilities. They then discussed teacher actions to promote identity and empathy using such books.

Two lessons involved engagement with picture books for two purposes, considering intersections of disability with race and ethnicity, and interactions of disability and migration experiences. The researcher shared those lessons through *Building Belonging and Empathy: Lesson Activities with Culturally Rich Children's Literature* (Burchard, 2023). For example, using books about refugee experiences, students discussed prompts, then painted a pebble similar to the one painted by one book character. Using books about migration stories, students reflected on their own family migration stories and colored illustrations. Community neighbors also illustrated migration stories. The instructor sewed each set of illustrations into a migration story quilt, one for the class, and one for the neighbors, which students then compared for experiences and expressions of emotion.

Instrumentation

During fall semester of the junior year, all students enrolled in one of two courses about inclusion of students with high incidence disabilities completed pre and post program evaluation surveys. To assess professional development needs and gains across the semester, the researcher used the *Culturally Responsive Special Education Experiences and Efficacy Scale, CRSEEES* (Appendix A) (Burchard, 2021). That instrument includes 29 items with two subscales of culturally responsive experiences and self-efficacy for culturally responsive practices. Students complete that survey in approximately ten minutes.

The first subscale includes 24 items asking educators to rate their previous engagement with specific culturally responsive teaching actions serving children with disabilities. Ratings include both frequency and levels of support used for such skills as building a representative classroom library, establishing culturally respectful class routines, and honoring cultures with respectful vocabulary.

The second subscale includes five items asking educators to rate the amount of professional development they need in components of cultural responsiveness as they teach students with disabilities. Those broad categories include informing one's teaching, designing a positive environment, adapting practices, engaging families, and problem-solving for individual needs.

The instructor allotted class time during the first week of classes and the last week of classes for completion of the CRSEEES through *Qualtrics* software. The first question asked for consent. Students who consented to participate in the study then completed the 29 items on the CRSEEES during approximately ten minutes. The instructor did leave the classroom during survey completion. During the last week of classes, students then completed post-assessment using the CRSEEES.

Culturally Responsive Components of Assignments.

The instructor curated updated assigned readings including articles about cultural responsiveness within special education. Students completed brief weekly quizzes on assigned readings by Thursday evenings, with follow-up discussions during Friday class sessions.

To existing assignments, the instructor added requirements with graded components specifically related to planning for and reflecting about specific teaching practices in serving students with disabilities that are culturally responsive. For one example, exam questions required essay responses to some of the reflection questions used during in-class discussions. For a second example, students wrote a paper about one documented issue of disparity for individuals with disabilities who also are diverse in race, ethnicity, language, poverty, etc. That paper required analysis of data about the problem, research about what is working to address the problem, and a proposal for their own personal actions to address that aspect of cultural responsiveness in their own teaching.

Study Methods

During one class session in the first week of classes, the researcher recruited participants from all students in the two courses. One question asked consent, so students who consented to participate then proceeded to the study questions. Participant recruitment and post-survey occurred during one class session in the last week of classes.

The researcher employed within-group quantitative methods, analyzing data through the Statistical Package for Social Sciences, SPSS version 27. Analysis included frequencies, correlations, Analysis of Co-variance of paired data (ANCOVA), as well as calculation of effectiveness of any gains comparing pre-assessment group means to post-assessment group means, through *Cohen's d* measurement of effect sizes.

Results

Correlation and Co-variance of Culturally Responsive Experiences and Culturally Responsive Self-Efficacy

Mean scores on the subscale of experiences correlated to mean scores on the subscale of self-efficacy $r=.492$, $p<.001$. Furthermore, results revealed significant one-way co-variance with 35% of variance in self-efficacy explained by variance in experiences, $F(1,45)=3.22$, $p<.05$. $R^2=.35$. This means the variance in one's culturally responsive experiences teaching students with disabilities explains 35% of the variance in self-efficacy for teaching children with disabilities using culturally responsive practices.

Effectiveness of Gains in Culturally Responsive Experiences

The researcher computed results into *Cohen's d* effect sizes to analyze within-group degree of change across standard deviation from pre-assessment to post-assessment. Though limited by the within-group study design, change across the semester resulted in large effect sizes for

educational research (Cohen, 1988; Kraft, 2019).

Students responded to prompts on a scale of 0 (for "I have not YET done this/ OR I CANNOT YET do this") to 5 (for "I do this regularly and provide assistance to others to do this."). Results showed participants' pre-assessment mean score for culturally responsive experiences at a relatively low mean of .74 (.68 σ). Further, results showed a post-assessment mean of 1.41 (.86 σ). Results showed mean gains in culturally responsive experiences of .66 (.68 σ). Such resulted in an effect size gain in culturally responsive experiences of *d*=.86 (Table 1).

Table 1
Effectiveness of Gains in Culturally Responsive Experiences and Self-Efficacy for Special Education Across one Semester

	Pre-Assessment Mean (σ)	Post-Assessment Mean (σ)	Gains Mean (σ)	Effects *d*
Culturally Responsive Experiences	.74 (.68)	1.41 (.86)	.66 (.68)	.86
Culturally Responsive Self-Efficacy	2.20 (.66)	3.07 (.94)	.87 (.88)	1.07

Effectiveness of Gains in Culturally Responsive Self-Efficacy

Students responded to self-efficacy questions asking them to assess their need for professional development. Responses ranged from 1 to 5 (1= "I'll take anything" to 5= "I feel ready to help others"). Results showed a pre-assessment mean score on culturally responsive self-efficacy of 2.20 (.66 σ) and a post-assessment mean score of 3.07 (.94 σ). These pre-service teachers made mean gains over one semester of .87 (.88 σ). In computation of degree of that gain, results showed an effect size gain in culturally responsive self-efficacy of *d*= 1.07 (Table 1). This means that across one semester, students demonstrated significant growth in self-efficacy for culturally responsive practices specific to teaching children with disabilities.

Discussion

Implications of Interactions between Culturally Responsive Experiences and Self-Efficacy

Similar to the approaches of other studies, this study started with program redesign (Scott, et al., 2014; Williams, et al., 2021). Consistent with previous models, the researcher emphasized shared vocabulary with routines for thinking and reflection (Kelly & Barrio, 2021; Costa, et al., 2021).

In an earlier study contextualized within a university theme year of reconciliation pre-service teachers' culturally responsive experience predicted almost half of the variance in culturally responsive self-efficacy for teaching children with disabilities (Burchard, 2022b). Consistent with those results, the variance in culturally responsive experiences of this cohort of pre-service teachers explained 35% of the variance in their self-efficacy to

teach children with disabilities using culturally responsive practices. These two studies together suggest that teacher preparation programs should prioritize engaging future teachers in authentic experiences with culturally responsive practices specific to students with disabilities.

Implications of Gains in Culturally Responsive Experiences and Culturally Responsive Self-Efficacy

Strong gains the previous year occurred in the context of a university theme of reconciliation. Strong gains across one semester this more typical academic year means that students actually experienced increased frequency of engagement or new culturally responsive experiences in teaching children with disabilities. Such strong effect size gains in both culturally responsive experiences and culturally responsive self-efficacy related to teaching children with disabilities encourages teacher educators to try specific instructional changes, such as reinforcement to participate in diversity-related campus events, explicit instruction about cultural responsiveness, use of guest speakers, engagement with children's books, and grading for components of cultural responsiveness within assignments. Instruction within the control of faculty can and does make a difference in building both experiences and self-efficacy to grow into culturally responsive teachers for children with disabilities.

Limitations

This study included a relatively small sample size. Such limits broad conclusions and suggests the value of scaling a similar study to a larger sample.

Of course, one key limitation is that this study occurred at one faith-based university. No assessment items asked students to identify political party, family income, or other such demographics. One observed characteristic of this sample is that many of the students represent generally middle-class conservative perspectives. Future research might ask detailed demographics to discern if a pre-service teacher's political views interact with willingness to adopt culturally responsive practices.

While instruction emphasized possibilities for field implementation, no assessment required demonstration of cultural competencies in concurrent field experiences. Therefore, assessments stayed primarily limited to self-ratings of experiences and self-efficacy, without assessment of practice.

While the researcher encouraged participation in existing campus events and engaged students with particular cultural days, still authentic cultural engagement in the community was quite limited for most participants. Previous research demonstrated the importance of authentic engagement in culturally rich community or field experiences (McCall, et al., 2014). That suggests outcomes of even greater gains with intentionality of authentic cultural engagement.

Next Directions and Importance

Clearly, an essential competency, teacher preparation programs must prepare teachers to teach with culturally responsive practices, including when disability intersects with other diversities that marginalize. Helpful studies might explore how teacher preparation programs in largely middle-class populations or rural settings might improve culturally rich authentic experiences. As states implement related educator competencies, next studies should explore which specific program changes impact learning outcomes of specific competencies.

Ultimately, the field needs in-service teachers to employ culturally responsive practices in teaching, including in teaching children with disabilities. Next directions in research must include assessment of needs and gains for in-service educators as well.

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Appendix A
Culturally Responsive Special Education Experiences and Efficacy Scale, CRSEEES

This instrument may be used at your discretion. Find a printer ready copy at
https://mosaic.messiah.edu/edu_ed/41/
Please reference the following citation:
Burchard (2021). Culturally Responsive Special Education Experiences and Efficacy Scale.
https://mosaic.messiah.edu/edu_ed/41/

This survey asks a total of 29 questions and should take about 10 minutes to complete. 24 questions ask about your experiences. The last 5 ask you to identify professional development needs. There are no right or wrong answers.

Part One Directions: For each of these statements, please select the response that BEST matches your current experience with this skill. If you don't know the meaning of a term or don't know if you can do the skill, choose "I have not YET tried this/ OR I CANNOT YET do this."

Response options for Part One Items:

I do this regularly and provide assistance to others to do this.=5	I do this regularly without support =4	I have done this a few times without support =3	I have done this a few times using support from someone with expertise =2	I have done this once =1	I have not YET done this/ OR I CANNOT YET do this =0

1. I **read articles** or chapters by experts on how **learning with a disability interacts with sociocultural factors** such as gender, race or ethnicity, English language learning, or economic status.

2. I **examine state and/or national** performance **data about how student disabilities interact with sociocultural factors** such as gender, race or ethnicity, English language learning, or economic status.

3. I **examine local progress monitoring data about how student disabilities interact with sociocultural factors** such as gender, race or ethnicity, English language learning, or economic status.

4. I use **students' comments** to understand **how learning with a disability interacts with sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status.

5. I use students' **nonverbal behaviors** to understand **how learning with a disability interacts with sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status.

6. I design my **classroom environment** with materials that welcome children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE Strategy posters showing learners with varied skin colors).

7. I build my **classroom library** with books that are inclusive of children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE book illustrations depicting a child with both a disability and garments specific to a particular ethnicity).

8. I **adapt vocabulary of texts** to meet the unique needs of children with **disabilities** with additional interacting **sociocultural factors** such as race or ethnicity, culture or faith, English language learning, or economic status (IE reading level of text, or names used in word problems).

9. I **adapt instruction** to meet the unique needs of children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE avoiding idioms or geographically specific terminology in examples).

10. I **adapt assessments** for children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE adjusting a rubric for group collaboration grade to acknowledge culturally expected gender roles).

11. I implement **class routines and rules that are culturally respectful** of **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE rules about how to dress or wear hair during physical education do not clash with culture or religion of my students).

12. I **adapt proactive behavior practices** for children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE respecting faith-based dietary restrictions for positive behavior events).

13. I **adapt behavior intervention practices** for children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE explicitly teaching code switching from a home culture to the social expectations in school culture).

14. I **honor cultures** of my children with disabilities in our class events (IE how we celebrate holidays, OR whether a child's face shows in photos used in class newsletters).

15. I **flex** how to **engage families** of my **students with disabilities** who also **struggle financially** (IE flexing timing of meetings when parents lose pay to miss work for meetings, OR communicating through paper instead of digitally).

16. In my **visual communications with families, I vary illustrations** showing varied **types of families** (IE showing families with foster or adopted children with varied skin tones).

17. In my **written communications with families**, I use **culturally sensitive vocabulary** (IE describing a teaching unit using the name of a specific Native American tribe).

18. I actively engage **parent priorities in planning** for a child's special education (IE incorporating IEP goals that honor the parent's hopes for their child's future).

19. I **provide translated documents** for **families** of children with **disabilities** who are **English language learners** (IE providing a copy of parent rights in Special Education translated into Spanish).

20. I **use interpreters** or interpreting services to make **communication accessible** for **families** of children with **disabilities** who are **English language learners or who use American Sign Language** (IE holding an IEP meeting using video sign language interpreting).

21. I **advocate** for unique needs children with **disabilities** with additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE organizing community Wi-Fi hot spots for access to on-line learning).

22. I **problem-solve** for unique needs of children with **disabilities** respecting additional interacting **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE collaborating with a neighborhood homework support program).

23. I **critique** how my own special education practices may be **biased** concerning **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status (IE expecting less of students of one gender or race, OR interpreting cultural expressions as inappropriate behaviors).

24. I **change my special education practices** as I learn about how disability interacts with **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status.

Part Two Directions: For each of these statements, please select the response that BEST matches your current need for professional development with this skill. If you do not know if you can do the skill, choose "I'll take anything."

Response options for Part Two Items:

I'll take anything= 1	I'm starting to get it, but I want lots more= 2	I do this, but I could benefit from more=3	I don't feel the need for more= 4	I feel ready to help others= 5

25. How much professional development do you need to **inform yourself how learning of a student with a disability interacts with sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?

26. How much professional development do you need to **design a positive environment** to support unique needs of **a student with a disability with** additional **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?

27. How much professional development do you need to **adapt practices** to support unique needs of **a student with a disability with** additional **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?

28. How much professional development do you need to **engage with families** of **students with a disability** with additional **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?

29. How much professional development do you need to **problem-solve** to support unique needs of **a student with a disability with** additional **sociocultural factors** such as gender, race or ethnicity, culture or faith, English language learning, or economic status?

Fostering Intentionality and Reflection in Pre-Service Teachers' Use of Behavior Specific Praise

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Abstract: Explicit training is needed to support pre-service teachers in use of preventive behavior management strategies including behavior specific praise. This descriptive demonstration focused on a training process in universal prevention strategies, specifically behavior specific praise, to improve preservice teachers' use of classroom management strategies across consecutive field-based experiences. Two examples were utilized to demonstrate a multi-component process of video self-reflection and coaching with feedback to impact growth in praise use over time. Future directions and implications are discussed.

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Introduction

Teachers encounter challenging behaviors daily in the classroom. Novice teachers entering the field often see challenging behavior as a major hurdle, feeling underprepared and ineffective. Challenging behaviors exhibited, including common or nuisance behaviors, can disrupt teaching and consume more than 80% of teachers' instructional time (Scott, 2017; Simonsen et al., 2008). Teachers often lack management skills needed to handle challenging behaviors such as verbal disruption, noncompliance, and off-task behaviors, which are the gateway to other occurrences of behavior (Alter et al., 2013).

Challenging behaviors can hinder learning and impact social emotional development, although it is important to remember that they ultimately serve a function (i.e., are purposeful) for the student. Challenging behaviors can be viewed as a skill deficit (can't do) or performance deficit (won't do), both signaling the need for instruction or support (McIntosh et al., 2006). When teachers use common language to describe challenging behaviors and can pinpoint the function of the behavior, then linkages to effective behavior reduction instructional practices can be made (Alter et al., 2013).

Evidence-based classroom management strategies, used universally at school or classroom levels, are the most effective way to decrease challenging behavior in the classroom (Beam & Mueller, 2017). Often when teachers use evidence-based behavioral practices effectively, students' undesired behaviors decrease, and they are more likely to be engaged in learning. Though, research suggests that universal strategies meant to prevent or reduce challenging behavior are often not applied consistently or with fidelity (Owens et al., 2020). This could be as a result of the lack of adequate training and support for behavior management.

Many special and general education teachers lack the preparation to select and implement effective behavioral strategies (Gable et al., 2012). In a study of the perspectives of special and general education teachers, both groups of educators acknowledged the importance and usage of large group classroom management practices as well as more individualized strategies, however both groups indicated that they were not prepared to implement classroom management practices, particularly individualized interventions. Simply exposing school personnel to various practices is not enough; school personnel must be instructed directly and systematically to a mastery level on each specific skill and demonstrate their competency in applied settings (Gable, 2004; Zoder-Martell et al., 2019).

The use of evidence-based practices to promote prevention and positive practices for students with challenging behavior has been supported for years and was included within the reauthorization of the Individuals with Disabilities Act (IDEA) in 1997. For example, in this reauthorization, IDEA was enhanced to promote a proactive approach to behavior by requiring the team to assess the need for positive behavior supports. It is well known that effective positive behavioral approaches within a tiered support framework are designed to meet the needs of students within schools by providing effective practices to all and systematically providing more support for the few students who may need increased intensity (McIntosh et al., 2023). The use of effective strategies for all students, commonly known as universal or Tier 1 strategies in a multi-tiered support framework, includes low intensity supports such as behavior specific praise, active supervision, precorrection, opportunities to

respond, and instructional choice (Beam & Mueller, 2017; Lane et al., 2015).

Use of Behavior Specific Praise and General Praise

Rooted in applied behavior analysis theory, specific contingent praise, also known as Behavior Specific Praise (BSP), has consistently been reported as a simple yet powerful strategy to acknowledge appropriate behaviors in a wide range of classroom settings (Alberto & Troutman, 2006). Recently, Royer and colleagues (2019) classified BSP as a potentially evidence-based practice when using The Council for Exceptional Children (CEC) *Standards for Evidence-Based Practices in Special Education.*

Behavior specific praise is a low-intensity, teacher-delivered classroom management strategy that is used to decrease problem behaviors and even prevent them from happening in the first place while creating a positive and supportive learning environment. This form of praise has shown greater effectiveness in increasing desired outcomes than the use of general praise alone (e.g., on-task, academic, social/emotional; Hattie & Timperley, 2007) possibly because the behavior specific statement focuses on the exact behavior the student has performed well and ultimately reinforces that behavior to be repeated (Ennis et al., 2020). This reinforcement will likely benefit both the target student and classmates by providing an example of what the teacher wants intentionally. BSP is typically used in conjunction with a package of universal behavior strategies. When viewed in a package, increases in use of BSP were linked to heightened praise to correction ratios (e.g., 4:1 positive statements to corrections) and increased on-task behavior (Zakszeski et al., 2020).

Overall, teachers may perceive their use of praise as sufficient, although natural rates of praise are typically low. In addition, rates of BSP are consistently lower as compared to rates of general praise (Reinke et al., 2013). For example, Reinke et al. (2013) reported higher rates of general praise to BSP, 25.8 general praise statements as opposed to 7.8 BSP statements per hour in kindergarten through 3rd grade classrooms. Floress and colleagues (2018) found that teachers used more general praise (28.9 praises per hour or 0.48 per minute) than specific praise (5.9 praises per hour or 0.10 per minute), reporting this as a statistically significant difference. It might be one thing to implement frequent and immediate general praise in response to student performance during instruction, however, to go the step further and add in specific behaviors or skills does not typically occur without training and continual support (Zakszeski et al., 2020). This may be especially true for novice teachers in the field, as there are a myriad of tasks, responsibilities, emotions, and situations to work through in finding one's footing as a new teacher.

Need for Explicit Training

Given the context-specific nuances of different learning environments, student dynamics that influence the classroom community, and necessity for on-the-spot decision making to address challenging behaviors, the importance of training teachers in classroom management practices cannot be understated. When looking more closely at some of the pivotal universal/Tier 1 classroom management strategies, explicit training and feedback are often needed for teachers to not only acquire the skill but use it fluently. Training with fidelity and using effective methods are key ingredients that

support educators' acquisition and maintenance of BSP use.

Ennis and colleagues (2020) classified coaching teachers to use BSP as an evidence-based practice. The authors defined coaching as "any form of ongoing support to facilitate teacher implementation of a practice, including self-coaching" (Ennis et al., 2020, p. 149). Other researchers have also reported performance feedback to increase teacher use of praise as a potentially evidence-based practice (Sweigert et al., 2016). Overall, researchers have reported that training teachers in use of BSP has taken on a range of forms, where many effective interventions take on a package approach to training including methods such as didactic methods, immediate and delayed performance feedback, or self-reflection (Ennis et al., 2020; Nagro et al., 2017; Vanlone et al., 2022). Use of technology is often integrated into training approaches for content delivery due to its accessibility and adaptability as well as potential for ease of cognitive load through more recent multimedia tools for training in the field of special education such as Content Acquisition Podcasts (CAP-TVs) (Rodgers et al., 2017). Additionally, performance feedback as part of a training package has been increasingly delivered using various methods of technology ranging from live bug-in-ear feedback to visual or video performance feedback, including video self-analysis (Ennis et al., 2020; Nagro et al., 2020; Scheeler et al., 2018). Establishing reflection as a practice is often first introduced in pre-service teaching and can continue into future training. Reflection, as a skill to improve outcomes, needs practice and feedback, especially for novice teachers (Lew & Nelson, 2016). Guided reflection, with video analysis, can improve pre-service teacher (PST) efficacy, confidence, and skills (Nagro et al., 2017).

In addition to ensuring that effective training approaches are being implemented, Royer and colleagues (2019) have also promoted a need for training to criterion before implementation occurs in the field. Taking this knowledge and applying it to intervention criteria prior to implementation in the classroom is something that Royer and colleagues (2019) have argued could improve treatment fidelity and maintenance in the field. Various strategies such as checking for understanding, scenario or role-play-based exercises, or targeted opportunities for receiving feedback could be implemented to increase acquisition and fluency when used in the field (Roscoe & Fisher, 2008). Further, Ennis et al. (2020) have also noted that training needs to extend beyond one session in order to promote teacher behavior change. Although, training teachers to increase use of praise has resulted in decreases in challenging behavior in the classroom (Floress et al., 2018), overtime, improved rates are not always maintained, resulting in a regression to previous habits and decreased praise use (Hawkins & Heflin, 2011). When feasible, multiple touchpoint training approaches may help to address the lack of skill maintenance in teachers' sustained use of BSP to provide for more frequent feedback, self-reflection, and overall attentiveness to implementation of this effective and preventative classroom management strategy.

To enhance preparation and understanding, an embedded training on BSP utilization with feedback and reflection was created. This universal strategy was selected intentionally because it is practically feasible and effective, described as a low-intensity strategy to teach as a manageable approach to improving classroom management practices (Ennis et al., 2020; Lane et al., 2015). Initial use, with just a few pre-service teachers, has provided some important points to consider to

increase outcomes. The process and an example demonstration are provided.

Demonstration Overview

This descriptive demonstration focused on the application and maintenance of evidence-based instructional practices with two pre-service teachers towards improved outcomes for PK12 students in inclusive settings. The focus directly aligned with existing needs in the field related to pre-service teacher training in delivery of praise (Ennis et al., 2020). Specifically, pre-service teachers were trained on the use of BSP as prevention for challenging behavior and to support effective instructional practice. The training process emphasized evidence-based features including virtual training modules with checks for understanding, video tagging to find instances of BSP as well as missed opportunities, and coaching with feedback. Having an explicit focus on both fidelity of implementation along with integrating technology in meaningful ways to enhance use and maintenance has the potential to change the trajectory for teachers entering the field with increased preparedness and confidence in classroom management skills.

A training process was developed by the university faculty serving as course instructors and supervisors across the practicum and subsequent student teaching experience. The initial need for the training was based on the lack of preparedness seen in student teachers' observations on lesson plan implementation and based on internal data that were collected demonstrating this as a reported area of need by pre-service teachers, cooperating teachers, and supervisors in the past. The key components of the training process included the following:

1. Creation of an implementation checklist (See Appendix A)- The BSP strategy was broken down into key components for implementation with high quality indicators that support effective use and fidelity of implementation. These components were influenced by the collective literature supporting universal strategies within a positive behavioral support framework (Lane et al., 2015). The components included using a praise statement that is positive, states the specific behavior that is observable, is delivered immediately after the desired behavior, and is genuine or sincere with appropriate voice inflection. The checklist was used as a data collection tool to tally general praise and BSP, and to capture the presence or absence of the components of BSP.

2. Development of a virtual training module- To present key content on BSP, a modified Content Acquisition Podcast- for Teachers with Embedded Modeling Videos (CAP-TV) format was created (Ely et al., 2014; Kennedy et al., 2017). In the module, BSP was defined and modeled. For example, videos found in Vanderbilt University's Peabody College IRIS Center's materials of BSP examples and non-examples were used as guides. The training video gave direct feedback to demonstrate what BSP looks like and does not look like. Next the student answered questions related to the videos that were assigned. Comprehension checkpoints were integrated within

the tutorial along with short YouTube videos of teachers implementing BSP components. The tutorial was uploaded to Edpuzzle.com where comprehension questions were embedded as a check for understanding for the participants to respond to as they watched the tutorial. This was used to increase fidelity prior to implementation in the classroom.

3. Implementation of a coaching process- Following their first lesson, students took part in a coaching session focused on reviewing the BSP strategy and providing a visual resource to summarize the strategy and assist with future implementation.

4. Reflection and goal setting- As a reflection on their implementation, video tagging procedures using GoReact (video assessment software) were reviewed. Pre-service teachers tagged the second and third lesson videos for occurrence of BSP and general praise, and for missed opportunities of BSP. After both lessons, individual feedback was emailed to the students that included their number of BSP examples, number of general praise statements, number of corrections, and whether the praise to correction ratio of 4:1 (Knoster, 2014) was maintained. For students that did not make progress after training from their baseline BSP use (Lesson 1) to their Lesson 2 use, a booster was implemented. The booster consisted of an additional EdPuzzle Training

Module (a training and formative assessment tool) and a video tagging activity. Pre-service teachers reflected on their use of this classroom management strategy in a goal-setting meeting at the end of the semester as a culminating activity. The combinations of approaches used over the course of a semester and emphasized in this coaching process addressed recent research suggesting that training should extend beyond one training session to promote teacher behavior change (Ennis et al., 2020).

Two pre-service teachers pursuing dual certification in Special Education PK-12/Early Childhood Education PK-4 were completing an inclusion practicum throughout the semester before student teaching. Two full days each week were spent in their practicum setting. One of the pre-service teachers, Rose, was placed in an inclusive kindergarten classroom while the other pre-service teacher, Kendall, completed her experience in an inclusive 3rd grade classroom (Note: pseudonyms are used to maintain pre-service teacher confidentiality). In the practicum experience, the students completed three lesson plans that were implemented, and video recorded. Videos were submitted to GoReact.com, enabling students to tag and timestamp critical features of strategy use within the lesson video. These videos were used as tools in the training process to enhance their classroom management strategy use. Their first lesson served as a baseline (Lesson 1) and the subsequent lessons served as post-training measures (Lesson 2 & 3)

Table 1

Example Progress

Name	Lesson	BSP	BSP + GP	4:1 ratio met?	Booster *
Rose	L1	3	19	N	N/A
	L2	4	55	Y	Y
	L3	7	33	Y	N/A
Kendall	L1	0	8	N	N/A
	L2	3	11	N	Y
	L3	7	27	Y	N/A

Note. * Only available after L2 for students who did not show progress in BSP use after training.

This example in Table 1 shows the potential impact of video reflection on BSP use. Overall, Rose showed positive gains after intervention. At baseline, Rose started with more reaction to students' undesired behavior, thus not meeting the desired praise to correction ratio of 4:1. For example, Rose gave 19 praises to 25 behavior corrections to her students. After video reflection, which involved tagging personal examples of BSP and missed opportunities of BSP, Rose achieved a 4:1 ratio in Lesson 2. She increased her overall praise to 55 statements and reduced her behavioral corrections to 9, demonstrating her increased use of the desired universal strategy and possible response to the feedback and reflection process implemented. Rose's growth in BSP from her baseline to Lesson 2 and then again from Lesson 2 to Lesson 3, shows use of prevention and intervention within her instruction and awareness in the appropriate use of BSP, which could suggest an increased awareness in universal classroom management supports.

At baseline, Kendall fell short of meeting the 4:1 ratio. Similarly, to Lesson 1, Kendall also did not meet the 4:1 ratio in Lesson 2. In Lesson 2, she improved in providing more praise than in the first lesson and continued to work to improve this balance. Although Kendall was not able to meet the 4:1 ratio in either Lesson 1 or Lesson 2, she made significant growth from baseline to her Lesson 3. In her third lesson, Kendall increased by 19 praise statements to a total of 27 praise statements and used only five behavioral corrections. In this lesson she did meet the 4:1 ratio. This suggests that Kendall's awareness of BSP and how/when to possibly use it had increased from her baseline. In particular, Kendall shifted her use of praise to favor BSP as opposed to her early use favoring general praise. For example, of the eight total praises in her baseline lesson, all were general praise statements, none of them were BSP. However, in Lesson 3, Kendell showed growth in both her use of BSP as well as total praise.

Both Rose and Kendell shifted their practice in distinct ways. For

Rose, she came in with some use of both BSP and general praise and showed growth in these areas over time although still needing a booster for additional support after training. Looking at Kendell's response to training, she started with little to no use of BSP and general praise but was able to make growth over time while still needing the booster for additional support after the initial training. Overall, both pre-service teachers increased in effective implementation of the 4:1 ratio and greater use of praise, specifically BSP.

Summary, Limitations, and Future Directions

There is a clear need for training and support of new teachers in classroom management practices. Classroom and behavior management continue to be areas of challenge for novice teachers in the field and although teacher preparation programs and in-service training may touch upon universal classroom management practices broadly, comprehensive training on individual prevention strategies, including use of BSP, may be helpful in increasing skill acquisition and maintenance. Teacher preparation programs can bring greater awareness to the use of BSP given the significance of its impact on teacher behavior and student performance. Training in BSP can also give rise to an intentionality in delivering more praise in general, therefore supporting the implementation of the 4:1 ratio as an effective practice.

In the future, teachers need to be explicitly taught about effective fidelity of implementation in conjunction with feedback and reflection for continued and improved use. Studies of this process fully used would help to better understand the strengths and needs of the process. The examples that were introduced give some preliminary information on use for these two pre-service teachers and give some initial context for implementation. In moving forward, and after iterations with larger samples, it may be helpful to add a self-checklist to be used in conjunction with the video tagging so the pre-service can unpack what was done and what was missing. It is possible that taking more video and having more data to utilize for feedback and reflection may yield stronger outcomes.

As an area of continued investigation, improvements in implementation and efficacy may depend on how much and what type of coaching or feedback is used. For example, in the future, investigations that help to understand the dosage of coaching that is minimally needed to see shifts in practice for increased use of BSP are needed. In addition, testing different methods for training associated with growth initially, when pre-service teachers have had less classroom experience, and then later in their field-based time when they are more fluid in their teaching, may show differences in BSP use. Another way to improve the process may be to look at the type of boosters or re-teaching implemented, including the timing this occurs, additional practice or feedback integrated, and the criteria/goals set in reference to the literature on praise rates to justify such follow-up.

This preliminary investigation had several limitations that need to be accounted for in order to understand

the context of the preliminary findings. First, two examples were identified to make specific points related to the strength of the process. The example cases were from a convenience group pulled from a setting used for placement of this practicum specifically. Within this descriptive demonstration, although there was some change in use of BSP and general praise with the use of just a few feedback points specifically tied to lesson plan teaching, pre-service teachers who were not responsive may have needed increased feedback and coaching. There was limited opportunity for continuous or daily feedback in this setting.

Integration of a training process with high impact components should be taken into consideration. In this descriptive demonstration, several evidence-based training methods such as CAP-TVs, performance feedback, and coaching were used. Pre-service teachers showed growth in their use of praise (whether it be BSP overall or general praise as a tangential effect), though it was difficult to target which training component impacted the results. However, the use of performance feedback through emailing post-lesson data tables did enhance pre-service teachers' ability to reflect and identify examples in their own practice through video tagging. Although goal setting in the specific area of BSP was not required during their practicum experience, when given the opportunity to reflect on goals for the future, pre-service teachers self-selected BSP as a part of their next steps for continued practice.

Training in BSP can easily be implemented within teacher preparation programs and strategic, data-focused feedback opportunities should be situated in field-based experiences to support intentionality of use and future maintenance. By investing time prior to student teaching through repeated practice and with frequent feedback opportunities in universal classroom management practices such as BSP, teacher preparation programs can influence pre-service teachers' awareness and intentionality. Repeated self-reflection over time in these pivotal areas has the potential to impact their future decision making in assessing and responding to challenging behaviors using universal classroom management strategies.

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Preparing Pre-Service Teachers for Special Education Transition Planning

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Abstract: This qualitative research explored pre-service teachers' understanding of special education transition planning. Findings suggest pre-service teachers increased their understanding of transition planning, accessing post-secondary services, and supporting students obtaining and maintaining employment. By including expert community members, pre-service teachers made connections to the content and complexity of this process.

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Introduction

Transition planning for students with disabilities is a critical component of the Individualized Education Program (IEP) and is mandated by special education law. There are three areas that are supported by the secondary transition plan: post-secondary education and training, employment, and independent living. These areas are to be addressed within the IEP and based on student strengths, interests, and results of formal and informal transition assessments (Plotner et al., 2017). As outlined within IDEA (2004), the age of 16 is when transition planning should begin for individuals with disabilities, however, within the commonwealth of Pennsylvania, as determined by regulation, students with disabilities begin the transition planning process at the age of 14 (Harrison, et al., 2017). Many secondary special education teachers do not feel prepared in effective transition plan writing and special education preparation programs show a lack in the instruction and training on transition standards, transition planning, and documentation of transition planning within a student's IEP (Anderson et al., 2003; Black et al., 2000). Existing research shows a growing need for instruction and curriculum in special education preparation programs focused on transition planning (Conderman & Johnston-Rodriguez, 2009). Pre-service teachers need specific training prior to leaving their teacher preparation program in order to support students with disabilities during transition planning.

Review of the Literature

When evaluating various components of post-secondary transition planning, special education law mandates transition planning for students with disabilities when they reach the age of 16;

however, in Pennsylvania, this must begin at 14 (Pennsylvania Department of Health, 2013). As part of Pennsylvania's State Performance Plan, Indicator 13 monitors the requirements of the transition plan within the Individualized Education Program (IEP) and holds its own requirements within the compliance monitoring expectations for school districts within the commonwealth of Pennsylvania (Harrison et al., 2017). However, students with disabilities have been found to be unprepared for a successful transition to the post-secondary environment (Hendrickson et al. 2017). Riesen et al. (2014) summarized data from the National Organization on Disability (2010) that explained that individuals with disabilities are employed at a rate of 21% compared to 59% of individuals without disabilities. Students with disabilities are unprepared for post-secondary education and the independent living and self-advocacy skills required for a successful transition to the post-secondary environment (Hendrickson et al., 2017).

Regarding transition planning at the secondary level, research focused on three main areas: post-secondary education and training, employment, and independent living (Harrison et al., 2017). Within IEPs at the secondary level, IEP teams should be addressing these main areas and ensure that goals are based on the individual student's strengths, interest, and result from formal and informal assessment (Plotner et al., 2017). It is critical that special education teachers possess the essential knowledge and skills that empower them to effectively plan and deliver transition services.

Pennsylvania Training and Technical Assistant Network (PaTTAN, 2018) describes the secondary transition process as a "bridge" to adult life. A six-step process is used to develop the IEP and guide parents, students, service providers, and educators to prepare students for their next steps

(PaTTAN, 2018). This allows students to explore the three main areas of transition: post-secondary education and training, employment, and independent living (Hendrickson et al., 2017). Through assessment, student present levels, building partnerships, planning, writing goals, and progress monitoring, the transition team can build an educationally meaningful plan to support the student's transition to adulthood (PaTTAN, 2018).

Research has shown that secondary special educators feel poorly prepared to support and plan for most transition needs of their students (Swindlehurst & Berry, 2023). A majority of secondary special educators reported receiving transition training within the field and believed they were unprepared to engage in effective transition curriculum and instruction (Greene & Kochhar-Bryant, 2003; Morningstar et al., 2008). When studying teacher preparation programs, Anderson et al. (2003) reported that less than half of the preparation programs in their national study addressed transition standards and 45% offered a transition course. Conderman and Johnston-Rodriguez (2009) explained that beginning secondary special educators believed they were poorly prepared in using instructional grouping systems, designing assessments, and supporting student access to the general education curriculum. Within the current research, many investigators point to the need to better support teachers and call for more research to better recognize how to prepare teachers accordingly.

Purpose

Transition planning is an important part of a secondary special education teacher's job. Special education law mandates starting at age 14 and specific transition plans need to be written into the IEP to support students as they transition into the post-secondary environment. Special education preparation programs need to include specific training and instruction related to transition planning for their pre-service special education teachers in order to better prepare future secondary special education teachers (Black et al., 2000; Plotner et al., 2017). Research shows that current secondary special education teachers feel unprepared to support and plan for transition needs of their students (Black et al., 2000). The purpose of this study was to survey pre-service teachers on their current knowledge of the special education transition planning process. Surveys were completed before and after attending a special education conference on transition planning to find out what pre-service teachers knew before attending the event and what new knowledge they learned from the event.

Topics of the conference included transition planning and college, early intervention transition, a presentation about the services and supports provided by the Office of Vocational Rehabilitation (OVR), and best practices in transition planning. In the presentation regarding transition planning and college, the executive director of the learning support services explained pertinent laws and regulations for students with disabilities to receive supports and accommodations while in the college setting and the process of accessing these supports. During the presentation regarding early intervention transition, an early intervention preschool teacher explained the process of transitioning from birth to three-year-old supports to preschool aged supports as well as preschool aged supports into elementary aged school supports. The presentation by OVR reviewed the services, process of application for supports, and types of supports provided locally by support counselors for adults in a post-secondary setting as well as early reach supports for

students with disabilities in secondary education setting. Finally, the presentation on best practices in transition planning was provided by a transition coordinator and special education supervisor. Based on previous research and practice in the field, speakers defined transition planning, support and actions taken by teachers in both the elementary and secondary setting, and involvement of Individualized Education Plan (IEP) team members including parents. This conference took place over a three-hour time period with speakers presenting for 30 to 45 minutes on each topic.

Methodology

Participants

All participants were pre-service teachers and attendees of a special education conference regarding transition planning. There were a total of 11 participants in the pre-conference survey and six participants in the post conference survey. This conference was held at a small, Catholic university in southeastern Pennsylvania in April 2022. These participants were over the age of 18, had less than five years of experience in special education, and had a high school diploma. Participants were students enrolled in a teacher education program.

Data Collection

In March and April of 2022, researchers formulated a pre (Appendix A) and post (Appendix B) online Google Forms survey for participants to complete prior to the start of the conference and at its conclusion. The pre-conference and post-conference surveys contained the same 20 four-point Likert-scale questions. The post survey also contained five open ended questions at the end of the survey. For the pre-conference survey, some of the questions included, "Please answer the following questions using the Likert scale

below: I understand the transition planning process;" and "please answer the following questions using the Likert scale below: I feel that the outside agency representative(s) present at my student's IEP meetings had knowledge of my student's strengths and needs." The questions were similar for both the pre- and post-surveys to determine what the participants learned as a result of attending the conference, comparing their answers.

Data Analysis

Following the completion of the surveys, the data was analyzed using descriptive statistics through the Google Forms analyze results feature. By examining the Likert-scale question responses, researchers were able to identify specific areas of transition planning that participants were familiar with prior to the conference and see if they gained further understanding on the topic as a result of attending the conference sessions. Additional themes were developed and categorized based on participant responses to open ended questions in the post-survey.

Key Findings

There was a total of 11 participants who completed the pre-conference survey and six participants for the post-conference survey.

The results from the pre-conference survey revealed that 100% of participants felt comfortable with teaching a student about their disability as well as their strengths and weaknesses (Table 1). 90% recognized the differences between the services available for students in K-12 settings compared to the services for students in the postsecondary setting. When considering their own education, 81% of participants felt they received adequate training in their teacher education program.

72% of participants disclosed that they could adequately prepare their students to obtain and maintain competitive employment and provide input when prior to developing a student's transition plan. 81% believed they could assist their student with accessing services in the postsecondary setting. 72% understood the role of the Office of Vocational Rehabilitation in postsecondary planning for students with disabilities. 81% expressed that they could prepare and provide input to the IEP team prior to an IEP meeting with information on each of the agencies that would be attending the IEP transition planning meeting. 72% stated they felt the outside agency representatives that would attend a student's IEP meetings would be knowledgeable of the student's strengths and needs. 90% believed they could teach a student specially designed instruction as it is listed in their IEP, address parent concerns regarding postsecondary services, and help the student meet the goals that were determined in their transition plan.

Following the conference, participants filled out the post-conference survey which included many of the original questions in addition to a short-answer section. Comparing the pre-conference survey and the post-conference survey results, there was a 0-28% increase in positive scores for all 16 questions. There was no decrease in any areas in the post-conference survey. 100% of the participants were confident in transition planning after attending the conference. The questions with the biggest change were "I feel comfortable giving my input regarding a student's transition plan prior to it being developed;" "I understand the role of the Office of Vocational Rehabilitation in assisting students after graduation from high school;" "I can adequately prepare a student to obtain competitive employment;" "I can adequately prepare a student to maintain competitive employment;" and "I feel that the outside

agency representative(s) present at my student's IEP meetings had knowledge of my student's strengths and needs.

Key themes from the short-answer section of the post-conference survey included the importance of "communication," how the information "helps prepare in-service teachers for the future," and that the conference was "important and highly needed." Participants felt everything shared in the conference was beneficial. In regard to areas that should be included in the training, participants shared that they would like "parent input" or "specific accommodations for behavioral concerns." For future training, participants added that they would like it to be "more interactive."

Limitations

There were several limitations of this study. First, all participants were undergraduate preservice teachers at a small-sized university. Students participated in this study following one day of a conference on the topic. This study also relied on the perceptions of the effectiveness of the conference rather than a particular set of outcomes measures that more directly assess a new teachers' preparation for the field. This study also had a very small sample of respondents. There were only a few participants who chose to participate in this study. Because the sample size of the participants was so small, this research cannot be generalized to other populations of pre-service teachers. A larger sample size would have provided a deeper insight into the perceptions of pre-service teachers on the effects of the transition conference on their preparation to support students with disabilities during the transition process. Recognizing potential limitations of this work, future research will attempt to mitigate these limitations.

Discussion

This transition conference had a positive impact on pre-service teacher understanding of the transition planning process as well as aided in their preparation for supporting students with disabilities as they transition out of their secondary education placement. Participants' written responses at the end of the post survey also shows the positive impact of this conference. Of the 6 participants in the post survey, 100% reported strong agreements with their understanding and skill levels in the transition planning process and supporting future students with disabilities in this educational area.

Pre-service teacher participants had the largest amount of growth in understanding of the post-secondary education and training, employment, and independent living area of the survey. This data is notable because of the unique nature of the conference in which post-secondary transition community members spoke directly to participants from their own personal experiences and knowledge. The conference speakers, who were outside resources from the traditional pre-service teacher preparation program, were pivotal components to furthering pre-service teacher understanding of this transition planning process. Through the introduction of community members who specialize in post-secondary transition planning, the conference was able to bridge gaps of knowledge in pre-service teachers' understanding to create a holistic view of this difficult process for students with disabilities.

Recommendations for Practice

Teacher Preparation educators should continue to provide education in these pivotal areas of transition planning in order to better prepare future teachers for the transition planning process. As most participants found this training to be beneficial, continuing to grow pre-service teachers' understanding of transition planning may lead to increased success in this area for students with disabilities. Teacher educators should increase the amount of content embedded in pre-service teacher coursework on transition planning. Content on this topic within coursework could include case studies, access to outside agency providers and other experts in this specific area, and project-based learning on completion of transition planning documentation. One final recommendation would be to increase the variety of information in conferences like this in order to broaden the depth of student understanding on this complex topic as well as to expand the audience of potential conference attendees (and survey participants) to include in-service teachers and administrators.

Conclusion

This research is one example of how to increase pre-service teachers' understanding of the special education transition process. The findings showed all participants increased their knowledge of this process with the most growth in the area of post-secondary education and training, employment, and independent living. Through the inclusion of community members with expertise in the areas mentioned above, pre-service teachers were able to make strong connections to the content and complexity of the transition planning process. We recommend using this type of training, with real-world service providers presenting actual practices from the field, in pre-service teacher preparation programs.

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Appendix A

Pre-Survey

1. Consent To Participate (Mark only one oval)

o   I agree to participate in this study. I understand that by providing my consent that my responses will remain confidential. (Continue to the survey)
o   I do not agree to participate in this study. (Please exit the survey).
o   Demographics

2. I am 18 years old or older (Mark only one oval)

o   Yes
o   No

3. What is your current role in the transition process for students with disabilities? (Mark only one oval)

o   Pre-service teacher (student)
o   In-service Teacher
o   Administrator
o   None of the above

4. How many years have you participated in the transition planning process? (Mark only one oval)

o   I am NOT an In-Service Teacher
o   0-5 years
o   6-10 years
o   11-15 years
o   15 years or more

5. What is your highest level of education? (Mark only one oval)

o   High school diploma
o   Associates
o   Bachelor's Degree
o   Master's Degree
o   Doctorate

Survey Questions

6. Please answer the following questions using the Likert scale below (Mark only one oval per row):

Strongly Agree	Agree	Disagree	Strongly Disagree

1. I understand the difference between the services for a student with disabilities in the K-12 setting versus services for a student with a disability in the postsecondary setting.
2. I understand the transition planning process.
3. I feel I received adequate training in effective practices for transition in my teacher certification program.
4. I understand the role of the Office of Vocational Rehabilitation in assisting students after graduation from high school.
5. I feel comfortable giving my input regarding a student's transition plan prior to it being developed.
6. I feel that I can give input at an IEP meeting regarding a student's transition plan.
7. I am comfortable that I will be able to assist my student's with accessing services in the postsecondary setting.
8. I feel that I can adequately prepare a student to meet the goals outlined in their transition plan.
9. I can teach a student about their disability.
10. I can teach a student about their strengths and weaknesses.
11. I can adequately prepare a student to obtain competitive employment.
12. I can adequately prepare a student to maintain competitive employment.
13. I can prepare the IEP team prior to the IEP meeting with information on each of the agencies that would be attending the IEP meeting.
14. I can teach a student specially designed instruction that is listed in his/her IEP
15. I feel that I am knowledgeable in addressing parent concerns regarding accessing services in the postsecondary setting.
16. I feel that the outside agency representative(s) present at my student's IEP meetings had knowledge of my student's strengths and needs.

Appendix B

Post-Survey

1. Consent To Participate (Mark only one oval)

o I agree to participate in this study. I understand that by providing my consent that my responses will remain confidential. (Continue to the survey)
o I do not agree to participate in this study. (Please exit the survey).
o Demographics

2. I am 18 years old or older (Mark only one oval)

o Yes
o No

3. What is your current role in the transition process for students with disabilities? (Mark only one oval)

o Pre-service teacher (student)
o In-service Teacher
o Administrator
o None of the above

4. How many years have you participated in the transition planning process? (Mark only one oval)

o I am NOT an In-Service Teacher
o 0-5 years
o 6-10 years
o 11-15 years
o 15 years or more

5. What is your highest level of education? (Mark only one oval)

o High school diploma
o Associates
o Bachelor's Degree
o Master's Degree
o Doctorate

Survey Questions

6. Please answer the following questions using the Likert scale below (Mark only one oval per row):

Strongly Agree	Agree	Disagree	Strongly Disagree

1. I understand the difference between the services for a student with disabilities in the K-12 setting versus services for a student with a disability in the postsecondary setting.
2. I understand the transition planning process.
3. I feel I received adequate training in effective practices for transition in my teacher certification program.
4. I understand the role of the Office of Vocational Rehabilitation in assisting students after graduation from high school.
5. I feel comfortable giving my input regarding a student's transition plan prior to it being developed.
6. I feel that I can give input at an IEP meeting regarding a student's transition plan.
7. I am comfortable that I will be able to assist my student's with accessing services in the postsecondary setting.
8. I feel that I can adequately prepare a student to meet the goals outlined in their transition plan.
9. I can teach a student about their disability.
10. I can teach a student about their strengths and weaknesses.
11. I can adequately prepare a student to obtain competitive employment.
12. I can adequately prepare a student to maintain competitive employment.
13. I can prepare the IEP team prior to the IEP meeting with information on each of the agencies that would be attending the IEP meeting.
14. I can teach a student specially designed instruction that is listed in his/her IEP
15. I feel that I am knowledgeable in addressing parent concerns regarding accessing services in the postsecondary setting.
16. I feel that the outside agency representative(s) present at my student's IEP meetings had knowledge of my student's strengths and needs.

Open-Ended Questions

17. What was the most important part of this training and why?

18. Which area of this training did you find to be the least helpful and why?

19. Are there any areas that should be included in this training?

20. How could this training improve in the future?

Pre-Service Teacher Perceptions of Virtual Just-in-Time Learning and Delivery Using Online Media Literacy Modules

Tracy A. McNelly
Veronica I. Ent
Makayla McMullen

Abstract: This study focused on the impact that online "just-in-time" learning modules had on teacher candidates' beliefs about media literacy as well as their personal beliefs about learning in an online environment with online learning modules. Our findings indicate that the delivery of a self-paced online learning module may be an effective solution for integrating content into otherwise "full" curricula. In order to most effectively implement this concept, however, programs should be prepared to overcome the negative perceptions that teacher candidates may have regarding online learning, particularly in a post-pandemic era.

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Introduction

Today's school-age students are immersed in a world fraught with mediated messages and are more connected to digital media than at any other time in history. Despite their connectedness, school-age students cannot adequately evaluate mediated messages and content (e.g., Steeves, 2014; Wineburg et al., 2016), have limited knowledge about the commercial aspects of online sites and platforms (Steeves, 2014), cannot effectively reason about the information found on the internet (McGrew et al., 2017), and have difficulty analyzing various types of mediated messages (Wineburg et al., 2016). Over the course of a year and a half, the Stanford History Education Group administered tasks meant to assess students' ability to reason about information they saw on the Internet. The researchers found that 82% of middle schoolers believed that sponsored content was a real news story and not an advertisement. When asked to choose the most reliable source, more than 70% of high schoolers selected the sponsored content. When asked to evaluate multiple sources to evaluate a claim, only 6% of college students and 9% of high school Advanced Placement students could identify the "backer" of an article. Most students accepted the website as trustworthy. Authors of this report concluded, "Overall, young people's ability to reason about the information on the Internet can be summed up in one word: bleak" (Wineburg et al., 2016, p.4). Between 2018 and 2019, that same group administered an assessment to measure high school students' ability to evaluate digital sources and found equally disturbing results. Among the findings, two-thirds of high school students could not tell the difference between news stories and ads and 96%

had difficulty assessing the credibility of a website. Fewer than 3% of students earned full credit on all 6 of the assessment tasks. The authors concluded that "students remain unprepared to navigate the digital landscape" (Breakstone et al., 2019, p. 26).

According to the U.S. Media Literacy Report, media literacy, which is the "ability to access, analyze, evaluate, create, and act using all forms of communication" (National Association for Media Literacy Education, n.d.) is imperative to combat the "deliberate and politically-motivated disinformation campaigns" that shape public perceptions as well as public policy (Media Literacy Now, 2020, p. 5). Media literacy education can help to develop youth who can discern what is true, and help them to behave as "engaged citizens, responsible consumers, healthy individuals, and informed creators of content" (Media Literacy Now, 2020, p. 5). The authors of the report assert that media literacy skills are essential "if our children and our society are to meet the challenges of a rapidly changing global communications environment" (p. 4). In essence, media literacy education within our schools is more important now than ever.

Despite the need for and benefits of media literacy education, very few states in the U.S. have made media literacy education a priority. In fact, at this writing, only 18 states had some type of media literacy related legislation (Media Literacy Now, 2023). Without standards to guide curriculum development, teachers are left without much guidance when it comes to media literacy education. Teachers face other challenges integrating media literacy into their classrooms as well, including lack of knowledge and confidence in media literacy (Harvey et al., 2022), which stems from several factors including the limited preparation teachers receive in their teacher

education programs. While the standards from programs such as CAEP (Council for the Accreditation of Educator Preparation) and NCATE (National Council for the Accreditation of Teacher Education) emphasize important content, pedagogical and technology standards, they do not address media literacy (Mahmoudi et al., 2020; Meehan et al., 2015). The lack of standards in media literacy for preservice teachers equates to a lack of media literacy education required coursework for preservice teachers. In essence, preservice teachers are not getting the training they need to equip students with the skills they need to effectively analyze and create digital media, which is so desperately needed. In reality, most teacher preparation programs today do not include media literacy education within their curricula (Tiede et al., 2015) and those that do focus on teaching about various technology tools and how to use technology in the classroom (Salomaa et al., 2017), instead of on media literacy education pedagogy. Our preservice teachers may be digital natives who have grown up surrounded by technology and media, but this does not mean that they understand how to translate that knowledge into effective pedagogy. Nor does technology competence suggest that preservice teachers value the importance of media literacy integration within their future classroom (Gretter & Yadav, 2018). Even though preservice teachers might have high perceptions of digital literacy, they lack the skills to find, evaluate, create and communicate information (McAnulty, 2020).

Despite the lack of noted media literacy training for preservice teachers, teacher preparation programs that have found ways to incorporate media literacy training via workshops and through coursework have done so with successful results (Botturi, 2019; Cherner & Curry, 2019; Erdem & Eristi, 2022; Meehan et al., 2015; Schmidt, 2013).

Although not a part of our teacher preparation program, media literacy education is something that our institution felt important for teacher candidates to understand, particularly since the use of media among school-age children has dramatically risen over the past several years (Rideout et al., 2022), while school-age students' understanding of how to evaluate the media they encounter remains deficient (McGrew et al., 2017; Robb, 2017; Steeves, 2014). Our dilemma was how to provide effective instruction to our preservice teachers in media literacy education in a program with limited space in a short period of time. As an alternative modality, and an alternative to methods we have used in the past, online modules were developed to deliver "just-in-time" media literacy content to our students.

The technique of "just-in-time" emerged in the automobile industry where parts would arrive to the warehouse exactly when they were ready to be installed. This process reduced large inventories and expenses associated with storage and maintenance. This concept was applied to the way that people learn (Scott, 2022). Just-in-time learning (JITL) has similar benefits to what automobile companies experienced. For instance, pre-service teachers are trained in the needed competencies at the precise time they can use the skills when entering the classroom (Growth Engineering, 2022).

The framework for developing JITL requires six elements for success based on the work of Voss and other researchers (2022): task specific, concise, contextual, visual, diverse, and integrated. Figure 1 is a chart aligning the media literacy JITL modules developed for the study using this framework.

Figure 1
Development of JITL Media Literacy Education Online Modules

Task specific: the need for task-specific information that covered a range of common areas where students required additional support	Pre-assessment data revealed areas in which teacher candidates were insufficiently aware of media literacy, were untrained in the use of media literacy strategies, and lacked media literacy skills
Concise: providing resources that covered concepts quickly and efficiently	Pulling most relevant and streamlined resources together for the sole purpose of immediate use (Media Literacy Now, Center for Media Literacy, etc.)
Contextual: the need to understand the most efficient way to convey information	The media literacy online modules were delivered as SCORM embedded modules on the student's learning management system
Visual: resources need to be visual and engaging	Using iSpring® authoring software and PowerPoint resources to merge visual content following interface design principles
Diverse: resources can offer opportunities for knowledge extension	Classroom resources in media literacy were provided as teacher-ready tools and curriculum within the modules
Integrated: with other aspects of their educational resourcing	Embedded exercises within the media literacy modules were cross-curricular and grade band specific based on teacher candidates

(Voss, 2022)

Beyond the mere logistics for finding time to teach content that is urgent or newly required within a short amount of time, there are other benefits of online professional development for preservice teachers. According to the research of Kim (2018), online professional development offers the flexible, and, if designed well, the quality content that's personalized and relevant to an educator's needs. Specific to preservice teachers, having an online module dedicated to one area of development is a streamlined resource that could offer the same popular "on-demand" learning found on the TED talks, Khan Academy, Google, or YouTube. The difficulty that arises from college-developed modules is the student perception of being "graded," which can reduce intrinsic motivation to engage in enrichment learning (Ciampa, 2014). In these cases, such modules used for teacher training are often perceived as class requirements and not as "on-demand" teacher development and enrichments. To reduce the perception of required training, JITL that is designed to ignite a learner's cognitive curiosity may lead to more intrinsic motivation (Ciampa, 2014). In order to investigate how students perceived our media literacy online modules, the research questions were formulated to ask participants about impact, attitudes, and beliefs. The three questions this study examined were:

Research Questions

1. Do online learning modules impact teacher candidates' beliefs about

their media literacy skills and about teaching media literacy in the classroom?

2. What are teacher candidates' attitudes about learning via the online learning modules?
3. What are teacher candidates' beliefs about online learning in the PK-12 school environment?

Methodology

The current study seeks to understand whether an online learning module can impact teacher candidates' beliefs about media literacy education as well as to understand the attitudes teacher candidates have towards online learning in general and in their future classrooms. This study also seeks to understand whether the use of an online learning module can be an effective tool for "just-in-time learning." Data for the study were taken from pre- and post-self-assessment surveys, embedded within the online learning modules that asked teacher candidates to reflect upon various aspects of media literacy. Additionally, teacher candidates were asked to complete a pre- and post-survey about their beliefs about online learning.

Participants

The participants for this study included twenty-one teacher candidates (19 undergraduates; two post-baccalaureate) who were enrolled in the fall semester of college before their student teaching semester. In addition to finalizing required coursework, all teacher candidates were pre-student teaching one day a week. Of the twenty-one participants, 11 were working on PK-4 certification, while ten were working on various secondary certificates, including chemistry, English, mathematics, and social studies. Sixteen of the teacher candidates were female and five were male.

Treatment/Instrument

During spring 2022, a graduate student in the Instructional Design and Technology program at Saint Vincent College was tasked with creating three online learning modules using iSpring software. Given the time constraints, these modules focused on the most essential media literacy topics that could be immediately applied within learners' pre-student teaching placements. The first module, "What is Media Literacy (and Why is it Important)?" defined relevant media literacy terms, explained the elements of media literacy, and introduced the benefits associated with media literacy instruction. The second module, "Becoming a Media Literate Educator," provided strategies for critical media analysis, as well as considerations for effective and ethical media creation. The final module, "Media Literacy Classroom Strategies," included ideas for integrating media literacy topics across content areas and grade bands.

As supported by the work of ScuteInicu et al. (2019), each module followed a similar structure and design for consistency purposes. A title slide and a "Navigation/Help" section of the module oriented users to the beginning of each module. Following this introduction, the module prompted users to complete a survey, through which they reflected upon their current self-efficacy with each of the module's learning targets (see figure 2). Next, the module presented users with visual content, complemented by the designer's audio narration and iSpring's interaction features. Embedded after each content interaction was an assessment, in the form of a hotspot, matching, sequence, multiple-choice, or true/false question; an open-ended

essay response; or a dialogue simulation. At the conclusion of the module, users were presented with the same survey as at the onset, cueing learners to re-evaluate their efficacy of the learning targets.

Figure 2
Assessment embedded within the online learning module

Before beginning this module, self-assess your media literacy skills. Use the scale below to indicate how much you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
I can define "media literacy."	○	○	○	○	○
I can identify types of media.	○	○	○	○	○
I can describe the elements of media literacy.	○	○	○	○	○
I can explain the benefits of media literacy.	○	○	○	○	○

Congruent with the JITL Framework (Voss, 2022), iSpring's interactivity features were intentionally integrated throughout the module design to promote student engagement and to support visual learning. This set of features, including circle diagrams, tabs, and hotspot images, allowed aspects of the content slides to become "clickable" and dynamic for the learner. For example, Module 2 presented a hotspot graphic of a mock unreliable website. This hotspot slide allowed users to click hyperlinked markers around the graphic to read more about each "warning sign of unreliability." Similarly, Module 3 provided users with a media catalog of electronic "cards," where each card represented a different subject matter or content area. By selecting the content area most closely aligned to their certification areas, users could view specific ideas for infusing media literacy into their lessons (see figure 3).

Figure 3
*Personalized opportunities to practice learning about media literacy skills*
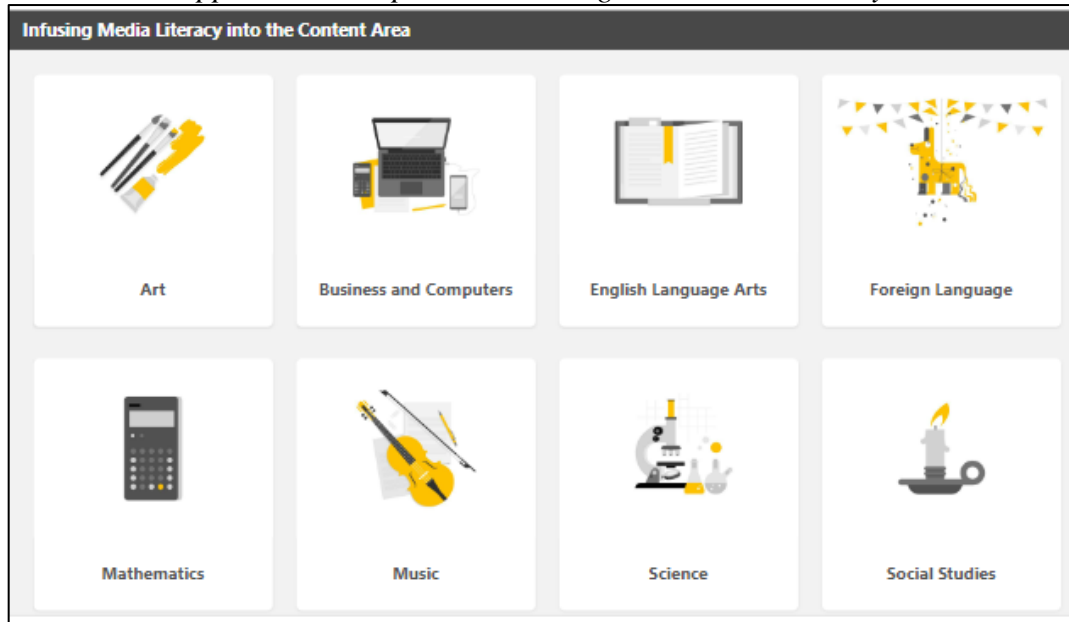
Also consistent with the JITL Framework (Voss, 2022), iSpring's assessment features were a focal point of module design, allowing for more efficient and relevant instruction. Embedded assessments utilized the feedback and branching capabilities of iSpring, prompting users to move to new content or review previous learning, depending on the demonstrated mastery of the material. For example, users who did not reach the 80% minimum score requirement on the Module 2 multiple-choice quiz received the message, "Please review the content and re-attempt the quiz when you feel ready." In contrast, users who did achieve the minimum score were provided with positive feedback and were permitted to continue within the module. To prompt users to better contextualize the media literacy material, the modules also utilized some of the more subjective assessment features of iSpring, including dialogue simulations, surveys, and open-ended responses. Module 2, for instance, provided a dialogue simulation in which users recommended classroom media literacy tips to a teacher "avatar" (see figure 4). Similarly, Module 3 required users to explore one of the provided media literacy resources and rate how likely they would be to use the resource in their own classrooms.

At the conclusion of the design phase, each module was uploaded as a SCORM package to the Schoology learning management system. This step facilitated easy student access and provided additional contextualization, as learners utilized the same learning management system throughout their teacher certification program. To ensure that requirements were satisfied in sequential order, Schoology's "Student Completion Rules" feature was enabled. Thus, users could only access Module 2 after the successful completion of Module 1.

Figure 4
Dialogue simulation from teacher avatar
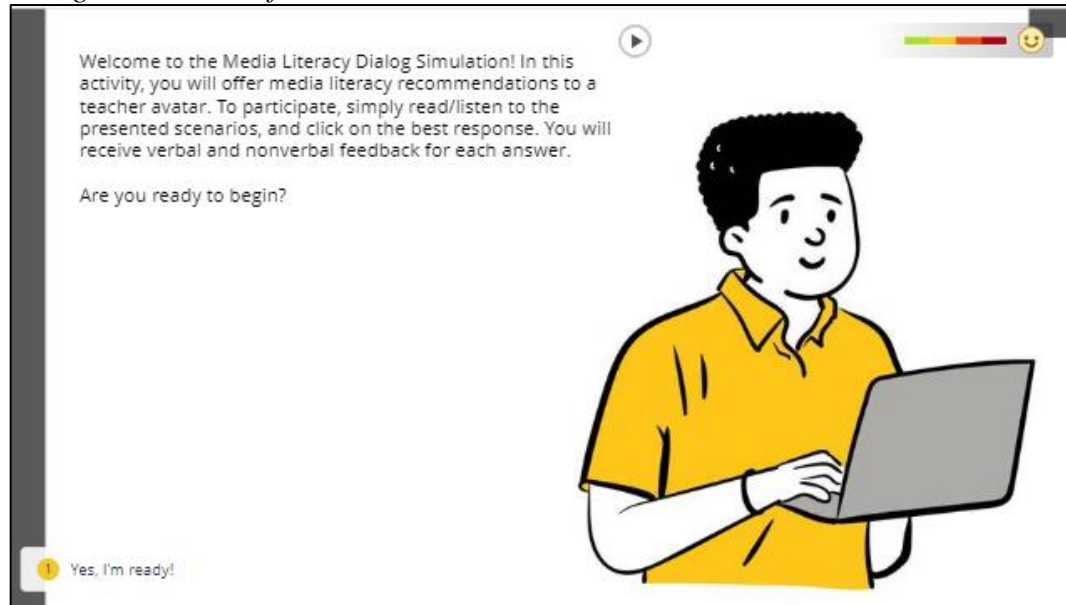
Data Collection & Analysis

This study was created to explore teacher candidates' use of an online learning module as a way to learn about media literacy education in a self-directed "just-in-time" learning environment.

Teacher candidates who consented to participate in the study were introduced to the online learning modules early in the fall 2022 semester during their pre-student teaching seminar course. During the introduction, students were given directions on how to access and work through the modules. Students were given three weeks to complete the three learning modules. Researchers were able to gauge teacher candidates' progress on the modules; in order to ensure that the modules were completed on time, the researchers sent weekly reminder emails to the teacher candidates regarding their progress.

Data regarding teacher candidates' perceptions about media literacy was collected through a self-assessment survey ($\alpha = .85$) at the onset of each module and then once again at the conclusion of each module. Before being permitted to begin each module, participants were asked a series of self-assessment statements that included items such as, "I can define media literacy"; "I can create media literacy in a safe and responsible manner"; and "I can evaluate media literacy resources for the classroom" and then asked those same statements at the conclusion of each module. Using inferential statistics, data was analyzed to compare each of the three pre-module assessments to the post-module assessments to determine significance. Means and standard deviations for each module as well as for each statement were also calculated.

In order to get a sense of teacher candidates' perceptions about self-directed online learning and about their online learning beliefs, data was also collected through a pre-post survey administered at the onset of the study and then again at the conclusion of the study, which occurred three weeks after students were introduced to the online learning modules. The pre-post

survey contained statements such as, "I prefer online learning over traditional classroom instruction"; "Learning from online modules is difficult for me"; and "Teacher preparation programs should include how to deliver instruction online."

Findings

To explore the impact online learning modules had on teacher candidates' beliefs and attitudes about media literacy as well as to explore teacher candidates' beliefs about online learning, several analyses were run. Data taken from the pre- and post-assessments embedded within the three online learning modules provided an understanding of teacher candidates' overall beliefs regarding media literacy and teaching media literacy in their future classrooms; paired samples t-tests were run to provide information about whether these beliefs changed as a result of the learning that took place during the online modules. Pre- and post-test survey data that was collected outside of the online learning

modules provided an understanding about teacher candidates' beliefs about online learning and, based on paired samples t-tests, whether those beliefs changed significantly following training using the online learning modules.

Online Learning Module Impact on Media Literacy Beliefs and Teaching

Research question 1 explored whether an online learning module can impact teacher candidates' beliefs about media literacy skills and teaching media literacy in the classroom. Response options for this measure ranged from 1 (strongly disagree) to 5 (strongly agree).

A paired samples t-test was performed to compare teacher candidate beliefs about media literacy at the onset of each online learning module and then again at the conclusion of each learning module. Findings indicate there was a significant difference in teacher candidate beliefs at the onset and conclusion of each of the online learning modules (See Table 1).

Table 1
Teacher Candidate Media Literacy Beliefs Before and After Completion of an Online Module

Learning Modules	*M*	*SD*	t value	df	*p*
Module 1					
Pretest	3.46	.371	-6.575	3	0.007**
Posttest	4.42	.085			
Module 2					
Pretest	3.78	.180	-12.122	2	0.007**
Posttest	4.64	.058			
Module 3					
Pretest	3.52	.169	-11.214	2	0.008**
Posttest	4.57	.050			

*p<.05; **p<.01

Descriptive analyses of survey items (see Table 2) indicate that teacher candidates had more positive beliefs about all areas of media literacy after engagement with the

online learning modules. In Module 1, What is Media Literacy? the post-test scores indicate that teacher candidates reported the highest means for their ability to identify

types of media literacy (M=4.48, SD = .51) and to explain the benefits of media literacy (M=4.48, SD =.51). Analysis of Module 2, Becoming a Media Literate Educator, found that teacher candidates reported the highest means on the posttests for two variables: I can create media in a safe and responsible manner (M=4.67, SD=.48) and I can reflect on how media affects everyday life (M=4.67, SD=.48). Module 3, Media Literacy Classroom Strategies, found the highest means on the posttest for teacher candidates' ability to integrate media literacy strategies within their content areas (M=4.62, SD=.50).

Table 2
Teacher Candidates' Media Literacy Beliefs

Survey Item	Pre-test			Post-test		
	n	*M*	*SD*	*n*	*M*	*SD*
Module 1						
I can define media literacy	20	3.35	0.59	20	4.43	0.51
I can identify types of media	20	3.85	0.67	20	4.48	0.51
I can describe the elements of media literacy	20	3.00	0.73	20	4.30	0.57
I can explain the benefits of media literacy	20	3.65	0.49	20	4.48	0.51
Module 2						
I can critically analyze media message	21	3.57	0.68	21	4.57	0.51
I can create media in a safe and responsible manner	21	3.86	0.73	21	4.67	0.48
I can reflect upon the way media affects everyday life	21	3.90	0.77	21	4.67	0.48
Module 3						
I can identify developmentally appropriate media literacy strategies	21	3.38	0.59	21	4.52	0.52
I can integrate media literacy strategies within my content area	21	3.48	0.75	21	4.62	0.50
I can evaluate media literacy resources for the classroom	21	3.71	0.46	21	4.57	0.60

5=strongly agree; 4=agree; 3=undecided; 2=disagree; 1=strongly disagree

Beliefs About Learning Using an Online Learning Module

Research question 2 asked teacher candidates to indicate various beliefs about learning online using an online learning module. Response options for this measure ranged from 1 (strongly disagree) to 5 (strongly agree).

Descriptive analyses of survey items (see Table 3) indicated that teacher candidates on average reported dissatisfied beliefs regarding learning online. Teacher candidates disagreed that online learning is as effective as learning in a face-to-face environment ($M = 2.29$, $SD = 1.08$), disagreed that forming lasting peer relationships in an online course is the same as in face-to-face courses ($M = 2.38$, $SD = 1.21$), and agreed that social presence is sacrificed during online learning ($M = 4.05$,

SD = .95). Teacher candidates responded that they did not prefer online learning over traditional classroom learning (*M* = 2.48, *SD* = 1.10). Despite the negative responses regarding learning online, teacher candidates disagreed that learning from online modules was difficult (*M* = 2.90, *SD* = 1.11).

Table 3
Teacher Candidates' Online Learning Beliefs

	Pre-test n=21		Post-test n=21	
Survey Item	*M*	**SD**	*M*	**SD**
I prefer online learning over traditional classroom instruction.	2.33	1.08	2.48	1.10
Learning from online modules is difficult for me.	2.95	1.21	2.90	1.11
Online learning is as effective as face-to-face learning.	2.05	1.13	2.29	1.08
Having lasting peer relationships occurs the same in online courses as in face-to-face courses.	1.76	0.75	2.38	1.21
Social presence (relationships, interaction, etc.) is sacrificed when learning is online.	4.00	1.23	4.05	0.95

5=strongly agree; 4=agree; 3=undecided; 2=disagree; 1=strongly disagree

A paired samples t-test was run to determine if there was a significant difference between teacher candidates' beliefs regarding learning online before and after completion of the online learning modules. Although the means of several survey items improved slightly from pretest to posttest survey, findings indicate no significant difference between the pre- and post-test survey (See Table 4).

Table 4
Comparison of Teacher Candidate Online Learning Module Beliefs

Online Learning Module Beliefs	*M*	*SD*	t value	df	*p*
Pretest	2.62	.889	-1.752	4	0.154
Posttest	2.82	.726			

*p<.05; **p<.01

Beliefs About Online Learning

Research question 3 asked teacher candidates to respond to questions concerning their beliefs about online learning in the PK-12 environment.

Response options for this measure ranged from 1 (strongly disagree) to 5 (strongly agree).

Descriptive analyses of survey items (see Table 4) indicated that teacher candidates on average reported positive

beliefs about online learning in the PK-12 classroom environment in several areas. The two most positive beliefs reported in the posttest were that online learning is valuable in all subjects and grade levels (M=4.52, SD=.50) and that teacher preparation programs should include instruction in teaching online (M=4.52, SD=.59). The two variables whose mean decreased at the

posttest were teacher candidates' beliefs that online learning is effective for some content areas, but not for all content areas (M=3.62, SD=1.05, -.38) and that online learning is not appropriate for PK-12 (M=2.52, SD=1.05, -.05), finding that teacher candidates mostly disagree with this statement.

Table 5

Teacher Candidates' Beliefs About Online Learning in PK-12 Environment

Survey Item	Pre-test n=21		Post-test n=21	
	M	**SD**	*M*	**SD**
Online learning is valuable in classroom settings in all subjects and grades.	4.33	0.84	4.52	0.50
Delivering my instruction online is enjoyable and satisfying for me.	2.81	1.43	3.14	1.17
Online learning is effective for some content areas, but not all.	4.00	0.93	3.62	1.05
Online learning is not appropriate for PK-12.	2.57	1.22	2.52	1.05
Teacher preparation programs should include how to deliver instruction online.	4.71	0.45	4.52	0.59

5=strongly agree; 4=agree; 3=undecided; 2=disagree; 1=strongly disagree

A paired samples t-test was run to determine if there was a significant difference between teacher candidates' beliefs regarding online in PK-12 settings

before and after completion of the online learning modules. Findings indicate no significant difference between the pre- and post-test survey (See Table 6).

Table 6

Comparison of Teacher Candidate Online Learning in PK-12 Environment Beliefs

Online PK-12 Beliefs	*M*	*SD*	t value	df	*p*
Pretest	3.68	.945	.157	4	0.883
Posttest	3.66	.873			

*p<.05; **p<.01

Discussion

This study focused on the impact that online learning modules had on teacher candidates' beliefs about media literacy, their personal beliefs about learning in an online environment with online modules, and their beliefs about teaching online in a PK-12 setting. Although this study focused on media literacy content, we wanted to better understand whether the use of online learning modules might be an effective way to tap into cognitive curiosity and to deliver a variety of educational and pedagogical content to our teacher candidates.

In terms of whether an online learning module can impact teacher candidates' beliefs about media literacy skills and teaching media literacy in the classroom, we found that there was a significant increase in teacher candidates' beliefs about media literacy after they worked through the modules' content. Moreover, post-test mean scores found that teacher candidates' beliefs about their media literacy knowledge improved after engaging with the modules. Thus, the results of the study indicate that the use of online learning modules can be a beneficial way to not only learn about media literacy, but also to deliver just-in-time instruction. Our research is consistent with prior research that supports the use of online modules for use with undergraduate students as a method for learning content (Elliot, 2017; Hsu & Lin, 2020; Johnston, 2010). For instance, a study by Johnston (2010) that investigated whether an online module was an effective way for undergraduate students to learn about information literacy found that the "flexible, self-paced delivery of [an online module] was an effective way for students to develop information literacy skills" (p. 207). Similarly, Hsu and Lin (2020) discovered that preservice teachers' TPACK knowledge significantly increased after training using

an online module; they concluded that online modules have "considerable potential for application to teacher training in other subjects" (p. 1). Based on our results, we concur that online modules can be useful in delivering content across a variety of subjects and can assist teacher preparation programs in fulfilling mandates and teaching content that can be self-directed and learner-controlled.

Our findings for personal online learning beliefs and beliefs about online learning in the PK-12 setting are mixed. There was not a significant increase from pre-test to post-test for either of these measures, which indicates that the online learning modules did not impact teacher candidates' beliefs in these areas. What we did learn was that there is some negativity surrounding teacher candidates' personal online learning beliefs. For instance, teacher candidates reported that they do not prefer online learning over traditional learning and that they disagree that online learning is as effective as face-to-face learning, citing that social presence and relationships are sacrificed in the online environment. In terms of their learning using online modules, although they did not find the modules difficult, they were undecided about the difficulty of using modules for learning, which may come as a result of their negativity towards online learning or with their unfamiliarity with this type of learning.

Although these teacher candidates expressed some negativity about their own personal online learning and did not find it satisfying to deliver instruction in an online learning setting, our findings indicated that they felt online learning was appropriate and valuable in the PK-12 setting. This finding is an interesting one because it helps us to understand the personal teaching preferences of our teacher candidates, where teaching face-to-face is more desirable than teaching online. There may be several reasons for this

preference. The teacher candidates in our study were freshman when the COVID-19 pandemic shuttered college doors; these students were required to transition to online learning with minimal to no training and were taught by professors who had minimal to no experiences teaching online. The online learning experiences the teacher candidates faced may have tainted their personal view of online learning. Moreover, due to the COVID-19 disruption, these same teacher candidates had gaps in the online teacher training that our institution provides all teacher candidates, which may have resulted in negativity towards delivering instruction in an online environment. As our results indicate, the teacher candidates agreed that teacher preparation programs should include training in how to deliver effective, engaging instruction online, which is consistent with research (e.g.: Luo et al., 2017; Smith & Schlaack, 2021). Unfortunately, the pandemic did not permit this to happen for this group of students.

Conclusion

The ability to integrate media literacy skills into classroom practice has become an increasingly vital skill for new teacher candidates. However, due to time constraints, state mandates, and required competencies, the inclusion of supplemental or enrichment topics, such as media literacy education, can be difficult for teacher education programs to manage.

Based on our results, we can conclude that the "just-in-time" delivery of a self-paced online learning module may be an effective solution for integrating these enrichment topics into otherwise "full" curricula. In particular, we believe that modules aligned to the just-in-time learning framework, as outlined by Voss (2022), show promise for teacher education programs. In order to most effectively implement this concept, however, programs should be prepared to overcome the negative perceptions that teacher candidates may have regarding online learning, particularly in a post-pandemic era. In overcoming these perceptions, teacher education programs may be able to more efficiently equip teacher candidates with the twenty-first-century skills required for success in today's classroom.

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