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DEVELOPING A TEACHER PROFESSIONAL DEVELOPMENT ACTIVITY WITH
SOCIAL LEARNING THEORY TO ADDRESS EDUCATORS' ATTITUDES,
KNOWLEDGE, AND SKILLS IN WORKING WITH LGBTQIA+ YOUTH

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Philosophy

By

Jacob C. Wadsworth

August 2021

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Jacob C. Wadsworth

2021

**DUQUESNE UNIVERSITY
SCHOOL OF EDUCATION**

Department of Counseling, Psychology, and Special Education

Dissertation

Submitted in partial fulfillment of the requirements for the degree
Doctor of Philosophy (Ph.D.)

School Psychology Doctoral Program

Presented by:

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B.A. Political Science, Theater Arts, Duquesne University, 2012
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May 25, 2021

**DEVELOPING A TEACHER PROFESSIONAL DEVELOPMENT ACTIVITY WITH
SOCIAL LEARNING THEORY TO ADDRESS EDUCATORS' ATTITUDES,
KNOWLEDGE, AND SKILLS IN WORKING WITH LGBTQIA+ YOUTH**

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ABSTRACT

DEVELOPING A TEACHER PROFESSIONAL DEVELOPMENT ACTIVITY WITH SOCIAL LEARNING THEORY TO ADDRESS EDUCATORS' ATTITUDES, KNOWLEDGE, AND SKILLS IN WORKING WITH LGBTQIA+ YOUTH

By

Jacob C. Wadsworth

August 2021

Dissertation supervised by Laura M. Crothers, D.Ed.

It is well documented that children who identify as a sexual minority or as gender-non-conforming are at an increased likelihood to experience adverse events and risk factors that can make it difficult to function in the community, home, and school environments. Lesbian, gay, bisexual, transgender, and questioning, intersex, or asexual (LGBTQIA+) youth report high levels of bullying and victimization with little or no effective intervention from teachers in schools. Research shows that not only are teachers ill-prepared to effectively intervene, but also they engage in homophobic behavior that contribute to a negative school climate. Previous literature shows that there is a lack of teacher preparation in teacher education programs to support this at-risk population. Therefore, teachers would benefit from ongoing professional development to provide knowledge, help them to challenge biases, and equip them with skills to best support LGBTQIA+ youth in schools. There is a lack of empirical studies that show the

effectiveness of teacher professional development on LGBTQIA+ issues. This study was conducted to add to the literature regarding the effectiveness of teacher professional development on increasing teacher knowledge, attitudes, and skills in order to support LGBTQIA+ youth in schools. The two-hour professional development model utilized social learning theory as a foundation for facilitating teacher learning. Utilizing a quasi-experimental approach, this study provides preliminary evidence for the effectiveness of teacher professional development in increasing knowledge, challenging attitudes, and equipping them with skills. The results of the study also show that teacher professional development is able to lower self-perceived levels of homophobia. However, there was no relationships between participants' self-reported knowledge, attitudes and skills regarding supporting LGBTQIA+ youth and these participants' homophobic beliefs.

DEDICATION

I dedicate my dissertation work and all of my graduate education success to all of my teachers through pre-school, elementary school, middle school, high school, and college. I especially want to dedicate this work to all of my faculty and mentors throughout my doctoral program that have guided me on this journey and have bestowed upon me the ability and knowledge to support the healthy psychological development of children, particularly to those kiddos that need it the most. School has saved my life in every way that a person's life can be saved, and for that I will be forever grateful for those teachers that made school a safe place for me. I can only hope to change a child's life in such a positive way as all of you have done for me.

Love and thank you from the very bottom of my heart,

Jake

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To Tom and Sharon Firreno, surrogate dad and mom, thank you for all of your ongoing support, love, kindness, and encouragement you have given me throughout this journey and my life. Although it was your son that brought me into your life, you accepted me as your son and have only supported me as I continue to achieve my goals. I will be forever grateful for everything you have done for me through these years and love you both so much.

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CHAPTER 1

INTRODUCTION

Lesbian, gay, bisexual, transgender, questioning, intersex, or asexual (LGBTQIA+) youth are at a significantly increased risk for academic, social, and emotional problems, which suggests that they are in greater need of support from school staff (Fisher, 2013). Due to risk factors such as a lack of support from parents and educators, which may lead to a repression of students' gender or sexual identity, it is hard to predict the number of students who identify as LGBTQIA+ (Fisher, 2013). However, in one study, authors estimated that 10-20% of adolescents report engaging in some type of same-gender sexual experience, likely suggesting that there are students in every secondary school who identify as lesbian, gay, or bisexual (Eisenberg & Resnick, 2006). Although some researchers have studied lesbian, gay, and bisexual students, specifically, for the purposes of this investigation, the population of gender-nonconforming students studied will be referred to as LGBTQIA+.

Youth tend to experience adverse school experiences due to LGBTQIA+ harassment as early as elementary school (Reis & Saewyc, 1999). These experiences can include verbal and physical harassment or result in violence. In example, Reis and Saewyc (1999) revealed that a second grade student witnessed hearing statements like "Get away, gay boy!" and "Don't let the gay boy touch you!" In one study that surveyed 218 secondary students in the Northeast of the United States (U.S.), the majority of the students had overheard homophobic statements within the school environment (Grant, 2006). Unfortunately, many students are exposed to negative school climates in which the perceived sexuality of students are seen as a vulnerability for harassment.

Unfortunately, research indicates that harassment of LGBTQIA+ youth tends to increase with the progression into adolescence. There is research that sheds light regarding the effects of ongoing peer victimization as it pertains LGBTQIA+ youth. Barnett and colleagues (2019) found an association between the peer victimization of sexual minority (LGBQ) youth and suicide attempts and completions. In illustration of this was a reported shooting of a gender-non-conforming 15-year-old by a peer, and another instance of two 11-year-olds completing suicide attempts due to ongoing harassment because peers thought they were gay (Biegel, 2010). Regrettably, LGBTQIA+ students do not feel that reporting harassment to educators is an effective way to prevent it from happening (GLSEN, 2019). This may be due to the perception of LGBTQIA+ children that educators are not prepared to intervene, or they fail to see the risk that students face within the school climate due to bullying for perceived gender and sexual orientation diversity.

In the most recent nationwide school climate survey conducted by GLSEN (2019), it is reported that a majority of LGBTQIA+ students feel unsafe and largely unsupported by their schools. Young adolescents may not receive the social and emotional supports offered to other students, or they may be unaware that such resources exist in schools (Holmes & Cahill, 2004). Some schools provide little to no education or resources for youth that identify as LGBTQIA+ (Youth Pride, Inc., 2010). Since students spend most of their time in schools, it is important for their wellbeing that teachers become allies to LGBTQIA+ students. Relatedly, it is necessary for teachers to obtain knowledge of the difficulties that the LGBTQIA+ student population faces and develop the skills to help support these students.

Significance of the Problem

Researchers indicate that many teachers do not receive adequate training in their teacher-training programs pertaining to LGBTQIA+-related issues (Payne & Smith, 2010). Surprisingly, there is not one state that requires teacher-training programs to include LGBTQIA+-related issues in their curricula (Payne & Smith, 2010). Because many teachers do not receive training to work with LGBTQIA+ students, they may be blind to the issues that these students face on a day-to-day basis. Accordingly, these teachers are underprepared to meet the needs of the LGBTQIA+ student population. This in turn has the potential to create a negative school climate for LGBTQIA+ students.

Research highlights the growing need for teachers to have professional development opportunities in order to support LGBTQIA+ youth within the classroom setting (McCabe & Rubinson, 2008). This importance is made clear by the need to support LGBTQIA+ youth that are at risk for social-emotional and academic issues within the school setting due to a lack of support and likelihood of experiencing peer victimization (Fisher et al., 2008; GLSEN, 2019). Professional development has the potential to provide teachers with ways to support LGBTQIA+ youth in the classroom setting. For example, GLSEN's most recent National School Climate Survey (2019) shows that students who attend schools that have a Gender/Sexuality Alliance (GSA) chapter perceive a more positive school climate than those without such a program. In addition, they report higher levels of representation and advocacy by teachers.

In order to educate teachers about the needs of LGBTQIA+ students, there are key components necessary to include in the training of both pre-service and practicing school professionals concerning LGBTQIA+ youth (Whitman, 2013). Research has indicated that education of school professionals regarding the needs of LGBTQIA+ students should include the

following: information on appropriate language and terminology, issues of identity development, school experiences of LGBTQIA+ youth, opportunities to explore one's own biases, the laws that provide protection for LGBTQIA+ youth, ways to advocate for change, and ways to provide support to LGBTQIA+ students and their families (Whitman, 2013). Moreover, school professionals need to gain requisite levels of knowledge, awareness, and skills in order to be culturally competent in providing services to LGBTQIA+ youth (Fisher, 2013). Additionally, there is a need for adult learning styles to be considered when addressing educators' professional development needs, particularly those who are far removed from their training programs (Whitman, 2013).

Adult Learning and Theoretical Framework

Theoretical models have been developed that specifically address adult learning. Knowles (1984) defined adult learners as those who perform roles that are defined by their own cultural factors in their adult roles, and who feel responsible for their own lives. Knowles stated that adult learners tend to be autonomous and self-directed. Consequently, facilitators of adult learning should guide the learning process but not fully direct it. An advantage that adult learners have over younger learners is that adults have a variety of life experiences that they can connect to new material presented to them, giving context to the new content.

The facilitation of adult learning requires a broader look at how adult learning differs from traditional child learning models. The reason for this is because adult learners may have an increased sense of responsibility, broader life experiences, and previous knowledge that relates to the training topics. Research indicated that the life experiences of an adult learner allow for discussion with the professional development facilitator (Vella, 2002). This may also result in increased dialogue between the professional development participants that encourage learning

from others' experiences. Another key difference between child and adult learners is that adults tend to be goal-oriented (Lieb, 1991). If professional development goals can align with teachers' goals for learning as well as take into consideration adult learning techniques, growth in those targeted goals may be achieved.

Research also indicates that teachers need to be active participants in their professional development (Wood et al., 1993). This seems to suggest that for growth to occur, educators need to be engaged in the professional development material. Lieberman (1996) warns that teachers are less likely to engage in the professional development or the targeted potential outcomes if they feel as though they are not active participants in their learning. This suggests a burden on the professional development facilitator to incorporate a theoretical foundation that supports adult learning and engages teachers' prior experiences and their own goals.

Social learning theory is the theoretical framework that integrates both cognitive and social aspects to support learning (Bandura, 1977). Essentially, social learning theorists postulate that learning and behavior change can happen through observation. The ability to learn through observations is often referred to as modeling and is considered to be an important aspect of teacher development (Lortie, 2002). Behavior can often become repetitive and, if not the target of intervention, tends to remain unchanged (Bandura, 1997). Through the interventions of modeling and planning is where change can occur (Bandura, 1997, 1977). An example of teacher development as the result of social learning is through student teaching experiences in which the preservice teachers are given opportunities to learn from observing in-service educators. Through feedback and assessment, teachers can learn by those that model the desired behavior and can form their own effective teaching behaviors (Lave & Wenger, 1991). An important aspect of social learning is the ability to feel as though one can complete tasks or behaviors on their own in

certain contexts, which is known as self-efficacy. Self-efficacy relies on affective elements of the learner, such as confidence and motivation (Bandura, 1997), followed by practice with the new, learned behavior.

Social learning theory is a relevant model as it pertains to supporting educators in their growth toward supporting LGBTQIA+ youth. Teachers contribute to the overall school climate simply by co-existing within the school environment; therefore, they have the ability to influence others within that system. Moreover, established anti-harassment efforts are useless if the educators within the schools do not follow through with consequences for those that offend (Hansen, 2007).

Teacher Education and Professional Development Concerning LGBTQIA+ Youth Issues

It is clear that educators play a crucial role in creating safe spaces in the school setting, but the literature regarding teachers' attitudes, beliefs, and knowledge regarding LGBTQIA+ youth is still limited (Dragowski et al., 2016). In this study by Dragowski and colleagues (2016), these authors found that teachers believed that advocacy for LGBTQIA+ youth in schools was important and they felt supported in intervening, but still felt hesitant to engage in such intervention. This research suggests that teachers may feel positively about intervening on behalf of LGBTQIA+ youth, but generally do not engage in these activities. Consequently, the goal of teacher professional development should be to identify those reasons why teachers are hesitant to intervene with LGBTQIA+ youth and to provide the knowledge and opportunities for skill development so that they can be supportive of the population.

Historically, teachers have felt negatively towards LGBTQIA+ youth and have been assessed to have minimal knowledge regarding this population (Sears, 1991). Research has also suggested that educators are becoming more aware of the need to better support LGBTQIA+

students, but still need to be educated about specific issues regarding LGBTQIA+ youth (Jennings, 2006; Koch, 2000). Sherwin and Jennings (2006) found that the further pre-service teachers progressed beyond foundation courses, the less likely they were to gain knowledge or skill regarding working with LGBTQIA+ youth. However, Athanases and Larrabee (2003) contend that pre-service teachers value gaining knowledge about LGBTQIA+ youth in schools.

Problem Statement

There is little to no research regarding the effectiveness of any pre-existing professional development opportunities for teachers concerning LGBTQIA+ issues. Although literature exists to support best practices in educating school professionals regarding LGBTQIA+ issues, the effectiveness of these practices has yet to be empirically supported. Furthermore, there is research to suggest that there is a pressing need for teachers to support this underserved population. Students who experience harassment and victimization due to their perceived sexual orientation or gender identity are more likely to experience lower levels of academic achievement as evidenced by poor grades (O'Shaughnessy et al., 2004).

Additionally, students are harassed and victimized due to their sexual orientation or gender identity are also more likely to experience higher levels of substance use and clinical levels of anxiety and depression (Birkett et al., 2009). Furthermore, these students are also more likely to be at a higher risk for suicidal ideation and attempts (Centers for Disease Control and Prevention, 2012). Since an improved school climate has been found to have a significant positive impact on students' overall academic achievement (Kosciw et al., 2009), supporting teachers in their understanding of LGBTQIA+ issues will likely result in more advocacy for this population, an improved school climate, and more successful mental health outcomes for LGBTQIA+ youth. Unfortunately, current LGBTQIA+ professional development opportunities

for teachers do not consider potential other deficits in teachers' knowledge of child development (Athanases & Larrabee, 2003).

Current Study

The purpose of the current study is to investigate the effectiveness of a professional development model aimed at increasing educators' awareness, knowledge, and skills working with LGBTQIA+ youth. Specifically, through this study, I sought to determine whether or not educators are able to acquire and maintain their overall preparedness in regard to working with LGBTQIA+ students. Overall preparedness refers to the combination of educators' perceived levels of knowledge, attitudes, and skills. Additionally, I investigated if a professional development model that addresses the awareness, knowledge, and skills of teachers can lower perceived levels of homophobia among the participating teachers.

Research Questions and Hypotheses

Research Question 1: Does an LGBTQIA+ all-content professional development program significantly increase the awareness, knowledge, and skills for educators that work with LGBTQIA+ youth in schools?

Hypothesis 1: An LGBTQIA+ all-content professional development will significantly increase the knowledge, awareness, and skills for educators that work with LGBTQIA+ youth in schools.

Research Question 2: Does an LGBTQIA+ all-content professional development significantly decrease perceived homophobia for educators?

Hypothesis 2: An LGBTQIA+ all-content professional development will significantly decrease perceived levels of homophobia.

Research Question 3: Do the perceived rates of knowledge, attitudes, and skills in regard to LGBTQIA+ students vary based upon a participant's self-rating of homophobia at the pre-test?

Hypothesis 3: The perceived rates of knowledge, attitudes, and skills in regard to LGBTQIA+ students will yield significant differences based upon a participant's self-rating of homophobia at the initial pre-test.

Summary

LGBTQIA + youth are at risk due to the likelihood of a lack of support at home and in school; therefore, this population warrants particular attention within the school system. Students start to experience peer victimization due to being perceived as LGBTQIA+ as early as elementary school, which continues into later adolescents and adulthood. As far as LGBTQIA+ issues are concerned, it is clear to researchers that students are often not aware of services or resources that exist within schools to support their social-emotional wellbeing. Furthermore, because teachers are often not trained in LGBTQIA+ issues, they may not be aware of the struggles associated with identifying as a non-gender-conforming or being sexually diverse. For both ethical and pragmatic reasons, it is important to provide professional development to educators on LGBTQIA+ issues in order to best support youth in schools.

CHAPTER 2

LITERATURE REVIEW

LGBTQIA+ Youth and Victimization in Schools

The majority (57.6%) of students that identify as LGBTQIA+ perceive their schools as being unsafe (GLSEN, 2019). These students experience many different forms of verbal and physical harassment. Of the students that identify as LGBTQIA+, 48% have experienced some sort of electronic harassment (e.g., text messages and Facebook posts; GLSEN, 2019). The majority of students that are harassed or assaulted at school do not report these incidents to the school staff because they doubt that effective intervention would be implemented and fear that further aggression would occur. On GLSEN's (2015) national school climate survey, LGBTQIA+ students were asked to describe how school staff responded to reports of victimization. The most common response (63.5%) was that "staff did nothing or told the student to ignore it" (GLSEN, 2015, p. 32). In the same study, one in four students were told to change their behaviors.

LGBTQIA+ students that face a school climate full of daily victimization are susceptible to challenges that affect their academic success and mental health. These LGBTQIA+ students who experience discrimination and victimization in schools have worse educational outcomes and compromised psychological health. These students are more likely to miss school than their cisgender, heterosexual peers. LGBTQIA+ students report that they are more likely to be disciplined at school than non-sexual-minority or non-gender-minority peers. Furthermore, the LGBTQIA+ and gender nonconforming students tend to have lower self-esteem and school belonging and higher levels of depression than other students (GLSEN, 2019).

Recent research indicates that students who feel safe and affirmed have better educational outcomes. The LGBTQIA+ students that have resources available to them are more likely to experience academic and emotional success. Over half of the students in the most recent GLSEN (2019) national survey reported that their school does not have a GSA or related student club. In this same survey, LGBTQIA+ students who had access to a GSA felt that there was more of a sense of interconnectedness with school and lower levels of discrimination. These students have reportedly felt the effect of the federal civil rights laws that prohibits sex discrimination in education.

Federal Rights of LGBTQIA+ Youth in Schools

There are several laws that are considered to be protective of the rights of LGBTQIA+ youth. In schools, students deserve the rights and liberty allowed for all students. It is imperative for school professionals to understand the importance of case law that protects LGBTQIA+ youth in order to stay compliant and supportive of LGBTQIA+ youth (Fisher & Kennedy, 2012). Fisher and Kennedy (2012) have previously laid out the following case law as it pertains to LGBTQIA+ youth for the benefit of school personnel.

First Amendment of the United States Constitution. The First Amendment provides for congress to not inflict religion or other principles that may infringe on a person's free speech or right to press (U.S. Const, Amend.. I). This allows for LGBTQIA+ youth to express themselves in schools. For example, students who identify as LGBTQIA+ can freely speak about their identity. Additionally, students can dress as it corresponds with their gender identity and cannot be forced to wear clothes that are associated with their biological sex. Also, students are allowed to protest and take those of the same gender to prom. This was held up in the Supreme Court in the case of *Tinker v. Des Moines Independent Community School District* (1969). In this case, a

teacher and her students were protesting the Vietnam war. The results of the case indicated that students continue to have constitutional rights within the public school system. In the U.S. Supreme Court case of *Romer v. Evans* (1996), it was found that schools must protect and treat all students equally. In this case, this means that schools have an obligation to treat LGBTQIA+ youth the same as their heterosexual counterparts.

14th Amendment of the United States Constitution. The 14th Amendment has a well-known legal protection referred to as the *Equal Protection Clause*. This refers to the aspect of the law that states: "...no State shall... deny any person within its jurisdiction the equal protection of the laws" (U.S. Const, amend XIV, § 1). For public schools, this means that they may be held accountable if they do not protect LGBTQIA+ youth against harassment and discrimination, as they would all other students. *Nabozny vs. Podlesny* (1996) is an important case that highlights the use of the *Equal Protections Clause*. In this case, a Wisconsin high school student was the subject of bullying and victimization due to LGBTQIA+ bullying. The school was found at fault because they never addressed the issue despite the accusations being brought to their attention.

Title IX of the Educational Amendments of 1972. Title IX of the Educational Amendments of 1972 is a federal law that is more commonly known as Title IX (U.S. Const, amend XIV, § 1), which protects citizens against discrimination based on their sex. Title IX does not yet prohibit sexual orientation harassment as sex discrimination under the law (Bedell, 2003; Fisher & Kennedy, 2012). This law prohibits students from being sexually harassed and includes those whose gender expressions do not align with their biological sex.

Family Education Rights and Privacy Act (FERPA). FERPA gives parents the opportunity to request their child's record from any school that receives governmental funding (FERPA, 1974). It also protects a child's right to privacy as it pertains to their educational

records (Wright & Wright, 2012). This becomes complicated when considering what is included in an educational record. For example, if a child is in a club, i.e. GSA, there is a potential for complication with the parental relationship if a child's parents are not aware of their association with the group. It is suggested that schools exercise caution when considering what is included in a child's record (Fisher & Kennedy, 2012). Furthermore, it is illegal for schools to share information about a child's sexuality and gender expression that may or may not be expressed within the school setting (Fisher & Kennedy, 2012; Sun, 2010). It is clear that through FERPA, schools have the responsibility of protecting the privacy of LGBTQIA+ students' identity in their educational records.

Equal Access Act. The Equal Access Act (20 U.S.C. § 4071-74) stipulates that if a particular non-curricular, student organization is allowed to exist on campus, then any student group may form in a similar fashion. This essentially protects students' rights to form groups that are in support of LGBTQIA+ interests such as a GSA or any other allyship group. Overall, The Equal Access Act gives LGBTQIA+ youth the right to organize and create a presence within the school building.

LGBTQIA+ Students' Perceptions of Teachers' Roles

Although there is federal case law that can provide support to LGBTQIA+ students within the school environment, student's perceptions of how their dignity is respected by educators is still in question. Beyond GLSEN's National Climate Survey and some other state and national surveys, students perceptions of educator's views of LGBTQIA+ youth are often anecdotal and not represented on large scale. This may be due to the unique, sensitive experience of coming to terms with being "out." Nonetheless, there have been some studies that looked at students' perceptions of teacher support for LGBTQIA+ students. For example, Elze (2003)

conducted a study with 136 students that self-identified as gay, lesbian, or bisexual youth within a Northeastern sample to measure their comfort within the school environment. The results indicated that students' comfort depended on the characteristics of the school, such as stigmatization and educator support. For example, students who felt that their teachers were more supportive within the school environment were more likely to feel comfortable within the school setting (Elze, 2003). In this study, the results indicated that students were more likely to feel supported in a school environment with teachers who were prepared to be supportive and intervene in issues concerning this group of students (Elze, 2003). These results indicate a further exploration of how to support teachers in their understanding of LGBTQIA+ youth and issues that concern them.

Unfortunately, the majority of LGBTQIA+ students indicate that their teachers do not support them; in fact, in some cases, it has been reported that teachers have been overheard making homophobic remarks. In the most recent National School Climate Survey conducted by GLSEN (2019), it was reported that students over-hearing teachers making homophobic statements was at an all-time high since the distribution of the survey. The effects of hearing teachers make similar, hateful comments about some youth continues to contribute to the negative school climate and the mistrust of designated adults that are to protect and nurture children within the school environment.

GLSEN's 2019 National School Climate Survey highlighted the previous years' surveys as they pertained to teacher intervention after LGBTQIA+ students reported bullying. The survey indicated that teachers were only 30-40% likely to intervene, indicating a minority of instances in which LGBTQIA+ youth felt supported by staff. In fact, 51% of LGBTQ+ students perceived their school staff to being ineffective when intervening due to harassment or assault. This is a

surprisingly low number when considering that 98% of youth head “gay” used in a negative way, 68% and 25% have been verbally or physically harassed, and 58% were sexually harassed. It is clear that presently, teachers are failing to address the harassment of LGBTQIA+ youth in schools

In describing their experiences, students responding to GLSEN’s 2019 National School Climate Survey provided statements about their traumatic events and their safety. One student stated: “I got rocks thrown at me and was beat by kids at my school. I never told anyone about this. Not a parent, school staff member, or peer” (GLSEN, 2019, p. 34). Although the school climate of this particular student’s school is unknown, it is clear that a supportive school climate would have provided the ability for the child to talk about this instance. Another student said: “More than one teacher did not allow me to hold hands with my girlfriend and threatened detention if they even saw us in the hall holding hands” (GLSEN, 2019, p. 40). This student’s experience is indicative of a larger issue, in which a romantic expression is shamed and punished while heterosexual counterparts are not held to the same standard. Another student discussed feeling like no one would intervene on behalf of their LGBTQIA+ identity: “...Teachers could see these things, but they never do anything. Even the teachers I was closest to didn’t care. Getting involved in a matter like that would very much so hurt their reputation with other students” (GLSEN, 2019, p. 125). This illustrates a student’s perception that teachers’ abilities to intervene are influenced by what the other students may think of them.

In another survey, The California Healthy Kids Survey (California Safe Schools Coalition & 4-H Center for Youth Development, 2004) indicated that teachers engage in acts of bigotry and harassment. The survey included data from eleventh and seventh, ninth, and eleventh graders. About 40% of the students surveyed indicated that they heard teachers make

homophobic statements. Furthermore, only 39% of LGBTQIA+ students observed teachers engaging in intervention when they saw harassment. This result is shocking considering that 91% of all student reported hearing peers use homophobic slurs. As previously discussed, it is clear that students are feeling harassed by these slurs (CSSC & 4-H, 2004). The results of these accounts provide evidence that students are hearing LGBTQIA+ slurs from educators, as well as observing a lack of intervention regarding peer-to-peer homophobic behavior.

As previously stated, the California Healthy Kids Survey includes data that spans middle school and high school, but there seems to be little to no data examining the effects of homophobic or transphobic behavior in elementary schools. Wimberly (2015) has highlighted the gap in research that does not include LGBTQIA+ families and issues concerning youth in elementary schools. Additionally, the GLSEN National School Climate Survey (2019) includes a sample of less than 2% of elementary school students. This highlights the need for additional research with families and children within these school settings.

It is clear that LGBTQIA+ students struggle with being able to identify teachers that they can consider allies within the school setting (GLSEN, 2019). A little over half (51%) could not identify a teacher or staff member who was openly LGBTQ+ in their schools (GLSEN, 2019). A positive school climate that includes teacher support and representation is important for students to thrive in their school environments academically and social-emotionally, and in non-curricular activities (Kosciw et al., 2012). Notably, it is important that teachers become more supportive when dealing with LGBTQIA+ issues in order to contribute to a positive school climate. Relatedly, in order to derive direction regarding the way in which to intervene, it would be helpful to identify teachers' perceptions of their roles in working with LGBTQIA+ youth.

Teachers' Perceptions of Their Roles with LGBTQIA+ Students

Although teachers' roles are clearly defined as instructors, it is important to understand that they are the frontline workers within the school system in terms of supporting students' emotional and behavioral health. Schools rely on teachers to identify students not only for academic needs, but also for mental health needs within the classroom setting. In spite of this role, there is a lack of empirical data that has reviewed teachers' knowledge, attitudes, and skills while working LGBTQIA+ youth. What is clear to researchers is that teachers are not sufficiently aware of the issues LGBTQIA+ students face, and they may have their own biases toward such students (Clark, 2010). Additionally, research has established that teachers lack the requisite skills in being able to support LGBTQIA+ youth (Clark, 2010). This is a noticeable deficit, since teachers' perceptions of LGBTQIA+ youth have the ability to affect a student's perception of school belongingness.

In addition to the lack of research on teachers' perceptions on working with LGBTQIA+ youth, there is a lack of cited statements from teacher organizations about supporting LGBTQIA+ youth. In the National Education Association (NEA) 2020-2021 Handbook, the the organization gives a call to action to teachers in regard to supporting LGBT youth in their classrooms (NEA, 2019). Although professional statements from the NEA do not appear to be available, they do provide teachers with material to create inclusive classrooms and LGBTQIA+ curriculum (NEA, n.d.). The NEA has a subdivision referred to as the NEA EdJustice. The NEA EdJustice also provides resources and education for teachers regarding their knowledge and attitudes working with LGBTQIA+ youth, including ways to support transgender youth, what to say when intervening in instances of bullying, and support in starting a GSA. There appears to be resources available to teachers; however, the lack of professional statements from this large

national teacher organization in support of LGBTQIA+ youth may be inferred as a result of a lack of support from teachers.

However, National Association of School Psychologists (NASP) provides some guidance in supporting LGBTQIA+ youth. NASP charges school psychologists specifically to help LGBTQIA+ students so they can “develop and express their personal identities in a school climate that is safe, accepting, and respectful of all persons and free from discrimination, harassment, violence, and abuse” (NASP, 2017, p.1). Furthermore, NASP has been in support of gender-non-conforming youth by stating that they respect “a person’s right to express gender identity, and the right to modify gender expression when necessary for individual well-being” (NASP, 2014, p.1). Although NASP represents school psychologists specifically, these professional statements provide guidance in how all educators should be supportive of LGBTQIA+ students’ development within the school setting. As previously stated, although there are resources and professional statements do exist, research shows that teachers are largely unaware of this call to action to create a more positive school environment for LGBTQIA+ students.

In a study that surveyed teachers’ perceptions of bullying in the LGBTQIA+ population, Kolbert et al. (2015) found that heterosexual teachers view the school climate as being equally supportive to LGBTQIA+ students as it is to heterosexual students. The authors argue that this could be due a belief that teachers may have that they must treat all students equally – and to provide intervention to rectify the actual inequities would be giving such a student more than others in terms of time and attention. The findings of this study also suggest that schools can be polarized in their views of being in support of LGBTQIA+ advocacy. Furthermore, the authors’ research indicated that teachers who were not aware of the schools’ anti-bullying policies were

less likely to provide an accurate report regarding whether their school was doing enough in bullying prevention. This implies that there is a need for increased communication within schools about what policies are already in place. In another study by Perez et al. (2013), the authors found that teachers determined that physical bullying was the most serious form of bullying, followed by verbal and relational aggression. However, they found that this pattern only was present when teachers were reflecting on non-LGBTQIA+ students. In regard to LGBTQIA+ students, teachers rated physical bullying as occurring slightly less than verbal and relational bullying. They also indicated slightly less empathy towards LGBTQIA+ youth who were physically bullied, and reported that they would be less likely to intervene in physical bullying of LGBTQIA+ youth. Of these participants, only 48% indicated that their employer provided training on how to intervene using their bullying intervention program.

As previously discussed, teachers may be aware of some LGBTQIA+ bullying or victimization that exists; however, research has been conducting showing that the majority (58%) would not discuss issues of homosexuality in the larger classroom setting (Mudrey & Medin-Adam, 2006). This poses an issue with intervening on a larger, classroom scale. While teachers may not be comfortable providing that level of intervention, they do express more positive attitudes toward students that do identify as LGB and non-gender-confirming when they have knowledge of their issues (Mudrey & Medin-Adam, 2006). Moreover, there are implications that teacher's attitudes tend to be more positive when they gain knowledge about the needs of specific students, but they still do not intervene at the classroom level. This highlights a skill deficit amongst the educators in this sample.

Previous research highlights the need for educators to intervene with increasingly high levels of derogatory use of the word "gay." In the most recent National School Climate Survey

(GLSEN, 2019), nearly 99% of the LGBTQ+ students reported hearing gay in a negative way. Of those that reported hearing gay used in a derogatory way, 91% reported feeling distress after hearing it. In a study by Kosciw and colleagues (2009), they found that teachers are less likely to intervene when “gay” is used in a derogatory sense due to their perceptions of it being too trivial and that there are more intense forms of bullying and verbal harassment occurring. As previously discussed, since there are high levels of distress associated with students who have reported hearing “gay” used in this manner, Kosciw et al. (2009) concludes that the lack of intervention may be contributing to feelings of isolation and creating a negative school climate.

Researchers are noting that educators are not developing a knowledge base to support LGBTQIA+ students in the school system (Zacko-Smith & Smith, 2010). Surprisingly, teacher educators have stated that LGBTQIA+ issues are seen as less important as compared to issues of race and ethnicity (Robinson & Ferfolia, 2008). As late as the late nineties this was identified as a problem and highlighted by Smith (1998): “Most preservice and inservice teachers are woefully undereducated and underprepared by traditional teacher education programs...related to sexual orientation” (p. 88). Furthermore, research shows that when educators do intervene, it is often done to stop harassment and not to prevent acts of homophobia or transphobia from occurring (Hillard et al., 2014). The reason for this may be due to a lack of skill development. Interestingly, in previous studies, teachers have identified the need to obtain skills to support LGBTQIA+ youth as they realize their obligation to this underserved population (Milburn & Palladino, 2012).

Teacher Professional Development on LGBTQIA+ Youth

There is a lack of professional development training programs for educators to improve upon their competency with LGBTQIA+ youth (Payne & Smith, 2010). Whitman (2013)

highlights several professional development opportunities, including materials that GLSEN provides online, such as the Space Safe Kit (GLSEN, n.d.). Additionally, Whitman (2013) reviewed research that shows teachers' lack of knowledge and skills supporting LGBTQIA+ youth in schools, and in some cases a lack of self-awareness regarding their need for more education (Jennings, 2006; Koch, 2000; Mudrey & Medina-Adams, 2008; Wyatt et al., 2008). These studies highlight that although professional development materials are available, there is a lack of teacher engagement with the material. Furthermore, GLSEN (2012, 2015) found that despite educators receiving some training on multicultural issues, only a small minority of teachers have received education as it relates more narrowly to issues regarding LGBTQIA+ students. As far as teacher educator programs are concerned in providing education to pre-service teachers, in a study by Sherwin and Jennings (2006), these authors found that although 90% of participating programs included LGBTQIA+ material in their courses, only a minority (18%) required pre-service teachers to engage in the utilization of that knowledge or skill. Furthermore, no state requires teacher education programs to include training on issues regarding LGBTQIA+ youth. These findings reveal that teachers may be underprepared in supporting LGBTQIA+ students due to a lack of formal education programming and ongoing professional development.

Some programming opportunities are available to school districts. In a previous study by Swanson (2014), the benefits of the LGBT Affirmative Training Program were communicated through earlier research done by Whitman and colleagues (2007). This training was formed by the Chicago chapter of GLSEN for counselors and teachers to provide professional development on supporting LGBTQIA+ youth so that they could be the "*agents of change with their own school communities*" (Whitman et al., 2007, p. 150). The professional development was created

to extend over a three-day training period and focused on the following four components: 1) enhancing participants' knowledge related the LGBTQ youth and the issues they face in schools; 2) modeling different types of training activities that could be used in staff development; 3) providing participants with opportunities to create, practice, and receive feedback on a training session geared toward their own school community; and 4) introducing participants to fundamental community organizing principles so that they are prepared to effectively advocate for change in their own school community schools, and legal and policy issues affecting LGBT youth and schools (Whitman et al., 2007, p. 150). The first day of the training was focused on LGBTQIA+ knowledge, while the second and third days built on the previous day's knowledge as well including modeling and designing activities that the teachers could return to their schools and disseminate (Whitman et al., 2007).

Another professional development training program designed for educators is the GLSEN Lunchbox (2005). Whitman (2013) describes the GLSEN Lunchbox as a training that includes over 40 activities that can be used for any school professional or educational setting. The GLSEN Lunchbox has a similar four-part component model as the LGBT Affirmative Training program, and incorporates adult learning techniques and strategies (Whitman, 2013).

Swanson (2014) also described the Youth Pride Inc (2010) professional development for educators and other school professionals known *OUTSpoken*. *OUTSpoken* provides educators with the opportunity to learn how to create safe spaces for LGBTQIA+ youth by utilizing activities and discussion-led conversations that target homophobia, transphobia, and heterosexism (Swanson, 2014). The purpose of *OUTSpoken* is to create community leaders by emphasizing advocacy, community involvement, and cultural awareness (Youth Pride Inc., n.d.).

At this time, there is no empirical evidence that supports the outcomes of this program, which is similar to Swanson's findings in 2014.

Greytak and colleagues (2013) developed a professional development workshop for school professionals (teachers, mental health professionals, and administrators) in an attempt to measure change in awareness, empathy, importance of intervention, and self-efficacy working with LGBTQIA+ youth. They argued that a professional development program that spans a day to two days is competing with other in-service topics that may be viewed as having higher importance than LGBTQIA+ issues. The study employed a quasi-experimental design of only a 2-hour district-wide training in urban secondary schools. Their training included both didactic and interactive components, including minilectures, discussion, reflections, and videos. The results of their study indicated that professional development could affect educators' beliefs about school climate for LGBTQIA+ youth and their own self-efficacy in addressing it. They also found that their professional development was successful in helping teachers to develop empathy for LGBTQIA+ youth, and correspondingly, teachers reported an increased understanding of what LGBTQIA+ youth experience in school.

The Reduction of Stigma in Schools (RSIS) program was developed in 2006 and has received positive empirical support (Payne & Smith, 2010). The efficacy and implementation of the program is founded within the Central New York area (Payne & Smith, 2010). The goal of the program is to be able to provide the attendees with resources to support LGBTQIA+ youth and to help them navigate systems that prevent educators from supporting LGBTQIA+ students due to barriers (Payne & Smith, 2010). The authors highlight the following five principals that are embedded within the professional development: 1) the use of the educator-to educator model; 2) bringing information into the schools where all educators...have access to the information; 3)

bringing information into the schools as facilitating connection of content to that school environment; 4) training content should be research-based and relevant to that school participant group; and 5) with adequate workshop time, most teachers will try to make the application to practice (Payne & Smith, 2010, p. 17-18). The program appears to be flexible, with the timing of the professional development ranging from 30 minutes to 3 hours (Payne & Smith, 2010). The effectiveness of the model was evaluated by descriptive statistics and qualitative responses, and the researchers concluded that the professional development had positive effects (Payne & Smith, 2010).

While there are some professional development opportunities available for teachers, the level of evaluation of these programs is limited. As a result of this lack of data and information, it is difficult to know what roles would be most effective for teachers in creating supportive environments for LGBTQIA+ students (Swanson & Gettinger, 2016). Nevertheless, it is clear that teachers' perceptions of their role as an ally or advocate is important in understanding at what point to intervene.

Teacher Training Issues on LGBTQIA+ Students

Teacher education programs address various forms of diversity, yet the attention to sexual orientation and gender identity topics are nonexistent (Jennings & Sherwin, 2008). Many teachers rely on the knowledge and skills obtained through their teacher preparation programs to address issues and concerns in their classrooms and schools. Throughout much of the research literature, there is a lot of discussion about the need to better prepare teachers and help expand their awareness of the issues surrounding LGBTQIA+ students (Milburn & Palladino, 2012).

Teachers' self-reports of being unprepared to address LGBTQIA+ bullying during their teacher education programs is concerning (Jennings & Sherwin, 2008). Teachers, willing or not,

are expected to be an effective ally for their students. However, teachers do not report being comfortable being able advocates based upon a lack of knowledge and skills regarding the needs of victimized students. Moreover, teachers tend to report that their university preparation programs are insufficiently preparing them for this role (Milburn & Palladino, 2012).

A research study conducted by Sawyer et al. (2006) indicated several possible issues in providing support to LGBTQIA+ students as noted by school service providers such as nurses, counselors, social workers, and school psychologists. One may be that teachers are unable to intervene because they lack the skills in order to be supportive of the LGBTQIA+ student population. Teachers report feeling like they are unable to answer questions from students about lesbian, gay, or bisexual people in the classroom (GLSEN, 2012). Teachers feel even more uncomfortable answering questions as it pertains to transgender issues (GLSEN, 2012). Research has not yet explored whether this is due to a lack of education or because of stigma related to supporting these marginalized populations. Teachers do report not being able to intervene because they are not prepared to address the levels of derogatory language due to the overuse of it in the classroom (Youth Pride Inc., 2010). Another reason why teachers may be unwilling to intervene is due to their own discriminatory attitudes towards LGBTQIA+ students (Sawyer, 2006). A third reason may be that because they are not aware of the extent to which bullying takes place at school, they do not see the importance of intervening at the student level (Sawyer, 2006). In summary, schools that employ teacher professional development for teachers regarding LGBTQIA+ issues are more likely to be able to equip their teachers with the skills to better advocate for their students.

Teacher Professional Development Theoretical Model

The current research that supports effective teacher professional development models are based on learning theories, such as social learning theory. The existence of these theories provide evidence that teacher professional development can make a meaningful impact within the classroom setting. Indeed, there is evidence to suggest that social learning theory, in particular, helps to create effective teacher professional development (Margolis et al., 2016).

Social Learning Theory

Social learning theorists simply speculate that social and personal development is in part due to the social contexts in which learning occurs. Theorists do not focus on internal thoughts or feelings of individuals or the external environment alone. Albert Bandura, the founder of social learning theory, hypothesized that human behavior is a “interrelated control system in which behavior is determined by external stimulus events, by internal processing systems and regulatory codes, and by reinforcing response-feedback system,” (Bandura, 1969, p. 19). Bandura (1969) proposed four principles or constructs that are used to explain the social learning theory. These four principles are differential reinforcement, vicarious learning, cognitive processes, and reciprocal determinism.

1. **Differential reinforcement** refers to the idea that consequences for behavior are dependent on stimulus conditions. This concept helps to explain the variability in a person’s behavior in different settings. The environment responds with either positive or negative reinforcement, punishment, or withdrawal.
2. **Vicarious learning**, or modeling, is the concept that humans may acquire new behaviors through observation of other. This can happen either by spoken or written communication. Reinforcement of these modeled behaviors can result in the

increased likelihood of the behavior occurring again. A modeled behavior that results in punishment is likely to deter the behavior.

3. **Cognitive processes** happens when encoding, organizing, and retrieving information regulates behavior. The environment provides a person with the possible consequences of exhibiting the behavior in that particular setting. Cognitive processes and self-regulation help to inform a person's self-efficacy. Self-efficacy refers to one's belief that he or she can exhibit a particular behavior. Engaging in self-reflection allows for a person to monitor his or her own ideas and to accurately judge his or her self-efficacy.
4. **Reciprocal determinism** (Bandura, 1977, p. 9) introduces the idea that the person, the environment, and the behavior all influence each other. The influence that they have on each other is determined by the particular setting and the behavior being exhibited. The person is influenced by his or her cognitive processes.

Social learning theory is an approach that posits that human behavior is learned from the social environment. Cognitive processing allows for a person to imagine a behavior he or she wants to exhibit in a particular environment. After a behavior is learned, it becomes a part of that person's repertoire and is subject to reproduction and self-reflection (Leonard & Blane, 1999).

Social Learning Theory Informing Teacher Professional Development

The most meaningful learning opportunities happen when real-world problems emerge from practice, which allows for experimental techniques to be modeled with peer input (Hawley & Valli, 2000). When teacher professional development occurs in authentic school situations and is 'experiential in nature,' teachers are able to better apply relevant literature and practice to the classroom. Researchers stress the need of the teacher professional development to be

collaborative and authentic, but teacher professional development has not adapted to the current research. Also, the literature highlights the lack of student involvement in teacher professional development. Moreover, the most effective teacher education and professional development models involve the presence of students (Margolis et al., 2016).

Margolis et al. (2016) created a matrix for evaluating teacher professional development that explores teacher learning activities in relationship to well-established learning theories.

Theory Behind TPD Event:	Level 1 - Outside Expert Presents Ideas	Level 2 - Insider Presents Ideas through Narrative	Level 3 - Insider Presents Ideas through Narratives and Artifacts	Level 4 - Insider Presents Ideas through Visual Demonstrations	Level 5 - Insider Guest Teaches	Level 6 - Insider Conducts Planned, Episodic Studio Classroom	Level 7 - Insider Conducts Ongoing Studio Classroom
Sociocultural – school culture emphasizes teacher experimentation and learning from practice					High student presence	<ul style="list-style-type: none"> Lesson Study⁸ Learning Walks¹⁰ Partner-teachers visit to each other's classrooms¹¹ 	<ul style="list-style-type: none"> A teacher or TL hosts an ongoing studio classroom that includes dialogue about practice¹²
Situated Learning – teacher learning is situated in authentic teaching experiences			Moderate student presence		<ul style="list-style-type: none"> Teacher or TL models a lesson in another teacher's classroom⁹ 		
Social Learning Theory – teachers learn within groups embedded in the school context	Low or no student presence		<ul style="list-style-type: none"> Teachers share experiences and student work⁴ Teachers are organized into PLCs⁵ 	<ul style="list-style-type: none"> Teacher models a lesson at TPD day⁶ Teacher models a lesson using a video of own classroom⁷ 			
Constructivism – teachers learn by connecting new knowledge with previous experiences		<ul style="list-style-type: none"> Teacher presents ideas rooted in personal classroom experiences³ Online virtual communities² 					
Behaviorism – the administration delivers instructional material through formal channels	<ul style="list-style-type: none"> External consultant or school administrators present new approaches¹ 						

Figure 1. Excerpt of Margolis et al. (2016) teacher professional development matrix depicting Social Learning Theory and moderate use of students. Permission for reprint was granted by the author.

On the left hand side of the model are the theories of teacher learning that guide the more effective forms of teacher professional development. From the bottom up, the theories progress from more traditional to more contextualized and sociocultural. From the right to the left of the

model, there are seven categories of approaches to teacher professional development. These different levels correspond with the more complex theories of teacher professional development (Margolis et al., 2016).

The student inclusivity of the model is represented within the teacher professional development structures. The model implies that with increasing levels of student presence, there is a positive correlation with the effectiveness of particular theoretical frameworks. The model allows for different ways to incorporate student presence from physical appearance to student narratives to no presence at all. The model suggests the less student presence, the less of an impact the professional development is likely to make on teachers (Margolis et al., 2016).

Incorporating moderate student involvement for the safety and wellbeing of LGBTQIA+ students is imperative. Level 3 of the Margolis et al. (2016) teacher professional development model provides an effective approach, encouraging student involvement through the use of narratives and artifacts, and also including teacher experiences. According to the model, teachers organized outside of a classroom without physical student presence appear to have a significant effect on teacher learning. This seems to be the safest, and most confidential way of including LGBTQIA+ students within a teacher professional development model.

Self-Efficacy and Professional Development

The long-term effects of professional development on teachers' self-efficacy has long been overlooked; however, there is some research that examined the effects of teachers' reported self-efficacy after receiving professional development. In one study, Pollack (2019) surveyed teachers' perceptions of their self-efficacy as it related to the impact of professional development. The qualitative study sampled teachers that had previously endorsed professional development experiences and were located within the suburbs of Chicago. Pollack (2019) found

the following three themes: “participants assume the student role during professional development; professional development leaders focus on the participants’ needs as learner; and professional development” (p. v). Furthermore, the participants of the study discussed activities associated with professional development that they found engaging such as hands-on material, group discussion and learning for each other, and receiving group feedback (Pollack, 2019, p. v). Ultimately the participants reported high levels of self-efficacy with more challenging professional development and felt like skills they learned were transferable to the classroom setting.

Providing professional development and leading educators to a higher sense of self-efficacy has important outcomes for student success. For example, research has shown that teachers who have identified self-efficacy in a particular domain exhibit more support for struggling students in their classrooms (Puchner & Taylor, 2006). Additionally, research has also shown that teachers who have self-efficacy in their subject area have higher student achievement outcomes (Bray-Clark & Bates, 2003). It seems that for teachers, competency and the belief that they can teach can result in academic success as well as provide students with educators that intervene and support them.

Professional development has the ability to fill in the gaps of education that educators may have not received in their training programs. A study by Powell-Moman and Schild (2011) found that although teachers’ years of service had a positive relationship with meeting student learning goals, they also found that the presence of professional development had a profound, positive effect on a teacher’s professional development. The study showed that the correlation between years of service and student learning no longer had a significant relationship. This

investigation also highlighted that professional development is an important intervention tool that can mediate teacher learning and student outcomes.

In order for self-efficacy to be achieved by its participants, professional development must include more than knowledge about a particular domain (Bray-Clark & Bates, 2003). Essentially, professional development must provide educators with skills, have those skills modeled, and then have opportunity to practice those skills (Bandura, 1977). If educators are not provided with the opportunity to learn and practice skills, they may eventually feel as though they cannot handle difficult situations in the classroom (Pan & Franklin, 2011).

Components of LGBTQIA+ Preparation for Educator Professional Development

There are a variety of key components necessary to include in the training of pre-service and practicing school professionals regarding LGBTQIA+ issues. Research of existing pre-service and professional development programs repeatedly indicates that education, across professional disciplines, needs to include the following: specific information about appropriate language and terminology; issues of identity development; information on the school experiences of LGBTQIA+ youth; opportunities to explore one's biases and misconceptions; information on federal, state, and district laws and policies; methods of advocating for change; and mechanisms for providing support (Capper et. al., 2006; Israel & Selvidge, 2003; McCabe & Rubinson, 2008). Fisher and Kennedy (2012) summarize these components into three basic concepts: knowledge, awareness, and skills.

Knowledge. It is crucial to understand and utilize the appropriate LGBTQIA+ language and terminology to communicate with respect. Graff and Stufft (2011) recommend that open discussions addressing language be incorporated in pre-service teacher education. These kinds of

discussions can be initiated by offering all pre-service and in-service professionals basic handouts of current terminology (Whitman et al., 2007).

Development of sexual and gender identity for LGBTQIA+ youth is critical to the understanding of working with LGBTQIA+ students. There are a variety of models of sexual and transgender development, and inclusive in many models of identity development are ways in which professionals and allies can intervene to facilitate the healthy development of these identities (Chun & Singh, 2010; Lev, 2004). Athansases and Larrabee (2003) recommend connecting these developmental identity models together during professional development workshops that are assessing understanding of LGBTQIA+ development.

There are a variety of social and psychological consequences that LGBTQIA+ students may experience as they come out in a heterosexist and homophobic environment. Trainings should present statistics and signs of depressions, suicidality, homelessness, and substance abuse for LGBTQIA+ youth (Whitman et al., 2007). It is also recommended that participants are exposed to information regarding recent legal cases as a result of anti-gay violence and their resulting impact on school policy, as such data may impact their knowledge of student protections (Biegel, 2010). Furthermore, Whitman et al. (2007) recommends that educators are aware that oppression can turn into resilience, and educators should be aware of this process so that strength-based interventions may be implemented.

Awareness. Evaluating one's own biases and misconceptions are important when working with sexual and gender minority youth. In order to fully understand and be able to competently work with LGBTQIA+ students, educators must be aware of their own sexual orientation development and be aware of their biases (Buhrke & Douce, 1991). Inviting school professionals to question the origin of their perspectives should be an integral part of

professional development (Fisher, 2013). In a study by McGravey (2014), it was pointed out that because teaching counselors about heterosexism may help challenge negative attitudes, this may also be the case for educators. Heterosexism is the societal belief that everyone experiences life in the same way as heterosexual-identifying people (Pachankis & Goldfried, 2004). This has the potential to put expectations on another individual that may be harmful or make them feel uncomfortable. In providing educators with the ability to question their own biases and subconscious expectations of others, it is believed that such measures will lessen negative attitudes towards LGBTQIA+ youth.

Skills. These training programs for school professionals need to include ways in which they can put their knowledge and awareness in to effect in order to make positive change to school climate (Whitman, 2013). Because it is not unusual for LGBTQIA+ students to come out to teachers whom they perceive as safe (McCabe & Rubinson, 2008), it is important for educators to understand the ways in which to be mechanisms of supports (i.e., displaying signs, books, and posters). Educators should also be aware of ways that they can intervene, including tools to adapt their current curriculum to incorporate LGBTQIA+ knowledge and literature (Whitman, 2013).

Purpose of Study

There is very little research to support teachers in their growth and understanding of the unique needs that the LGBTQIA+ student population faces. This is evident by the lack of existing resources and empirical research to support what already is being utilized. Additionally, there is less research on training teachers to work specifically with LGBTQIA+ youth who are experiencing victimization and how they can better support those marginalized population. This study will add to the available professional development resources for teachers to use to increase

their competencies on supporting and understanding the LGBTQIA+ population. It will include the incorporation of evidence-based practices and strategies when addressing LGBTQIA+ youth. Aligning the curriculum with the social learning theory allows for participants to gain knowledge and skills by relating it to their practice and modeling strategies they subsequently can use in the classroom.

Summary

The majority of LGBTQIA+ students report feeling unsafe within in school, and they have high rates of experiencing bullying and victimization. This is concerning since LGBTQIA+ youth are an at-risk population and have low levels of school belongingness. Schools have a legal and ethical obligation to protect LGBTQIA+ students as evidenced by court cases, the interpretation of the constitution, and other federal law that protects the privacy and dignity of students. LGBTQIA+ students perceive teachers by and large as unsupportive and unwilling to prevent or effectively intervene in instances of bullying or victimization. In some instances, teachers feel that LGBTQIA+ youth receive equal support in the school setting, but also feel that they are less likely to be as empathetic to their negative experiences. Teachers report not being prepared to support LGBTQIA+ youth due to a lack of competency in regard to issues they face and the necessary skills to intervene. There are very few professional development programs to address teachers' lack of knowledge and skills in supporting LGBTQIA+, and even fewer have empirical research in supporting their efficacy. A social learning theory approach coupled with a professional development model that addresses attitudes, knowledge, and skills may provide educators with higher levels of self-efficacy to support this marginalized population within the school system.

CHAPTER 3

METHODS

In this study, I aimed to investigate whether a professional development workshop aligned with social learning theory, consisting of three modules, would increase the self-perceived awareness, knowledge, and skills of educators when working with LGBTQIA+ youth. The primary independent variable (IV) was the implementation of a curriculum I developed for the purposes of this investigation, called “All That Glitters.” There were two levels of the IV: the length of time following the implementation of the professional development workshop (i.e., immediately or six weeks post-intervention). The primary dependent variable in this study was educators’ self-perceived competence in working with LGBTQIA+ youth, including the skills attained in the following areas that were presented in the curriculum: 1) overall awareness of issues facing LGBTQIA+ youth, 2) laws protecting LGBTQIA+ youth, 3) demographic variables of LGBTQIA+ youth, 4) identity development of LGBTQIA+ youth, 5) risk factors for LGBTQIA+ youth, and 6) mechanisms of support for LGBTQIA+ youth. In this study, I also measured the self-perceived competency and knowledge change in educators immediately following the intervention and whether there were gains that were maintained (six weeks after the intervention). Additional factors, such as years of professional experience, the extent of experience with LGBTQIA+ youth, and prior knowledge of LGBTQIA+ issues were analyzed in order to gain a wider understanding of the demographic variables of this sample.

Research Design

In this project, I used a quasi-experimental approach in order to evaluate the effects of the curriculum upon the factors previously identified. Quasi-experimental designs are useful when randomization of the participants is unrealistic (McMillan & Schumacher, 2010). In order to

measure the degree to which the LGBTQIA+ professional development workshop changed the awareness, knowledge, and skills of the participants, pre- and multiple post-test measures were administered. Using quantitative analysis, the scores of participants were measured at a pre-, post- and a subsequent posttest interval. Additionally, qualitative information was collected through open-ended questions posed to the participants of the study about the effectiveness of the workshop.

Participants and Recruitment

The sample consisted of 83 teachers from four public, suburban and urban-based K-12 school districts in the mid-Atlantic region. Participants each, at minimum, had completed a bachelor's level educational program from an accredited university and had earned a state certificate for teaching.

After IRB approval was granted by the University in which I was enrolled and school district consent was obtained, participants were recruited through a letter. The letter detailed the need for a workshop to educate in-service teachers about working with LGBTQIA+ youth in their classrooms. The purpose of the letter was to recruit general-education teachers working in grades K-12 in a public school.

Potential participants were given an informed consent form before attending the workshop. An information sheet included alongside of the informed consent form indicated that participation in the research component of the workshop presentation was entirely voluntary, with no adverse consequences for choosing not to participate. All participants attending the workshop who agreed to participate in the research component of the session were supplied with a packet at the beginning of the workshop that included an information sheet, a background

information questionnaire, the LGBT-DOCCS scale, The Scale of Homophobia, and qualitative questions developed by the author.

In order to protect the identities of the participants, the packets were coded, each with a unique numerical identifier. As unique identifiers were used on all other study materials and were not linked in any way to any personal information (addresses, email addresses, or phone numbers), the confidentiality of all responses were preserved. Furthermore, email addresses were only used for the purposes of sending the follow-up questionnaires; they were not shared with anyone other than the researcher. After participating in the workshop, participants submitted their packets to the evaluator who immediately placed them in an envelope. Moreover, the study presented minimal risk to participants.

Measures

Demographic Questionnaire

A short demographic questionnaire was created in order to allow for information about the participants to be collected prior to completing the workshop, including data regarding participants' experience, background knowledge, job title, education, and other related information. Additional information regarding sexual orientation, gender identity, ethnicity, and income level was also collected.

LGBT-Development of Clinical Skills Scale (LGBT-DOCCS).

The awareness, knowledge, and skills of participants regarding LGBT students were evaluated using the LGBT-DOCCS (Bidell, 2017). The LGBT-DOCCS was designed to measure self-perceived competency in working with LGBT individuals. It is an individually-administered self-report instrument. The scale includes three subscales: awareness (previously published as attitudes), knowledge, and skills. It has 18 items with seven measuring skills, seven measuring

awareness, and four measuring knowledge. It uses a 7-point Likert scale ranging from 1 – Not at all True to 7 – Totally True.

In order to develop the LGBT-DOCCS, Bidell (2017) used a factor analytic approach and compared the LGBT-DOCCS to other multicultural competency scales in order to establish convergent validity. LGBT-DOCCS items are scored in terms of an overall score and in terms of subscales, with higher scores indicating higher levels of sexual orientation competency. Scores are categorically defined by Bidell (2017) as High (6.00-7.00), Moderate (3.00- 5.00), and Low (1.00-2.00). Bidell's (2017) initial study indicated that the LGBT-DOCCS is psychometrically sound; reliability was established at .86 for the overall LGBT-DOCCS using the coefficient alpha. The original attitudes subscale had a .88 coefficient alpha; .80 for Attitudes, .88 for the Skills, and .83 for the Knowledge subscale (Bidell, 2017). One week test-retest reliability indicated correlation coefficients of .84 for the overall LGBT-DOCCS, .85 for Attitudes, .83 for Skills, and .84 for the Knowledge subscale.

The Homophobia Scale

The participants' self-report of engaging in negative behaviors, cognitions, and affect towards LGBTQIA+ individuals was assessed by the Homophobia Scale. This measure was developed to determine if those who self-report negative cognitions and affect toward LGBTQIA+ individuals would also self-report exhibiting negative behaviors. It is solely used as a self-report measure. The original factor analysis included a loading of three factors labeled as cognition, affect, and behavior. The scale has 25 items, with five items related to cognition, ten items related to affect, and ten items related to behavior. It uses a 5 point Likert scale ranging from 1-Strongly Agree to 5-Strongly Disagree (Wright et al., 1999).

The results of the revised Homophobia Scale yielded an overall reliability coefficient of $\alpha = .94$. Following a one-week test-retest, the scale yielded a reliability coefficient of .96 (Wright et al., 1999). Congruent validity was established utilizing the Index of Homophobia (IHP). A Pearson Correlation coefficient was calculated and resulted in a significant correlation ($r = .66, p < .01$). This indicates that the two scales are measuring moderately-similar constructs. In regard to the factor structure, an exploratory factor analysis was calculated on the 25-item scale. A three-factor solution emerged that accounted for the 68.69% of the scale's variance. The first factor, Behavioral, accounted for 40.88% of the scale's variance. The second factor, Affect, accounted for 23.05% of the scale's variance. The third factor, Cognitive Negativism, accounted for 4.77% of the scale's variance.

Intervention

I designed the professional development/workshop that was used for this study. The title of the professional development is "All That Glitters: Supporting LGBTQIA+ Youth in School Environments," and the desired effects were for participants to acquire and retain knowledge, reflect on their awareness, and learn skills regarding advocacy for LGBTQIA+ students. My main goal was for educators to learn facts, statistics, and risk factors as they pertain to LGBTQIA+ youth. I also desired to have the participants reflect on their own biases and misperceptions. Finally, the curriculum was designed to provide educators with ways they can be an ally for LGBTQIA+ youth and respond with the appropriate skills in the classroom. This workshop is targeted toward educators and is designed to be delivered during in-service programs. The curriculum includes lectures, videos, group discussion, reflection, and group collaboration through activities.

All That Glitters flows in a sequential order starting with the first module, Knowledge. In starting with knowledge, a basic understanding of statistics, identity development, and LGBTQIA+ issues is the goal after completion. After working to instill in participants a base level of knowledge, the professional development flows into the second module, Awareness. During the Awareness module, participants are challenged to reflect on their biases and misconceptions concerning LGBTQIA+ youth through group discussion and videos. Once Awareness is completed, the Skills module is implemented. The Skills module provides educators with ways in which they can be an ally, how to address certain issues that may arise when working with LGBTQIA+ youth, and how to let youth know that their classroom is a safe space. Issues that are addressed include how to intervene with bullying of LGBTQIA+ youth, how to respond LGBTQIA+ youth coming out, and how to create a more inclusive classroom.

Upon the completion and creation of the professional development, I sent the presentation and associated material to two experts in the field. One expert has a strong research base in educator professional development, while the other expert is a school psychologist that serves on a committee that focuses upon advocating for support of LGBTQIA+ youth in schools. After feedback was provided from both experts, edits were made to the presentation and material was redeveloped to reflect the changes required to meet both content and professional development standards. The new version of the professional development continued to undergo rounds of edits until all standards of both LGBTQIA+ content was satisfied as well as adult learning elements were implemented.

In order to affirm that the professional development fit the criteria for the research questions, I presented the professional development program on two separate occasions at alternative schools. The purpose of this was to present it to the target audience that would be

similar to those that would participate in study, while making sure that the final version of the professional development would meet the appropriate duration. The activities and content were adjusted at this time and the corresponding changes were made to the lectures.

Procedure

After obtaining participants' verbal consent, consent forms were self-addressed and mailed. These were read and signed at the participants' leisure. Signed consents were placed in a stamped, addressed envelope and mailed back to the researcher before individuals participated in the professional development program.

Prior to the workshop, participants were asked to initial and confirm their consent. Anyone who was not on the list of consent was asked to read and sign a consent form or were offered the option to not participate in the research. The participants in the research study were asked to create an individual identification key. The key was comprised of the participant's last initial, street address number, and birthdate year, and became the person's participant number. The participants were instructed to not write any other identifying information on the packet.

The first module began after the completion of the pretest and focused on building the knowledge base of the participants regarding LGBTQIA+ youth. Specifically, the module focused on language and terminology, identity development, and risk factors. Once the presentation was completed, the participants were able to ask questions about the module or anything they needed clarification on that was presented. The module lasted approximately thirty-five minutes and included a discussion, short-videos, questions, and a review of artifacts from LGBTQIA+ youth.

The second module consisted of a presentation that focused on the awareness of attitudes about LGBTQIA+ individuals. Primarily, the presentation focused on biases, misconceptions,

and the awareness of one's own sexual and gender identity development. The format of this module was similar in style and format to the first module. The participants were allowed to ask questions following this module. Following the question time, the participants were given a five minute break.

After the break, the third and final module, "Working with LGBTQIA+ Skill Development" began. This presentation primarily focused upon discussion of different mechanisms of support and advocacy. There was some discussion regarding federal, state, and school district policy regarding LGBTQIA+ youth. Reflection was encouraged and feedback was provided (i.e., on how to make the classroom a safer space). Furthermore, specific techniques and strategies when working with LGBTQIA+ youth were discussed.

Six weeks after the workshop, the author sent a link to the follow-up survey to each participant. Before starting the survey, participants were prompted to enter their participant number that they created at the beginning of the workshop. They then completed the LGBT-DOCCS scale, the Homophobia Scale, the additional questions regarding competence, all of the post-test questions from the workshop, and qualitative questions regarding what the he/she/they has done to advocate for LGBTQIA+ youth. A reminder to complete the survey was sent out a week later. A final reminder was sent out two-weeks from the initial request.

Data Collection

After collecting the data, it was stored in a locked room. When the data were entered into the statistical software, it was de-identified with a legend that was locked and maintained in another space. For the purposes of this study, it included the background information and the pre/posts test(s), the pre/post ratings, and follow up questions.

Scoring

Reverse Coding. During the scoring process, it was required to reverse score items on both of the scales utilized for this study. The LGBT-DOCSS required reverse scoring on all items that were negatively-worded so that it aligned with the measurement (overall preparedness to work with LGBTQIA+ youth, knowledge, attitudes, and skills). Likewise, The Homophobia Scale was reversed scored so that the negatively-worded items aligned with homophobia.

Table 1

Reverse scored items

LGBT-DOCSS^a	The Homophobia Scale^b
3	1
4	2
5	4
7	5
9	6
12	9
17	12
18	13
	14
	15
	17
	19
	21
	23
	24
	25

^a Bidell (2017)

^b Wright et al. (1999)

Data Analysis

In research question one, I investigated whether the All That Glitters curriculum was effective in increasing the participants' knowledge, attitudes, and skills in regards to working with students that identify as LGBTQIA+. A repeated measures MANOVA was utilized to determine whether was a significant increase in competency levels from the pretest to the posttest for all the participants of the study. Years of experience and previous professional development regarding LGBTQIA+ content was controlled for during this test.

In research question two, I investigated whether the All That Glitters curriculum was effective in decreasing participants' perceived homophobic affect, behavior, and cognitions. Again, a repeated measures ANOVA was used in order to control for years of experience and previous training regarding working with LGBTQIA+ youth.

In research question three, I investigate whether the All That Glitters curriculum was effective in increasing educators' attitudes, knowledge, and skills despite the perceived levels of homophobia rated by the educators. A multiple regression analysis was utilized to determine the extent of the effect of All That Glitters curriculum and the overall preparedness of participants to work with LGBTQIA+ youth. Both differences in means within and across groups and across the posttest and follow-up were examined. A probability level of 0.05 or greater was selected to determine whether the null hypothesis should be accepted or rejected. Effect size was then computed to determine the strength of the change after the educators participated in the All That Glitters curriculum. In addition, frequencies are also reported to help illustrate the number of participants who met the mastery score.

Summary

The *All That Glitters* professional development program was designed so that educators who work with LGBTQIA+ youth could receive a two-hour professional development training that could potentially increase their knowledge, reflect on their awareness, and promote skill-development in advocacy. Theoretically, this professional development model should improve upon the knowledge, skills, and attitudes of educators working with LGBTQIA+ youth with a corresponding positive educational outcome. Indeed, the aim of the study was to investigate the effectiveness of a professional development model as it has the ability to directly increase an educator's preparedness to work with LGBTQIA+ students; therefore, increasing the preparedness of the educators in this sample. The goal of the study is to expand on the very limited research existing within this area by providing a way to effectively and efficiently provide training to educators on working with LGBTQIA+ youth. Specifically, through this study, I sought to determine if this professional development model was successful in increasing the knowledge, attitudes, and skills of this particular sample.

Chapter 4

RESULTS

First, I analyzed and presented the demographic data and descriptive statistics for the participants who participated in the study. Next, I presented the results of a repeated measures MANOVA and repeated measures ANOVA. Lastly, I provided the results of the multiple regression I conducted in order to determine whether self-reported levels of homophobia are explained by self-reported levels of knowledge, attitudes, and skills.

Research Questions and Hypotheses

Research Question 1: Does an LGBTQIA+ all-content professional development program significantly increase the awareness, knowledge, and skills for educators that work with LGBTQIA+ youth in schools?

Hypothesis 1: An LGBTQIA+ all-content professional development will significantly increase the knowledge, awareness, and skills for educators that work with LGBTQIA+ youth in schools.

Research Question 2: Does an LGBTQIA+ all-content professional development significantly decrease perceived homophobia for educators?

Hypothesis 2: An LGBTQIA+ all-content professional development will significantly decrease perceived levels of homophobia.

Research Question 3: Do the perceived rates of knowledge, attitudes, and skills in regard to LGBTQIA+ students vary based upon a participant's self-rating of homophobia at the pre-test?

Hypothesis 3: The perceived rates of knowledge, attitudes, and skills in regard to LGBTQIA+ students will yield significant differences based upon a participant's self-rating of homophobia at the initial pre-test.

Demographics

For all analyses conducted, I utilized the Statistical Package for the Social Sciences (SPSS 26.0) software package. Of the 83 individuals who participated in this study, 14 (15.9%) identified as male, 67 (76.1%) identified as female, and 2 (2.3%) identified as transgender (male to female). Sixteen participants (18.2%) were 20-29 years, 26 (29.5%) were 30-39 years, 26 (29.5%) were 40-49 years, 13 (14.8%) were 50-59 years, and 2 (2.3%) were 60-69 years. The participants of this study largely represent a homogenous sample based on racial identification (see Table 1). The majority (88.6%) of the participants identify as heterosexual (83%) and have a bachelor's degree (83%) as their highest educational level attained. Although the individuals included in this sample have a range of years in which they have served as teachers, the majority of the participants (40%) have taught between 6 to 10 years. The educators who participated in this investigation teach a variety of subjects, including Mathematics, English Language Arts, Sciences, Social Studies, Performing Arts/Visual Arts, Consumer Arts, and Vocational Studies. In regard to previous professional development, the majority (56.8%) of participants indicated that they had no previous professional development trainings on the topic of sexual-minority and/or gender-minority youth.

Table 1*Descriptive Statistics of the Sample*

Group	N	Percent
Male	14	15.9%
Female	67	76.1%
Transgender (Female to Male)	2	2.3%
Age 20-29	16	18.2%
Age 30-39	26	29.5%
Age 40-49	26	29.5%
Age 50-59	13	14.8%
Age 60-69	2	2.3%
White/Caucasian	60	68.2%
Black/African American	19	22.9%
American Indian or Alaska Native	2	2.4%
Asian	2	2.4%
Heterosexual	78	88.6%
Lesbian	2	2.3%
Gay	3	3.4%
Years Teaching 1-5	15	18.1%
Years Teaching 6-10	36	43.4%
Years Teaching 11-15	27	32.5%
Years Teaching 16-20	5	6.0%
Prior Training Sessions 0	50	56.8%
Prior Training Sessions 1-2	22	25%
Prior Training Sessions 3-4	11	12.5%

Statistical Assumptions

The dependent and independent variables of this study represent continuous data by virtue of using the self-reported mean scores. The independent variable was measured in the same group of participants over three periods of time. Only 27 participants completed the follow-up measures; however, further analyses were conducted to analyze the effects of each time measurement by looking at pairwise comparisons. In regards to observing outliers, a scatterplot of the data was conducted to determine any visual outliers. Additionally, Mahalanobis distance was calculated to determine outliers. Notably, there were no outliers that needed to be addressed within this sample.

Tests of sphericity were conducted to answer research questions one and two. The Shapiro's Wilks test was utilized to test for normality, the results of which suggested that the data are not normally distributed. Although this violates the test of normality, previous research suggests that ANOVAs are robust to deviations of normality (Bray & Maxwell, 1985). There was homogeneity of variance for all relevant variables (Knowledge, Attitudes, Skills, and Homophobia), assessed utilizing a Levene's test, $p > 0.05$. There was also homogeneity of covariance as assessed by a Box's M test ($p > .001$). Utilizing a scatterplot to visually scan for a linear relationship between knowledge, attitude, skills, and homophobia, there appeared to be a positive slope and linear relationship. Homoscedasticity was assessed by using a scatterplot and a visual analysis showed that this assumption was not violated.

For the multiple regression analysis, all included variables had a skewness and kurtosis values between -1 and +1 (see Table 2), suggesting a normal distribution amongst the data (Mertler & Vannatta, 2013). The direction of the skewness is expected due to the nature of self-

Table 2

Skewness and Kurtosis for Multiple Regression

Variable	Skewness	Kurtosis
Pretest Homophobia	.389	-.501
Pretest Knowledge	-.368	-.623
Pretest Attitudes	-.145	-.591
Pretest Preparedness (skills)	.166	-.659

reporting working with a vulnerable population. For the multiple regression analysis, multicollinearity was assessed, and the tolerance and variance inflation factor (VIF) scores were utilized for this assumption. The lowest tolerance value was 0.996 and the highest VIF value was 1.004, demonstrating that there is no multicollinearity.

Research Question 1

In order to thoroughly investigate whether the intervention had an effect on educators' knowledge, attitudes, and skills working with LGBTQIA+ youth as measured by the LGBT-DOCSS, a Repeated Measures MANOVA was utilized to see if there were main effects between pretest, posttest, and follow-up results. Additionally, a post-hoc analysis was conducted to further investigate the significant differences between all three points of times of measuring the educators' perceptions of their growth regarding their knowledge, attitudes, and skills.

Table 3 displays the descriptive statistics that include the means and standard deviations at each time measurement. Table 4 shows the results of the multivariate tests of the repeated measures MANOVA utilizing the Wilk's Lambda. This analysis showed a statistically significant result of the overall multivariate model, $F(6, 92) = 55.58, p = .001$, which indicates a change of ratings over the three measurements over time. Additionally, there was a medium

Table 3*Descriptive Statistics*

	M	SD
Pretest Knowledge	10.54	1.90
Posttest Knowledge	15.00	1.44
Follow-up Knowledge	14.67	1.09
Pretest Attitudes	29.67	2.71
Posttest Attitudes	34.05	1.87
Follow-up Attitudes	29.55	2.23
Pretest Preparedness (skills)	20.65	2.75
Posttest Preparedness (skills)	26.14	2.19
Follow-up Preparedness (skills)	29.22	2.21

Note. $N = 27$

effect size $\eta^2 = .78$, which represents a moderate positive change in ratings. Table 4 also shows the results from the post-hoc pairwise comparisons test that was conducted to show the differences among the periods of time.

Due to the significance of the model, several of these times were expected to be clinically significant as evidenced by the pairwise comparisons table. The difference of time in self-rating of Knowledge Posttest to Follow-up was ($p = .33$). Knowledge Posttest had a mean of 15.00 (SD = 1.44) as compared to the Knowledge Follow-up, which had a mean of 14.67 (SD = 1.09). This demonstrates that there was a slight decrease of knowledge at the six-week follow-up. Although the results showed a change between Attitudes Posttest to Follow-up ($p = .00$), there was no

Table 4*Multivariate Tests*

	Wilk's Lambda	<i>F</i>	Hypothesis <i>df</i>	Error <i>df</i>	Sig	Partial Eta Squared
Time	.047	55.58	6	92	.001	.78

Table 5*Pairwise Comparisons with Bonferroni Adjustment*

Comparisons	Mean Difference	Std. Error	95% CI	
			Lower Bound	Upper Bound
Knowledge				
Pretest vs. Posttest	-4.46*	.386	-5.45	-3.46
Posttest vs. Follow-up	.330	.337	-.54	1.19
Pretest vs. Follow-up	-4.13*	.502	-5.42	-2.84
Attitudes				
Pretest vs. Posttest	-4.38*	.508	-5.69	-3.70
Posttest vs. Follow-up	-4.49*	.638	-2.85	6.14
Pretest vs. Follow-up	.120	.624	-1.48	1.73
Skills (Preparation)				
Pretest vs. Posttest	-5.49*	.647	-5.45	-3.46

Posttest vs. Follow-up	-3.07*	.683	-.539	1.99
Pretest vs. Follow-up	-8.57*	.386	-5.45	-2.84

* $p > .05$

significant change in Attitudes Pretest to Posttest ($p = .22$). The means of the Attitudes Pretest of 29.67 (SD = 2.71) and the Follow-Up of 29.55 (SD = 2.23) indicate little to no change.

Research Question 2

In the second research question of the study, I examined the impact of the professional development upon educators’ perceived levels of homophobia after targeting their growth in the areas of knowledge, attitudes, and skills. In order to answer this research question, a repeated measures ANOVA was conducted to ascertain the overall impact of the perceived levels of homophobia across all three periods of time. Like the previous research question, descriptive statistics and a pairwise comparison was also employed to further explore the differences at multiple points in time. The sample size for this question is 27 participants, which represents all of those participants who completed ratings at all three periods of time.

In Table 5, the descriptive statistics for this research question are depicted. There is a decrease from Pretest Homophobia with $M = 20.80$ (SD = 3.97) to the Posttest with $M = 18.84$ (SD = 3.01) in the sample. The mean of the follow-up assessment, $M = 17.96$ (SD = 2.39) shows a continued decrease in ratings of homophobia from the Pretest and Posttest. The multivariate test (Table 6) showed a significant change over time when analyzing all three moments of measurement, $F(2, 25) = 5.29, p = .013$. There was a medium effect size ($\eta^2 = .34$), which indicates the difference within the model is a significant. The pairwise comparisons showed that

Table 6*Descriptive Statistics for Research Question Two*

	M	SD
Pretest Homophobia	20.80	3.97
Posttest Homophobia	18.84	3.01
Follow-up Homophobia	17.96	2.39

Note. $N = 27$ **Table 7***Multivariate Tests*

	Wilk's Lambda	F	Hypothesis df	Error df	Sig	Partial Eta Squared
Time	.69	5.29	2	25	.01	.34

Table 8*Pairwise Comparisons with Bonferroni Adjustment*

Comparisons	Mean Difference	Std. Error	95% CI	
			Lower Bound	Upper Bound
Homophobia				
Pretest vs. Posttest	-4.46*	.386	-5.45	-3.46
Posttest vs. Follow-up	.330	.337	-.54	1.19
Pretest vs. Follow-up	-4.13*	.502	-5.42	-2.84

* $p > .05$

there was a significant difference from Pretest vs. Posttest ($p = .021$) and Pretest vs. Follow-up ($p = .019$); however, there was not a significant difference between Posttest vs. Follow-up. This finding suggests that there was little change in ratings from the posttest to the follow-up in regard to participants' self-perceived levels of homophobia.

Research Question 3

In order to answer Research Question Three, I employed a multiple regression to analyze if the self-reported knowledge, attitudes, and skills measurements from the sample are predictors of individuals' reported levels of homophobia measured at the pretest period. As previously discussed, all assumptions were considered prior to the analysis. Both log-transformed and non-log transformed data were considered due to some issues of skewness; however, upon seeing little difference between scores, non-logged data were used.

Results indicated that the self-reported knowledge, attitudes, and skills of participants did not predict levels of homophobia, as seen in Table 8 ($R^2 = 0.014$, $F(3, 79) = .36$; $p = .64$). The model only accounted for 1.4% of variance. In Table 9, none of the coefficients were revealed to be statistically significant. The direction of the Knowledge ($\beta = -0.11$, $p < .69$) and Attitudes ($\beta = 0.283$, $p < .69$) coefficients indicate an inverse relationship, meaning that with increased levels of homophobia, there was less advanced knowledge and attitudes.

Table 9

<i>Model Summary</i>							
R	R ²	R ² Adjusted	ΔR^2	F change	<i>p</i>	df ₁	df ₂
.12	.01	-.02	.01	.36	.64	3	79

Table 10*Coefficients for Multiple Regression*

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Knowledge	-.133	.129	-.112	-.0147	.692
Attitudes	-.173	.006	-.109	-0.394	.695
Skills	.169	.162	.117	1.041	.301

Summary

In this study, assessed whether a two-hour professional development promoted educators' knowledge, attitudes, and skills in support of LGBTQIA+ youth in schools. Results indicate that the two-hour professional development was able to successfully promote educators' self-ratings of knowledge, attitudes, and skills in support of LGBTQIA+ youth in schools. Upon further analysis, teachers' knowledge in support of LGBTQIA+ youth in schools from pre-test to post-test and pre-test to the six week follow-up was significantly changed. Teachers' attitudes in support of LGBTQIA+ youth in schools also significantly changed from pre-test to post-test and from post-test to follow-up; however, there was no change from pretest to the follow-up. There was significant change in regard to teachers' skills in support of LGBTQIA+ youth in schools obtained during the workshop as evidenced by the significant change between each measurement point. This study also examined whether or not the professional development focusing on knowledge, attitudes, and skills in support of LGBTQIA+ youth predicted educators' perceived levels of homophobia. Results revealed that self-reported homophobia was lowered using this model of professional development with teachers. More specifically, there was a statistically significant change from pre-test to post-test and from pre-test to follow-up, but there was no

significant change from post-test to the follow-up.. Finally, in the study, I attempted to see if participants' knowledge, attitudes, and skills in support of LGBTQIA+ youth in schools could predict perceived levels of homophobia. Results indicated that knowledge, attitudes, and skills in support of LGBTQIA+ youth in schools were not able to predict educators' perceived levels of homophobia.

CHAPTER 5

DISCUSSION

In this study, I examined the effects of a two-hour professional development targeting educators' growth levels of knowledge, attitudes, and skills in working with LGBTQIA+ youth in the classroom. Teachers rated their knowledge, attitudes, and skills in working with LGBTQIA+ youth prior to the intervention, immediately following the intervention, and again at a six-week follow-up. Furthermore, through this study, I analyzed educators' perceptions of homophobia by measuring homophobic thoughts about students and their families. This construct was also measured at the pretest, posttest, and follow-up time periods of the intervention. Lastly, I explored the impact that individuals' attitudes, knowledge, and skills in support of LGBTQIA+ youth in schools have on their self-reported levels of homophobia. This was done to determine if there was an association between homophobia and how participants rated their knowledge, attitudes, and skills in support of LGBTQIA+ youth in schools.

The professional development activities were conducted with 83 high school teachers across four schools located in both urban and rural areas within the mid-Atlantic United States. Demographic and background information were collected at the pre-test, prior to the professional development activities being administered, as well as completion of ratings of the LGBT-DOCSS and the Homophobia Scale. After the two-hour professional development activities, participants completed the same rating scales for the posttest point of measurement. At the point of six-weeks following the intervention, the participants of the study received the rating scales to complete. However, only 27 participants completed the rating scales at follow-up.

The majority of participants of the study were female (76%), while only 14% of the participants were male. The composition of the sample reflects that of the nation's schools, as

individuals identifying as female comprise the majority of those that hold positions in K-12 schools (NCES, 2021). This also implies that there may be gender-based learning needs that need to be considered when implementing instruction and delivery (Hayes & Flannery, 2000).

Furthermore, the majority of this sample (56%) had not participated in any professional development aimed at increasing knowledge and support of LGBTQIA+ youth, and 25% had received only one to two trainings prior to the current study. The majority of the participants in this investigation had worked for six to ten years in schools. Considering that most of the participants in this study have worked in education between six to ten years and 56% have never received professional development pertaining to supporting LGBTQIA+ youth in schools, concern is present regarding the apparent lack of knowledge and skills to support such minoritized youth.

Bredeson (2003) discovered that teachers, and veteran teachers in particular, will often ignore information that is taught to them through professional development (Bredeson, 2003). To illustrate, teachers that have worked in the field for ten or more years were likely to engage in the suggested training through a two-hour professional development activity. Apparent is that educators use their previous learning and professional to select what practices to implement after a professional development activity. One way to combat this is to actively include teachers in their professional development, by engaging in collaboration, interacting with the professional development materials, and hearing about others' experiences. Allowing teachers to engage in professional development in this way may allow them to feel like they are agents of change rather than simply lectured to and acted upon (Lieberman, 1996). Educators engaging in their own growth has the potential to support their self-efficacy and continued practice of the newly-learned skills. Relatedly, in regard to the professional development activities conducted in this

study, it will be important for teachers to model behavior that shows acceptance, support, and belongingness of LGBTQIA+ youth in schools.

Summary of the Results

Question One

The primary goal of this intervention was to execute professional development activities that focused on supporting educators' growth in their knowledge, attitudes, and skills regarding the support of LGBTQIA+ youth. Researchers have stated that it is often recommended by those writing in the school-based mental health field that professionals gain knowledge, awareness and skills in order to be culturally competent in supporting LGBTQIA+ youth in the field (Whitman, 2013, p. 129). In this study, awareness was targeted by focusing on the attitudes of the educators that participated in the professional development. Whitman (2013) discussed the importance of having educators engage in conversations about LGBTQIA+ issues in order to uncover attitudes regarding this marginalized population. Regarding this question, I hypothesized that a two-hour professional development activity would increase educators' knowledge, attitudes, and skills in support of LGBTQIA+ youth in schools from pretest to posttest and a six-week follow-up posttest.

Results indicated an overall large, positive effect in the self-perceived growth of educators' knowledge, attitudes, and skills in support of LGBTQIA+ youth in schools across the three periods of measurement. The two-hour professional development was able to support an overall and sustained change in educators' beliefs that they have developed and maintained sufficient knowledge, supportive attitudes, and skills to provide a safe school climate for LGBTQIA+ students. As previously stated in the earlier chapters of this dissertation, there are limited studies examining the effectiveness of professional development that focuses on

supporting teachers working with LGBTQIA+ youth. Greytak et al. (2013) conducted a comparable study that used a two-hour professional development model for school professionals that targeted their role in anti-LGBT bullying, harassment, name calling, and negative remarks. These researchers also provided opportunities for educators to learn through modeling and then engaging in supervised practice through specially-designed scenarios. Greytak and colleagues (2013) found that teachers who participated in the study had an improved sense of self-efficacy when intervening on behalf of LGBTQIA+ students.

In this study, due to the significance of the overall repeated measures MANOVA, it was expected that there would be significant changes in each of the dependent constructs across intervention phases; however, there were variables that did not significantly change. For example, teacher ratings of their knowledge in support of LGBTQIA+ youth in schools increased from pretest to posttest, but did not change significantly from posttest to the six-week follow-up. This result seems understandable if participants of the study did not gain any further knowledge of LGBTQIA+ youth between the posttest and the six-week follow-up. Otherwise, teachers reportedly rated their knowledge of LGBTQIA+ issues higher after the professional development activities as compared to their knowledge prior to engaging in the professional development opportunity.

Although there was a significant change in overall attitudes for educators in support of LGBTQIA+ youth in schools from the pretest to the posttest, there was no significant difference between values when comparing the pretest and the follow-up phase. This could be due to the fact that although educators felt as though from pretest to posttest their attitudes were challenged, they may not have engaged in further self-reflection regarding their biases and preconceived notions of LGBTQIA+ individuals after the professional development activities. This is

consistent with research conducted by Lieberman (1996) implying that educators receiving professional development will be more apt to engage in change if they are given opportunities to take an active role. This result suggests that it may be valuable for teachers to be provided with ongoing professional development with which to actively engage in order to challenge their beliefs and replace the old ways of responding with new and culturally-responsive ways of interacting with students.

Finally, educators reported significant changes at all three points of measurement in regard to their skills of supporting LGBTQIA+ students. It was expected that teachers would gain skills from pretest to posttest; however, they also endorsed higher rates of skills and implementation of those skills in the classroom during the follow-up phase. This result indicates that teachers used the skills that were discussed and practiced during the professional development activities. It may also suggest that teachers are having broader discussions or researching other skills to use in the classroom beyond the professional development activities provided through this program.

Question Two

I inquired whether a professional development program that focused on increasing the knowledge, attitudes, and skills of educators would decrease self-reported levels of homophobia. The importance of this question is twofold: 1) do teachers perceive the responsibility to intervene in instances of bullying and harassment and 2) are teachers able to question their homophobic thoughts and actions? In a study conducted by McCabe and colleagues (2013), these researchers asked school psychologists to rate student and teacher interactions and comments made to and about LGBTQIA+ identifying students or students who were perceived to belong this marginalized group. Although McCabe et al. (2013) were concerned primarily with school

psychologists identifying homophobia and microaggressions, the incidence of teacher behavior in engaging in such behaviors, as perceived by school psychologists, was also identified. One school psychologist was quoted as saying, “I have had many incidents of effeminate boys being talked about in a disrespectful way by teachers. ...I have heard insulting remarks about fellow staff members who are perceived to be gay,” (McCabe et al, 2013, p. 18). Furthermore, 11% of the school psychologists went into detail in describing hearing teachers and staff engage in biased, discriminatory conversation. It is clear through such research that identifying and tolerating homophobia is a concern for both educators and students in schools.

For this question, the overall repeated measures ANOVA model resulted in a statistically significant change, indicating that individuals participating in the two-hour professional development reported success in changing their self-perceived overall homophobic views and behaviors. This is consistent with prior research suggesting that although teachers are aware that homophobia exists (Dessel, 2010; O’Higgin-Norman 2009), they are simply not prepared to intervene (Warwick et al., 2001) or question those beliefs within themselves. The results of the current study imply that teachers feel less homophobic themselves after engaging in a professional development that engages them in support of LGBTQIA+ youth.

Although there was a change from pretest to posttest and from pretest to the follow-up, there was not a significant change from posttest to the follow-up. In fact, the positive direction of the data suggests that there was a small growth in homophobic views from posttest to the six week follow-up; however, the change was not significant. This may be due to the low levels of homophobia that was reported at posttest; therefore, not allowing for the participants to rate themselves any lower. These results imply that although the intervention immediately lessened feelings of homophobic behaviors, it did not encourage further challenging of any homophobic

beliefs in the participants. The mean scores indicate that there was very little observable change between the posttest and the follow-up points of measurement. This result further supports the need for ongoing professional development conducted in creative ways for educators so that they are provided with more opportunity to question their biases and identify microaggressions that may be related to more entrenched homophobic beliefs.

Question Three

Regarding the final question of this study, I assessed the levels of shared variance among homophobia and attitudes, knowledge, and skills regarding supporting LGBTQIA+ students in school systems. A multiple regression was utilized in order to ascertain whether there was a relationship among the coefficients, as well as to determine whether the variables of knowledge, attitudes, and skills related to supporting LGBTQIA+ youth predicted homophobic attitudes. There is very little research that predates this study in regard to analyzing these constructs in this way. In one study, Butler (1994) found that pre-service teachers held negative views about homosexual couples, lacked knowledge about this marginalized group, and had no intention of supporting their needs in school. A more recent study confirmed these findings and found that people continue to hold negative views toward sexually-diverse individuals, and were more negative toward gay men than they were homosexual women (Herbstrith et al., 2013). This study, therefore, represents an initial inquiry into better understanding the contributions to homophobia in order to best intervene in professional development contexts.

The results indicated that the knowledge, attitudes, and skills of teachers regarding supporting LGBTQIA+ youth participating in this study did not predict their level of homophobia. Moreover, none of the coefficients had a significant relationship with homophobia as the construct (dependent variable). Although this result was disappointing, there are different

reasons to consider to explain these results. First and foremost, there may have been little variability amongst the variables. Little to no variability would limit a regression analysis to differentiate among highly-correlated predictive variables. The variables may be too alike, thus unable to provide the variability needed for the analysis. Another consideration that may be more obvious is that homophobia is explained by more than just by individuals' knowledge, attitudes, and skills. This professional development program that focused upon increasing participants' knowledge, questioning their attitudes, and building upon their skills may be unable to impact a set of beliefs that contributes to homophobia. It is clear that further investigation is required in order to help refine professional development in order achieve the goal of diminishing educator homophobia in schools.

The negative direction of the coefficients are worth noting due to the inverse relationship of increased knowledge and better-informed attitudes' with low levels of homophobia. The relationship between them implied that as homophobia rises, there is an observable loss of knowledge and attitudes. Homophobia's effect on these coefficients shows that perhaps homophobia prevents someone from gaining knowledge and engaging in a reflection of their attitudes. Additionally, the relationship shows that if knowledge and attitudes grow that homophobia may decrease. The directionality is consistent with the results from the previous research question and highlights the need for educators receiving more professional development in order to challenge their biases.

Another consideration is that high levels of homophobia may result in being limited in learning unbiased knowledge, challenging attitudes, and learning skills in supporting LGBTQIA+ youth. Although the participants' mean level of homophobia was relatively low at pretest, it is plausible that those with higher levels of homophobia had an aversion to the content

and activities related to the professional development. Further exploration of how to intervene with educators who exhibit higher levels of homophobia would support ongoing revisions for more effective teacher professional development in support of LGBTQIA+ youth.

Limitations

There are some limitations to consider when interpreting the results of this study. First, all of the data collected within this study utilized self-report questionnaires in order to measure the variables. While utilizing self-reports are helpful in gaining behavioral and emotional insight from research participants, they potentially present some issues. Participants may respond to self-reports in a socially-desirable way, which results in concerns regarding objectivity. Throughout the study, at both the pretest and posttest measurements, the participants completed the associated rating scales sitting next to peers. At the six-week follow-up, the participants completed the rating scales on their own and in their own environments. At the beginning of each professional development workshop, participants were told that their responses would be kept confidential, and they kept an identification code as to not reveal their true identity. These practices were taken into consideration in order to reduce the susceptibility of some to supply socially-desirable responses.

In addition to the ratings that were required to be completed in order to participate in this study, some of the school districts required teachers to complete their own review of the professional development. This may have contributed to fatigue in completing the rating scales and resulted in participants skipping questions. Furthermore, through the DOCCS, participants were asked to rate their self-perception in the areas of knowledge, attitudes, and skills in support of LGBTQIA+ youth in schools. Their knowledge, attitudes, and skills were not measured by

others observing these educators in working with LGBTQIA+ youth. No qualitative data were gathered to ascertain what skills were most useful in teachers' everyday practice.

The attrition rate for those participants that completed the rating scales associated with the study should be considered a limitation. There were 83 participants that completed the ratings at pretest and posttest, while only 27 participants completed follow-up questionnaires. This prevented further analyses such as examining other variables as mediators. Although there was enough participation to help provide enough power to the analyses, the significant attrition reduced the amount of information gathered in regard to the long-term effects of this professional development activity.

It is important to mention the time and consistency of the delivery of the professional development as a limitation and consideration of this research. Although all participants received the professional development from the same facilitator, some deviation in the content of the session occurred due to questions asked by participants and the level of engagement from each participant. For the purposes of the study, there was a two-hour cutoff point to ensure the consistency of the professional development. However, some activities conducted throughout the professional development were compromised in terms of time spent due to unanticipated engagement during other moments of the professional development. That said, each professional development delivery lasted for two-hours and consisted of all three targeted areas of growth (knowledge, attitudes, and skills in support of LGBTQIA+ youth in schools).

The measurements themselves also need to be considered as limitations of the study. Both the DOCCS and Homophobia Scale do not explicitly include educators as a population that was targeted for inclusion in the normative sample and the factor analysis used to create the constructs that were used in this study. The DOCCS was utilized due to the nature of the study,

which was holding educators to the same standard as clinicians in their ability to rate their knowledge, attitudes, and skills (preparedness) in working with LGBTQIA+ youth. As previously noted, Whitman (2013) postulates that educators should also have an education of LGBTQIA+ issues that emphasizes knowledge, attitudes, and skills. Furthermore, the Homophobia Scale's initial factor analysis utilized a male college sample to develop the constructs that comprise the scale.

Finally, the participants were not randomly selected to participate in this study. They comprised a sample of convenience by being offered the opportunity to participate in the research study beyond simply receiving the intervention. The participants were all required to participate in the professional development by their school administration. Each professional development workshop that was administered for this study had a varying number of participants that gave consent to be part of the study. Those that did not willingly participate in the research did not have to complete rating scales. This aspect of this investigation suggests that generalizing the findings of this study across those individual schools would have its own limitations.

Implications

The results from this study have yielded valuable implications for the support of professional development targeting increasing educators' service provision to LGBTQIA+ youth in schools. The findings from this study may inform practice by supporting teachers in their endeavors of creating a more accepting, inclusive school climate for LGBTQIA+ youth. The results of this study should also help to support changing educators' beliefs about LGBTQIA+ individuals.

The results of this investigation first and foremost highlight the need for teacher education of LGBTQIA+ issues in order to better support these students in school. Over half of

the educators reported that they have never received trainings specific to working with LGBTQIA+ youth. Only a quarter of the sample reported having one to two trainings and 12.5% reported having 3-4 trainings. There may be competing competencies that need to be covered in teacher training programs; however, as supported by this study, there is a need to support pre-service and in-service educators with professional development skills to best support LGBTQIA+ youth in schools.

From an anecdotal standpoint, the case is sometimes made that teachers often have a lot of diversity and cultural understanding to prepare for different students in the classroom, so why should there be separate trainings regarding the needs of this particular group? In answer to such a question, LGBTQIA+ youth are a marginalized group that are often at higher risk for suicidal ideation with rates that are four times greater than other populations (Meyer, 2003; Mortier et al., 2018). This seemingly requires teachers to have the knowledge and ability to support sexual and gender minority students and a school to have the ability to create a positive school climate for all students.

This study also provided the evidence that a two-hour professional development program does have the ability to provide educators with enough content and activity to change their perceptions of their knowledge, attitudes, and skills in support of LGBTQIA+ students. The two-hour timeframe was originally set in order to accommodate a busy and productive in-service school day, but also it was chosen to expand upon previous research that also found effectiveness using only two hours of time with an emphasis LGBTQIA+ issues for educators (Greytak et al., 2013). Prior studies found that although there is no condition that requires a particular duration of time, there has been a general consensus that professional development should extend over a period of time and should last for 20 hours or more (Desimone, 2009). A professional

development that spans two days limits the window of time that it could potentially be delivered for teachers' consumption, not to mention the competing interests and tasks that need to be covered during in-service days. This study shows that positive, sustained outcomes can be achieved with less time as it pertains to educators' perceived competency and preparedness in working with LGBTQIA+ youth.

This study also provided insight regarding the way in which educators' homophobic behavior can be the target of intervention. As previously discussed, there is limited research regarding educators' explicit views on their perceived levels of homophobia. This study measured homophobia and targeted it through the professional development by exploring biases through activities and knowledge content. Although this study was not able to confirm the predictability of homophobic behavior, it was able to lower perceived levels of it. It is expected that through professional development that targeted knowledge, attitudes, and skills, teachers would be able to now detect homophobic behaviors within themselves and within the students. Indeed, this should give them the ability to intervene and help to create a more inclusive classroom environment for sexual and gender minority students.

Future Research

There are several future research directions that are recommended to continue in order to support educators and LGBTQIA+ students in schools. First and foremost, a continuation of the current study is recommended in different regions. The current study was conducted in the northeast region of the United States, which may have different views and levels of acceptance of diversity. Such research may provide a larger impact for the overall design of the professional development, as well as the two-hour implementation of the workshop. Different regions may find through a needs assessment that alterations may need to be made to further support teachers'

understanding of LGBTQIA+ issues and to provide them with skills. Stone (2018) postulates that much of the research on LGBTQIA+ needs is restricted to regions in the northern part of the United States, leaving a hole in research in the southern states. It is possible that regional cultural norms or values may require different strategies to address knowledge, attitudes, and skills. Furthermore, after longer periods of follow-up, rating scales could be used to help measure the possibility of sustained outcomes and perceptions of teachers' abilities to provide support to LGBTQIA+ youth. Additionally, more objective measures should be considered in future studies that assesses teachers' actual obtained knowledge and demonstration of skills (e.g., peer observation).

A comparison study in which researchers investigated the outcomes of different durations of professional development would help to provide insight regarding the most appropriate duration for professional development activities for educators. Such research would add educational significance to the field of professional development and, in particular, intervention with teachers who work with LGBTQIA+ students. Another interesting study would be to examine the effects of a similar study facilitated by a self-identified member of the LGBTQIA+ community. Such an endeavor may allow for analysis of the different levels of homophobia that are expressed, as well as the connection to the subject material made by the facilitator and the participants.

As it was in the case for this study, there were other professionals that were required to attend but could not participate in the data collection. A study that would compare and contrast the needs of other school professionals would be helpful in understanding the whole school climate and how to best support LGBTQIA+ youth. As training programs for other school professionals are different, it is important for stakeholders and those that make decisions for all

students should understand their development and how to best support them. Other investigations may be initiated to examine the effects of ongoing consultation pre- and post-intervention to gauge how teachers feel supported by other school professionals working with LGBTQIA+ students.

Measurements need to be created and normed specifically to assess teachers' and other school professionals' perceptions and readiness to work with LGBTQIA+ youth. The current study shed light upon the lack of evidence-based resources that support professional development facilitators and educators in the endeavor of supporting the knowledge, attitudes, and skills regarding supporting LGBTQIA+ youth. An instrument that is developed through a factor analysis would be a valuable asset in this field of study and would contribute to the ease in conducting a needs assessment for school administrators.

Continued research on educators may want to look different demographic factors to see how they correlate with different variables. For example, looking at how years of service have an effect on an educator's ability to engage in changing the knowledge, attitudes, and skills as it relates to LGBTQIA+ individuals. Furthermore, it would be interesting to see how gender identity effects how teachers interact with sexual minority youth. Additionally, further research could look at how LGBTQIA+ identifying educators may perceive their preparedness to work with LGBTQIA+ youth. It may also be prudent to look at how LGB educator's perceive students who are not gender-conforming and their levels transphobia.

Finally, it will be important to examine the effects that an intervention like this has on the teachers' students. Although it is important to see the change in perception and a growth of self-efficacy for teachers, the emphasis must be placed upon how to best make classroom and schools more inclusive and safe for students. Measures should be selected that assess school climate, but

additionally, a questionnaire should be developed that assesses the students' perceptions of their teachers in developing a more inclusive classroom.

Conclusion

Currently, there is limited evidence that supports professional development opportunities in order to increase teachers' abilities to create an inclusive classroom environment for LGBTQIA+ youth. This study contributes to this under-researched area, and it provides insight to future researchers regarding potential ways of reducing homophobia and raising awareness of the needs of LGBTQIA+ youth. By targeting teachers' knowledge, attitudes, and skills in a professional development activity, this study highlighted a need for an increased attention to LGBTQIA+ students in post-secondary educational training programs, which should also increase opportunities for students to learn to effectively consult on this topic with other school professionals. School staff such as school psychologists should see these results and recommendations as a way in which they can better support teachers, so that they can serve LGBTQIA+ students in schools and in effect, create an educational experience as one in which these students may thrive.

References

- Athanases, S. Z., & Larrabee, T. G. (2003). Toward a consistent stance in teaching for equity: Learning to advocate for lesbian- and gay-identified youth. *Teaching and Teacher Education, 19*(2), 237–261. [https://doi.org/10.1016/S0742-051X\(02\)00098-7](https://doi.org/10.1016/S0742-051X(02)00098-7).
- Bandura, A. (1969). *Principles of behavior modification*. Holt, Reinhart & Winston.
- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W H Freeman/Times Books/Henry Holt & Co.
- Bedell, J. (2003). Personal liability of school officials under §1983 who ignore peer harassment of gay students. *Illinois Law Review, 3*, 829-862. Retrieved from <http://illinoislawreview.org/wp-content/ilr-content/articles/2003/3/Bedell.pdf>.
- Barnett, A. P., Molock, S. D., Nieves-Lugo, K., & Zea, M. C. (2019). Anti-LGBT victimization, fear of violence at school, and suicide risk among adolescents. *Psychology of Sexual Orientation and Gender Diversity, 6*(1), 88–95. <https://doi.org/10.1037/sgd0000309>
- Bidell, M. P. (2017) Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS): Establishing a new interdisciplinary self-assessment for health providers. *Journal of Homosexuality, 64*(10), 1432-1460.
doi:10.1080/00918369.2017.1321389.
- Biegel, S. (2010). *The right to be out: Sexual orientation and gender identity in America's public schools*. University of Minnesota Press.

- Birkett, M., Espelage, D. L., & Koenig, B. (2009) LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. *Journal of Youth and Adolescence*, 39, 989-1000. <http://dx.doi.org/10.1007/s10964-008-9389-1>
- Bray, J. H., & Maxwell, S. E. (1985). *Multivariate analysis of variance* (No. 54). Sage.
- Bray-Clark, N., & Bates, R. (2003). Self-efficacy beliefs and teacher effectiveness: Implications for professional development. *The Professional Educator*, 26(1), 13-22. Retrieved from <https://files.eric.ed.gov/fulltext/EJ842387.pdf>
- Bredeson, P. V. (2013). Distributed instructional leadership in urban high schools: Transforming the work of principals and department chairs through professional development. *Journal of School Leadership*, 23(2), 362–388. doi:<https://doi.org/10.1177/105268461302300206>
- Buhrke, R., & Douce, L. (1991). Training issues for counseling psychologists in working with lesbian women and gay men. *Counseling Psychologist*, 19, 216-234. doi:10.1177/0011000091192006.
- Capper, C., Theoharis, G., & Sebastian, J. (2006). Toward a framework for preparing leaders for social justice. *Journal of Educational Administration*, 44, 209-224. doi:10.1108/09578230610664814.
- Centers for Disease Control and Prevention. (2013). Parents’ influence on the health of lesbian, gay, and bisexual teens: What parents and families should know. Retrieved from https://www.cdc.gov/healthyyouth/protective/pdf/parent_engagement_strategies.pdf
- Clark, C. T. (2010). Preparing LGBTQ-allies and combating homophobia in a U.S. teacher education program. *Teaching and Teacher Education*, 26, 704-713. doi:10.1016/j.tate.2009.10.006

- Dessel, A. B. (2010). Effects of intergroup dialogue: public school teachers and sexual orientation prejudice. *Small Group Research, 41*(5), 556–592.
doi:10.1177/1046496410369560
- Dragowski, E. A., McCabe, P. C., & Rubinson, F. (2016). Educators' reports on incidence of harassment and advocacy toward LGBT students. *Psychology in the Schools, 53*(2), 127-142. doi:10.1002/pits.21895
- Eisenberg, M. E., & Resnick, M. D. (2006). Suicidality among gay, lesbian and bisexual youth: the role of protective factors. *The Journal of Adolescent Health, 39*(5), 662–668.
<https://doi.org/10.1016/j.jadohealth.2006.04.024>
- Elze, D. E. (2003). Gay, lesbian, and bisexual youths' perceptions of their high school environments and comfort in school. *Children & Schools, 25*(4), 225-239.
- Equal Access Act, 20 U.S.C. §§ 4071 et seq. Family Educational Rights and Privacy Act, 20 U.S.C. § 1232g.
- Family Educational Rights and Privacy Act of 1974, 20 U.S.C. § 1232g (1974).
- Fisher, E. S., Komosa-Hawkins, K., Saldana, E., et al. (2008). Promoting school success for lesbian, gay, bisexual, transgendered, and questioning Students: Primary, secondary, and tertiary prevention and intervention Strategies. *Contemporary School Psychology, 13*, 79–91. <https://doi.org/10.1007/BF03340944>
- Fisher, E. S., & Kennedy, K. S. (2012). *Responsive school practices to support lesbian, gay, bisexual, transgender, and questioning students and families*. Routledge.
- Fisher, E. S. (2013). Supporting lesbian, gay, bisexual, transgender, and questioning students and families. In E. S. Fisher & K. Komosa-Hawkins (Eds.), *Creating safe and supportive*

learning environments: A guide for working with lesbian, gay, bisexual, transgender, and questioning youth and families. (pp. 3-9). Taylor and Francis.

Gay, Lesbian, and Straight Education Network. (n.d.). *GLSEN Safe Space Kit*. Retrieved from:
<https://www.glsen.org/activity/glsen-safe-space-kit-solidarity-lgbtq-youth>

Gay, Lesbian, and Straight Education Network. (2005). *GLSEN lunchbox: A comprehensive training program for ending anti-lgbt bias in schools*. Retrieved from
<http://www.glsen.org/cgi-bin/iowa/all/library/record/1748.html?state=tools-&type=tools>.

Gay, Lesbian, and Straight Education Network. (2012). *Training for school staff on LGBT issues*. Retrieved from <http://glsen.org/chapters/connecticut/resources/training-school-staff-lgbt-issues>

Gay, Lesbian, and Straight Education Network. (2015). *The 2015 National School Climate Survey*. Retrieved from <https://www.glsen.org/sites/default/files/2020-01/GLSEN%202015%20National%20School%20Climate%20Survey%20%28NSCS%29%20-%20Full%20Report.pdf>

Gay, Lesbian, and Straight Education Network. (2019). *The 2019 National School Climate Survey*. Retrieved from https://www.glsen.org/sites/default/files/2021-04/NSCS19-FullReport-032421-Web_0.pdf.

Graff, C., & Stufft, D. (2011). Increasing visibility for LGBTQ students: What schools can do to create inclusive classroom communities. *Current Issues in Education*, 14(1), 1-21. Retrieved from: <http://cie.asu.edu/ojs/index.php/cieatasu/article/view/636>

Grant, T. (2006, September 27). Gay students often bullied in PA schools. *The Pittsburgh Post-Gazette*, pp. B1, B2.

- Hansen, A. L. (2007), School-based support for GLBT students: A review of three levels of research. *Psychology in the Schools*, 44, 839-848. <https://doi.org/10.1002/pits.20269>
- Hayes, E., & Flannery, D. D. (2000). *Women as learners: The significance of gender in adult learning*. San Francisco: Jossey-Bass Publishers.
- Herbstrith, J. C., Tobin, R. M., Hesson-McInnis, M. S., & Joel Schneider, W. (2013). Preservice teacher attitudes toward gay and lesbian parents. *School Psychology Quarterly*, 28(3), 183–194. <https://doi.org/10.1037/spq0000022>
- Hillard, P., Love, L., Franks, H., Laris, B., & Coyle, K. (2014). “They were only joking”: Efforts to decrease LGBTQ bullying and harassment in Seattle public schools. *The Journal of School Health*, 84, 1-9. doi: 10.1111/josh.12120
- Holmes, S. E., & Cahill, S. (2004). School experiences of gay, lesbian, bisexual, and transgender youth. *Journal of Gay & Lesbian Issues in Education*, 1(3), 53-65. https://doi.org/10.1300/J367v01n03_06
- Israel, T., & Selvidge, M. M. D. (2003). Contributions of multicultural counseling to counselor competence with lesbian, gay and bisexual clients. *Journal of Multicultural Counseling and Development*, 31(2), 84–98. <https://doi.org/10.1002/j.2161-1912.2003.tb00535.x>
- Jennings, K. (2006). *Mama’s boy, preacher’s son*. Beacon Press.
- Jennings, T. & Sherwin, G. (2008) Sexual orientation topics in elementary teacher preparation programs in the USA. *Teaching Education*, 19(4), 261-278. doi:10.1080/10476210802436328
- Knowles, M. (1984). Introduction: The art and science of helping adults learn. In M. S. Knowles (Ed.), *Andragogy in action: Applying modern principles of adult learning* (pp. 1-21). Jossey-Bass.

- Koch, C. (2000). *Attitude, knowledge, and anticipated behaviors of pre-service teachers toward individuals with different sexual orientations*. Unpublished doctoral dissertation. The George Washington University.
- Kosciw, J. G., Greytak, E. A., Diaz, E. M., & Bartkiewicz, M. J. (2009). *The 2009 national school climate survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools*. GLSEN. Retrieved from www.glsen.org
- Kosciw, J. G., Greytak, E. A., Bartkiewicz, M. J., Boesen, M. J., & Palmer, N. A. (2012) *The 2011 national school climate survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools*. GLSEN.
- Kolbert, J. B., Crothers, L. M., Bundick, M. J., Buzgon, J., Berbary, C., Simpson, J., & Senko, K. (2015). Teachers' perceptions of bullying of lesbian, gay, bisexual, transgender, and questioning (LGBTQ) students in a southwestern Pennsylvania sample. *Behavioral Sciences*, 5, 247-26. doi:10.3390/bs5020247.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Leonard, K. E., & Blane, H. T. (1999). *Psychological theories of drinking and alcoholism*. Guilford Press.
- Lev, A. I. (2004). *Transgender emergence: Therapeutic guidelines for working with gender-variant people and their families*. Haworth Clinical Practice Press.
- Lieberman, D.A. & Reuter, J. (1996). Designing, implementing and assessing a university technology-pedagogy institute. *To Improve the Academy*, 15, 231-249.
<https://doi.org/10.1002/j.2334-4822.1996.tb00312.x>.

- Lieb, S. (1991). *Principles of adult learning*. Vision-South Mountain Community College.
<http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-2.htm>(& 1.htm).
- Lortie, D. C. (2002). *Schoolteacher* (2nd ed.). The University of Chicago Press.
- Margolis, J., Durbin, R., & Doring, A. (2016). The missing link in teacher professional development: Student presence. *Professional Development in Education*, 43, 23-35.
Retrieved from <http://dx.doi.org/10.1080/19415257.2016.1146995>
- McCabe, P. C., & Rubinson, F. (2008). Committing to social justice: The behavioral intention of school psychology and education trainees to advocate for lesbian, gay, bisexual, and transgendered youth. *School Psychology Review*, 37(4), 469–486. Retrieved from <https://psycnet.apa.org/record/2009-00707-002>.
- McCabe, P. C., Dragowski, E., & Rubinson, F. (2013). What is homophobic bias anyway? Defining and recognizing microaggressions and harassment of LGBTQ Youth. *Journal of School Violence*, 12, 7-26. doi: 10.1080/15388220.2012.731664.
- McGravey, K. A. (2014). Measuring the effectiveness of a professional development workshop on awareness, knowledge, and skills of mental health professionals in working with lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth (Order No. 3624632). Available from ProQuest Dissertations & Theses Global. (1553437399).
<https://search-proquest-com.authenticate.library.duq.edu/dissertations-theses/measuring-effectiveness-professional-development/docview/1553437399/se-2?accountid=10610>
- McMillon, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). Pearson.

- Mertler, C. A., & Vannatta, R. A. (2013). *Advanced and multivariate statistical methods*. (5th ed.). Pyrczak Publishing.
- Meyer I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Milburn, W., & Palladino, J. (2012). Preservice teachers' knowledge, skills, and dispositions of LGBTQ bullying intervention. *The American Association of Behavioral and Social Sciences Journal*, *16*, 86-98. Retrieved from <https://files.eric.ed.gov/fulltext/ED536041.pdf>
- Mortier, P., Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., Hwang, I., Kessler, R. C., Liu, H., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Zaslavsky, A. M., Abdulmalik, J., Aguilar-Gaxiola, S., Al-Hamzawi, A., Benjet, C., Demyttenaere, K., Florescu, S., ... Bruffaerts, R. (2018). Suicidal thoughts and behaviors among college students and same-aged peers: Results from the World Health Organization World Mental Health Surveys. *Social Psychiatry and Psychiatric Epidemiology*, *53*(3), 279–288. <https://doi.org/10.1007/s00127-018-1481-6>
- Mudrey, R., & Medina-Adams, A. (2006). Attitudes, perceptions, and knowledge of pre-service teachers regarding the educational isolation of sexual minority youth. *Journal of Homosexuality*, *51*(4), 63-90. doi: 10.1300/J082v51n04_04
- Nabozny v. Podlesny 92 F.3d 446. (7th Cir. 1996). In *Lambda Legal: Making the case for equality*. Retrieved from <http://www.lambdalegal.org/in-court/cases/nabozny-v-podlesny>

- National Educational Association. (2020). *National Education Association Policy Statements 2020-2021*. Author. <https://www.nea.org/sites/default/files/2020-09/NEA%20Policy%20Statements%202020-21.pdf>
- National Association of School Psychologists. (2014). *Safe schools for transgender and gender diverse students* [Position statement]. Author.
- National Association of School Psychologists. (2017). *Safe and supportive schools for LGBTQ+ youth* (Position statement). Author.
- NCES. (2021). (rep.). Characteristics of Public School Teachers. Retrieved from [https://nces.ed.gov/programs/coe/indicator/clr#:~:text=About%2076%20percent%20of%20public,school%20level%20\(36%20percent\)](https://nces.ed.gov/programs/coe/indicator/clr#:~:text=About%2076%20percent%20of%20public,school%20level%20(36%20percent))
- O'Higgins, N. J. (2009). Straight talking: Explorations on homosexuality and homophobia in secondary schools in Ireland. *Sex Education, 9*, 381-393.
doi:10.1080/14681810903265295.
- O'Shaughnessy M., Russell S., 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*. San Francisco, CA: California Safe Schools Coalition. Retrieved from <http://www.casafeschools.org/SafePlacetoLearnLow.pdf>
- Pachankis, J. E., & Goldfried, M. R. (2004). Clinical issues in working with lesbian, gay, and bisexual clients. *Psychotherapy: Theory, Research, Practice, Training, 41*(3), 227–246.
<https://doi.org/10.1037/0033-3204.41.3.227>
- Pan. S. C., & Franklin, T. (2011). The influence of a two-year professional development institute on teacher self-efficacy and use inquiry-based instruction. *Science Educator, 20*(2), 47-

54. Retrieved from <https://eric-ed.gov.ezproxy.indstate.edu/contentdelivery/servlet/ERICServlet?accno=EJ960637>
- Payne, E. C., & Smith, M. (2010). Reduction of stigma in schools: an evaluation of the first three years. *Journal of Issues in Teacher Education*, 19(2), 11-36. Retrieved from <https://files.eric.ed.gov/fulltext/EJ902673.pdf>
- 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, 174-200. <https://doi.org/10.1080/19361653.2011.563183>
- Pollack, J. M. (2019). *An exploration of growth in teacher self-efficacy through constructs embedded in professional development* (Order No. 27545653). Available from ProQuest Dissertations & Theses Global. (2334693394). <https://search-proquest-com.authenticate.library.duq.edu/dissertations-theses/exploration-growth-teacher-self-efficacy-through/docview/2334693394/se-2?accountid=10610>
- Powell-Moman, A., & Brown-Schild, V. (2011) The influence of a two-year professional development institute on teacher self-efficacy and use of inquiry-based instruction. *Science Educator*, 20(2), 47-54/ Retrieved from <https://eric-ed.gov.ezproxy.indstate.edu/contentdelivery/servlet/ERICServlet?accno=EJ960637>
- Puchner, L. D. & Taylor, A. R. (2006). Lesson study, collaboration, and teacher efficacy: Stories from two school-based math lesson study groups. *Teaching and Teacher Education*, 22(2006), 922-934. doi:10/1016/j.tate.2006.04.011
- Reis, B., & Saewyc, E. (1999). *Eighty-three thousand youth: Selected findings of eight population-based studies as they pertain to anti-gay harassment and the safety and well-*

- being of sexual minority students*. Safe Schools Coalition of Washington. Retrieved from: www.safeschoolscoalition.org/83000youth.pdf.
- Robinson, K. H., & Ferfolja, T. (2008). Playing it up, playing it down, playing it safe: Queering teacher education. *Teaching and Teacher Education*, 24(4), 846–858.
<https://doi.org/10.1016/j.tate.2007.11.004>
- Romer v. Evans. 517 US. 620(1969). United States Supreme Court. Argued October 10, 1995.
- Sawyer, R. J., Porter, J. D., Lehman, T. C., Anderson, C., & Anderson, K. M. (2006). Education and training needs of school staff relevant to preventing risk behaviors and promoting health behaviors among gay, lesbian, bisexual, and questioning youth. *Journal of HIV/AIDS Prevention in Children & Youth*, 7(1), 37-53.
https://doi.org/10.1300/J499v07n01_03
- Sears, J. T. (1991). Educators, homosexuality, and homosexual students: Are personal feelings related to professional beliefs? *Journal of Homosexuality*, 22, 29-79.
https://doi.org/10.1300/J082v22n03_03
- Singh, A., & Chun, K. Y. S. (2010). “From the margins to the center”: Moving towards a resilience-based model of supervision for queer people of color supervisors. *Training and Education in Professional Psychology*, 4(1), 36–46. <https://doi.org/10.1037/a0017373>
- Smith, G. P. (1998). *Common sense about un- common knowledge: The knowledge bases for diversity*. Washington, DC: American Association of Colleges for Teacher Education.
- Supporting LGBTQ+ Youth. NEA. (n.d.). <https://www.nea.org/professional-excellence/just-equitable-schools/core-values/supporting-lgbtq-youth>.

- Swanson, K. M. (2015). Teacher attitudes towards and knowledge of lesbian, gay, bisexual and transgender students: An examination of the effects of gay-straight alliances, anti-bullying policies and teacher professional development training (Order No. 10025624). Available from ProQuest Dissertations & Theses Global. (1770078271). <https://search-proquest-com.authenticate.library.duq.edu/dissertations-theses/teacher-attitudes-towards-knowledge-lesbian-gay/docview/1770078271/se-2?accountid=10610>
- Swanson, K., & Gettinger, M. (2016). Teachers' knowledge, attitudes, and supportive behaviors toward LGBT students: Relationship to Gay-Straight Alliances, antibullying policy, and teacher training. *Journal of LGBT Youth*, 13(4), 326-351.
doi:10.1080/19361653.2016.1185765
- Tinker v. Des Moines Independent Community School District 1969 (No. 21). 393 U.S. 503 (1969). United States Supreme Court. Argued November 12, 1968.
- U.S. Constitution, amendment I.
- U.S. Constitution, amendment XIV.
- U.S. Educational Amendments, Title IX.
- Vella, J. (2002). Quantum learning: Teaching as dialogue. *New Directions for Adult and Continuing Education*, 2002, 73-84. <https://doi.org/10.1002/ace.51>
- Whitman, J. S., Horn, S. S., & Boyd, C. J. (2007). Activism in the schools: Providing LGBTQ affirmative training to school counselors. *Journal of Gay & Lesbian Psychotherapy*, 11(3-4), 143-154. https://doi.org/10.1300/J236v11n03_08
- Whitman, J. S. (2013). Training school professionals to work with lesbian, gay, bisexual, transgender, and questioning students and parents. In E. S. Fisher & K. Komosa-Hawkins (Eds.), *Creating safe and supportive learning environments: A guide for working with*

- lesbian, gay, bisexual, transgender, and questioning youth and families* (pp. 123–139).
Routledge.
- Wimberly, G. L. (2015). Use of large-scale data sets and LGBTQ education. In F. J. Levine
(Eds.), *LGBTQ issues in education: Advancing a research agenda*. AERA.
- Wood, F., Killian, J., McQuarrie, F. & Thompson, S. (1993). *How to organize a school- based
staff development program*. Alexandria, VA: Association for Supervision and Curriculum
Development.
- Wright, L. W., Adams, H. E., & Bernat, J. (1999). Development and validation of the
Homophobia Scale. *Journal of Psychopathology and Behavioral Assessment* 21, 337–
347. <https://doi.org/10.1023/A:1022172816258>
- Wyatt, T., Oswald, S., White, C., & Peterson, F. (2008). Are tomorrow’s teacher ready to deal
with diverse students? Teacher candidates’ attitudes toward gay men and lesbians.
Teacher Education Quarterly, 35(2), 171-185. Retrieved from [http://www.teqjournal.org-
/TEQ%20Website/Black%20Issues/Volume%2035/Volume%035%20Number%202.html](http://www.teqjournal.org-
/TEQ%20Website/Black%20Issues/Volume%2035/Volume%035%20Number%202.html)
- Youth Pride, Inc. (2010). OUTSpoken. In *Youth Pride, Inc: Don’t Grow Up Invisible*. Retrieved
from <http://www.youthprideri.org/Programs/OUTSpoken/tabid/164/Default.aspx>
- Zacko-Smith, J.D. & Smith, G.P. (2010). Recognizing and utilizing queer pedagogy.
Multicultural Education, 18, 2-9. Retrieved from
<https://files.eric.ed.gov/fulltext/EJ916840.pdf>