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LGBTQ+-Inclusive Professional Development in Elementary Schools: Does It Matter to Schoolwide Discipline?

Mollie T. McQuillan[1], Erin K. Gill[1], and Xue Gong[1]

Abstract

PK-12 leaders use gender- and sexuality-inclusivity professional development (IPD) as a tool to improve the school climate for LGBTQ+ students, but IPD programs vary widely in their scope, breadth, duration, instructional approach, and content. In this paper, we present the IPD conceptual framework, which proposes a sustained, intensive, and expansive approach to PD can influence student outcomes through changes in educators' beliefs, attitudes, skills, and knowledge concerning gender and sexuality. Using a large, Midwestern school district as a case study, we examine characteristics of schools participating in an intensive IPD program and whether participation contributed to school disciplinary rates. Using 2018-2019 administrative and program data from the district and state department of instruction, we: 1) describe demographic and program differences between IPD and non-IPD schools, and 2) evaluate the contribution of IPD on disciplinary outcomes using OLS regression analysis controlling for selection characteristics. Our analysis reveals less racial and ethnically-diverse and better financially-resourced schools participate in the IPD program. The regression analysis suggests schools participating in IPD have lower suspension rates, assault rates, and endangering behavior rates compared to non-IPD schools. Several studies indicate supportive leaders and IPD improves school climates

[1]Department of Educational Leadership and Policy Analysis, University of Wisconsin - Madison, Madison, WI, USA

Corresponding Author:
Mollie T. McQuillan, Department of Educational Leadership and Policy Analysis, University of Wisconsin – Madison, 270C Education Building, 1000 Bascom Mall, Madison, WI, USA.
Email: mmcquillan@wisc.edu

for LGBTQ+ students; however, quantitative descriptions of how IPD may influence student behavior remain scarce. Policymakers and educational leaders may be interested in this study's results suggesting a decrease in disciplinary actions among schools committed to IPD with core components of the IPD framework.

Keywords
gender, sexuality, professional development, school discipline, LGBTQ+, inclusivity professional development framework, professional development, inclusivity

Introduction

In a year when more states have enacted anti-trans, anti-queer state laws than ever before in the United States (205 by April of 2021; HRC 2021), PK-12 leaders need evidence about effective practices that could support lesbian, gay, bisexual, transgender, queer, and other gender-expansive students (LGBTQ+). All students deserve to feel safe in schools, supported by educators, and achieve their academic goals. Yet, the institutionalization of the gender binary in schools creates cis-privileged and heterosexist systems, which contributes to disparities between LGBTQ + students and their straight and cisgender counterparts in academic achievement (Poteat et al., 2013), school safety (Toomey et al., 2010, 2012), and, ultimately, the school-to-prison pipeline (Marksamer, 2008; Snapp & Russell, 2016) and the school-to-coffin pipeline (Wozolek et al., 2017).

One of several ways to counter moves to further institutionalize homophobia and transphobia in schools could be to focus on changing educators' practices. Educational research suggests school-based supports (supportive staff, inclusive curricula, presence of gender and sexuality alliances (GSAs), and anti-bullying or harassment policies) can improve school climates for LGBTQ + students and, subsequently, the academic and behavioral outcomes of LGBTQ + youth (Day et al., 2019; Murchison et al., 2021; Poteat et al., 2013). However, similar quantitative evaluations of gender and sexuality inclusivity professional development (IPD) remain scarce.

Gender and sexuality inclusivity professional development (IPD) is one of several tools school leaders use to change school climate. Several researchers have suggested IPD plays an important role in shifting educators' beliefs (Case & Meier, 2014; Greytak et al., 2013; Greytak & Kosciw, 2010; Payne & Smith, 2018; Staley & Leonardi, 2020), attitudes about gender and sexuality, knowledge, and skills. In doing so, IPD subsequently can improve LGBTQ + students' sense of belonging in schools (Szalacha, 2003) and decrease rates of victimization (Poteat et al., 2019). Still, other educational scholars have questioned whether IPD contributes to sustained structural changes or sustained changes in educational leaders' and teachers' practices (Martino et al., 2020; Payne & Smith, 2018). Administrators' personal beliefs, values, and experiences with LGBTQ + people contribute to their willingness to learn about inclusion and implement

policies' protections (Hernandez & Fraynd, 2014; Marshall & Hernandez, 2013).Leaders are more likely to participate in IPD when it is framed as an important element in improving school climate and achievement goals (Capper, 2018; Payne & Smith, 2018). Several scholars note changes in educators' beliefs and practices after IPD; yet, it is unclear whether IPD can provoke significant changes to complex, more distal student outcomes, such as discipline rates, and, if so, under what conditions. Contributing to the difficulty of measuring IPD programs' effects on educators' and students' behaviors, the scale, scope, and intensity of IPD programs vary widely.

Using a modified version of Desimone's professional development conceptual framework (2009; shown in Figure 1), this study examines elementary students' disciplinary outcomes after the implementation of an intensive IPD program that required several of the core features of professional development described in Desimone's framework. These core features include: 1) content focus, 2) duration, 3) active learning, 4) collective participation, and 5) coherence (Desimone, 2009). We first review the literature on how school climates contribute to the social relationships and discipline of LGBTQ + students. We then discuss the role administration and teachers play in improving the school climate and discipline of LGBTQ + students. Next, we explain why IPD incorporating the core features of professional development highlighted in the conceptual framework shown in Figure 1 can strengthen that relationship. After reviewing the literature and IPD conceptual framework, we explain the IPD case study and methods. In this intensive IPD program in a large, Midwestern school district, school leaders had to commit to several training sessions, curriculum development, leadership teams, and modifications to the school mission for at least one year. Thus the IPD program aligned with some of the core features of PD outlined in the IPD conceptual framework.

Our study of elementary schools then addresses two main research goals. First, we describe *which types of elementary schools* participated in this intensive, elective IPD program by comparing demographics and financial resources for IPD and non-IPD schools. Second, we examine *whether participation in the IPD program contributed to decreased disciplinary rates* in IPD schools. For this study aim, we conducted a cross-sectional OLS regression analysis of the most recent year of delivery (2018-2019), when 39% of the elementary schools participated in the program, and controlled for school characteristics associated with selection into the IPD program. While the cross-sectional design does not allow us to make any causal claims, using multivariate regression analysis allows us to test if there is an association between IPD delivery and disciplinary rates while controlling for school demographic differences. To conclude, we discuss the potential of IPD to facilitate supportive school climates and learning for adults and youth in schools, especially IPD programs that embed the core components of the IPD conceptual framework.

Background

LGBTQ + Student Learning in Poor School Climates

Despite several nationwide efforts to curb gender-based bullying, such as the Trevor Project's "It Gets Better" campaign, and wider acceptance of LGBTQ + people (Flores et al., 2017; Gallup, Inc, 2021; Pew Research Center, 2016), the number of LGBTQ + students bullied in school remains high (Kosciw et al., 2020). While LGBTQ + youth flourish in many schools, LGBTQ + students still face persistent victimization in schools overall (Gordon et al., 2018; Poteat et al., 2019). More than eighty percent of LGBTQ + students (86%) report they have experienced harassment or assault at school, and more than half (59.1%) report they felt unsafe at school because of their sexual orientation (Kosciw et al., 2020). One-fifth of LGBTQ + students indicate they changed school because they felt unsafe.

These social experiences may have academic repercussions. When students with marginalized identities encounter hostile environments, they experience physical stress (McQuillan et al., 2021; Hatzenbuehler et al., 2013; Meyer, 1995), which impedes their ability to learn (Hammond, 2014). LGBTQ + students who report higher bullying levels also indicate they miss more school, have lower GPAs, higher rates of depression, more discipline at school, and lower academic aspirations. This bullying does not only come from students' peers. Two-thirds of LGBTQ + students indicate educators and staff also make derogatory comments based on gender, and less than one-fifth report staff intervene when LGBTQ + students report bullying behavior among their peers. The gender- and sexuality-based bullying that negatively impacts LGBTQ + students' learning also creates a poorer learning environment for all students. Gender-policing limits the identity development of cisgender and heterosexual students alike. Conversely, inclusive schools can create space for identity development (Hernandez et al., 2020), reduce bullying behaviors (Thapa et al., 2013), and improve student attendance, discipline, and academic achievement (Cohen et al., 2009).

LGBTQ + Students and School Discipline

Being absent from school can subsequently lead to academic decline, pushing students out of schools and into the criminal justice system (Mallett, 2015; Nicholson-Crotty et al., 2009; Snapp et al., 2015). In addition to avoiding school because of gender- and sexuality-based bullying, the over-policing of gender in schools contributes to the school-to-prison pipeline for LGBTQ+ and students of color (Marksamer, 2008; Snapp & Russell, 2016). LGBTQ + students encounter disproportionate disciplinary actions from school administrators and teachers, which increases the number of students who receive in-school suspensions, out-of-school suspensions, and expulsions (Snapp et al., 2015). Students who skip, due to fear and avoidance of bullying, or miss school, because of disciplinary actions, do not engage with instructional content (Birkett et al., 2014; Fabelo et al., 2011; Lacoe & Steinberg, 2019; Losen et al., 2014; Skiba & Losen,

2016). School leaders play an important role in disrupting this pushout by identifying and interrupting gender-based bullying by students and adults in schools.

Supportive Educators' Role in Improving LGBTQ + Students' Social Relationships

School cultures that value diversity and support students with marginalized identities create positive climates that enhance all students' abilities to thrive. Administrators set the foundation for positive school cultures by establishing learning and diversity and inclusion goals for the school, and then by selecting the appropriate professional development and curriculum to modify educators' skills, knowledge, beliefs, and attitudes to implement these goals (Capper, 2018; Capper et al., 2006; Theoharis, 2007). Yet, one in five LGBTQ students (22.5%) report school administration is not supportive of LGBTQ + students (Kosciw et al., 2020).

Educators play an essential role in supporting more positive social interactions, improving learning, and decreasing disciplinary rates. LGBTQ + students experience better school climates when teachers intervene in bias-based bullying and harassment (Kosciw et al., 2020). Yet, a number of studies suggest educators inconsistently intervene and often indirectly punish gender-expansive students when they do try to intervene (Meyer, 2008; Snapp et al., 2015). Whether educators intervene depends, in part, on how much training they have received, their self-efficacy (Poteat et al., 2019), and whether they believe their administration will support teachers and staff who do intervene in bias-based bullying. The alignment of administrators, teachers, and staff who build inclusive classrooms allows students to feel more comfortable to engage in learning - and can even mitigate the effects of poor school climates on LGBTQ + students' educational and behavioral outcomes.

Supportive Educators' Role in Improving LGBTQ + Students' Learning and Discipline

The importance of supportive school leaders, teachers, and staff on student learning and discipline is also well-established. LGBTQ + students with more supportive staff at their school reported higher levels of school belonging, self-esteem, and lower levels of depression (Kosciw et al., 2020). Supportive staff has been positively associated with LGBTQ + students' sense of safety and negatively associated with absenteeism and victimization (Kosciw et al., 2020; McGuire et al., 2010; Watson et al., 2021). Students with supportive school staff even have reported better distal outcomes that influence learning, such as less alcohol use, compared to LGBTQ + students who report that adults in their school are not supportive (Watson et al., 2021). These socio-emotional factors contribute to better learning environments for LGBTQ + students. LGBTQ + students with more supportive staff and mentors have higher school engagement, educational aspirations, GPA's, and rates of high school graduation (Drevon et al., 2016; Kosciw et al., 2013, 2020; Seelman et al., 2015).

Similarly, educators' beliefs and knowledge about LGBTQ + students influence school discipline. Educators enforce discipline policies based on beliefs about culturally appropriate behavior (Diamond & Lewis, 2019; Ispa-Landa, 2017; Losen et al., 2014; Poteat et al., 2016), resulting in the over-policing of students with historically-marginalized identities. Exclusionary discipline practices – such as in-school suspensions, out-of-school suspensions, and expulsions - negatively impacts students of color and LGBTQ + students' when educators' mistake students' gender expression (i.e., use of language, appearance, voice volume, social interactions) as defiant (Ispa-Landa, 2013; Snapp et al., 2015). Because of this heightened scrutiny of gendered behavior, students are unsure if and when their expression will result in punishment and whether or not teachers will intervene in bias-based bullying, inhibiting their learning. Conversely, student learning can be enhanced when students trust the adults in their school will intervene in direct bullying and provide a safe, supportive environment to explore different aspects of their identity.

Inclusivity Professional Development as a Mechanism to Improving School Social Dynamics, Learning, and Discipline

No single strategy will accomplish the work of changing the gendered school policies, procedures, and practices in American schools, but IPD represents one tool that may shift the beliefs, attitudes, knowledge, and skills of key adults involved in schools. Changing educators' beliefs, attitudes, knowledge, and practices through professional development can then mediate students' outcomes (Borko, 2004; Darling-Hammond et al., 2017; Desimone, 2009). School leaders and teachers set behavioral expectations and facilitate many in-school student interactions; yet, educators report they either lack the necessary training or want more training to create inclusive schools for LGBTQ + students (Dragowski et al., 2016; Swanson & Gettinger, 2016). In a survey of secondary teachers conducted by the LGBTQ + advocacy group GLSEN, only one-third reported receiving professional development on diversity, LGB issues, and transgender issues (Kosciw et al., 2018). Despite many educators expressing a need for IPD on gender and sexuality issues, few educators receive this in-service training.

PK-12 administrators responsible for selecting professional development might not understand the importance of IPD concerning gender and sexuality. While some educational leadership instructors do discuss gender and sexuality in individual courses, O'Malley and Capper (2014) found these topics have not been integrated into educational leadership programs either. Like many the curriculum in educational leadership programs, many PK-12 leaders don't see gender and sexual diversity as part of their diversity and inclusion mission. In an evaluation of an IPD program in New England, Payne and Smith (2018) found many administrators did not believe there were enough LGBTQ + families in their school to warrant the resources and did not see gender- and sexual-diversity as falling under their inclusion and diversity goals. Payne and Smith identified resistance among school leaders to commit to IPD trainings, even when educators in their school believed teachers would benefit from it.

Several studies indicate school supports can improve school climates for LGBTQ + students (Day et al., 2019; Kosciw et al., 2013, 2020; McGuire et al., 2010; Poteat et al., 2013; Seelman et al., 2015), which is linked to students' academic and health outcomes. However, quantitative evaluations of the relationships between gender- and sexuality-inclusivity-professional development (IPD) and students' school experiences and outcomes remain scarce, especially studies exploring distal student outcomes such as student disciplinary actions. Further, not all IPD programs are equal, and the design of IPD likely matters in both the impact on educators and students. Finally, scholars have widely focused on student outcomes for middle and high school students. Far fewer studies examine student outcomes in elementary schools. This study examines elementary students' disciplinary outcomes after the implementation of an intensive IPD program that shares several of the core features of effective professional development (Desimone, 2009).

Conceptual Framework

Effective Features of Inclusivity Professional Development

The IPD program evaluated in this study uses a conceptual framework similar to many effective content professional development programs focusing on content delivery, active learning, coherence, duration, and collective participation (Blank & Alas, 2009; Desimone, 2009; Garet et al., 2001). We adapt Desimone's professional development conceptual framework (2009; shown in Figure 1) to highlight how elements of effective content-focused professional development may apply to IPD and, consequently, contribute to changes in school disciplinary rates (see Fig. 1). Previous reviews and metanalyses of rigorous PD studies suggest that PD can significantly improve student achievement (Blank & Alas, 2009; Van Veen et al., 2012; Yoon et al., 2007). PD studies that demonstrate a positive link between PD and improved student outcomes share the following program features: content-focused, utilizes active learning, engages participants in collaboration, models effective practice, supplies coaching, provides time for feedback and reflection (Blank & Alas, 2009; Darling-Hammond et al., 2017; Desimone, 2009; Van Veen et al., 2012). While content-specific instructional PD has been shown to effectively influence student outcomes under specific conditions (Darling-Hammond et al., 2017), the scope, scale, and format of professional development trainings have been a significant predictor of change (Anand & Winters, 2008).

Schools that successfully implement change ensure that educators work centers on professional learning (Hirsch, 2019; Jensen et al., 2016). High-performing schools link professional learning to district goals, develop teacher expertise and leadership capacities, articulate a clear evaluation and accountability system, and designate time for educators to engage in professional learning (Jensen et al., 2016; Van Veen et al., 2012). In many ways, the failure of IPD to initiate change in existing IPD studies concerning gender and sexuality can be understood through the modified IPD conceptual

framework (Figure 1). The IPD program in our study meets all of the aforementioned best practices except for *content-focused*; rather, the scope of the IPD program addresses teachers' beliefs, attitudes, knowledge, skills concerning gender and sexuality regardless of the content area.

Inclusivity Professional Development Shift Educators Beliefs and Practices

Creating inclusive environments for LGBTQ + students requires educators to change their behaviors and redefine their deeply held beliefs of gender and sexuality. IPD has been associated with greater involvement in LGBT-supportive practices, such as intervening in gender-based bullying (Espelage et al., 2014; Swanson & Gettinger, 2016), providing individual students with support (GLSEN 2016), and using an LGBTQ + -inclusive curriculum. Similarly, educators' improved self-efficacy influences their likelihood to intervene in LGBTQ + bias-based bullying (Greytak & Kosciw, 2010). Interview studies (Mangin, 2019; Payne & Smith, 2011) and at least one quantitative evaluation with pre-/post-IPD survey data (Greytak et al., 2013) suggest that IPD can change educators' beliefs about gender. Once trained, over 95% of educators report IPD is useful and relevant (McQuillan & Leininger, 2021). These studies suggest IPD can at least raise awareness about LGBTQ + students and why schools need gender reforms, which could be an important step towards more equitable practices (Hanssmann, 2012).

Scale and Scope of Inclusivity Professional Development Matters

When IPD programs discuss gender and sexuality in schools, numerous educational scholars have noted that existing IPD programs fail to move educators beyond frames of safety and risk towards sustained, deeper structural reforms (Mayo & Blackburn, 2019; Sadowski, 2020; Smith & Payne, 2016). These critiques of IPD also speak to the range of IPD trainings available, especially IPD programs that do not meet the criteria described in the conceptual framework. For example, Smith and Payne (2016) found that educators' attempts to integrate transgender students into schools reified the heteronormative structure, and Martino et al. (2020) argued that school leaders use inclusive practices for individual transgender students to resist further structural changes to cisnormative systems. Staley and Leonardi (2020) propose the overarching approach to content learning needs to shift towards conversations of oppression, power, and the self with a greater focus on active learning that prepares teachers to "disrupt normativity." Preparing teachers to disrupt normativity includes providing *active learning* opportunities. Rather than passively listening to a lecture on gender and sexuality in schools, *active learning* involves opportunities for reflection and to practice changing instruction, discipline, and social interactions. This can include role-playing, planning new lessons, journaling, small group discussions, or on-going professional learning communities. These aspects of professional development align with prominent approaches to building equity-focused professional learning communities (Carter Andrews & Richmond, 2019; Cochran-Smith, 2011).

Several studies also point to the ineffectiveness of IPD trainings that are not part of a broader, sustained organizational effort, which speaks to the *coherence* of the IPD goals across organizational structures and *duration* of the IPD delivery across time. A longitudinal analysis of 30 years of corporate diversity efforts revealed IPD alone was among the least effective measures companies took to increase workforce diversity (Kalev et al., 2006). Similarly, evaluations of a one-hour, online diversity training indicated diversity training could *decrease* support for marginalized groups (Chang et al., 2019), and a meta-analysis of the influence of inclusivity training in the workplace suggested IPD had virtually no impact on behaviors and attitudes (Bezrukova et al., 2016). However, in Bezrukova's study, participants did learn more about marginalized groups and discrimination. The effect of this change was even greater when IPD is part of sustained diversity strategies across time and stakeholders. Integrated, sustained efforts to build *collective participation* by reaching multiple stakeholders have had limited success in changing workplace climates (Anand & Winters, 2008; Bezrukova et al., 2016), but it is clear that short, passive trainings that remain disconnected from broader equity goals have been ineffective at motivating organizational reforms. Most descriptions of the IPD programs do not meet many of the core features of professional development programs that initiate changes in educators' behaviors: collective participation, duration, coherence, active learning, and content learning.

So, what happens when schools embed gender- and sexuality-equity goals using IPD that meets the criteria of our conceptual framework: collective participation throughout the school community, sustained duration, coherence from policies to practices, active learning opportunities, and content learning concerning gender and sexuality? Evaluations of this scaled-up delivery remain scarce, but existing evaluations highlight the importance of these IPD components when describing the shortcomings of specific IPD programs. Payne and Smith (2011) emphasized the importance of a sustained effort by school leaders so educators can process and implement strategies from IPD. They argue that IPD also needs to be tailored to the local context, delivered within schools, and developed by other educators in order to change educators' beliefs and efforts about gender. However, in their later evaluation of an IPD program, Payne and Smith (2018) noted that IPD trainers often struggle to gain access to schools to deliver IPD because administrators did not prioritize gender and sexuality issues. In one of the earliest evaluations, Szalacha, 2003 mixed-methods study assessing school supports concerning sexual diversity in Massachusetts secondary schools indicated an additive effect of school supports on student school climate (2003). When schools adopted more than one of the Safe Schools Program for Gay and Lesbian Students recommendations, which included teacher training along with GSA's or school policies, students' perceptions of school climate increased compared to students without school supports. However, this effect for teacher trainings disappeared when schools had all three supports, suggesting the relative importance of school policies and GSAs.

Still, a number of IPD evaluations suggest investing resources into intensive IPD with collective participation, duration, coherence, active learning, and content learning could lead to improved school climates. Staley and Leonardi (2020) stressed the importance of IPD with a queer pedological lens that has the potential to disrupt broader systems of oppression in schools. While acknowledging the challenges to sustaining the political and

financial resources for this kind of IPD training, they highlight the need to provide resources and space for continuous reflection – both for educators and those delivering IPD to diverse school contexts. Hanssman (2012) suggested that IPD can be a useful mechanism to start educators on a journey but should not be the end of the journey. He proposed that IPD can provide opportunities for educators to reflect on their beliefs and attitudes concerning gender, educate teachers about gender and sexuality concepts, practice new skills, and build a foundation for more gender work. However, Hanssman underlined IPD should not be *the* solution to reforming schools (Hanssman, 2012). Instead of focusing on the impact of IPD on teachers' beliefs and attitudes, the current study extends the literature on gender- and sexuality-inclusivity professional development designed for educational institutions, and more specifically, the relatively limited quantitative evaluations, by evaluating one districts' rollout of an IPD program on students' behavioral outcomes.

Method

This study of 33 elementary schools in a large, urban, Midwestern school district used cross-sectional data to evaluate whether IPD contributes to variation in student behavioral outcomes. The district only offered elementary school leaders the whole-school IPD program. Secondary and middle school teachers could individually elect to take parts of the curriculum portion of the training, such as an LGBTQ + Students 101 course. However, the district did not offer the whole-school IPD training and support to middle and high school principals.

The school district started the IPD program in 2013 with one school participating. By 2018, 15 of 33 schools participated in the IPD program. The study used cross-sectional data from 2018-2019 to evaluate the relationship between IPD and our outcomes of interest in the year with the highest degree of participation. Both academic researchers and district-level practitioners designed the current study to examine the implementation of an IPD program aimed at improving outcomes for LGBTQ + students across a large, Midwestern district. However, the authors of this paper have not been involved in the design or implementation of the IPD curriculum, nor do they have a financial stake in the program's success.

The IPD Program

Elementary school principals elect to enroll their school in the year-long program (duration), committing the whole school (collective participation) to: 1) at least two 90-minute training sessions for all staff (content knowledge), and 2) two 45-minute sessions devoted to LGBTQ + -inclusive lesson modeling, lesson planning, scenario practice, reflection, and discussion (active learning). In some schools, the facilitators also delivered trainings to the parent-teacher organization (collective participation) and organized parent and/or student panels (content knowledge).

Initially, trainers describe basic gender and sexuality concepts and the risks PK-12 schools pose to students who vary from gender norms. After the first year of the program, training delved into more nuanced topics, such as family diversity, specific strategies for supporting transgender and nonbinary students, and the legal foundation for creating

inclusive schools (content delivery). The IPD facilitators also adopt an intersectional, critical approach to the training that includes discussions about how marginalized identities may intersect to increase risk or access resources. A national LGBTQ advocacy organization provides the district trainers with a curriculum and a template for sustained engagement, but local trainers modify this template using their knowledge of the district policies, procedures, practices, and school culture. Next, the principal commits to revising the school improvement plan to align with training objectives and building a leadership team (coherence). This alignment within the school also puts the school in better alignment with the district's policies and guidance concerning LGBTQ + students. The leadership team guides the implementation of key improvement goals and attends on-going retreats and monthly meetings (coherence and duration).

The IPD program in this study shares key features (i.e., content delivery, active learning, coherence, duration, and collective participation) of effective PD programs and schools that successfully implement change (i.e., link professional learning to district goals, develop teacher expertise, ensure time for professional learning). Based on the existing literature concerning the effectiveness of PK-12 professional development programs, we propose that the scaled-up version of IPD at the center of this evaluation would likely to change (1) educators' beliefs, attitudes, knowledge, and skills, (2) educators' social interactions with students, their instructional, and disciplinary practices, and (3) improve students' social interactions, learning, and behavior as Desimone's model (2009) indicates (see Figure 1). However, because this study relies on existing secondary data, we only test one aspect of this theory of change: whether the IPD program relates to changes in educators' and students' behaviors, proxied by school discipline rates.

Data

The 2018-2019 school data comes from two sources: 1) the state department of education school report card and discipline data for 33 elementary schools, and 2) district training records.

Variables

IPD Delivery. This study's main independent variable is the dichotomous variable of school IPD delivery (0 = no schoolwide inclusivity professional development; 1 = received schoolwide inclusivity professional development). We partnered with school district trainers who kept detailed records of when schools committed to the intensive IPD program and their fidelity to the training plan. Individual educators in non-IPD schools could have received IPD training through voluntary districtwide trainings or external professional development. This analysis focuses only on schoolwide delivery. Participation has increased from one school in the 2013-2014 to 15 in the 2018-2019 school year. In 2018-2019, 55% of elementary schools in the district were *not* in the IPD program.

Demographics. The research team retrieved school enrollment, racial breakdown, percent of students' economically disadvantaged, and percent of students receiving special education, and English Language Learner services from the Department of Instruction's school report card data. We derived the school percentages from a count of each student group as a percent of all students' enrollment. Table 1 presents the means for these school-level demographics across IPD and non-IPD schools.

Disciplinary Actions. The state requires each school to track and report disciplinary actions to the state department of education. The discipline data includes counts on suspensions, expulsions, and incidents by the infraction (i.e., assaults, endangering behavior, weapons-related, and other school violations). We created discipline rates by dividing the number of incidents/suspensions by enrollment to assess counts per student in the school. There were too few elementary school exclusions to analyze meaningfully, so we excluded this variable from our analysis.

Analytical Strategies

To empirically explore the research questions, the researchers used independent sample t-tests and Ordinary Least Squares (OLS) multivariate regression analysis. Using demographic data from the School Report Card, we examine the balance of school demographics between IPD and non-IPD schools across several variables of interest with independent sample t-tests and account for multiple comparisons using the Bonferroni correction. These variables include race/ethnicity, economic status (proxied by Free and Reduced Lunch enrollment), percent of students enrolled in special education programs, and English language learners (ELL). Next, we explore variation in IPD uptake and school-level discipline outcomes by conducting OLS multivariate regression analysis evaluating whether IPD participation in the 2018-2019 academic year contributes to disciplinary outcomes controlling for race, SES, and special education enrollment. The regression analysis techniques allow the research team to evaluate differences when a greater percentage of elementary schools (39%) participated during the 2018-2019 academic year.

We use Stata/SE 14.2 for Mac and an a-priori p-value of 0.05 as the criterion for statistical significance in all analyses, except the bivariate analysis of school demographics across IPD and non-IPD schools. For this analysis, we use the adjusted the criterion to $p < 0.0045$ after computing Bonferroni's correction.

Results

Bivariate Analysis of School Demographics Between IPD and Non-IPD Schools

As shown in Table 1, our results suggest IPD schools enroll fewer low-SES students ($t(33) = 3.348$, $p = 0.002$). Non-IPD schools have less white students ($t(33) = -2.208$, $p = 0.035$), more Black/African American students ($t(33) = 3.336$, $p = 0.002$), and more

students with two or more races ($t(33) = 3.464$, $p = 0.002$) than IPD schools. These results suggest meaningful differences in schools that commit to the intensive IPD program compared to other schools in the district that do not commit. Except for the difference in white students in non-IPD and IPD schools, these significant differences stand even after adjusting for multiple comparisons with the Bonferroni correction (α/n). Using the Bonferroni correction, we rejected the null hypothesis if the *p*-value was less than 0.0045.

OLS Multivariate Regression Analysis Examining Inclusivity Professional Development, School Demographics, and Disciplinary Actions

Table 2 presents the preliminary regression analysis results for 2018-2019. When controlling for school demographics, IPD schools have lower suspension ($\beta = -1.592$, $p = 0.032$), assault ($\beta = -1.098$, $p = 0.049$), and endangering behavior rates ($\beta = -0.273$, $p = 0.035$) than non-IPD schools. There are no significant differences in other school violations ($\beta = -0.168$, $p = 0.200$) and weapon-related incidents ($\beta = -0.045$, $p = 0.191$) between IPD and non-IPD schools. Overall, our results suggest the IPD program contributes to lower behavioral problems of students even after controlling for school demographics in the 2018-2019 academic year.

Discussion

As more PK-12 students identify as lesbian, gay, bisexual, transgender, queer, and other gender-expansive (LGBTQ+) identities (Johns et al., 2020), educational leaders have sought strategies to increase staff awareness of gender issues and educational reforms. The IPD training described in this study represents programming that required a sustained and deep commitment to school gender- and sexuality-related reforms. It targets educators' practices, knowledge about LGBTQ + identities, and beliefs because they are important mechanisms in improving students' social and learning environments as well as educators' approaches to discipline. The trainers provided time to reflect on educators' identity and role in students' social interactions, learning, discipline and prepared educators to engage in inclusive practices through active learning opportunities. It also required leaders to embed principles from the training into the school's mission, curricular practices, and in the creation of a leadership team tasked with on-going training. Our findings suggest schools that enrolled in the scaled-up IPD program experienced lower disciplinary rates (Figure 2).

Additionally, our results suggest that gender- and sexuality-inclusivity efforts that leaders adopted to address poor school climates for LGBTQ + students have a positive impact on all students. Our results indicated lower disciplinary rates among all students in schools that adopted the IPD program, not just lower disciplinary actions for LGBTQ + students. Educational scholars and activists alike have called upon school leaders to incorporate a more nuanced understanding of gender into school reforms (Airton et al., 2019; Butler, 2004; Kirkup et al., 2020; Mayo, 2017). Mayo (2017) pushes educational

researchers to consider the complex nature of how gender has been understood across contexts and time. For instance, what and who is considered gender-expansive changes depending upon the historical period, the institution, and the students' multiple identities. Kirkup et al. (2020) Butler investigates the expansive nature of implementating of laws protecting from discrimination based on gender identity and expression in Canada. The authors explain how these legal protections could extend beyond the protection of transgender and gender nonconforming people, since all people have a gender expression. Airton et al (2019) and McQuillan (2022) expand this argument further in their descriptions of administrative guidance documents concerning transgender students in Canada and the United States, respectively. The authors illustrate how policymakers provide more nuanced understandings of gender to educators that also extend to all students' gender nonconforming expression, although protecting transgender students is the stated goal of the policy implementation documents. The findings of the current student suggest that comprehensive, intensive inclusivity efforts could benefit all students in the school.

Existing case studies have documented improvements to educators' inclusivity practices after IPD (Greytak et al., 2013; Mangin, 2019; Payne & Smith, 2011), but scholars have questioned whether gender and sexuality IPD has the potential to improve conditions for students (Payne & Smith, 2018; Sadowski, 2020). Importantly, several scholars have drawn upon queer theory to emphasize the importance of centering *and listening to* student voices in developing teachers' professional development that (Meyer et al., 2016; Staley & Leonardi, 2020). Past research has indicated IPD decreased rates of LGBTQ + student bullying (Espelage et al., 2014; Ioverno & Russell, 2020) and changes in teachers' gendered beliefs and practices (Kosciw et al., 2018; Ioverno et al., 2022; McQuillan, 2021) found schools committing to IPD for over a decade had an even greater effect on decreasing victimization, supporting our argument that IPD should be sustained over time. Most notably, we were not able to assess changes in educators' beliefs, knowledge, attitudes, and skills that previous scholars have described in the existing qualitative and survey research.

Based on the IPD Conceptual Framework shown in Figure 1, we theorize that the changes in schoolwide discipline come through changes in beliefs, attitudes, knowledge, and skills. Thus, our findings extend previous research by connecting IPD to improvements in student disciplinary actions, a result we found especially surprising given the distal nature of disciplinary actions from IPD delivery in our conceptual framework. The results from the current study highlight the importance of also drawing from the existing PD research base when making decisions about effective PD investments: the content depth, sustained duration, opportunities for active learning, commitment to reform across school structures, and collective efforts of the community matter.

While our promising results suggest the IPD program may positively influence student disciplinary outcomes, inequitable access to the program remains a concern. IPD schools served predominantly white students from families with a higher economic status. Whereas non-IPD schools tended to have more students of color, students

receiving special education services, and economically-disadvantaged students. Selection into the program raises equity concerns about which students have access to IPD-trained teachers, who may be better able to support LGBTQ + students and foster inclusive classrooms. Additionally, these contextual differences often influence whether and how PD influences teachers' beliefs, skills, attitudes, and beliefs change (Borko, 2004; Desimone, 2009).

While this study makes a methodological and conceptual contribution to the existing IPD literature, which frequently depends upon qualitative case studies and a primarily queer studies framework, there are several important limitations of this study. First, schools volunteered to participate in the IPD program, introducing selection bias. While student outcomes between required and voluntary PD do not always vary (OECD, 2021; Timperly et al., 2007), the selection bias still poses a methodological concern. We attempted to control for some demographic characteristics of schools in the 2018-2019 OLS regression analysis. However, it is unlikely we captured all factors. Because we used existing secondary data for this study, we were limited in our ability to test all components of the conceptual model due to data limitations. Most notably, we were not able to assess changes in educators' beliefs, knowledge, attitudes, and skills that previous scholars have described in the existing qualitative and survey research.

Second, this study concentrates on one district's efforts to implement IPD training in elementary schools. The small sample size (15 IPD schools, 33 schools total), inaccessibility of student-level data, and demographic covariates contributed to low statistical power, reducing the likelihood of detecting an association. As more data is available, more complex models should control for additional characteristics that may influence discipline. Third, the outcome we use in this study, discipline measures, could be too general to capture the real effect of IPD. Student outcome measures reside at the end of a long chain of interrelated actions IPD could initiate. IPD may be more closely associated with other student outcomes, such as perceived teacher support or school belonging (Szalacha, 2003). Alternatively, IPD may influence teachers' beliefs and actions but fall short of inspiring institutional change that improves students' outcomes. These measurement concerns and schools' propensity to engage in many reform efforts at once contributes to possible confounding factors influencing our results. Random assignment of IPD, a larger sample size, and triangulating a broader array of outcomes across teachers and students may be necessary to capture the true effect of IPD.

Despite the obstacles encountered, our findings suggest that committing to an intensive IPD program may positively influence student disciplinary outcomes and point to the need for more rigorous quantitative research to complement the ongoing qualitative evaluations. The authors propose adapting an existing content-focused model to explore the relationship between an intensive, scaled IPD program and changes in both teachers' and students' behaviors because educational scholars have not reached a consensus about what constitutes effective IPD. Future research is needed to assess whether and under what conditions IPD programming can

inspire structural change to improve student outcomes. We encountered several methodological challenges similar to what has been documented in the broader literature. These challenges included changes in the content and scale of the IPD program as the program evolved in the district and nationally. The district and national instructional changes limited the viability of a longitudinal design. Moving forward, researchers and local programmers should work in partnership to develop well-implemented, rigorously-designed, mixed-methods program evaluations. Methods that permit causal inference may be ideal for identifying the mechanism of IPD change.

Conclusion

Principals, superintendents, and other district leaders responsible for making decisions about PD programming will be interested in our findings of LGBTQ + -inclusivity training and decreased disciplinary actions. This study highlights the importance of sustained efforts to reform and align supportive policies, procedures, and practices for LGBTQ + students (coherence) in addition to IPD that introduces new information about gender and sexuality (content knowledge). Beyond this alignment and content training, the IPD should provide opportunities for active learning and dialogue for multiple educational stakeholders, including administration, teachers, other school staff, and parents (collective participation and content learning). In other words, the teacher training sessions focused on content delivery and developing new skills should be only one component of an intensive effort to reform cis- and heteronormative policies, procedures, practices, and beliefs in schools. A commitment to long-term, broad-reaching IPD programs should be aligned with several reform tools, such as protective policies and administrative guidance concerning transgender students (McQuillan, 2022), to prompt a continuous cycle of learning.

An intensive, scaled approach to IPD programming is even more important as schools welcome students back from virtual learning. More specifically, the IPD programs' emphasis on intersectionality for schools that have been committed for several years explores the multiple, structural inequalities for students with multiple marginalized identities or social statuses that have been exacerbated by the pandemic. Policymakers and district leaders should not only consider the content of IPD delivery, but whether the program has used the core features of collective participation, sustained duration, coherence across the organization, and active learning opportunities as they seek additional guidance and resources in their work with LGBTQ + families and students.

Appendix

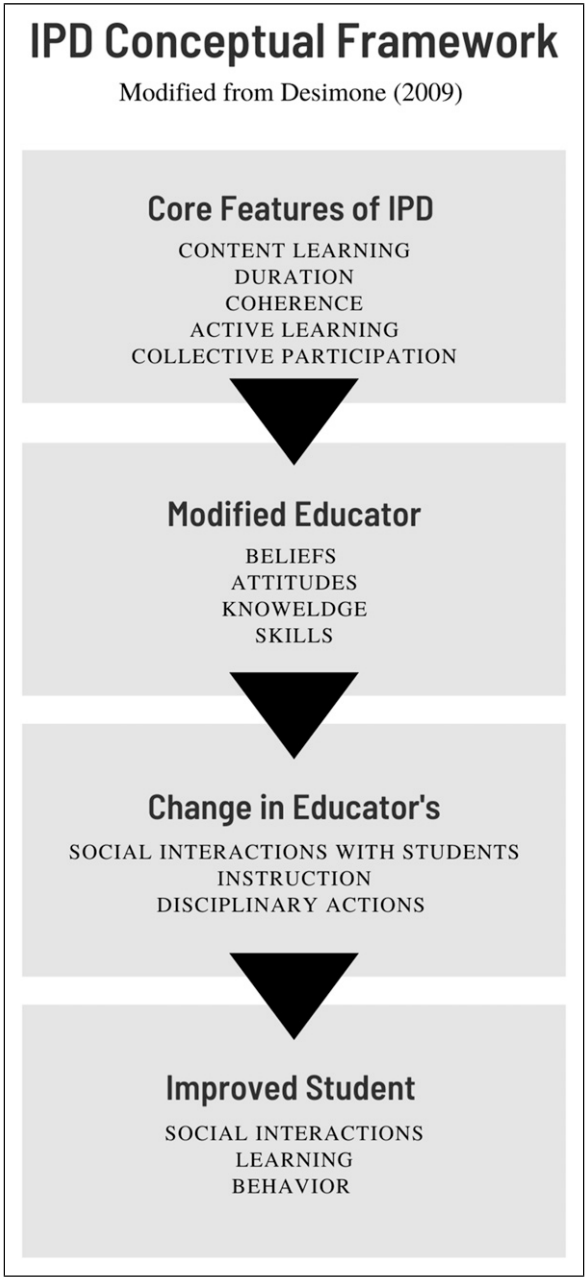

Figure 1. IPD Conceptual Framework Modified from Desimone's PD Framework (2009).

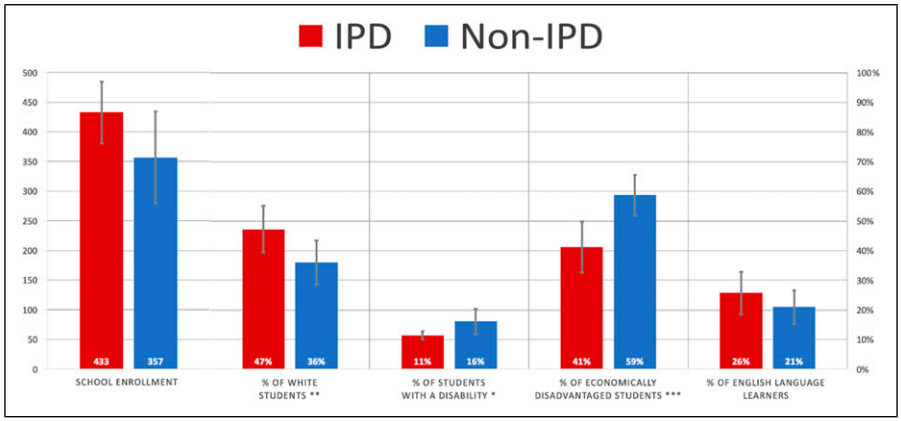

Figure 2. Comparison of Non-IPD to IPD school demographics in 2018-2019.

Table 1. Comparison of Non-IPD to IPD School Demographics in 2018-2019.

	All Schools (33)		Non-IPD Schools (18)		IPD Schools (15)		Diff. In Mean	
	Mean	SE	Mean	SE	Mean	SE	t	*p*-value
School Enrollment	391.424	23.4490	357.111	36.636	432.600	24.232	−1.645	0.110
% American Indian or Alaskan Native	0.003	0.001	0.003	0.001	0.002	0.001	0.798	0.431
% Asian	0.086	0.012	0.071	0.014	0.105	0.020	−1.415	0.167
% Black or African American	0.125	0.038	0.254	0.031	0.129	0.018	3.336	0.002**
% Hispanic/Latinx	0.208	0.023	0.202	0.026	0.214	0.039	−0.271	0.788
% Native Hawaiian/ Other Pacific Islander	0.001	0.000	0.001	0.001	0.000	0.000	1.186	0.245
% Two or More Races	0.094	0.005	0.108	0.008	0.077	0.004	3.464	0.002**
% White	0.411	0.027	0.360	0.035	0.472	0.036	−2.208	0.035**
% Students with Disabilities	0.140	0.012	0.161	0.021	0.114	0.006	2.013	0.053
% Economically Disadvantaged	0.507	0.029	0.587	0.033	0.412	0.040	3.348	0.002**
% ELL/LEP	0.231	0.021	0.210	0.027	0.257	0.033	−1.119	0.272

Notes. SE refers to Standard Error. *$p < .05$ **$p < .01$.

Table 2. OLS Regression Analysis of 2018-2019 Behavioral Outcomes Controlling for School Demographic Characteristics.

	Model 1	Model 2	Model 3	Model 4	Model 5
Variable	Suspension Rate	Assault Rate	Endangering Behavior Rate	Other School Violation Rate	WeaponRelated Rate
Intercept	1.072 (2.983)	−0.685 (2.101)	0.710 (0.608)	0.690 (0.737)	0.311 (0.240)
PD Status	−1.592** (0.707)	−1.098** (0.534)	−0.273** (0.123)	−0.168 (0.128)	−0.045 (0.034)
% White Students	1.581 (3.827)	2.894 (2.797)	−0.350 (0.729)	−0.543 (0.810)	−0.371 (0.269)
% Students with Disabilities	−7.009** (3.049)	−4.296* (2.177)	−1.442* (0.780)	−0.908 (0.668)	−0.306 (0.208)
% Economically Disadvantaged	2.803 (2.841)	3.205 (2.200)	−0.065 (0.708)	−0.183 (0.666)	−0.136 (0.180)
N	33	33	33	33	33
R2	0.224	0.226	0.193	0.089	0.178
F for change in R2	2.27*	2.14	2.01	0.66	0.61

Notes. Robust standard errors are in parentheses. *$p < .1$ **$p < .05$ ***$p < .01$.

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ORCID iDs

Mollie T. McQuillan https://orcid.org/0000-0002-2522-3871
Xue Gong https://orcid.org/0000-0003-3577-2142

References

Airton, L., Kirkup, K., McMillan, A., & DesRochers, J., Documents. (2019). What Is "Gender Expression"? How a New and Nebulous Human Rights Construct Is Taking Shape in Ontario School Board Policy. *Canadian Journal of Education / Revue Canadienne de l'éducation*, *42*(4), 1154–1182.

Anand, R., & Winters, M-F. (2008). A Retrospective view of corporate diversity training from 1964 to the present. *Academy of Management Learning & Education*, *7*(3), 356–372. https://doi.org/10.5465/amle.2008.34251673

Bezrukova, K., Spell, C. S., Perry, J. L., & Jehn, K. A. (2016). A meta-analytical integration of over 40 years of research on diversity training evaluation. *Psychological Bulletin*, *142*(11), 1227–1274. https://doi.org/10.1037/bul0000067

Birkett, M., Russell, S. T., & Corliss, H. L. (2014). Sexual-orientation disparities in school: The mediational role of indicators of victimization in achievement and truancy because of

feeling unsafe. *American Journal of Public Health*, *104*(6), 1124–1128. https://doi.org/10.2105/AJPH.2013.301785

Blank, R. K., & Alas, N. L. (2009). *Effects of teacher professional development on gains in student achievement*. Council of Chief State School Officers. Retrieved at https://files.eric.ed.gov/fulltext/ED544700.pdf

Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, *33*(8), 3–15. https://doi.org/10.3102/0013189X033008003

Butler, J. (2004). *Undoing Gender*. Routledge. https://doi.org/10.4324/9780203499627

Capper, C. A. (2018). *Organizational theory for equity and diversity: Leading integrated, socially just education* (1st ed.). Routledge. https://doi.org/10.4324/9781315818610

Capper, C. A., Theoharis, G., & Sebastian, J. (2006). Toward a framework for preparing leaders for social justice. *Journal of Educational Administration*, *44*(3), 209–224. https://doi.org/10.1108/09578230610664814

Carter Andrews, D. J., & Richmond, G. (2019). Professional development for equity: What constitutes powerful professional learning? *Journal of Teacher Education*, *70*(5), 408–409. https://doi.org/10.1177/0022487119875098

Case, K. A., & Meier, S. C. (2014). Developing Allies to transgender and gender-nonconforming youth: Training for Counselors and educators. *Journal of LGBT Youth*, *11*(1), 62–82. https://doi.org/10.1080/19361653.2014.84076

Chang, E. H., Milkman, K. L., Gromet, D. M., Rebele, R. W., Massey, C., Duckworth, A. L., & Grant, A. M. (2019). The mixed effects of online diversity training. *Proceedings of the National Academy of Sciences of the United States of America*, *116*(16), 7778–7783. https://doi.org/10.1073/pnas.1816076116

Cochran-Smith, M. (2011). Teaching in new times: What do teachers really need to know? *Kappa Delta Pi Record*, *47*(sup1), 11–12. doi: https://doi.org/10.1080/00228958.2011.10516715

Cohen, J., Mccabe, E. M., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record: The Voice of Scholarship in Education*, *111*(1), 180–213. https://doi.org/10.1177/016146810911100108

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute. Retrieved from https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report

Day, J. K., Ioverno, S., & Russell, S. T. (2019). Safe and supportive schools for LGBT youth: Addressing educational inequities through inclusive policies and practices. *Journal of School Psychology*, *74*(1), 29–43. https://doi.org/10.1016/j.jsp.2019.05.007

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, *38*(3), 181–199. https://doi.org/10.3102/0013189x08331140

Diamond, J. B., & Lewis, A. E. (2019). Race and discipline at a racially mixed high school: Status, capital, and the practice of organizational routines. *Urban Education*, *54*(6), 831–859. https://doi.org/10.1177/0042085918814581

Dragowski, E. A., McCabe, P. C., & Rubinson, F. (2016). Educators' reports on incidence of harassment and advocacy toward LGBTQ students. *Psychology in the Schools*, *53*(2), 127–142. https://doi.org/10.1002/pits.21895

Drevon, D. D., Almazan, E. P., Jacob, S., & Rhymer, K. N. (2016). Impact of mentors during adolescence on outcomes among gay young adults. *Journal of Homosexuality*, *63*(6), 821–837. https://doi.org/10.1080/00918369.2015.1112583

Espelage, D. L., Polanin, J. R., & Low, S. K. (2014). Teacher and staff perceptions of school environment as predictors of student aggression, victimization, and willingness to intervene in bullying situations. *School Psychology Quarterly: The Official Journal of the Division of School Psychology, American Psychological Association*, *29*(3), 287–305. https://doi.org/10.1037/spq0000072

Fabelo, T., Thompson, M. D., Plotkin, M., Carmichael, D., Marchbanks, M. P., & Booth, E. A. (2011). *Breaking schools' rules: A statewide study of how school discipline relates to students' success and juvenile justice involvement*.Council of State Governments Justice Center. Retrieved from https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=266653

Flores, A. R., Brown, T. N. T., & Park, A. S. (2017). *Public support for transgender Rights: A Twenty-three Country survey*. The Williams Institute. http://williamsinstitute.law.ucla.edu/wp-content/uploads/23-Country-Survey.pdf

Gallup Inc (2021). *LGBT Identification Rises to 5.6% in latest U.S. Estimate*. Gallup.Com. https://news.gallup.com/poll/329708/lgbt-identification-rises-latest-estimate.aspx

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What Makes Professional Development Effective? Results From a National Sample of Teachers. *American Educational Research Journal*, *38*(4), 915–945. https://doi.org/10.3102/00028312038004915

Gordon, A. R., Conron, K. J., Calzo, J. P., White, M. T., Reisner, S. L., & Austin, S. B. (2018). Gender expression, violence, and bullying victimization: Findings from Probability samples of high school students in 4 US school districts. *The Journal of School Health*, *88*(4), 306–314. https://doi.org/10.1111/josh.12606

Greytak, E. A., & Kosciw, J. (2010). *Year one evaluation of the New York city department of education Respect for all training program*. U.S. Department of Education. http://files.eric.ed.gov/fulltext/ED512335.pdf

Greytak, E. A., Kosciw, J. G., & Boesen, M. J. (2013). Educating the educator: Creating supportive school Personnel through professional development. *Journal of School Violence*, *12*(1), 80–97. https://doi.org/10.1080/15388220.2012.731586

Hammond, Z. (2014). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin Press.

Hanssmann, C. (2012). Training Disservice. In A. Enke (Ed.), *Transfeminist perspectives in and beyond transgender and gender studies* (pp. 112–132). JSTOR Temple University Press. http://www.jstor.org.ezproxy.library.wisc.edu/stable/j.ctt14bt8sf.12

Hatzenbuehler, M. L., Phelan, J. C., & Link, B. G. (2013). Stigma as a fundamental cause of population health inequalities. *American Journal of Public Health*, *103*(5), 813–821. https://dx.doi.org/10.1542%2Fpeds.2010-3020

Hernandez, F., Alston, J., & Fraynd, D. (2020). Inclusive leadership and LGBTQ students. In *Leadership for Increasingly diverse schools* (2nd ed.). Routledge.

Hernandez, F., & Fraynd, D. J. (2014). Leadership's role in inclusive LGBTQ-supportive schools. *Theory Into Practice*, *53*(2), 115–122. https://doi.org/10.1080/00405841.2014.885811

Hirsh, S. (2019). *4 Cornerstones of professional learning: Fundamental principles Pave the way for educators' actions*. Learning Forward. Retrieved at https://learningforward.org/wp-content/uploads/2019/02/4-cornerstones-for-download-1.pdf

Ioverno, S., Bishop, M. D., & Russell, S. T. (2022). Does a Decade of School Administrator Support for Educator Training on Students' Sexual and Gender Identity Make a Difference for Students' Victimization and Perceptions of School Climate? *Prevention Science*, *23*(1), 108–118. https://doi.org/10.1007/s11121-021-01276-x

Ioverno, S., & Russell, S. T. (2021). Homophobic bullying in positive and negative school climates: The Moderating role of gender sexuality alliances. *Journal of Youth and Adolescence*, *50*(2), 353–366. https://doi.org/10.1007/s10964-020-01297-9

Ispa-Landa, S. (2013). Gender, race, and justifications for group exclusion: Urban black students bussed to affluent suburban schools. *Sociology of Education*, *86*(3), 218–233. https://doi.org/10.1177/0038040712472912

Ispa-Landa, S. (2017). Racial and gender inequality and school discipline: Toward a more comprehensive view of school policy. *Social Currents*, *4*(6), 511–517. https://doi.org/10.1177/2329496517704876

Jensen, B., Sonnemann, J., Roberts-Hull, K., & Hunter, A. (2016). Beyond PD: Teacher professional learning in high-performing systems. In *Teacher quality systems in Top performing Countries*. National Center on Education and the Economy. Retrieved at http://www.ncee.org/wp-content/uploads/2015/08/BeyondPDWeb.pdf

Johns, M. M., Lowry, R., Haderxhanaj, L. T., Rasberry, C. N., Robin, L., Scales, L., Stone, D., & Suarez, N. A. (2020). Trends in Violence Victimization and Suicide Risk by Sexual Identity Among High School Students - Youth Risk Behavior Survey, United States, 2015-2019. *MMWR supplements*, *69*(1), 19–27. https://doi.org/10.15585/mmwr.su6901a3

Kalev, A., Dobbin, F., & Kelly, E. (2006). Best Practices or Best Guesses? Assessing the Efficacy of Corporate Affirmative Action and Diversity Policies. *American Sociological Review*, *71*(4), 589–617. https://doi.org/10.1177/000312240607100404

Kirkup, K., Airton, L., McMillan, A., & DesRochers, J. (2020). The Aftermath of Human Rights Protections: Gender Identity, Gender Expression, and the Socio-Legal Regulation of School Boards. *Canadian Journal of Law and Society / La Revue Canadienne Droit et Société*, *35*(2), 245–268. https://doi.org/10.1017/cls.2020.7

Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). *The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in* our nation's schools. GLSEN.

Kosciw, J. G., Greytak, E. A., 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*. Gay: Lesbian and Straight Education Network (GLSEN.

Kosciw, J. G., Palmer, N. A., Kull, R. M., & Greytak, E. A. (2013). The effect of negative school climate on academic outcomes for LGBT youth and the role of in-school supports. *Journal of School Violence*, *12*(1), 45–63. https://doi.org/10.1080/15388220.2012.732546

Lacoe, J., & Steinberg, M. P. (2019). Do suspensions affect student outcomes? *Educational Evaluation and Policy Analysis*, *41*(1), 34–62. https://doi.org/10.3102/0162373718794897

Losen, D., Hewitt, D., & Toldson, I. (2014). *Eliminating excessive and unfair exclusionary discipline in schools policy recommendations for reducing disparities*. Discipline Disparities Research to Practice Collaborative at Indiana University. Retrieved from https://www.njjn.org/uploads/digital-library/OSF_Discipline-Disparities_Disparity_Policy_3.18.14.pdf

Mallett, C. A. (2015). *The school-to-prison pipeline: A comprehensive Assessment*. Springer Publishing Company.

Mangin, M. M. (2019). Transgender students in elementary schools: How supportive principals lead. *Educational administration Quarterly*, *56*(2), 255–288. https://doi.org/10.1177/0013161X19843579

Marksamer, J. (2008). And by the way, do you know he thinks he's a girl? The failures of law, policy and legal representation for transgender youth in juvenile delinquency courts. *Sexuality Research and Social Policy*, *5*(1), 72–92. https://doi.org/10.1525/srsp.2008.5.1.72

Marshall, J. M., & Hernandez, F. (2013). I would not consider Myself a Homophobe": Learning and teaching about sexual orientation in a principal Preparation program. *Educational Administration Quarterly*, *49*(3), 451–488. https://doi.org/10.1177/0013161X12463231

Martino, W., Kassen, J., & Omercajic, K. (2020). Supporting transgender students in schools: Beyond an individualist approach to trans inclusion in the education system. *Educational Review*, *74*(4), 753–772. https://doi.org/10.1080/00131911.2020.1829559

Mayo, C. (2017). Queer and Trans Youth, Relational Subjectivity, and Uncertain Possibilities: Challenging Research in Complicated Contexts. *Educational Researcher*, *46*(9), 530–538. https://doi.org/10.3102/0013189X17738737

Mayo, C., & Blackburn, M. V. (Eds.), (2019). *Queer, trans, and intersectional theory in educational practice: Student, teacher, and community experiences*. Routledge.

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. (2008). Gendered harassment in secondary schools: Understanding teachers' (non) interventions. *Gender and Education*, *20*(6), 555–570. https://doi.org/10.1080/09540250802213115

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: The Voice of Scholarship in Education*, *118*(8), 1–50. https://doi.org/10.1177/016146811611800806

McQuillan, M. T. (2021). Scaling Gender and Sexual Diversity Policies in K-12 Schools. *Educational Policy*, *08959048211058461*. https://doi.org/10.1177/08959048211058461

McQuillan, M. T. (2022). A Starting Point: Gender, Hot Cognition, and Trans-Informed Administrative Guidance. *Educational Researcher*, *51*(5), 336–351. https://doi.org/10.3102/0013189X221084707

McQuillan, M. T., Kuhns, L. M., Miller, A. A., McDade, T., & Garofalo, R. (2021). Gender Minority Stress, Support, and Inflammation in Transgender and Gender-Nonconforming Youth. *Transgender Health*, *6*(2), 91–100. https://doi.org/10.1089/trgh.2020.0019

McQuillan, M. T., & Leininger, J. (2021). Supporting gender-inclusive schools: Educators' beliefs about gender diversity training and implementation plans. *Professional Development in Education*, *47*(1), 156–176. https://doi.org/10.1080/19415257.2020.1744685

Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, *36*, (1), 38–56. https://doi.org/10.2307/2137286

Murchison, G. R., Rosenbach, S. B., Poteat, V. P., Yoshikawa, H., & Calzo, J. P. (2021). Gender–sexuality alliance membership and activities: Associations with students' comfort, confidence and awareness regarding substance use resources. Health Education Research, *36*(3), 295–308. https://doi.org/10.1093/her/cyab007

Nicholson-Crotty, S., Birchmeier, Z., & Valentine, D. (2009). Exploring the impact of school discipline on racial disproportion in the juvenile justice system. *Social Science Quarterly*, *90*(4), 1003–1018. https://doi.org/10.1111/j.1540-6237.2009.00674.x

OECD (2021). *Education at a Glance 2021: OECD Indicators*. Organisation for Economic Co-operation and Development. https://www.oecd-ilibrary.org/education/education-at-a-glance-2021_b35a14e5-en

O'Malley, M. P., & Capper, C. A. (2014). A measure of the quality of educational leadership programs for social justice: Integrating LGBTIQ identities into principal Preparation. *Educational Administration Quarterly*, *51*(2), 290–330. https://doi.org/10.1177/0013161X14532468

Payne, E., & Smith, M. (2018). Refusing relevance: School administrator resistance to offering professional development addressing LGBTQ issues in schools. *Educational Administration Quarterly*, *54*(2), 183–215. https://doi.org/10.1177/0013161x17723426

Payne, E. C., & Smith, M. (2011). The reduction of stigma in schools: A new professional development model for empowering educators to support LGBTQ students. *Journal of LGBT Youth*, *8*(2), 174–200. https://doi.org/10.1080/19361653.2011.563183

Pew Research Center (2016). 5. Vast majority of Americans know someone who is gay, fewer know someone who is transgender. In *Pew research Center's Religion & Public Life Project*. http://www.pewforum.org/2016/09/28/5-vast-majority-of-americans-know-someone-who-is-gay-fewer-know-someone-who-is-transgender/

Poteat, V. P., Scheer, J. R., & Chong, E. S. K. (2016). Sexual orientation-based disparities in school and juvenile justice discipline practices: Attending to contributing factors and evidence of bias. In R. Skiba, K. Mediratta, & M. Rausch (Eds.), *Inequality in school discipline*. New York: Palgrave Macmillan. https://doi.org/10.1057/978-1-137-51257-4_4

Poteat, V. P., Sinclair, K. O., DiGiovanni, C. D., Koenig, B. W., & Russell, S. T. (2013). Gay–straight alliances are associated with student health: A multischool comparison of LGBTQ and heterosexual youth. *Journal of Research on Adolescence*, *23*(2), 319–330. https://doi.org/10.1111/j.1532-7795.2012.00832.x

Poteat, V. P., Slaatten, H., & Breivik, K. (2019). Factors associated with teachers discussing and intervening against homophobic language. *Teaching and Teacher Education*, *77*, 31–42. https://doi-org.ezproxy.library.wisc.edu/10.1016/j.tate.2018.09.0062018.09.006

Sadowski, M. (2020). *Safe is not enough: Better schools for LGBTQ students*. Harvard Education Press.

Seelman, K. L., Forge, N., Walls, N. E., & Bridges, N. (2015). School engagement among LGBTQ high school students: The roles of safe adults and gay–straight alliance characteristics. *Children and Youth Services Review*, *57*, 19–29. https://doi.org/10.1016/j.childyouth.2015.07.021

Skiba, R. J., & Losen, D. J. (2016). From reaction to prevention: Turning the page on school discipline. *American Educator*, *39*(4), 4. https://eric.ed.gov/?id=EJ1086522

Smith, M. J., & Payne, E. (2016). Binaries and Biology: Conversations With Elementary Education Professionals After Professional Development on Supporting Transgender Students. *The Educational Forum*, *80*(1), 34–47. https://doi.org/10.1080/00131725.2015.1102367

Snapp, S. D., Hoenig, J. M., Fields, A., & Russell, S. T. (2015). Messy, butch, and queer: LGBTQ youth and the school-to-prison pipeline. *Journal of Adolescent Research*, *30*(1), 57–82. https://doi.org/10.1177/0743558414557625

Snapp, S. D., & Russell, S. T. (2016). Discipline disparities for LGBTQ youth: Challenges that perpetuate disparities and strategies to overcome them. In *Inequality in school discipline* (pp. 207–223). New York: Palgrave Macmillan.

Staley, S., & Leonardi, B. (2020). A Pretty queer thing: Thinking queerly about teachers' gender and sexual diversity–focused professional learning. *Journal of Teacher Education*, *72*(5), 511–522. https://doi.org/10.1177/0022487120971588

Swanson, K., & Gettinger, M. (2016). Teachers' knowledge, attitudes, and supportive behaviors toward LGBT students: Relationship to Gay-Straight Alliances, anti-bullying policy, and teacher training. *Journal of LGBT Youth*, *13*(4), 326–351. http://dx.doi.org/10.1080/19361653.2016.1185765

Szalacha, L. A. (2003). Safer sexual diversity climates: Lessons learned from an evaluation of Massachusetts safe schools program for gay and lesbian students. *American Journal of Education*, *110*(1), 58–88. https://doi.org/10.1086/377673

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, *83*(3), 357–385. https://doi.org/10.3102/0034654313483907

Theoharis, G. (2007). Social justice educational leaders and resistance: Toward a theory of social justice leadership. *Educational Administration Quarterly*, *43*(2), 221–258. https://doi.org/10.1177/0013161X06293717

Timperly, H., Wilson, A., Barrar, H., & Fung, I. (2007). *Teacher professional learning and development: Best evidence synthesis iteration (BES)*. University of Auckland, New Zealand, & Ministry of Education.

Toomey, R. B., McGuire, J. K., & Russell, S. T. (2012). Heteronormativity, school climates, and perceived safety for gender nonconforming peers. *Journal of Adolescence*, *35*(1), 187–196. https://doi.org/10.1016/j.adolescence.2011.03.001

Toomey, R. B., Ryan, C., Diaz, R. M., Card, N. A., & Russell, S. T. (2010). Gender-nonconforming lesbian, gay, bisexual, and transgender youth: School victimization and young adult psychosocial adjustment. *Developmental Psychology*, *46*(6), 1580–1589. https://doi.org/10.1037/a0020705

Van Veen, K., Zwart, R., & Meirink, J. (2012). What makes teacher professional development effective. In M. Kooy & K. Van Veen (Eds.), *Teacher learning that matters: International perspectives* (pp. 3–21). Routledge.

Watson, R., Fish, J., Poteat, V., Wheldon, C. W., Cunningham, C. A., Puhl, R. M., & Eaton, L. A. (2021). Teacher support, victimization, and alcohol Use among sexual and gender Minority youth: Considering Ethnoracial identity. *Prev Sci*, *22*(5), 590–601. https://doi.org/10.1007/s11121-021-01216-9

Wozolek, B., Wootton, L., & Demlow, A. (2017). The school-to-coffin pipeline: Queer youth, suicide, and living the in-between. *Cultural Studies ↔ Critical Methodologies*, *17*(5), 392–398. http://doi.org/10.1177/1532708616673659

Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007). *Reviewing the evidence on how teacher professional development affects student achievement. issues & answers*. rel 2007-no. 033. Regional Educational Laboratory Southwest (NJ1). Retrieved at https://files.eric.ed.gov/fulltext/ED498548.pdf

Author Biographies

Mollie McQuillan, University of Wisconsin, School of Education, Department of Educational Leadership and Policy Analysis, 1000 Bascom Mall, Office #270C, Madison, Wisconsin 53706 Mollie McQuillan, PhD, is an assistant professor in the Department of Educational Leadership and Policy Analysis at the University of Wisconsin Madison. Their research focuses on the intersection of educational policy, leadership, school climate, and health of LGBTQ+ populations. Dr. McQuillan was the principal investigator in the Madison Education Partnership Project: Examining School Supports and Barriers to Improving the Health, Safety, and Academic Achievement of MMSD LGBTQ+ Students.

Erin K. Gill, University of Wisconsin, School of Education, Department of Educational Leadership and Policy Analysis, 1000 Bascom Mall, Madison, Wisconsin 53706 Erin K. Gill is a fellow in the Interdisciplinary Training Program in Education Sciences and a PhD student in Educational Leadership and Policy Analysis at the University of Wisconsin-Madison. Her research interests include LGBTQ+ students' wellbeing, education policy, rural schools, and teacher professional development.

Xue Gong, University of Wisconsin, School of Education, Department of Educational Leadership and Policy Analysis, 1000 Bascom Mall, Madison, Wisconsin 53706 Xue Gong is PhD student in Educational Leadership and Policy Analysis at the University of Wisconsin-Madison. In addition to evaluating inclusivity professional development, Ms. Gong's research examines interventions aimed at alleviating STEM disparities, including collegiate mentoring programs, summer learning loss programs, tracking programs, parental involvement, and peer effects.