

Sex, Gender, and Education Research: The Case for Transgender Studies in Education

Elizabeth J. Meyer¹

This article situates transgender studies in education within related bodies of education research literature to highlight this field as an important emerging area of scholarship. This scholarship is key for scholars centering gender, equity, and liberation as priorities to engage with since transgender epistemologies can add strength, nuance, and criticality to education research and practice. The purpose of this article is to clearly identify the history of harmful gender ideologies and practices embedded in everyday structures and practices of K-12 schools that have been documented and amplified in education research. I argue that by drawing from transgender studies and epistemologies, education researchers can move toward more liberatory scholarship and educational practices.

Keywords: descriptive analysis; equity; feminist theory; gay/lesbian studies; gender; gender studies; pedagogy; queer theory; sex; transgender

ender has always been a part of the official and hidden curriculum in schools and is the subject of this article designed to conceptualize and provide historical context for this special issue on transgender studies in education. Gender is taught in explicit and implicit ways from preschool through postsecondary education, and transgender studies provides rich frameworks for analyzing how gender and cisnormativity, practices that reinforce the hegemony of the gender binary, are embedded throughout the PK-12 education system. While children learn about gender through many institutions, including family, religion, language, and culture, schools are places where this gender socialization can be interrogated and transformed. Procedures, routines, curriculum, and pedagogy often teach and reinforce narrow gender norms unless educators and institutions carefully work to question and disrupt the binaries and hierarchies embedded in dominant culture. In the case of U.S. schools, this socialization centers White, Christian, settler, cisheteronormative, patriarchal worldviews as natural, normal, and the most valued (Grande, 2004/2015). Cisheteronormativity is a term used to describe how the hegemony of the gender binary works alongside expectations for heterosexuality to produce a culture that recognizes only cisgender, heterosexual people as normal and natural while simultaneously erasing and derogating the experiences of people who identify as lesbian, gay, bisexual, transgender, queer, intersex, or asexual (LGBTQIA). The prefix "cis"

comes from Latin and means "on this side" and is used to describe people who do not identify as transgender. As leading transgender studies in education, scholar Z. Nicolazzo (2017a) points out,

White supremacy, colonization, racism, and sexism operate to erase—figuratively and literally—people and experiences from our shared past/present/future. By doing so, those of us with marginalized identities are imagined to have had no past, are deemed remarkable when we are recognized in the present moment, and our future . . . is always already positioned as being impossible. (p. 513)

This article situates transgender studies in education within existing bodies of education research in K-12 schools to highlight this field as an important emerging area of scholarship for education researchers. It is important to understand and engage with transgender epistemologies in order to add strength, nuance, and criticality to research that centers gender and liberatory learning environments as priorities. Transgender studies in education invites us to welcome people in our full humanities (Keenan, 2017), value polyvocality (Nicolazzo, 2017a), understand trans* oppression as intersectional, situate trans* oppression as part of all projects seeking liberation (Kean, 2020;

¹University of Colorado Boulder, Boulder, CO

Snorton, 2017), and center trans experiential knowledge (Kean, 2020; Keenan, 2017; Nicolazzo, 2017a). These five concepts are central themes in transgender studies in education and will be used as frames throughout this article and special issue.

Public schools in the United States serve many important roles. They are tasked with preparing citizens for active participation in government, educating workers to be able to contribute to the economy, providing academic development to support creative and scientific innovation, and teaching language, values, and norms to create a shared culture and identity among a country's residents. In creating this shared culture and identity, schools carefully and intentionally select and prepare curriculum materials that communicate the values of the dominant culture (Apple, 2004). Educational systems also carefully prepare and select professionals who embody notions of a "good role model" to pass on key lessons about who and what matters in addition to traditional academic and vocational skills. The consequence of valuing cisheteronormative, patriarchal, White, settler, colonial gaze is the erasure of queer, trans, and BIPOC (Black, Indigenous, people of color) people in educational institutions (Nicolazzo, 2016, 2017b). Similarly, research on educational systems also emphasizes what is prioritized as areas of study in K-12 schools. As Django Paris (2019) notes, the "goal of research is fundamentally about who is and can be valued through the work" (p. 218).

This article will present the early evolution of research that examined "sex differences" in educational environments and the role of feminist scholarship in shaping this knowledge base. I will then discuss the emergence of studies on homophobia and transphobia in schools and how the examination of normativity through queer theory has influenced this body of research and its connections to transgender studies in education. The ideas here are enriched by Paris's (2019) understanding of the White settler gaze. He points out how marginalized communities are often named by White people as a tool to reinforce "White, middleclass, monolingual, cis-hetero-patriarchal-ableist" superiority (p. 218). Nicolazzo (2017a) also points out that "because of the way the cisgender public continues to dominate the shaping of the discourse on trans* people, there has been a lack of conversation about a truly transgender epistemology that is for us and by us" (p. 514). This "for us by us," or FUBU, perspective calls on researchers to center trans experiential knowledge—a methodological issue taken up by Harper Keenan in this issue. In this article, I aim to offer evidence and frameworks to continue building and amplifying the knowledge generated by and for trans, gender nonconforming, and nonbinary (TGNCNB) youth and educators to help other education researchers learn from and expand on the concepts and research developed in the area we are calling "transgender studies in education." I include gender nonconforming and nonbinary individuals explicitly here to attend to all the forms of gender diversity that are often excluded, surveilled, and affected by the cisheteronormative cultures of K-12 schools. *Nonbinary* is a term used to refer to individuals whose gender identity goes beyond the binary categories of man and woman. While some trans people identify within the gender binary and use he or she pronouns, some do not. Nonbinary individuals often use gender neutral pronouns such as they, ze, or xim.

To avoid repeating the hegemonic perspectives and the "gazing cisgender eye" (Nicolazzo 2017a, p. 513), I aim to help readers recognize the differences between studying transgender people and centering transgender epistemologies as a lens in research. I will also share exemplar scholarship that presents transgender-affirming and gender expansive pedagogies (Keenan, 2017) and epistemologies (Kean, 2020; Nicolazzo, 2017a). As a White, settler, cisgender, queer woman, I engage in this work as part of the greater project of liberation and radical transformation of learning environments. While I do not identify as transgender, my own scholarship has been improved by learning from trans*1 epistemologies and I hope to make a contribution to the field of education research by amplifying and sharing these lessons with others. I seek to help other scholars of all gender identities find ways to do theoretical and empirical work that is part of ongoing projects of liberation and transformation that is informed and strengthened by knowledge generated by the field of transgender studies. I am always aiming to do this work with humility and in solidarity with trans youth and scholars in order to create schools and communities that are safer and more affirming for all—but with particular attention to TGNCNB youth. I will now turn to an exploration of the early questions that established the concept and the field of "sex differences" in education research.

How Did We Get Here? Studying (and Creating) Binary "Sex Differences"

Sex and gender have been the subject of scholarly examination for the past century or so-since the field of psychological research established the study of "sex differences" (Hollingworth, 1918; Woolley, 1914). Most early examinations of gender in education compared the performance of girls and boys on various measures, including literacy and math skills, self-esteem, leadership, and aggression, and school discipline gained popularity in the 1960s and 1970s as documented in several meta-analyses (Hyde, 1981, 2005) and reviews of the research (Delamont, 1984; M. P. Sadker et al., 1986). Much of the research used the terms sex and gender interchangeably and treated both as biological facts that are binary, unchangeable, and determined by medical professionals at birth. This body of work helped strengthen the hegemony of cisnormativity. In Glasser and Smith's (2008) article, "On the Vague Meaning of 'Gender' in Educational Research," they outline multiple examples in popular media and research articles to provide the history and impacts of this methodological problem. In their review of 886 articles from the Journal of Research in Science Teaching published between 1990 and 2005, they found 104 articles that focused on sex, gender, or both. The analysis of these 104 articles found only one that explicitly addressed the definitional problems related to the synonymous use of these terms in education research. In their conclusion, they assert,

The practice of using the term gender to refer to a vague, illdefined aspect of men's and women's experience or as a synonym for sex is widespread in everyday and academic writing . . . but understanding gender and its educational effects will not be possible without additional focused efforts to clarify its meaning in educational research. (p. 349)

Even this definition reinforces cisnormativity by reducing gender to describing only "men's and women's experience." However, in Luis Levva's 2017 study on math education, he reported that "several achievement studies conceptualized gender and sex as the same construct and did not take into consideration intersex and gender nonconforming people, thus reifying the idea that there are two distinct biological groups of people" (p. 401). Leyva's analysis disrupts cisnormativity and also points out that "Whiteness is excluded across the sex-based and gender-based participation studies' analyses of mathematics practices and identities" (p. 418). This is a trend through much of the scholarship on sex and gender in education that transgender studies seeks to expand by drawing from Black feminist theory, critical race theory, and queer of color (QOC) critique (Ferguson, 2004; Gill-Peterson, 2018; Snorton, 2017; Spade, 2011; Travers, 2019).

In this article, I use the term sex to refer to a medico-legal category that is assigned at birth and has been socially constructed using the binary concepts of male and female (Fausto-Sterling, 2000; Meyer, 2010) and "gender" as both an identity and a set of social relations that interact to produce a set of expectations and behaviors that are linked to the sex category assigned at birth (Bem, 1993; Butler, 1990). Gender can be expansive and empowering when viewed as an identity constructed by the individual to express who they are and how they want to be seen in the world. It can, at the same time, be restrictive and harmful when examining the set of social relations and expectations that one is expected to conform to or pay the consequences for nonconformity. These sets of rules and expectations have been referred to as the "gender binary discourse" (Nicolazzo, 2016). This discourse is also connected to "compulsory heterogenderism," which describes how nondominant gender identities and expressions are often conflated with queer sexual identities and can render trans* identities invisible (Nicolazzo, 2016, 2017b). This early framing of sex and gender continues to shape educational practice and research; however, there have been several more recent approaches to understanding these phenomena that have started to push against this narrow and dated understanding of sex and gender that was established in the questions, methods, and thus the results and recommendations of studies of "sex differences."

Interrogating Gender Norms in Education Research: Feminism and Critical Masculinity **Studies**

The second wave of the feminist movement informed a shift to a more critical and comprehensive examination of gender in schools. This shift encouraged new methods and questions to emerge in education research. The scholarship, informed by feminist theories, examined the underrepresentation and stereotyping of girls and women in texts (M. P. Sadker, 1980; Zittleman & Sadker, 2002), the construction of gender in school (Thorne & Luria, 1986), as well as the broader theme of "sex equity" in education (Fleming, 2000; Powers, 1981; D. Sadker, 1999; M. P. Sadker et al., 1986; Tittle, 1985; Wirtenberg, 1981). These studies and related theoretical work pushed back at the dominant and stereotypical notions of what was "appropriate" or "acceptable" for girls and helped make space for women to enter and transform the cultures of historically male-dominated spaces (Frary, 1985; Martin, 1981). This body of research evolved to draw from third-wave feminism that introduced the concept of gender as a social construction (Bem, 1993), an important part of identity (Golombok & Fivush, 1994), and led to poststructural analyses of gender that described it as a set of repeated performances (Butler, 1990) and interactions (West & Zimmerman, 1987) that is contextual, malleable, and distinct from the medico-legal category of sex assigned at birth.

An important contribution of black feminism to education research was the concept of intersectionality (Combahee River Collective, 1977/1997; Crenshaw, Intersectionality brings attention to the multiple modes of oppression experienced by minoritized bodies for reasons of race, ethnicity, disability, language, and culture as well as gender. Gloria Anzaldúa (1987) and bell hooks (1984, 1994) greatly affected how scholars took up these ideas by showing how all oppressions are interconnected and, therefore, must be studied and addressed simultaneously. These scholars, among others, argue that ending sexist oppression also means addressing the racial, sexual, cultural, and linguistic oppressions due to their intersecting forces on people's lives. The concept of intersectionality is foundational to four of the central concepts in transgender studies in education presented in the introduction: to welcome people in our full humanities (Keenan, 2017), to value polyvocality (Nicolazzo, 2017a), to understand trans* oppression as intersectional, and to situate trans* oppression as part of all projects seeking liberation (Kean, 2020; Snorton, 2017).

This feminist and poststructuralist research was followed by a backlash (Weaver-Hightower, 2003) that gave rise to a new body of research exploring how boys and men have been shortchanged by the "feminization" of schooling. Critical masculinity scholarship presented research and theorizing that deployed the concept of hegemonic masculinity (Connell, 1989, 1995). Critical masculinity scholars argued that this hierarchy of masculinities, which privileged heteronormativity, was the problem in boys' education, not the so-called "feminization" of schooling (Frank et al., 2003; Kehler et al., 2005; Martino, 1995; Martino & Berrill, 2003; Mills, 2001). These studies rarely considered how schools affected TGNCNB students. The related fields of gay and lesbian studies and queer studies in education helped change this trend.

Exposing Homophobia in Schools: Gay and Lesbian Studies

Although gay and lesbian studies in education focuses primarily on sexuality (identities and orientation) and not gender, it is important to name here as this body of work expanded what kinds of questions could be taken up in education research. By creating space to talk about the homophobia experienced by gay and lesbian youth in schools, researchers slowly expanded questions and projects to include understanding transphobia in schools as well. As Jules Gill-Peterson (2018) argues in her book Histories of the Transgender Child, "the fact that trans life could fall under the sign of 'homosexuality' is actually an important clue for how to read the early twentieth-century medical archive, for the wider category of sexual inversion regularly mixed gay and trans connotations" (p. 61). This medical conflation of sex/ gender/sexuality elucidated throughout her book is repeated throughout many disciplines and is important to understand the histories of these bodies of research together although queer and trans theorists generally understand sex, gender, and sexuality as interconnected, yet distinct aspects of identity.

There was little published empirical research or peer-reviewed scholarship on homophobia in schools in educational journals before the mid-1990s (Grayson, 1987; Jackson, 2001; Rofes, 1989; Sears, 1991). These early publications provided research evidence that would start a wave of policy changes to provide support for gay, lesbian, bisexual, and transgender youth in schools. The primary focus of these studies was on homophobia experienced by gay and lesbian youth, with bisexual and transgender youth being considered more carefully as this field evolved. In 1999, the Gay, Lesbian, and Straight Education Network, now known simply as GLSEN, started systematically studying school climate in the United States in their biannual surveys of LGBT youth. These studies primarily focused on homophobia in schools that other researchers have made clear was often directly linked to gender expression (Martino & Berrill, 2003; McCready, 2004; Meyer, 2006, 2008; Pascoe, 2005). More recently, GLSEN's research team added questions and conducted more in-depth analyses on the particular and diverse experiences of transgender youth as well as how they are different from those of LGB youth (Kosciw et al., 2018; Movement Advancement Project & GLSEN, 2017), as well as focusing their analyses on the intersectional identities of LGBTQ youth of color (Diaz & Kosciw, 2009; Zongrone et al., 2020). These shifts are important to attend to as they provide more robust data on the variation of experiences in schools through more nuanced and intersectional lenses. A detailed discussion of what these shifts have revealed is beyond the scope of this article and is available in the forthcoming volume, Transgender Studies in K-12 Education: Mapping an Agenda for Research and Practice (Mangin & Suarez, in press). The field of queer studies in education has some overlaps with gay and lesbian studies by exploring and challenging concepts of normativity in schools that allowed research about homophobia and transphobia to evolve and expand.

Queering Norms in Education

Queer studies differ from gay and lesbian studies as it doesn't focus solely on the experiences and identities of gays and lesbians; rather, it examines and critiques the structures of heteronormativity, and later cisnormativity, and how they affect everyone as they experience their culture's sex/gender system. Deborah Britzman's (1995) influential article, "Is there a Queer Pedagogy? Or, Stop Reading Straight," draws from gay and lesbian studies and argues for the importance of critically interrogating "repetitions of normalcy" (p. 152) in pedagogies of sexuality. Kevin Kumashiro (2001) centered queer theory in his intersectional project of anti-oppressive education. He explains his use of the term *queer* as follows:

Although I mainly use "queer" to refer to sexual orientation, I do not limit its definition to "gay, lesbian, or bisexual," partly because of the interconnectedness of sexuality and sex/gender (Butler, 1990) and partly because of the interconnectedness of heterosexism and gender oppression (Wilchins, 1997). The term "queer," after all, like "fag" and "dyke," derogates and polices not only people who feel attraction for members of the same gender, but also people who exhibit physical and behavioral traits that society deems appropriate only for those of a different gender (e.g., boys who act "like girls" and girls who look "like boys"). In addition to its inclusiveness, I choose to use the term "queer" for its pedagogical effect and political significance. (p. 26)

Kumashiro explicitly includes gender expression and cisnormativity (though the term wasn't in use at the time) into the project of queer pedagogy, which created space and opportunity for scholars studying gay and lesbian topics in education to expand and consider gender normativity as part of this field of study. Britzman (1995) and Kumashiro (2001) along with Connell (1995) and Martino (1995) influenced my own research on gender, bullying, and harassment in schools that included harassment for gender nonconformity or transphobic harassment (Meyer, 2006, 2008, 2009) and the development of gender and sexual diversity studies (Bryan, 2012; Meyer, 2010) as a lens to bring queer theory and queer pedagogy into more educational spaces in order to disrupt harmful gender binary discourses in schools.

More nuanced and complex studies informed by queer theory began to emerge as scholars paid closer attention to the silenced voices in existing bodies of research, including those of students of color (Brockenbrough, 2015; Cruz, 2001; McCready, 2004) and transgender youth (Greytak et al., 2013). Publications started focusing on "LGBT" people in schools rather than just gay and lesbian students (Kosciw, 2004; Mayo, 2007). However, this was often inclusion in name only since transgender people were often lumped into analyses with LGB students despite some very different challenges and experiences in schools including access to proper facilities, participating in sex-segregated activities, and being recognized as their affirmed gender with the correct name and pronouns in all aspects of school life. This has shifted with more recent research examining carefully the experiences of transgender and gender nonconforming students as distinct from those who identify as gay, lesbian, or bisexual (Luecke, 2011; Meyer et al., 2016; Movement Advancement Project & GLSEN, 2017; Slesaransky-Poe et al., 2013). However, as leading transgender studies scholar Susan Stryker (2004) points out, "queer theory hasn't realized its potential for radical restructuring of gender . . . such as transsexuality" (p. 214). While there has been much evolution in the area of gender theorizing within queer studies in education since the early 1990s, the necessity for a transgender-informed perspective is clearly presented within the field of transgender studies.

Centering Trans* Experiential Knowledge in **Education Research**

The field of transgender studies in education is slowly emerging from the larger field of transgender studies that draws from and speaks back to work in the fields of women's and gender studies,

feminist theories, critical race theory, and queer theory. One of the earliest dedicated publications to transgender studies was a special issue of Women's Studies Quarterly titled "trans." This volume included an exploration of the terms trans, trans-, and transgender (Stryker et al., 2008) and introduced the term transpedagogies into the lexicon (Galarte, 2014; Muñoz & Garrison, 2008). This concept, which was situated in the higher education context, argues that "centering the transgender body as a site of knowledge production is a crucial transpedagogy" (Galarte, 2014, p. 147). This assertion that gender is real and embodied pushes against the postmodern and poststructural approaches in feminist and queer studies that argued that gender is merely a social construction and a set of social relations that are not inherently "real" (Butler, 1990; West & Zimmerman, 1987). However, in his book, Black on Both Sides: A Racial History of Trans Identity, Snorton (2017) argues that "there is a growing consensus in transgender studies that trans embodiment is not exclusively, or even primarily, a matter of the materiality of the body" (p. 175). This polyvocality, or divergence of trans theorizing, is central to trans* epistemologies, which Nicolazzo (2017a) sees as "a group project" that invites "future changing, challenging, and amending" (p. 515).

TGNCNB people were structurally invisible in schools and education research until relatively recently; trans people have "become increasingly socially visible, [however] we remain highly invisible throughout educational research" (Nicolazzo, 2017b, p. 42). Nicolazzo (2017b) refers to this as the "trans* paradox" (p. 42). Most research about trans people tells a dismal tale of how the world, including schools, is a dangerous and damaging place for people who don't conform to gender norms and/or binaries (Gill-Peterson, 2018; Mangin & Suarez, in press; Spade, 2011)—particularly trans folks of color (Singh, 2012; Snorton, 2017). Early examples of harm-focused research in education asked students about the issue of harassment for "gender nonconformity" and how that was related to homophobia and other forms of school violence (O'Shaughnessy et al., 2004) and reported on violence experienced by gender nonconforming youth in high school (Wyss, 2004). There has been other scholarship that has documented the harms experienced by transgender youth (McGuire et al., 2010; Murchison et al., 2019) that provide important data about the toxic environment in schools; however, these studies may be used to perpetuate harmful deficit-based stereotypes that being trans is dangerous or stigmatizing rather than focusing on the strength and creativity of trans youth.

More recently, scholars have focused on the benefits of environmental supports (Olson et al., 2016; Roberts et al., 2012) and resilience trans youth demonstrate in the face of often hostile and oppressive school and family environments (Grossman et al., 2011; Singh, 2012). These studies offer a starting point for learning more about the experiences of transgender youth but didn't explicitly draw from a transgender studies-informed lens: They are about transgender youth, but not analyzed or presented through a theoretical lens informed by transgender studies.

Contributions from scholars that center transgender epistemologies and trans experiential knowledge in the field of K-12 education were particularly scarce until recently. Lee Airton, a scholar who identifies as nonbinary, helped inform this evolving area of research with their work on "genderism" in schools (Airton, 2009) and the importance of respecting the use of pronouns in educational spaces, particularly the gender neutral "they" (Airton, 2018). In 2017, Harper Keenan introduced the concept of a "Critical Trans Pedagogy" in his Harvard Educational Review article. Drawing from his own experiences as a transgender educator and reflecting on his lifetime of experiences in schools as student and as an elementary teacher, he reminds us that,

We need pedagogies that concentrate more of our efforts on inviting people to be with each other in our full humanity. We need pedagogies that deeply examine how our current gender system confines us all and how that interacts with other systems, like race, class, and ability. We need pedagogies that aim toward the immediately necessary projects of preventing the murders and suicides of trans people in addition to preventing our slower deaths at the hands of inadequate medical and legal systems. We need pedagogies that listen to transgender experience in all its forms (p. 553).

This call echoes Z. Nicolazzo's (2017b) work that challenges education researchers to take on an "epistemology of love," which she describes as

seeing and hearing each other for who we are, which requires giving each other the agency to define who we are for ourselves as well as allowing each other to change and amend who we are or could be in the future. It is my contention that were we educational scholars and practitioners to embrace such an epistemology of love, we may very well be able to do research and create educational environments that increase possibilities (Butler, 2006) and life chances (Spade 2015) for trans* students. (p. 153)

The importance of humanizing and loving approaches to work that centers transgender experiential knowledge is a common theme in the emerging field of transgender studies in education. For example, Eli Kean's (2020) work, "Advancing a Critical Trans Framework for Education," explicitly advances a transgender studies-informed lens for research in education. In this article, they present three principles for educators and researchers to consider in their work to "celebrate gender diversity and center transgender experiences" (p. 262). First, that gender operates on individual, institutional and cultural levels. Second, genderism interacts with all other systems of oppression and epistemic injustice. Finally, the importance of centering trans experiential knowledge. These principles, taken together, are helpful for scholars and researchers to consider and apply in any scholarship that seeks to attend to issues of justice and the intersections of identity and social experience in schools. In a similar vein, Nicolazzo (2017a) shares six tenets that shape her conception of a trans* epistemology:

- 1. Trans* people may be from oppression, but we ourselves are not of oppression.
- We all experience our trans*ness differently as a result of our varied, intersecting identities.
- In and through community with each other, we have the power to heal and remake ourselves as trans* people.
- Our continued de/re/construction of our trans* subjectivities spans material and virtual environments.

- "Trickle up activism" and grassroots coalition-building are, and will remain to be, orientations for our community.
- In/visibility and its varied meanings are central to our senses of self, community, and kinship. (pp. 517–518).

These tenets offer researchers a starting point to build from in order to carefully consider their assumptions, questions, and other methodological and theoretical decisions when designing and executing projects that center understandings of gender, equity, and liberation in education as key goals. For example, in my own work, I have prioritized working in collaboration with TGNCNB scholars, graduate assistants, and community advisory boards to ensure that the questions and methods I am employing minimize the "cisgender gaze" and are aimed at understanding issues and solutions that center trans experiential knowledge.

There is a growing body of research that focuses on educators learning about (Smith & Payne, 2015) and working to support transgender students (Leonardi & Staley, 2018; Mangin, 2019) that indicate that some educational scholars are building on these important foundations. For example, Leonardi and Staley (2018) write about how school administrators "muddled through" the challenges of supporting trans youth in their schools—specifically working with parents who were supportive or resistant to supporting their children who told their teacher that they were transgender (pp. 767-768). Their work links to Kean's trans framework by acknowledging how gender operates on individual, institutional, and cultural levels. Mangin's (2019) work also studied the practices of school administrators who affirmed transgender youth in their schools and reported that these leaders employed a "child-centered approach" that foregrounded transgender experiential knowledge.

A growing number of articles have also applied critical race theory, QOC critique, and centered the knowledge and experiences of BIPOC trans and queer youth. This body of literature brings attention to the resilience of BIPOC people in PK-12 schools and provides an alternative approach to the colonized and Whitewashed understandings of gender in schools. In 2020, Equity and Excellence in Education published a special issue that focused on "queeruptions" and centering QOC critique. In Kia Darling-Hammond's (2020) contribution to this issue, she calls out several common elements across the articles that include "elements of a FUBU sensibility; application of mutuality, collectivity, and activism as community practices; critical consciousness; and disruptive modes of self-assertion and refusal that promote relief, pleasure, and healing" (p. 425). This QOC analysis shares strong theoretical roots and commitments with the field of transgender studies, and the bodies of work are strengthened when scholars are able to draw from them both by addressing how genderism interacts with all other systems of oppression, and epistemic injustice (Kean, 2020). As bell hooks (1984) reminds us, "our emphasis must be on cultural transformation: destroying dualism, eradicating systems of domination" (p. 165). More recently, trans legal studies scholar Dean Spade (2011) wrote,

A critical trans politics is emerging that refuses empty promises of 'equal opportunity' and 'safety' underwritten by settler colonialism, racist, sexist, classist, ableist, and xenophobic imprisonment, and ever-growing wealth disparity. This politics aims to center the concerns and leadership of the most vulnerable and to build transformative change through mobilization. (p. 41)

The five core principles from transgender studies in education that have broad applicability in many areas of education research are to welcome people in our full humanities (Keenan, 2017), value polyvocality (Nicolazzo, 2017a), understand trans* oppression as intersectional, situate trans* oppression as part of all projects seeking liberation (Kean, 2020; Snorton, 2017), and center trans experiential knowledge (Kean, 2020; Keenan, 2017, Nicolazzo, 2017a). Education researchers and practitioners alike must work to better understand the role of gender when studying and addressing systems of power and oppression.

Discussion

The topics of sex and gender have been of great interest to education researchers for over a century. Many of these studies shared similar goals: to document differences and provide evidence of obstacles in order to improve access and opportunities for students who have been systematically denied safe, affirming, equitable, and robust learning environments. However, we still have a long way to go in ensuring that all students have educational experiences free from toxic messages about sex and gender, particularly for TGNCNB youth and educators. This includes an overemphasis on how poor school environments harm TGNCNB students while de-emphasizing or erasing how TGNCNB youth are leading and succeeding. Education researchers have an opportunity to learn from terrain established in other disciplines while incorporating new understandings of gender, education, power, and liberation through transgender studies.

While the fields of gay and lesbian studies and queer theory started to create spaces for trans-informed understandings of educational and youth spaces, they have repeated certain silences and deficit narratives and often colonized and Whitewashed understandings of schools and youth experiences. What a transgender-informed lens affords education researchers is a radical rethinking of gender and power and how to approach research projects that include gender and liberation as a central or related elements of the study. As Keenan makes clear in his article (this issue, pp. 307-314), theoretical and methodological choices are central to shaping what we know and how we know it. They frame what we understand as the "problem" we are trying to solve. If we frame the transgender student as the problem in schools rather than the institutional structures that reproduce White, settler, cisheteronormative, patriarchal ideals, we will collect very different data and come to very different conclusions about how to fix the "problem" (Loutzenheiser, 2015; Walton, 2010). Thus, it is essential for education researchers to begin to reframe their examinations of gender in schools to help build a more developed field of transgender studies in education. To repair the harm created by decades of deficit-based studies that talk about transgender people, I call on education researchers to engage with transgender theory and epistemologies to help add nuance, depth, criticality, and humanizing lenses to their own research on school climate, learning, diversity, equity, and youth

There are dangers in cisgender scholars approaching this work who have not reflected on the limits of their knowledge and imposing the "cisgender gaze" on how they frame their studies and the "problem" they are interested in studying. I continue to work through these tensions as I remain committed to working in solidarity with diverse communities to improve schools and education research. I have experienced critiques for being a cisgender woman leading research with and for TGNCNB youth as I cannot enact the principle of "FUBU" in my projects. However, I remain committed to this line of work and seek to always reflect critically on the limits of my knowledge and ensure that the work I do always centers the knowledge, needs, voices, and priorities of TGNCNB youth and educators. I am informed by the position offered by Travers (2019) in their book, The Trans Generation: How Trans Kids (and Their Parents) Are Creating a Gender Revolution: "thinking in terms of the most precarious transgender kids is a powerful orientation for a vision of a more just and equitable future for all of us" (p. 201). Understanding the secure and successful transgender kids also helps us envision what already exists in educational spaces and the changes that need to be made in school structures in order to support all students (Meyer et al., 2016).

The field of education research has historically been somewhat more conservative and, thus, slow to adopt knowledge and theories from more critical and radical disciplines in the social sciences. Critical race theory (Ladson-Billings & Tate, 1995), decolonial theories (Grande, 2004/2015), and queer theories (Bryson & De Castell, 1993) have all taken some time to migrate from other disciplines in the social sciences to be taken up by more than a handful of education researchers, as noted by Brockenbrough (2015). However, these lenses, much like transgender studies in education, all have crucial insights and perspectives that disrupt hegemonic patterns in our scholarship that attend to historical silences and can strengthen our empirical and theoretical projects that aim to create truly liberatory educational environments. I want to conclude with another nod to Keenan's (2017) call for welcoming us in our full humanities and Nicolazzo's (2017a) invitation to engage in epistemologies of love. It is my hope that the work presented in this special issue, along with the scholarship cited here, will support the development of a more robust and expansive field of transgender studies in education research.

ORCID ID

Elizabeth J. Meyer https://orcid.org/0000-0002-1974-1576

NOTES

This article was completed as part of The Transgender Studies in Education Learning Community supported by the Spencer Foundation. I would like to thank Melinda Mangin, Harper Keenan, Mollie McQuillan, Mario Suarez, and Lance McCready for their support and feedback on earlier versions of this article.

¹I use trans* or trans-asterisk to honor the writing of Z. Nicolazzo on this topic. While the use of the asterisk is seen as both inclusive of multiple trans identities and controversial because it is seen as replacing or erasing some trans identities, I will use both "trans*" when referring to Nicolazzo's work on trans* epistemologies and "trans" when speaking generally about the transgender community. I draw from the notion of polyvocality in using both of these terms in this article.

REFERENCES

- Airton, L. (2009). Untangling "gender diversity": Genderism and its discontents (i.e., everyone). In S. Steinberg (Ed.), Diversity and multiculturalism: A reader (pp. 223–245). Peter Lang.
- Airton, L. (2018). The de/politicization of pronouns: Implications of the No Big Deal campaign for gender-expansive educational policy and practice. Gender and Education, 30(6), 790-810. https://doi .org/10.1080/09540253.2018.1483489
- Anzaldúa, G. (1987). Borderlands/La Frontera: The New Mestiza. Aunt Lute Books.
- Apple, M. (2004). Ideology and the curriculum (3rd ed.). Routledge-Falmer. https://doi.org/10.4324/9780203487563
- Bem, S. (1993). The lenses of gender: Transforming the debate on sexual inequality. Yale University Press.
- Britzman, D. (1995). Is there a queer pedagogy? Or, stop reading straight. Educational Theory, 45(2), 151-165. https://doi .org/10.1111/j.1741-5446.1995.00151.x
- Brockenbrough, E. (2015). Queer of color agency in educational contexts: Analytic frameworks from a queer of color critique. Educational Studies, 51(1), 28-44. https://doi.org/10.1080/0013 1946.2014.979929
- Bryan, J. (2012). From the dress-up corner to the senior prom: Navigating gender and sexuality diversity in preK-12 schools. Rowman Littlefield.
- Bryson, M., & De Castell, S. (1993). Queer pedagogy: Praxis makes im/perfect. Canadian Journal of Education, 18(3), 285-305. https://doi.org/10.2307/1495388
- Butler, J. (1990). Gender trouble. Routledge Falmer.
- Combahee River Collective. (1997). A black feminist statement. In L. Nicholson (Ed.), The second wave: A reader in feminist theory (pp. 63-70). Routledge. (Original work published 1977)
- Connell, R. W. (1989). Cool guys, swots and wimps: The interplay of masculinity and education. Oxford Review of Education, 15(3), 291-303. https://doi.org/10.1080/0305498890150309
- Connell, R. W. (1995). Masculinities. Allen & Unwin.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. Stanford Law Review, 43(6), 1241-1299. https://doi.org/10.2307/1229039
- Cruz, C. (2001). Toward an epistemology of a brown body. International Journal of Qualitative Studies in Education, 14(5), 657-669. https://doi.org/10.1080/09518390110059874
- Darling-Hammond, K. (2020). Queeruptions and the question of QTPOC thriving in schools: An excavation. Equity & Excellence in Education, 52(4), 424-434. https://doi.org/10.1080/1066568 4.2019.1705205
- Delamont, S. (1984). Sex roles and schooling or "See Janet suffer, see John suffer too." Journal of Adolescence, 7(4), 329-338. https://doi .org/10.1016/0140-1971(84)90013-7
- Diaz, E., & Kosciw, J. (2009). Shared differences: The experiences of lesbian, gay, bisexual, and transgender students of color in our nation's schools. GLSEN.
- Fausto-Sterling, A. (2000). Sexing the body: Gender politics and the construction of sexuality. Basic Books.
- Ferguson, R. (2004). Aberrations in Black: Toward a queer of color critique. University of Minnesota Press.
- Fleming, P. M. (2000). Three decades of educational progress (and continuing barriers) for women and girls. Equity & Excellence in Education, 33(1), 74-79. https://doi.org/10.1080/1066568000330111
- Frank, B., Kehler, M. D., Lovell, T., & Davison, K. G. (2003). A tangle of trouble: Boys, masculinity and schooling-future directions. Educational Review, 55(2), 119-133. https://doi .org/10.1080/0013191032000072173

- Frary, R. B. (1985). AERA opinions on women's equity issues. Educational Researcher, 14(2), 12-17. https://doi.org/10.3102/00 13189X014002012
- Galarte, F. (2014). Pedagogy. Transgender Studies Quarterly, 1(1-2), 145-148. https://doi.org/10.1215/23289252-2399857
- Gill-Peterson, J. (2018). Histories of the transgender child. University of Minnesota Press. https://doi.org/10.5749/j.ctv75d87g
- Glasser, H. M., & Smith, J. P. (2008). On the vague meaning of "gender" in education research: The problem, its sources, and recommendations for practice. Educational Researcher, 37(6), 343-350. https://doi.org/10.3102/0013189X08323718
- Golombok, S., & Fivush, R. (1994). Gender development. Cambridge University Press.
- Grande, S. (2015). Red pedagogy: Native American social and political thought (10th anniversary ed.). Rowman Littlefield. (Original work published 2004)
- Grayson, D. A. (1987). Emerging equity issues related to homosexuality in education. Peabody Journal of Education, 64(4), 132-145. https://doi.org/10.1080/01619568709538574
- Greytak, E., Kosciw, J., & Boesen, M. (2013). Putting the "T" in resource: The benefits of LGBT-related school resources for transgender youth. Journal of LGBT Youth, 10(1-2), 45-63. https:// doi.org/10.1080/19361653.2012.718522
- Grossman, A. H., D'Augelli, A. R., & Frank, J. A. (2011). Aspects of psychological resilience among transgender youth. Journal of LGBT Youth, 8(2), 103-115. https://doi.org/10.1080/19361653 .2011.541347
- Hollingworth, L. S. (1918). Comparison of the sexes in mental traits. Psychological Bulletin, 15(12), 427-432. https://doi.org/10.1037/ h0075023
- hooks, b. (1984). Feminist theory: From margin to center. Routledge.
- hooks, b. (1994). Teaching to transgress: Education as the practice of freedom. RoutledgeFalmer.
- Hyde, J. S. (1981). How large are cognitive gender differences? A metaanalysis using w^2 and d. American Psychologist, 36(8), 892–901. https://doi.org/10.1037/0003-066X.36.8.892
- Hyde, J. S. (2005). The gender similarities hypothesis. American Psychologist, 60(6), 581-592. https://doi.org/10.1037/0003-066X.60.6.581
- Jackson, J. (2001, April 10-14). Come out, come out, Wherever you are: A synthesis of queer research in education [Paper presentation]. American Educational Research Association Annual Meeting, Seattle, WA, United States.
- Kean, E. (2020). Advancing a critical trans framework for education. Curriculum Inquiry, 51(2), 261-286. https://doi.org/10.1080/03 626784.2020.1819147
- Keenan, H. (2017). Unscripting curriculum: Toward a critical trans pedagogy. Harvard Educational Review, 87(4), 538-556. https:// doi.org/10.17763/1943-5045-87.4.538
- Keenan, H. (2022). Methodology as pedagogy: Trans lives, social science, and the possibilities of education research. Educational Researcher, 51(5), 307-314.
- Kehler, M. D., Davison, K. G., & Frank, B. (2005). Contradictions and tensions in the practice of masculinities in school: Interrogating embodiment and "good buddy talk." Journal of Curriculum Theorizing, 21(4), 59-72.
- Kosciw, J. (2004). The 2003 national school climate survey: The school-related experiences of our nation's lesbian, gay, bisexual and transgender youth. GLSEN. https://www.glsenboston.org/ GLSEN2003NationalSchoolClimateSurvey.pdf
- Kosciw, J., Greytak, E., Zongrone, A. D., Clark, C. M., & Truong, N. L. (2018). The 2017 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's schools.

- GLSEN. https://www.glsen.org/sites/default/files/2019-10/GLSEN-2017-National-School-Climate-Survey-NSCS-Full-Report.pdf
- Kumashiro, K. (2001). Toward a theory of antioppressive education. Review of Educational Research, 70(1), 25-53. https://doi. org/10.3102/00346543070001025
- Ladson-Billings, G., & Tate, W. F. (1995). Toward a critical race theory of education. Teachers College Record, 97(1), 47-68.
- Leonardi, B., & Staley, S. (2018). What's involved in "the work"? Understanding administrators' roles in bringing trans-affirming policies into practice. Gender and Education, 30(6), 754-773. https://doi.org/10.1080/09540253.2018.1455967
- Leyva, L. (2017). Unpacking the male superiority myth and masculinization of mathematics at the intersections: A review of research on gender in mathematics education. Journal for Research in Mathematics Education, 48(4), 397-433. https://doi.org/10.5951/jresematheduc.48.4.0397
- Loutzenheiser, L. W. (2015). "Who are you calling a problem?" Addressing transphobia and homophobia through school policy. Critical Studies in Education, 56(1), 99-115. https://doi.org/10.10 80/17508487.2015.990473
- Luecke, J. C. (2011). Working with transgender children and their classmates in pre-adolescence: Just be supportive. Journal of LGBT Youth, 8(2), 116–156. https://doi.org/10.1080/19361653.2011.544941
- Mangin, M. (2019). Transgender students in elementary schools: How supportive principals lead. Educational Administration Quarterly, 59(2), 255-288. https://doi.org/10.1177/0013161X19843579
- Mangin, M., & Suarez, M. (in press). Transgender studies in K-12 education: Mapping an agenda for research and practice. Harvard Education Press.
- Martin, J. R. (1981). The ideal of the educated person. Educational *Theory*, 31(2), 97–109. https://doi.org/10.1111/j.1741-5446.1981. tb00954.x
- Martino, W. (1995). "Cool boys," "party animals," "squids" and "poofters": Interrogating the dynamics and politics of adolescent masculinities in school. British Journal of Sociology of Education, 22(2), 239-263. https://doi.org/10.1080/01425699995434
- Martino, W., & Berrill, D. (2003). Boys, schooling and masculinities: Interrogating the "right" way to educate boys. *Educational Review*, 55(2), 99-117. https://doi.org/10.1080/0013191032000072164
- Mayo, C. (2007). Chapter 3 Queering Foundations: Queer and lesbian, gay, bisexual, and transgender educational research. Review of Research in Education, 31(1), 78-94. https://doi.org/10.3102/009 1732X07300046078
- McCready, L. T. (2004). Understanding the marginalization of gay and gender non-conforming Black male students. Theory Into Practice, 43(2), 136-143. https://doi.org/10.1207/s15430421tip4302_7
- McGuire, J. K., Anderson, C. R., Toomey, R. B., & Russell, S. T. (2010). School climate for transgender youth: A mixed method investigation of student experiences and school responses. Journal of Youth and Adolescence, 39(10), 1175-1188. https://doi. org/10.1007/s10964-010-9540-7
- Meyer, E. J. (2006). Gendered harassment in North America: Schoolbased interventions for reducing homophobia and heterosexism. In C. Mitchell & F. Leach (Eds.), Combating gender violence in and around schools (pp. 43-50). Trentham Books.
- Meyer, E. J. (2008). Gendered harassment in secondary schools: Understanding teachers' (non)interventions. Gender and Education, 20(6), 555–572. https://doi.org/10.1080/09540250802213115
- Meyer, E. J. (2009). Gender, bullying, and harassment: Strategies to end sexism and homophobia in schools. Teachers College Press.
- Meyer, E. J. (2010). Gender and sexual diversity in schools. Springer. https://doi.org/10.1007/978-90-481-8559-7
- Meyer, E. J., Tilland-Stafford, A., & Airton, L. (2016). Transgender and gender-creative students in PK-12 schools: What we can learn from their teachers. Teachers College Record, 118(8), 1-50.

- Mills, M. (2001). Challenging violence in schools: An issue of masculinities. Open University Press.
- Movement Advancement Project, & GLSEN. (2017). Separation and stigma: Transgender youth & school facilities. GLSEN. https:// www.glsen.org/sites/default/files/2019-11/Separation_and_ Stigma_2017.pdf
- Muñoz, V., & Garrison, E. K. (2008). Transpedagogies: A roundtable dialogue. Women's Studies Quarterly, 36(2-4), 288-308. https:// doi.org/10.1353/wsq.0.0093
- Murchison, G. R., Agenor, M., Reisner, S. L., & Watson, R. J. (2019). School restroom and locker room restrictions and sexual assault risk among transgender youth. Pediatrics, 143(6), e20182902. https://doi.org/10.1542/peds.2018-2902
- Nicolazzo, Z. (2016). "Just go in looking good": The resilience, resistance, and kinship-building of trans* college students. Journal of College Student Development, 57(5), 538-556. https://doi .org/10.1353/csd.2016.0057
- Nicolazzo, Z. (2017a). Imagining a trans* epistemology: What liberation thinks like in postsecondary education. Urban Education, 56(3), 511-536. https://doi.org/10.1177/0042085917697203
- Nicolazzo, Z. (2017b). Trans* in college: Transgender students' strategies for navigating campus life and the institutional politics of inclusion.
- Olson, K. R., Durwood, L., DeMeules, M., & McLaughlin, K. A. (2016). Mental health of transgender children who are supported in their identities. Pediatrics, 137(3), e20153223. https://doi .org/10.1542/peds.2015-3223
- O'Shaughnessy, M., Russell, S. T., Heck, K., Calhoun, C., & Laub, C. (2004). Safe place to learn: Consequences of harassment based on actual or perceived sexual orientation and gender non-conformity and steps for making schools safer. California Safe Schools Coalition. http://www.casafeschools.org/SafePlacetoLearnLow.pdf
- Paris, D. (2019). Naming beyond the white settler colonial gaze in educational research. International Journal of Qualitative Studies in Education, 32(3), 217-224. https://doi.org/10.1080/09518398.2 019.1576943
- Pascoe, C. J. (2005). "Dude, you're a fag": Adolescent masculinity and the fag discourse. Sexualities, 8(3), 329-346. https://doi. org/10.1177/1363460705053337
- Powers, J. B. (1981). Sex equity: Where have we been and where might we go? Social Studies Review, 21, 50-55.
- Roberts, A. L., Rosario, M., Corliss, H., Koenen, K. C., & Austin, S. B. (2012). Childhood gender nonconformity: A risk indicator for childhood abuse and posttraumatic stress in youth. Pediatrics, 129(3), 410-417. https://doi.org/10.1542/peds.2011-1804
- Rofes, E. (1989). Opening up the classroom closet: Responding to the educational needs of gay and lesbian youth. Harvard Educational Review, 59(4), 444-454. https://doi.org/10.17763/ haer.59.4.31183h6345747510
- Sadker, D. (1999). Gender equity: Still knocking at the classroom door. Educational Leadership, 56(April).
- Sadker, M. P. (1980). Sex bias in reading and language arts teacher education texts. Reading Teacher, 33(5), 530-537.
- Sadker, M. P., Sadker, D., & Klein, S. (1986). Abolishing misperceptions about sex equity in education. Theory Into Practice, 25(4), 219-226. https://doi.org/10.1080/00405848609543230
- Sears, J. (1991). Educators, homosexuality, and homosexual students: Are personal feelings related to professional beliefs? Journal of Homosexuality, 22(3-4), 29-79. https://doi.org/10.1300/ J082v22n03_03
- Singh, A. A. (2012). Transgender youth of color and resilience: Negotiating oppression and finding support. Sex Roles, 68(11–12), 690-702. https://doi.org/10.1007/s11199-012-0149-z

- Slesaransky-Poe, G., Ruzzi, L., Dimedia, C., & Stanley, J. (2013). Is this the right elementary school for my gender nonconforming child? Journal of LGBT Youth, 10(1-2), 29-44. https://doi.org/1 0.1080/19361653.2012.718521
- Smith, M. J., & Payne, E. (2015). Binaries and biology: Conversations with elementary education professionals after professional development on supporting transgender students. Educational Forum, 80(1), 34-47. https://doi.org/10.1080/00131725.2015 .1102367
- Snorton, C. R. (2017). Black on both sides: A racial history. of trans identity. University of Minnesota Press. https://doi.org/10.5749/minnesota/9781517901721.001.0001
- Spade, D. (2011). Normal life: Administrative violence, critical trans politics, and the limits of law. South End Press.
- Stryker, S. (2004). Transgender studies: Queer theory's evil twin. GLQ: A Journal of Lesbian and Gay Studies, 10(2), 212-215. https://doi. org/10.1215/10642684-10-2-212
- Stryker, S., Currah, P., & Moore, L. J. (2008). Introduction: Trans-, trans, or transgender? WSQ Women's Studies Quarterly, 36(3-4), 11-22. https://doi.org/10.1353/wsq.0.0112
- Thorne, B., & Luria, Z. (1986). Sexuality and gender in children's daily worlds. Social problems, 33(3), 176-190. https://doi. org/10.2307/800703
- Tittle, C. K. (1985). Research on sex equity in education: An agenda for the divisions, SIGs, and AERA. Educational Researcher, 14(9), 10 - 18.
- Travers, A. (2019). The trans generation: How trans kids (and their parents) are creating a gender revolution. New York University
- Walton, G. (2010). The problem trap: Implications of Policy Archaeology Methodology for anti-bullying policies. Journal of Education Policy, 25(2), 135–150. https://doi.org/10.1080/02680930903428630
- Weaver-Hightower, M. (2003). The "boy turn" in research on gender and education. Review of Educational Research, 73(4), 471-498. https://doi.org/10.3102/00346543073004471
- West, C., & Zimmerman, D. H. (1987). Doing gender. Gender & Society, 1(2), 125-151. https://doi.org/10.1177/ 0891243287001002002
- Wirtenberg, J. (1981). Sex equity in American education. Educational Leadership, 38(4), 311-319.
- Woolley, H. T. (1914). The psychology of sex. Psychological Bulletin, 11(10), 353-379. https://doi.org/10.1037/h0070064
- Wyss, S. E. (2004). "This was my hell": The violence experienced by gender non-conforming youth in US high schools. International Journal of Qualitative Studies in Education, 17(5), 709–730. https://doi.org/10.1080/0951839042000253676
- Zittleman, K., & Sadker, D. (2002). Gender bias in teacher education texts: New (and old) lessons. Journal of Teacher Education, 53(2), 168-180. https://doi.org/10.1177/0022487102053002008
- Zongrone, A. D., Truong, N. L., & Kosciw, J. (2020). Erasure and resilience: The experiences of LGBTQ studens of color. GLSEN.

AUTHOR

ELIZABETH J. MEYER, PhD, is an associate professor in the School of Education at the University of Colorado Boulder, 249 UCB, Boulder, CO 80309; elizabeth.j.meyer@colorado.edu. Her research focuses on gender and sexual diversity in schools.

Manuscript received November 17, 2020 Revisions received June 24, 2021, and August 31, 2021 Accepted September 6, 2021