SUPPORTING GENDER DIVERSE STUDENTS IN THE SCHOOL SETTING:
A PILOT PROJECT

by

Laura A. Plantenberg

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Approved by:

_____
Dr. Kathleen S. Jordan

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Dr. Cory Sheeler

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Dr. Susan W. Hester

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Dr. Concepcion B. Godev

ABSTRACT

LAURA ANN PLANTENBERG. Supporting Gender Diverse Youth in the School Setting:
A Pilot Project
(Under the direction of DR. KATHLEEN JORDAN)

Bullying, high-risk behaviors, and rejection from family and friends leave lesbian, gay, bisexual, transgender, queer/questioning, or other (LGBTQ+) students feeling unsafe and unsupported at school. These adverse events can lead to serious physical, social, and mental health challenges including depression and suicidal ideation. This clinical nursing change project examined the effects of an educational intervention on school staff knowledge, confidence, and self-efficacy in supporting LGBTQ+ youth at school. The mixed-methods pilot project consisted of three parts: a quantitative pretest/posttest survey, an educational intervention, and a qualitative focus group interview. An anonymous pretest survey collected demographic information and included questions about confidence and self-efficacy. A two-hour professional development training entitled, *Creating Gender Inclusive Schools*, was held, and a post-test survey was given immediately after the training. Data gathered in the surveys was analyzed quantitatively using descriptive statistics and non-parametric tests. A focus group interview occurred 30 days after the educational intervention and collected qualitative data about participants' experiences. Data gathered in the focus group was analyzed using coding and thematic analysis. Project findings suggest that gender inclusive education may be an effective way to increase knowledge, confidence, and self-efficacy among school staff members, thus promoting a safe and inclusive school environment.

Keywords: School nursing, LGBTQ youth, school staff, gender inclusive practices

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And finally, I want to recognize and honor the higher power that exists within the universe and within me. I would not be where I am or who I am today were it not for this source, and for that, I am eternally grateful. *She believed she could, so she did.*

DEDICATION

This scholarly project is dedicated to Rosa Elizabeth Beck.

Rosa, thank you for trusting me enough to ask the difficult, yet important questions. You have

opened my eyes to very meaningful work, and I will continue to serve as a voice for LGBTQ+

youth, especially in the school setting. Keep being YOU - you are a bright light in the world!

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LIST OF ABBREVIATIONS

CDC   Centers for Disease Control and Prevention

DNP   Doctor of Nursing Practice

IRB   Institutional Review Board

LGBTQ+   Lesbian, gay, bisexual, transexual, queer/questioning, other

NASN   National Association of School Nurses

PICO   Population, intervention, comparison, outcome

SCT   Social Cognitive Theory

TCS   The Catamount School

TP   Trevor Project

UNC   University of North Carolina

WS   Welcoming Schools

CHAPTER 1: INTRODUCTION

Students who identify as lesbian, gay, bisexual, transgender, queer/questioning, or other

(LGBTQ+) often face negative experiences in the school setting such as bullying and other types

of verbal and physical harassment. These adverse experiences leave gender diverse students

feeling unsafe and unsupported at school, and can lead to serious physical, social, and mental

health risks. Bullying and victimization, suicidal ideation, and other mental health challenges are

experienced by students who identify as LGTBQ+ at higher rates than their heterosexual peers

(National Association of School Nurses, 2013) which creates a health disparity in the school

setting.

The National Association of School Nurses (NASN) recognizes the important role that

school nurses, school staff, and school communities have in supporting LGBTQ+ students. The

NASN position statement, *LGBTQ Students*, states that school nurses should, "collaborate with

educational teams to create welcoming, healthier, and thus safer environments for all students,

while addressing stigma, discrimination, and marginalization of LGBTQ students" (NASN,

2021, p. 1). As the health experts in the school setting, school nurses are uniquely positioned to

intervene in the negative experiences faced by LGBTQ+ students; however, many report a lack

of knowledge and available resources to do so (Neiman et al., 2021).

To assess level of knowledge and self-efficacy in supporting LGBTQ+ students, a Doctor

of Nursing Practice (DNP) scholarly project featuring an educational intervention was

implemented. Guided by Social Cognitive Theory, it was expected that this project would result

in increased knowledge and self-efficacy for school staff, thus promoting a supportive and

inclusive school climate for gender diverse students.

1.1 Background Terminology

The terms *LGBTQ+*, *gender diverse*, and *cisgender* are used throughout this paper.

LGBTQ+ is an umbrella term that includes individuals who identify as lesbian, gay, bisexual, asexual, transgender, Two-Spirit, queer, and/or intersex; individuals with same-sex or -gender attractions or behaviors; those with a difference in sex development; those who do not self-identify with one of these terms but whose sexual orientation, gender identity or expression, or reproductive development is characterized by non-binary constructs of sexual orientation, gender, and/or sex (National Institutes of Health, 2022).

The term *gender diverse* is another umbrella term that falls within the broader LGBTQ+ category. *Gender diverse* is used to describe an ever-evolving array of labels people may apply when their gender identity, expression, or even perception does not conform to the norms and stereotypes others expect (Rafferty, 2022) and includes those who do not place themselves within the male/female binary. Some variations of this term include *gender expansive*, *gender creative*, *gender non-conforming*, *gender neutral*, *genderqueer*, *gender fluid*, and *agender*, among others. The more specific term *transgender* or *trans* may also fall under this category and is used to describe persons who identify with a different sex than the one assigned to them at birth.

The term *cisgender* (pronounced *sis-gender*) refers to a person whose gender identity aligns with the sex assigned to them at birth. The Latin prefix *cis-* means "on this side," whereas the prefix *trans-* means, "across," or "on the other side" (Dame, 2017). It is important to note that gender identity differs from sexual orientation, which refers to sexual and/or romantic attraction. A person can identify as cisgender and straight, lesbian, gay, bisexual, or another sexual orientation, just as a person can identify as transgender and any sexual orientation.

1.2 Problem Statement

The DNP scholarly project was implemented at a middle school in rural, western North

Carolina where the project lead works as a nationally certified school nurse. Several students at this school sought counsel regarding questions pertaining to issues of gender identity for which the nurse was unable to provide answers. This prompted the need for discussion with other school staff at the clinical practice site to help identify potential local and regional support resources.

Upon discussion, it was determined that there was a need for further education about how to best support students who are questioning their gender identity. Additionally, the literature suggests that school nurses play an important role in supporting and advocating for students who face issues with gender identity (Bradley et al., 2013; Cicero et al., 2017; Cotton, 2014; Menkin & Flores, 2019). If school staff are better equipped to support gender diverse students, the disparities faced by these students may be reduced; therefore, examining the effects of an educational intervention warranted exploration.

1.3 Purpose of Project

The purpose of this scholarly project was to examine school staff knowledge, confidence, and self-efficacy in providing support to gender diverse adolescents in the school setting.

1.4 Clinical Question (PICO)

The PICO question for this DNP project was: In the school setting, do staff (P) who have received gender-affirming education (I) report increased knowledge, confidence, and self-efficacy in supporting gender diverse adolescents (O) compared to before receiving education (C)?

1.5 Project Objectives

The main project objective was to assess pre- and post-levels of knowledge, confidence, and self-efficacy among school staff in supporting LGBTQ+ youth, and to examine whether an educational intervention affected their self-reports. An additional objective was to gain insight

and understanding of the lived experiences school staff have when working with LGBTQ+ and gender diverse youth. Upon project completion, it was expected that school staff would report an increased level of knowledge, confidence, and self-efficacy in supporting gender diverse students in the school setting. The overall project goal was that school staff would be better equipped to support gender diverse students, thereby creating a gender affirming and inclusive school climate.

CHAPTER 2: LITERATURE REVIEW

There is a substantial body of evidence-based information on the topic of addressing gender identity in the school setting. A preliminary search of the literature was conducted to gain insight on issues concerning LGBTQ+ youth in schools. The search, conducted between September and December 2021, yielded several thousand articles (n=3,472) published during the last seven years (2016-2022), a majority of which were published in the last five years (2018-2022). Several of these articles that pertained specifically to supporting LGBTQ+ youth in the school setting were included in the review of literature, as they provide general background information in support of the clinical change project at hand.

A refined search was then conducted which focused specifically on transgender/gender diverse students, knowledge, self-efficacy, and training for school staff. The search was conducted through Western Carolina University's research library using the Health and Human Sciences research guides which included MEDLINE, CINAHL, and ERIC databases. A second search was conducted through the University of North Carolina at Charlotte's research library using PubMed, Cochrane Database of Systematic Reviews, and ProQuest databases. The following searches, search terms, and Boolean operators were used: *transgender* AND *knowledge* AND *self-efficacy*; *transgender* AND *youth* AND *knowledge* AND *self-efficacy*; *gender diverse* AND *youth* AND *knowledge* AND *self-efficacy*; *transgender* AND *youth* AND *training* AND *school staff*; *LGBTQ* AND *training* AND *teachers*; *transgender* AND *youth* AND *knowledge* AND *self-efficacy* AND *school* AND *teachers*. The searches yielded 98 articles. Duplicates were removed; articles that pertained to health and medical professionals (other than school nurses) were removed; articles that focused on specific programming (sex education in school, HIV testing, programs, and prevention) were removed. The final number of articles

included in the review was 25. Both qualitative and quantitative studies were included with the following design methods: surveys, case studies, focus groups, pretest/posttests, and one systematic review.

In addition to scholarly articles, data was reviewed from several web-based sources including the CDC, Gay and Lesbian Sexual Education Network, Human Rights Campaign, and the Trevor Project. The Trevor Project (TP) is "the world's largest suicide prevention and crisis intervention organization for lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ) young people," (TP, 2022). TP conducts a national survey on LGBTQ youth mental health annually and presents research briefs on data obtained from their surveys. Position statements from the National Association of School Nurses (NASN) were also included as support references for this project (NASN, 2016; NASN, 2021).

Upon review of the literature, three main themes were identified: disparities and inequities; supportive school climate; and the role of the school nurse. Findings from the literature are summarized according to these categories.

2.1 Disparities and Inequities

Members of the LGBTQ+ population face an extraordinary set of challenges compared with their heterosexual/cisgender counterparts. Discrimination in the workplace, the public sector, and healthcare have a significant impact on the lives of LGBTQ+ adults, while LGBTQ+ youth experience their own unique set of disparities and inequities in the school setting. Safety and psychological well-being warrant consideration for this population.

Safety at school for LGBTQ+ youth is among the top concerns expressed in the literature. Sexual orientation and gender-based bullying manifests in a variety of ways including physical, verbal, social, and cyberbullying. Many LGBTQ+ and gender diverse students report feeling

unsafe at school due to bullying (Cotton, 2014; Hooker, 2019; Johns et al., 2021; Neiman et al., 2021), being threatened with a weapon (Hooker, 2019; Johns et al. 2021), and other forms of verbal and physical harassment (Hooker, 2019; Johns et al., 2021). An even greater disparity exists when examining bullying experienced by transgender youth. A study by Day et al. (2018) found that transgender youth had over two times greater odds of experiencing bullying as compared with their lesbian, gay, and bisexual peers, while the CDCs national Youth Risk Behavior Surveillance (CDC, 2020) showed that 43% of transgender youth have been bullied on school property, compared to 18% of cisgender youth.

Safety concerns in the school setting contribute to psychological struggles for many LGBTQ+ and gender diverse students. The psychological and social-emotional health of LGBTQ+ students is often negatively impacted due to their experiences in school. The literature contains many studies highlighting student feelings of loneliness, anxiety and depression, and suicidality, to name a few. In one large-scale study, The Trevor Project National Survey on LGBTQ Youth Mental Health 2021, results indicated that 72% of LGBTQ+ youth reported symptoms of generalized anxiety disorder in the past two weeks, including more than 3 in 4 transgender and nonbinary youth; 62% of the respondents reported symptoms of major depressive disorder, including more than 2 in 3 transgender and nonbinary youth (TP, 2021).

Arguably, the greatest mental health threat facing LGBTQ+ youth today is suicidality. A recent national survey of nearly 35,000 LGBTQ+ youth ages 13-24 found that 42% of respondents had seriously considered attempting suicide in the past year, including more than half of transgender youth (Trevor Project, 2021). In a separate study of nearly 14,000 students in grades 9–12 in public and private schools in the United States, data showed that among all students, LGBTQ+ students had greater odds of suicide risk than heterosexual students across all

indicators: persistent feelings of sadness or hopelessness, seriously considered attempting suicide, made a suicide plan, attempted suicide, and suicide attempt requiring medical treatment (CDC, 2020).

Additionally, psychological and mental health challenges have been shown to affect overall academic success, resulting in disproportionately lower academic achievement for LGBTQ+ students. Increased truancy and poor academic performance have been noted (Aragon et al., 2014; Day et al., 2018; Johns et al., 2021). Successful student academic performance is the primary outcome for schools; therefore, school staff and administration should have a vested interest in helping students to overcome these barriers to achievement.

2.2 Supportive School Climate

School climate refers to the quality and characteristics of the school environment and includes the attitudes, behaviors, and practices that are shared in the school setting. School climate may be perceived differently by individuals or groups of people involved. Much of the research examined the relationship between school climate and the experiences of LGBTQ+ and gender diverse youth. LGBTQ+ students who perceive their school climate as "poor" report barriers to inclusivity such as lack of gender-neutral bathrooms and changing spaces (Cotton, 2014; Johns et al. 2021; Neiman et al., 2021), gender exclusive programs and events (Johns et al., 2021), and ignorance about LGBTQ+ issues from adults in schools (Johns et al., 2021). Circumstances such as these leave gender diverse students feeling unsupported at school and contribute to a more negatively perceived school climate.

On a positive note, many resources, behaviors, and practices have been identified that can help create a positive school climate that is supportive of gender diversity. Providing education about language, definitions, and terms of LGBTQ+ culture can instill confidence in school staff

(Cotton, 2014; Perron et al., 2017). Using gender-affirming names and pronouns can help foster caring and supportive relationships with gender diverse students (Johns et al., 2021; Neiman et al., 2021). Advocacy groups, such as a Gay-Straight Alliance, help support student well-being and family support and acceptance (Neiman et al., 2021). Creating and enforcing school policies about bullying and inclusivity specific to LGBTQ+ and gender diverse students has been suggested to further enhance a positive school climate (Day et al., 2018; Hooker, 2019; Neiman et al., 2021; Perron et al., 2017). These practices, alone or in combination, have repeatedly been suggested as ways to enhance school climate for LGBTQ+ and gender diverse students. Additionally, results from a systematic review strongly support "the importance of positive school climates on suicidality and depressive symptoms among LGBTQ adolescents" (Ancheta et al., 2021, p. 81).

2.3 Role of the School Nurse

School nursing is a complex, multifaceted, and evolving area of nursing practice and is defined as, "a specialized practice of nursing that advances the well-being, academic success, and lifelong achievement and health of students" (NASN, 2016). The school nurse is tasked not only with providing care for the physical needs of children, but also with providing support for children with social-emotional, psychosocial, and mental health needs. In *LGBTQ Students* (2021), NASN instructs school nurses to support LGBTQ+ youth by, "creating LGBTQ-affirming spaces, guiding youth towards resources, advocating for school-wide protections, and assuring youth that their identities and feelings are normal and appropriate" (NASN, 2021).

The role of the school nurse in caring for gender diverse students is clearly described in the literature. School nurses can provide support by learning about signs of bullying and victimization (Hooker, 2019), offering a nonjudgmental and private place for students to ask

questions (Perron et al., 2017), and providing gender-affirming education to students, families, school staff, and the public (Ancheta et al. 2021; Hooker, 2019; Neiman et al., 2021; Perron et al., 2017). Additionally, school nurses are tasked to advocate for gender diverse students by using correct language, preferred names, and pronouns (Perron et al., 2017), and by influencing school policy development that supports gender diverse students (Hooker, 2019; Johns et al., 2021). School nurses should also be knowledgeable about local and national resources that are available to help support gender diverse students and their families (Cicero et al., 2017; Hooker, 2019; Neiman et al., 2021; Perron et al., 2017).

2.4 Rationale for an Educational Intervention

Providing LGBTQ+ education to school staff through professional development trainings has been suggested in the literature to create and foster an inclusive school environment (Hooker, 2019; Johns et al., 2021; Neiman et al., 2021; Perron et al., 2017;). The need for professional development for school staff on LGBTQ+ issues was identified in several studies (Boyland et al., 2020; Garbers et al., 2018; Stargell et al., 2020) and was associated with increased participant understanding of LGBTQ+ issues and ways to support students (Stargell et al., 2020). Findings from an additional study indicated that an educational intervention increased participant knowledge of LGBTQ+ issues (Traister, 2020). Prior literature provides clear support for the use of an educational intervention to further examine knowledge and self-efficacy on LGBTQ+ issues.

2.5 Theoretical Framework

The theoretical framework selected for this DNP project is the Social Cognitive Theory (SCT). SCT was developed in 1986 and originally stemmed from Albert Bandura's Social Learning Theory of the 1960s (LaMorte, 2019). It is one of several health behavior change

models used as a framework for health education and health promotion efforts. SCT considers three main tenets that contribute to human behavior change: environmental influences, personal factors, and attributes of the behavior itself (Kritsonis, 2004). The central concept in SCT is the interconnectedness of person, behavior, and the environment, with social influence affecting whether a person will engage in a particular behavior (LaMorte, 2019).

Self-efficacy, or belief in one's own abilities, is key consideration in SCT. Self-efficacy is viewed as the most important factor that determines whether a person's behavior will change (Kritsonis, 2004). Self-efficacy can change, and it is also influenced by individual and environmental factors (LaMorte, 2019). As summarized by LaMorte (2019), change occurs through behavioral capability (providing the learner with necessary skills and knowledge), observational learning (observing and reproducing the behavior of others), reinforcements (responses to the behavior that affect whether it will be continued), and expectations (anticipated outcomes from engaging in the behavior). Increasing self-efficacy, in theory, increases the likelihood of successful behavior change.

SCT was applied to this project in several ways. During the intervention, participants examined their own personal beliefs and past experiences with LGBTQ+ issues that influence and shape their behavioral patterns. Participants then received training on issues specific to supporting LGBTQ+ youth at school, which provided the knowledge and tools necessary for behavior change. As part of the training, participants had the opportunity to practice the concepts they learned in small groups. They also participated in a large group-think activity that pertained specifically to supporting LGBTQ+ youth at their school. These activities reinforced the new learning and provided a set of expectations for future behaviors to be used, which, according to SCT, would influence behavior change and increase participants' feelings of self-efficacy.

CHAPTER 3: METHODS

3.1 Project Design

      This scholarly clinical change project utilized a pretest/posttest design format with an educational intervention. The educational intervention was a professional development training for school staff; it featured a guest speaker who provided education on supporting LGBTQ+ youth at school. A focus group was also conducted following the educational intervention.

3.2 Setting

      The project was implemented at The Catamount School (TCS), where the project lead works as a nationally certified school nurse. TCS is a laboratory (lab) school for students in grades 6-8, located in Sylva, North Carolina; enrollment is limited to no more than 75 students across the three grade levels. Lab schools in North Carolina are a collaborative effort between the universities within the University of North Carolina (UNC) System and local public-school districts. This unique partnership is aimed at improving student performance in low-performing schools while simultaneously providing teacher and principal training through real-world experiences.

      TCS, operated by Western Carolina University, receives support from the Title 1 program. The Title 1 program is "a federally supported program that offers assistance to educationally and economically disadvantaged children to help ensure they receive an equitable, high-quality, well-rounded education and meet a school system's challenging academic standards" (TCS, 2022, p. 1). Additionally, TCS utilizes the CDCs Whole School, Whole Community, Whole Child approach to education which recognizes the important connection between health and academic achievement. This clinical change project helps to meet the cognitive, physical, social, and emotional development of each child, a primary focus at TCS, and reaches the UNC System mission of teaching, research, and public service.

3.3 Sample

A needs assessment identified that the crucial starting point for creating supportive change regarding gender diversity begins with the staff at TCS. There were 12 core staff members at the school including traditional in-service classroom teachers, support teachers, the principal, school nurse, and school secretary. In addition, student interns were also directly involved with students at TCS. Interns included pre-service teachers, school psychology students, student nurses, and health and physical education interns. The total number of staff (including core staff and interns) varied slightly each semester; therefore, the estimated sample size was 12-20 people.

The population for the pretest/posttest portion of the project was a convenience sample taken from school staff members and interns at TCS. Participation in the project was voluntary. The inclusion criteria were that one be: a staff member or intern at TCS, age 18 or over, with anticipated employment or internship placement at TCS through December 2022; candidates were also required to be proficient in English. The exclusion criterion was inability to attend the professional development training scheduled on August 10, 2022. The final sample for the pretest/posttest survey was n=12. The population for the focus group portion of the project was a convenience sample, as described above. The inclusion and exclusion criteria for the focus group was identical to that of the pretest/posttest group with a resulting sample of n=6.

Recruitment for the project occurred via email notification which was sent to all TCS staff and interns. The email included a detailed description of the project and included the informed consent document as an attachment. The recruitment script and informed consent document were included in the project's overall Institutional Review Board (IRB) approval process.

3.4 Intervention

  There were three activities associated with this project: a pretest/posttest survey, an educational intervention, and a focus group. The pretest and posttest survey questionnaires used Likert-scale questions (quantitative) and open-ended questions (qualitative) to assess participants knowledge, confidence, and self-efficacy in supporting gender diverse students in the school setting. The surveys also collected demographic information including age, gender, and years of service working in the school setting.

  Participation in the pre-and posttests was voluntary and responses to the survey questions were anonymous. The pre-and posttest surveys were identical; they were created using Qualtrics and were administered through Western Carolina University's survey management platform. The pretest survey was open and available for participants to complete 10 days prior to receiving the educational intervention. The posttest survey was open immediately following the educational intervention and was left open for one week.

  The educational intervention was presented on August 10, 2022, by a facilitator from the Human Rights Campaign Foundation's Welcoming Schools program. Welcoming Schools (WS) is "the most comprehensive bias-based bullying prevention program in the nation to provide LGBTQ+ and gender inclusive professional development training, lesson plans, booklists and resources specifically designed for educators and youth-serving professionals" (Welcoming Schools, 2022). Participants received a two-hour educational professional development training through WS, entitled *Creating Gender Inclusive Schools*, which is specifically for staff working in secondary schools. Upon completing the training, participants were asked to complete the posttest as described above.

  To further assess knowledge, self-efficacy, and retention of learning, participants were invited to join a focus group that occurred eight weeks after receiving the educational

intervention, on October 5, 2022. Participation in the focus group was voluntary and the number of participants was limited to 10. Additional focus groups would have been offered had there been interest.

3.5 Measurement Tools

A search of the literature for a tool that measured knowledge, confidence, and self-efficacy among school staff in supporting gender-diverse students yielded no results. A variety of tools address similar issues such as attitudes, feelings, and beliefs about members of the LGBTQ+ community. Additional tools focus on different populations including older adults, health care providers, law enforcement officers, school psychologists, school counselors, social-service personnel, and even gender-diverse youth themselves. However, no previously used tool was identified that measures knowledge, confidence and self-efficacy among school staff in supporting gender diverse youth in the school setting.

The project lead constructed a survey questionnaire that would help determine whether an educational intervention was successful in increasing knowledge, confidence, and self-efficacy among school staff (Appendix A). The questionnaire was adapted from two previously used and validated tools that most closely address the clinical question of this project: the Transgender and Gender Nonconforming Language Self-Efficacy Scale (Warren & Steffen, 2020) and the Multicultural Teacher Self-Efficacy Survey (Brant, 2017). Permissions were granted from the original authors for use and adaptation in the current project (Appendix B).

The pretest/posttest questionnaire consisted of 15 questions relating to knowledge, confidence, and self-efficacy using a combination of Likert-scale and open-ended questions. The Likert-scale questions were answered on a scale of 1 to 3 with 1 = not confident at all; 2 = somewhat confident; 3 = very confident. The open-ended questions were categorized, coded, and converted into quantitative data following the scoring scales used in the validated tools. The

questionnaire also included five demographic questions which served to provide additional descriptive data about the study participants.

In addition to the pretest/posttest survey, the project lead conducted a focus group eight weeks after the educational intervention. During the focus group, two case studies were presented that centered on gender identity in the school setting. Participants were asked open-ended questions about how they would approach each case and how they would incorporate knowledge gained in the professional development training to each scenario. The case studies and focus group questions were created by the project lead.

Following the case studies, five open-ended questions were asked that addressed school staff knowledge, confidence, and self-efficacy about supporting LGBTQ+ youth at school. These questions were adapted with permission from the Lesbian, Gay, Bisexual, and Transgender Competency Assessment Tool (Leitch et al., 2021). Focus group case studies and discussion questions are listed in Appendix C.

3.6 Data Collection Procedure

After Institutional Review Board approval had been granted, the data collection process began. The pre- and post-test surveys were created using the Qualtrics online survey platform. A recruitment script that described the project and a copy of the informed consent for the project were sent via email to all staff and interns at TCS ten days prior to the educational intervention (August 1, 2022). The recruitment script contained a link to the pre-test survey. Additionally, pre-training materials for the educational intervention (WS professional development training) were emailed to all staff and interns. Instructions were sent with the WS pre-training materials; individuals who were planning to attend the training and who were participating in this project were instructed to complete the pre-test survey prior to reviewing the training materials. A

reminder email was sent to all staff and interns one day prior to the intervention (August 9, 2022).

A link containing the post-test survey was sent to all TCS staff and interns immediately following the WS training (August 10, 2022) with instructions to complete the survey within one week. A reminder email with the post-test survey link was sent to all staff and interns one day before the survey window closed (August 16, 2022). Data collection from the pre- and post-test surveys was completed electronically via the Qualtrics platform.

Facilitation of a focus group was the second step in the data collection process. The date for the focus group was chosen by the project lead; it occurred eight weeks after the educational intervention, on October 5, 2022. This date worked well, as all school staff and interns were present at school, but no students were in attendance, as it was a designated teacher workday. A recruitment script and a copy of the informed consent was sent to all TCS staff and interns via email one week prior to the focus group, on September 28, 2022. A reminder email was sent out one day prior to the focus group, on October 4, 2022.

Participants who attended the focus group were read the consent form and given a paper copy; each participant verbalized agreement and was given the opportunity to ask questions before the focus group discussion began. Paper copies of the case studies and questions for discussion were available for the participants to reference during the group interview. Data obtained during the focus group interview was collected via audio recording on the project lead's iPhone; the device was password protected, and the project lead was the only one with access.

3.7 Data Analysis

Three types of data analysis were conducted: descriptive statistics, nonparametric tests, and thematic analysis. Descriptive statistics were used to describe the demographic data

collected about the participants. Nonparametric tests, rather than parametric tests, were used to examine the additional data collected in the surveys due to the small sample size. Thematic analysis was used for the data collected during the focus group interview.

The Wilcoxon signed-rank test was run in the data analysis program, SPSS, and was used for the nine Likert scale questions related to confidence. The Wilcoxon signed-rank test is the equivalent to the parametric paired t-test but does not assume normality in the data. It is used to compare two sets of scores that come from the same participants and investigates any change in scores from one time point to another (Laerd Statistics, 2018). Bhapkar's test was run using R analytics and was used on the six questions related to self-efficacy. Bhapkar's test is a test of marginal homogeneity which investigates whether percentages from each category changed. Thematic analysis was conducted on the data gathered during the focus group interview using the web-based data analysis program, Dedoose. These methods were appropriate for use in this project, as both quantitative and qualitative data were obtained.

3.8 Ethical Considerations

Due to the potentially sensitive nature of the project and the data being collected, IRB approval was sought and granted through Western Carolina University, which operates The Catamount School. An affiliation agreement was then sought and granted from the University of North Carolina Charlotte where the project lead was a student. Measures of confidentiality and anonymity were enacted throughout the scholarly project. As previously stated, participation in the project was voluntary. Additionally, the participants were not subordinates of the project lead which eliminated any potential sense of coercion.

The pretest/posttest survey questionnaires were completed anonymously. The Qualtrics management program settings offered an anonymous URL link with the option, "anonymize responses," selected; this setting ensured that no identifying information was collected (name,

email address, IP address, and location data). Survey responses were only viewed by the project

lead and committee members as needed for data analysis purposes. The survey and responses

were deleted at project completion.

Prior to beginning the focus group, the project lead discussed the condition of

confidentiality and asked that participants keep information shared in the session confidential.

The project lead also included a statement that disclosed the risk to privacy and confidentiality,

as others in the group may not respect the confidentiality agreement. Audio recording was used

during the focus group using an iPhone device that was password protected; only the project lead

had access to the password. The audio recording was deleted after thematic analysis of the data

occurred and the project was complete.

CHAPTER 4: PROJECT RESULTS

The project intervention had three components: a pre-test/post-test survey, an educational intervention, and a focus group. The pre- and post-test surveys were identical and contained three separate parts with questions focused on demographics, confidence, and self-efficacy. Data gathered in the surveys was analyzed quantitatively using descriptive statistics and non-parametric tests. The focus group occurred on one occasion and focused on collecting qualitative data from participants. Data gathered in the focus group was analyzed using coding and thematic analysis.

4.1 Survey: Demographic Information

The pre-test survey response rate was 57% (total possible participants n=23; respondents n=13) and the post-test response rate was 92% (total possible participants n= 13; respondents n=12). Participants were instructed to self-assign a random 4-digit number that would be used in both the pre-and post-test surveys. This allowed the data to be matched while preserving anonymity.

The survey began by collecting demographic information about participants. Information collected included age, years of service in the school setting, race/ethnicity, sexual orientation, and gender identity. Age and years of service response choices were arranged categorically, and participants were allowed to select only one answer choice. Race/ethnicity, sexual orientation, and gender identity questions were "select all that apply." Common response choices were offered, and an open-ended option was included for participants to write in their own response. 100% of respondents self-identified as white and female; 50% were between the ages of 30-39 years; 62% had worked 10 or more years in the school setting; 50% self-identified as heterosexual. A full breakdown of post-test demographic results is included in Table 1.

Table 1

Demographic Data from Survey Participants

Demographic question	*n*	%
Age		
18-29	3	25
30-39	6	50
40-49	1	8
50 or older	2	17
Years of service		
None (pre-service / intern)	2	17
1-4	1	8
5-9	1	8
10 or more	8	67
Race/Ethnicity*		
American Indian/Alaska Native	0	0
Asian/Asian American	0	0
Black/African American	0	0
Hawaiian / Pacific Islander	0	0
Hispanic/Latino	0	0
White	12	100
Another race/ethnicity	0	0
Gender Identity*		
Female	12	100
Male	0	0
Trans female	0	0
Trans male	0	0
Another gender	0	0
Prefer not to answer	0	0
Sexual Orientation*		
Heterosexual	6	50
Bisexual	4	34
Gay	0	0
Lesbian	1	8
Another sexual orientation	1	8
Prefer not to answer	0	0

Note. N = 12
* Reflects "select all that apply" question.

4.2 Survey Part 1: Confidence

Part 1 of the survey examined the concept of confidence. Participants were asked to rate

their level of confidence on a scale of 1 – 3 (1 = not confident at all; 2 = somewhat confident; 3 =

very confident) in explaining the difference between various sex and gender related terminology, and their confidence in using preferred pronouns. The Wilcoxon signed-rank test was used to analyze the data, with α = .05 and confidence interval = 95. Statistical significance between the pre- and post-test survey data was found in six of the nine questions addressing confidence. An increase in confidence was found in explaining the difference in the following terms: *biological sex* versus *gender*; *cisgender* versus *transgender*; *transgender* versus *gender diverse*. Increased confidence was also noted in using preferred names, apologizing for misusing pronouns, and seeking out a professional referral. No statistically significant change in confidence was noted in explaining the terms *sexual orientation* versus *gender identity*, asking preferred pronouns, and identifying when pronouns were misused.

4.3 Survey Part 2: Self-Efficacy

Part 2 of the survey examined the concept of self-efficacy. Participants were asked to respond to open-ended questions about their understanding of the terms: *sexual orientation, gender identity, cisgender, transgender, gender diverse*, and *gender expression*. Data was coded into categories (1 = answered the question; 2 = did not answer the question; 3 = answered with, "I don't know" or "I'm not sure") and analyzed using Bhapkar's test. No test was run on *sexual orientation, gender identity*, or *transgender* because there was no change (i.e., respondents did not change their answers from pre- to post-test). For *cisgender* and *gender expression*, some respondents changed how they answered those two questions, but the percentage change was not significant. For *gender diverse*, there was a significant change in the percentages (p = .00136). Six respondents who gave "do not know or not sure" in the pre-test answered this question in the post-test.

4.4 Focus Group

The focus group response rate was 46% (total possible participants n = 13; number of participants n = 6). Thematic analysis was conducted using the web-based data analysis program, Dedoose. Three central themes emerged in the data pertaining to supporting gender diverse students in the school setting: *conversations*, *supportive actions*, and *lack of knowledge*. The WS professional development training was mentioned on various occasions throughout the discussion, particularly when discussing knowledge of and resources for supporting gender diverse students.

The topic *conversations* was the first primary theme that emerged during the interview. Focus group participants described various types of conversations relating to issues surrounding gender diversity that may occur in the school setting, including conversations with other teachers and staff members, students, and parents/caregivers. Participants voiced that conversations were often difficult or uncomfortable to navigate with other teachers and staff members but recognized that they were an essential part of helping students feel safe and supported at school. One person commented, "Some of those conversations are harder to have. How do you talk with other staff members who maybe aren't sitting at this table, or who aren't as invested as some of us are?" One participant shared:

> We have all worked with other colleagues who are not open to these kinds of
> conversations, and we know who those people are. And so, I think it's important
> to learn how to navigate those conversations with people that are closed off to it.
> Realistically, these are the students we are going to have, and these are the
> conversations we are going to have.
>
> Another participant echoed this idea, saying:

It's important for other people to know, like, it's okay to have these uncomfortable conversations. You don't have to agree with me on it and we can sit in the uncomfortable, but this is what is right. And it is about the student. It's not about me. It's not about you. It's not about us as educators. It's about making this place safe for our kids.

Facilitating conversations about gender identity with students was also a priority, although participants noted that conversations with students may differ from conversations they have with parents/caregivers. One person stated, "We've got be willing to sit down and listen to a kid share whatever they need to share and help that kid facilitate conversations with whoever they want to facilitate conversations with." Another participant agreed, and added, "But you also have to be careful about what you say that may be against their parents' wishes. You never want to put a kid against their parents."

Level of comfort emerged as a sub theme in the topic surrounding *conversations*, particularly among adults. Participants noted that teachers, school staff members, and parents/caregivers have different levels of familiarity with LGBTQ+ issues, especially gender diversity. The case studies presented described two different scenarios involving children who were questioning their identity and using pronouns other than those traditionally associated with their sex assignment at birth. Some participants were well-versed and comfortable with this topic, while others were learning new information. One person stated, "Some adults are going to have a hard time with the shift [in a student's gender expression]."

Another central theme, *supportive actions*, was discussed during the interview. The conversation primarily focused on actions to support students. Participants voiced that one way to promote an inclusive school environment is through the use of gender affirming vocabulary:

"It's the little stuff. How we start our class and how we acknowledge our students. Like, let's not say 'good morning, ladies and gentlemen' - what can we do that's different?" Another participant added, "And using their pronouns to empower them; making them feel included." One teacher shared a recent personal experience they had with a student:

> A student raised their hand, and I came over and said, "Yes Sir?" and they asked
> their question and we moved on. It was school. But then at the end of the day, that
> kid came back around to me and said, "Remember when you called me 'sir'?" I
> was like, "Yeah." They said, "That's the first time anyone's really done that. And
> it felt amazing! And thank you so much!" They didn't have to say that to me - but
> it was nice. And we've been able to kind of maintain that relationship since.

Another supportive action that was identified was promoting a sense of safety through advocacy efforts. Advocacy included serving as a voice for students and creating physical spaces within the school environment that are inclusive to gender diverse students. One staff member commented, "Our job is always to continue educating everyone about what a safe space looks like, sounds like, feels like." Another person agreed and referenced physical spaces within the school: "Yeah, and being prepared; like, 'Oh, yeah, we have a gender-neutral bathroom right here. Here it is.'"

> I think we need to be able to advocate for the students when they don't feel like
> they have a voice, or they don't feel like they're heard yet, or they don't know how
> to appropriately advocate for themselves. Be that voice for them; help them
> navigate that and show them that they can be empowered. You know, like, we're
> in this together and they have people that are their allies.

Among focus group participants, knowledge of LGBTQ+ issues fell along a continuum with some people having in-depth knowledge and some having relatively little knowledge. One member of the group openly identified as a member of the LGBTQ+ community and therefore was familiar with inclusive practices such as affirming vocabulary and the importance of a safe school environment. Other members expressed they had little prior knowledge and were just beginning to learn. However, despite prior knowledge level, all participants agreed there was still an overall theme of *lack of knowledge* in how to best support LGBTQ+ youth at school.

The professional development training through WS was viewed as a useful and effective method for teaching school staff about gender inclusive practices. It provided a foundation for participants to learn about inclusive vocabulary, how to navigate difficult conversations, and provided resources that could be implemented in the classroom setting. Participants expressed appreciation of the resources they were provided with as part of the training, including access to a gender support plan. One person commented, "Welcoming Schools seems like a really good place to start. Their website also has tons of resources." All participants found benefit in attending the training and several shared examples of ways they were incorporating what they learned into their daily work. One participant commented:

I feel like I am better prepared to have crucial conversations. Like if I am on a team, I can ask those probing questions like, 'Oh, why did you say that?' 'What makes you feel that way?' 'Have you thought about?' 'Have you read this?' Those kinds of questions can get a conversation started and get learning across to your team.

Another participant agreed and added:

I think it's even the really tiny, subtle things such as reflecting on how we start

our class and how we acknowledge our students. What are some ways we can

reframe to be more inclusive? And I've been using it. Like saying, 'Happy

Thursday mathematicians,' is really inclusive language that just doesn't dictate

any gender stuff at all.

A third participant shared more on the benefits of the training:

This was the first formal training that I have had. I've seen it have positive

impacts on students, but after the training I now have, like, this language to use.

Because I didn't know what I didn't know. Like the difference between gender

identity and like sexual orientation - I knew I wanted to be aware of them for the

students, but I didn't really know to differentiate them and what they meant. So,

the training was really impactful for me just to, like, learn that language and to

know what areas I could grow. I know that I need to grow but I didn't know what

specific areas I was better at. It really helped me to reflect on where my practice is

and what my next steps are.

An additional and somewhat unexpected benefit of the training was the impactful

dialogue that occurred between colleagues. Participants engaged with each other in thought-

provoking activities, scenarios, and conversations, both in small- and large-group settings. These

activities provided the opportunity for participants to practice exploring and navigating issues

surrounding LGBTQ+ issues and to get to know one each other on a new level.

Going to the training with my intern was fabulous because my intern, her

pronouns are she and they. And you know, her gender identity and a lot of her

stuff has been kind of fluid over the years, and it really allowed us to have a

conversation about her identity and how I can support her in lots of ways.

Overall, focus group participants were engaged in the group interview process and were willing to openly discuss their opinions. All agreed there were many benefits from attending the training including gaining knowledge of supportive measures for students and recommendations for ways to incorporate new knowledge into the classroom. When asked if they thought school staff members would find benefit in receiving additional training through WS or another LGBTQ youth-serving advocacy group, participants unanimously agreed.

CHAPTER 5: SIGNIFICANCE AND IMPLICATIONS

5.1 Discussion and Interpretation of Results

Demographics

The pre-/post-test surveys collected information about participant demographics and quantitative information about knowledge, confidence and self-efficacy. The focus group interview gathered qualitative information about participants experiences with the educational intervention (professional development training) and how they were using their knowledge 30 days after the intervention. A discussion of the interpretation of findings follows.

The most notable demographic finding was *sexual orientation* of study participants. Data showed that only 50% of participants identified as heterosexual; the remaining 50% identified as bisexual (34%), lesbian (8%), and another sexual orientation (8%). This is of particular interest when considering the project at hand, because it infers that half of study participants identify as a member of the LGBTQ+ community themselves. This is a high percentage when compared with the general population. A recent Gallup poll reported that 7.1% of the adult population identifies as LGBTQ+ (Jones, 2022), which suggests that the sample may not have been truly representative of all members of the school staff.

This finding may have affected the study in several ways. First, members of the LGBTQ+ community may have a more personal interest in supporting LGBTQ+ youth, therefore introducing participant bias. Additionally, members of the LGBTQ+ community naturally have a deeper understanding of LGBTQ+ issues such as culture, terminology, and supportive measures. Prior knowledge of the topic may have impacted the remaining data analysis about knowledge, confidence, and self-efficacy, thus resulting in fewer statistically significant findings.

The demographics *age* and *years of experience in the school setting* may also have

influenced the study. Half of all participants (50%) fell in the age range 30-39 years, while 25% were age 18-29. Millennials have been regarded as "particularly interested in commitment to social justice and diversity issues, including LGBTQ acceptance" (Worthen, p. 290), while 1 in 5 Generation Z adults identify as members of the LGBTQ+ population (Jones, 2022). Participants in these age categories may have been more open to participating in the project and receiving the educational intervention on gender inclusivity.

Additionally, two-thirds of participants (67%) had ten or more years' experience working in a school setting. Expert teachers and staff members have more competence and experience in the classroom; however, many educators report that they did not receive any prior education about LGBTQ topics during their teacher preparation programs or when they were students themselves (Najarro, 2021). Teachers and school staff members who participated in the project also may not have received any prior gender-inclusivity training, which could have made them more open to participating.

Confidence

Literature supports the assertion that providing education about language, definitions, and terms of LGBTQ+ culture can instill confidence in school staff (Cotton, 2014; Perron et al., 2017). In the current study, *confidence* was assessed in the pre-/post-test surveys. Participants used a 3-point Likert scale to rate their level of confidence in nine statements relating to gender identity. Four items addressed knowledge of LGBTQ+ terminology and language, while the remaining five questions asked about the individual's ability to interact with an LGBTQ+ student. An increase in confidence was noted in six of the nine items between the pre- and post-test surveys. This finding aligns with prior research and suggests that the educational intervention was effective at providing new knowledge and subsequently resulted in an increased

level of confidence.

Self-efficacy

The theoretical framework used for this project was the Social Cognitive Theory (SCT), which places the concept of self-efficacy at its center. *Self-efficacy* was assessed in the pre-/post-test surveys through six open-ended questions pertaining to participants understanding of LGBTQ+ terminology. Five of the items resulted in either no change, or an insignificant difference between the pre- and post-test responses. However, the question about participants' understanding of gender diversity showed a statistically significant difference following the educational intervention. This finding again suggests that the educational intervention was effective at increasing knowledge. Providing the learner with necessary skills and knowledge is one way to increase self-efficacy (LaMorte, 2019).

Focus Group Interview

Ignorance about LGBTQ+ issues from adults in schools is one factor that leaves gender diverse students feeling unsupported at school (Johns et al., 2021), and the focus group interview in the current project reinforced the findings from prior literature. Focus group participants recognized their own lack of knowledge, confidence, and self-efficacy in supporting gender diverse students, and agreed that more education was needed. Focus group participants expressed their desire for more knowledge on LGBTQ+ topics and voiced the need for further education on inclusive vocabulary. They discussed their difficulty in navigating conversations with students, parents/caregivers, and colleagues relating to gender identity. They also talked about behavioral changes that could be implemented that would provide for a more supportive and inclusive school environment.

5.2 Limitations

The project had two noteworthy limitations. First, there was a small sample size for each part of the project. The quantitative pre-/post-test surveys (n=12) required data analysis with non-parametric versus parametric tests, thus resulting in lower statistical power and reduced reproducibility. The qualitative focus group interview (n=6) occurred on only one occasion for one hour. Results from a recent systematic review showed 9–17 interviews or 4–8 focus group discussions reached data saturation (Hennink & Kaiser, 2022), which suggests that one discussion with an n=6 in this study may not have allowed for complete data collection.

A second limitation of the study was the homogeneity among participants which resulted in low generalizability. Convenience sampling was used, and 100% of participants identified as White and female. Additionally, the study was conducted at a small school in the rural Southeast. Findings garnered from a small, homogenous sample are generalizable to a more restrictive population – in this case, potentially only to other White, female-identifying people from rural areas.

5.3 Recommendations

The role of the school nurse in supporting LGBTQ+ youth is clearly recognized throughout the literature. As health experts in the school setting, school nurses are called to support LGBTQ+ students in a variety of ways. School nurses are urged to adopt changes to their personal clinical nursing practice, such as incorporating gender neutral terminology, offering safe spaces, and providing resources to support social-emotional, psychosocial, and mental health needs (Cicero et al., 2017; Hooker, 2019; Johns et al., 2021; NASN, 2021; Neiman et al., 2021; Perron et al., 2017).

Results from this clinical nursing change project reinforce the need for school nurses to

assess the current school climate in regard to student and staff needs about LGBTQ+ issues. School nurses should examine their own knowledge of gender-inclusive health care behaviors and practices and should familiarize themselves with current, evidence-based guidelines on how to support LGBTQ+ youth in the school setting. They should implement supportive interventions, such as changing school health forms and questionnaires to reflect inclusive and gender-affirming language, and they should use pronouns and names that align with a person's identity when speaking to and about gender diverse students. School nurses should provide a private setting to allow for sensitive and confidential information to be shared.

Additionally, findings from this project highlight the need for school nurses to serve as advocacy leaders and change agents in schools by providing opportunities for LGBTQ-inclusive health trainings for school staff members. As revealed in this study and acknowledged in prior literature, providing gender-affirming education to students, families, school staff, and the public is an important way to help support gender diverse students and their families (Ancheta et al. 2021; Hooker, 2019; Neiman et al., 2021; Perron et al., 2017). School nurses should familiarize themselves with community, regional, and national LGBTQ+ advocacy organizations and partner with them to bring current, evidence-based information into the school setting.

5.4 Future Projects or Research

As the title of this paper indicates, the current project was a pilot project, a small-scale implementation that explored the viability of a potentially larger project or study. Based on the project findings from this preliminary project, there is an identified need for further study in this area. Ideally, this project would be recreated and expanded upon using a larger sample from a larger population. It could be expanded to include other middle-grades schools within the school district, or it could even be expanded further to include surrounding districts in the region.

Due to the sensitive nature of the topic and time constraints on behalf of the author, who is a doctoral student, IRB approval was granted only for participants ages 18 and older. The age requirement therefore did not allow children at the school to participate. The primary focus of the current study was to learn about how school staff can support gender diverse students. However, student feedback on what they view as supportive measures by their teachers and school staff members is key information. For future studies, seeking input from the students themselves is recommended.

Another recommendation for a similar project is to focus specifically on school nurses' knowledge, confidence, and self-efficacy in supporting LGBTQ+ youth at school. The project might include school nurses who work in the same district but with different age populations (elementary, middle, high-school, and/or early college). Alternatively, it could focus on the same population (middle school) but include all the middle school nurses from several area school districts. This approach would lend strength to the body of evidence about the role of the school nurse in supporting LGBTQ+ youth in the school setting and would help further guide school nursing clinical practice.

5.5 Summary

LGBTQ+ youth, particularly transgender and gender diverse youth, experience serious adverse physical, mental, and psychosocial health challenges, with suicidality among the most consequential. These adolescents spend a substantial amount of their time in the school setting where they face many of these challenges. School staff members including teachers, administrators, and other professional support staff interact regularly with students, and are therefore uniquely positioned to have an influence on overall student health and well-being. Therefore, examining school staff knowledge, confidence, and self-efficacy in supporting gender

diverse students is of paramount importance.

The concepts of *knowledge*, *confidence*, and *self-efficacy* are interconnected and help determine a person's behavior. Greater knowledge leads to greater confidence which results in increased self-efficacy, which then leads to behavior change. Underpinned by the Social Cognitive Theory and supported by the literature, this clinical change project examined the effects of an educational intervention in supporting LGBTQ+ youth. Project findings suggest that gender affirming education may be an effective way to increase knowledge, confidence, and self-efficacy among school staff members, thus promoting a safe and inclusive school environment.

References

Ancheta, A. J., Bruzzese, J.-M., & Hughes, T. L. (2021). The impact of positive school climate on suicidality and mental health among LGBTQ adolescents: A systematic review. *Journal of School Nursing, 37*(2), 75-86. https://doi.org/10.1177/1059840520970847

Aragon, S. R., Poteat, V. P., Espelage, D. L., & Koenig, B. W. (2014). The influence of peer victimization on educational outcomes for LGBTQ and non-LGBTQ high school students. *Journal of LGBT Youth, 11*(1), 1–19. https://doi.org/10.1080/19361653.2014.840761

Boyland, L. G., Kirkeby, K. M., & Boyland, M. I. (2020). Actions and attitudes regarding middle-grade LGBTQ students: Principals' perspectives. *Journal of School Leadership, 30*(2), 166-191. http://dx.doi.org/10.1177/1052684619852109

Bradley, B., Kelts, S., Robarge, D., Davis, C., Delger, S., & Compton, L. (2013). NASN position statement: Sexual orientation and gender identity/expression (sexual minority students): school nurse practice. *NASN School Nurse* (Print), 28(2), 112–113. https://doi.org/10.1177/1942602X12473950

Brant, C. A. R. (2017). How do I understand the term queer? Preservice teachers, LGBTQ knowledge, and LGBTQ self-efficacy. *The Educational Forum, 81*(1), 35-51. https://doi.org/10.1080/00131725.2016.1243744

Centers for Disease Control and Prevention. (2021). *Whole school, whole community, whole child* (WSCC) [webpage]. https://www.cdc.gov/healthyschools/wscc/index.htm

Centers for Disease Control and Prevention. (2020). Youth risk behavior surveillance — United States, 2019. *Morbidity and Mortality Weekly Report*, 69(1), p. 1-88. https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2019/su6901-H.pdf

Cicero, E. C., & Wesp, L. M. (2017). Supporting the health and well-being of transgender

students. *Journal of School Nursing, 33*(2), 95–108.

https://doi.org/10.1177/1059840516689705

Cotton, R. (2014). Supporting transgender students in schools. *British Journal of School*

Nursing, 9(3), 141-143. https://doi.org/10.12968/bjsn.2014.9.3.141

Dame, A. (2017). Tracing terminology: Researching early uses of "cisgender." *American*

Historical Association. https://www.historians.org/publications-and-

directories/perspectives-on-history/may-2017/tracing-terminology-researching-early-

uses-of-cisgender

Day, J. K., Perez-Brumer, A., & Russell, S. T. (2018). Safe schools? Transgender youth's school

experiences and perceptions of school climate. *Journal of Youth & Adolescence, 47*(8),

1731-1742. https://doi.org/10.1007/s10964-018-0866-x

Garbers, S., Heck, C. J., Gold, M. A., Santelli, J. S., & Bersamin, M. (2018). Providing

culturally competent care for LGBTQ youth in school-based health centers: A needs

assessment to guide quality of care improvements. *Journal of School Nursing, 34*(6),

424-429. https://doi.org/10.1177/1059840517727335

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A

systematic review of empirical tests. *Social Science & Medicine, 292*, 114523.

https://doi.org/https://doi.org/10.1016/j.socscimed.2021.114523

Hooker, A. L. (2019). Nurses can curb LGBTQ bullying in schools. Nursing, 49(5), 64-65.

https://doi.org/10.1097/01.NURSE.0000553280.49213.8f

Johns, M. M., Zamantakis, A., Andrzejewski, J., Boyce, L., Rasberry, C. N., & Jayne, P. E.

    (2021). Minority stress, coping, and transgender youth in schools—Results from the

    Resilience and Transgender Youth study. *Journal of School Health, 91*(11), 883-893.

    doi: 10.1111/josh.13086

Kritsonis, A. (2004). Comparison of change theories. *International Journal of Scholarly*

    Academic Intellectual Diversity, 8(1), 1-7.

    https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1048.9350&rep=rep1&type=p

    df

Laerd Statistics. (2018). Wilcoxon signed-rank test using SPSS statistics.

    https://statistics.laerd.com/spss-tutorials/wilcoxon-signed-rank-test-using-spss-

    statistics.php

LaMorte, W. W. (2019). Behavioral change models: The Social Cognitive Theory. Retrieved

    November 12, 2021, from *Boston University School of Public Health*.

    https://sphweb.bumc.bu.edu/otlt/mph-

    modules/sb/behavioralchangetheories/BehavioralChangeTheories5.html#headingtaglink_

    1

Leitch, J., Gandy-Guedes, M., & Messinger, L. (2021). The psychometric properties of the

    competency assessment tool for lesbian, gay, bisexual, and transgender clients. *Journal of*

    Homosexuality, 68(11), 1785–1812. https://pubmed.ncbi.nlm.nih.gov/32031497/

Menkin, D., & Flores, D. D. (2019). Transgender students: Advocacy, care, and support

    opportunities for school nurses. *NASN School Nurse*, *34*(3), 173–177.

    https://doi.org/10.1177/1942602X18801938

Najarro, Ileana. (2021). Teachers are divided on teaching LGBTQ topics. *Education Week*.

    https://www.edweek.org/leadership/educators-divided-on-whether-schools-should-teach-

    about-lgbtq-topics-survey-finds/2021/12

National Association of School Nurses. (2013). *Sexual orientation and gender*

    identity/expression (sexual minority students): School nurse practice [NASN position

    statement]. https://pubmed.ncbi.nlm.nih.gov/23600096/

National Association of School Nurses. (2016). *The role of the 21st century school nurse*

    [Position Statement]. https://www.nasn.org/advocacy/professional-practice-

    documents/position-statements/ps-role

National Association of School Nurses. (2021). *LGBTQ students* [Position Statement].

    https://www.nasn.org/nasn-resources/professional-practice-documents/position-

    statements/ps-lgbtq

National Institutes of Health. (2022). *Sexual and Gender Minority Research Office* [webpage].

    https://dpcpsi.nih.gov/sgmro

Neiman, T., Sieve, L., Stenberg, L., Molesky, N., & Nic Rider, G. (2021). Bridging the gap:

    School nurse experiences providing care for transgender and gender diverse students and

    their parents/guardians. *The Journal of School Nursing* [manuscript in preparation], 1-8.

    https://doi.org/10.1177/10598405211025442

Perron, T., Kartoz, C., & Himelfarb, C. (2017). LGBTQ Youth Part 1. NASN school nurse

    (Print), 32(2), 106-115. https://doi.org/10.1177/1942602X16689327

Rafferty, J. (2022). *Gender diverse and transgender children* [webpage].

    https://www.healthychildren.org/English/ages-stages/gradeschool/Pages/Gender-Diverse-

    Transgender-Children.aspx

Stargell, N. A., Jones, S. J., Akers, W. P., & Parker, M. M. (2020). Training schoolteachers and

administrators to support LGBTQ+ students: A quantitative analysis of change in beliefs

and behaviors. *Journal of LGBT Issues in Counseling, 14*(2), 118-133.

https://doi.org/10.1080/15538605.2020.1753624

The Catamount School. (2022). *Federal and state program statements. Title 1 – Parent and

family engagement* [pdf document].

https://www.wcu.edu/WebFiles/PDFs/CatSchl_Title1Policy.pdf

Traister, T. (2020). Improving LGBTQ cultural competence of RNs through education. *The

Journal of Continuing Education in Nursing, 51*(8), 359-366.

https://doi.org/10.3928/00220124-20200716-05

Trevor Project. (2022). *What we do* [webpage]. https://www.thetrevorproject.org/explore/

Warren, A. R., & Steffen, A. M. (2020). *TGNC Language Self-Efficacy Scale* [Database record].

Retrieved from PsycTESTS. https://dx.doi.org/10.1037/t80777-000

Welcoming Schools. (2022). *Creating safe and welcoming schools* [webpage].

https://welcomingschools.org/

Worthen, M. G. F. (2021). The young and the prejudiced? millennial men, "Dude bro"

disposition, and LGBTQ negativity in a US national sample. *Sexuality Research & Social

Policy, 18*(2), 290-308. https://doi.org/10.1007/s13178-020-00458-6

Appendix A

Supporting Gender-Diverse Students Questionnaire

Demographic Information:

1.) Age
- a. Under 30
- b. 30-39
- c. 40-49
- d. 50 or older

2.) Number of years as a school staff member
- a. None (pre-service teacher or intern)
- b. 1-4 years
- c. 5-9 years
- d. 10-14 years
- e. 15 or more years

3.) Race/Ethnicity (select all that apply)
- a. American Indian / Alaska Native
- b. Asian/Asian American
- c. Black/African American
- d. Hawaiian/Pacific Islander
- e. Hispanic / Latino
- f. White
- g. Other

4.) Gender (select all that apply)
- a. Female
- b. Male
- c. Transgender female
- d. Transgender male
- e. Another gender
- f. Prefer not to answer

5.) Sexual orientation (select all that apply)
- a. Heterosexual
- b. Bisexual
- c. Gay
- d. Lesbian
- e. Another sexual orientation
- f. Prefer not to answer

Appendix A (continued)

Part 1: Adapted from the TGNC Language Self-Efficacy Scale (Warren & Steffen, 2020)
<u>Directions:</u> On a scale of 1 – 3, rate your level of confidence in the following statements:

1 = not confident at all   2 = somewhat confident   3 = very confident

1.) I am confident I can explain the difference between *biological sex* and *gender*.

2.) I am confident I can explain the difference between *sexual orientation* and *gender identity*.

3.) I am confident I can explain the difference between *cisgender* and *transgender*.

4.) I am confident I can explain the meanings of *transgender* and *gender diverse*.

5.) I am confident I can ask a student their preferred name.

6.) I am confident I can ask a student their preferred pronouns.

7.) I am confident I can identify when I misuse pronouns with a transgender / gender diverse student.

8.) I am confident I can apologize for misusing pronouns when working with a transgender / gender diverse student and subsequently continue the conversation.

9.) I am confident I can actively seek out a professional referral for a transgender / gender diverse student when needed.

Part 2: Adapted from the Multicultural Teacher Self-Efficacy Survey (Brant, 2017)
<u>Directions:</u> Respond to each open-ended question. There are no right or wrong answers. Please provide as much information as you feel comfortable. If you do not know, type, "I don't know" or "I'm not sure." If you prefer not to answer, type, "I prefer not to answer."

1.) How do you understand the term *sexual orientation*?

2.) How do you understand the term *gender identity*?

3.) How do you understand the term *cisgender*?

4.) How do you understand the term *transgender*?

5.) How do you understand the term *gender diverse*?

6.) How do you understand the term *gender expression*?

Appendix B

Author Permissions

B Brant, Cathy Anne Rosenberg <brantc@rowan.edu>
To: Laura Plantenberg

Wed 3/23/2022 3:42 PM

> **WARNING:** This email originated from a non-WCU email account. Do not click links or open attachments unless you are confident the content is safe.

Hi Laura,

Thanks for reaching out. Absolutely. Let me look for it. If you do not hear from me by Friday please give me a nudge. 😊

Cathy

Cathy A.R. Brant, Ph.D. (she/her/hers)
Assistant Professor
Interdisciplinary & Inclusive Education
College of Education
Rowan University
(856) 256-4500 x53047
brantc@rowan.edu

WR Warren, Allison R. (they/them/theirs)(she/her/hers) <Allison.Warren3@va.gov>
To: Laura Plantenberg

Wed 3/23/2022 10:54 AM

You don't often get email from allison.warren3@va.gov. Learn why this is important

> **WARNING:** This email originated from a non-WCU email account. Do not click links or open attachments unless you are confident the content is safe.

Hi, Laura,
Your project sounds interesting! Yes, I'm happy for you to adapt the scale for your needs. Good luck with your work and let me know if there's anything else I can do for you.
Best,
Allison

Allison Warren, PhD
Research Psychologist
PRIME Center
VA Connecticut Healthcare System
Associate Research Scientist
Yale School of Medicine
203.932.5711 x5624
pronouns: they/she

Appendix B (continued)

Judith Leitch <jeleitch@uncg.edu>
To: Laura Plantenberg

Wed 3/23/2022 11:19 AM

You don't often get email from jeleitch@uncg.edu. Learn why this is important

WARNING: This email originated from a non-WCU email account. Do not click links or open attachments unless you are confident the content is safe.

Laura,

Yes, of course use the LGBT-CAT. I'm also in NC. I'm on leave this semester so have limited time but would like to support your work if possible.

Greetings, Dr. Leitch,

My name is Laura Plantenberg and I am in the Doctor of Nursing Practice program at the University of North Carolina Charlotte. I am a Registered Nurse, and my doctoral work focuses on gender-inclusive care for youth in the school setting.

I currently work as a school nurse at a middle school (grades 6-8) here in North Carolina. For my scholarly project, I am examining school staff knowledge and self-efficacy in supporting gender-diverse students in the school setting. I am using a pre-/post-test design with an educational intervention.

During my review of the literature, I came across your tool, the Lesbian, Gay, Bisexual, and Transgender Competency Assessment Tool (LGBT-CAT). With your permission, I would like to adapt your tool for use in my project. I would like to replace the words 'social worker' with the words 'teacher or school staff member.' I would like to modify and use only the questions that best pertain to my work.

May I have your permission to use an adapt your tool? I would of course credit you and your co-author for your original work.

Thank you for your consideration of my request and thank you for your work in this important area!
~Laura

Laura Plantenberg (she/her), MSN, RN, NCSN

Western Carolina University
Instructor, School of Nursing
Health Services Coordinator, The Catamount School
Phone: (C) 828-788-3106
Email: lplantenberg@wcu.edu

It is our collective responsibility to respect and recognize that Western Carolina University is situated within the ancestral homelands of the Cherokee people, twenty miles from present-day Eastern Band of Cherokee Indian communities of the Qualla Boundary. (Learn more about WCUs Land Acknowledgment)

--
Judith Leitch, PhD, LICSW

Pronounced LEECH
she/her or they/them

Appendix C

Supporting Gender-Diverse Students Focus Group – Case Scenarios

<u>Case #1</u>

Lena is a 14-year-old student who is just starting 8th grade. Lena has been at your school since 6th grade, and you have gotten to know her well over the last two years. This year, however, you have noticed that Lena seems withdrawn; she sits by herself at lunch, keeps her hoodie pulled up when changing classes, and she doesn't engage in the classroom like she has in the past. You find some time to talk with Lena in private during a study period. She tells you that she prefers to use he/him pronouns and wants to be called Gavin this year instead of Lena but is afraid of what the other students will say and how they will behave. He wants the other teachers and staff to know but doesn't know how to tell them. There is also a fall dance coming up, and Gavin is feeling uneasy.

1.) How would you approach this situation?
2.) How would you navigate the conversation with other school staff members?
3.) What strengths/skills do you have that would be helpful in supporting Gavin?
4.) What would you find challenging about this situation?
5.) What could you incorporate from the *Welcoming Schools* training that may help support this student at school?

<u>Case #2</u>

You receive an email that there is a new 7th grade student who will be transferring to your school next week. You read through the paperwork and learn that Samuel Evans is a male, 13-year-old, 7th grader who recently moved here from another state. Monday arrives; you greet Samuel and introduce yourself as he enters the school building. The student immediately corrects you and tells you their name is Rowan Evans and states that they use they/them pronouns. Rowan goes on to tell you that their parents don't like it and are not supportive of the preferred name and pronouns; they keep saying, "it's just a phase." Rowan is excited to be at their new school and asks you to show them around.

1.) What would you say next to this student?
2.) What considerations are important when showing Rowan around the school?
3.) How would you navigate a conversation with Rowan's parents?
4.) What strengths/skills do you have that would be helpful in supporting Rowan?
5.) What would you find challenging about this situation?
6.) What could you incorporate from the *Welcoming Schools* training that may help support this student at school?

Appendix C (continued)

Additional Focus Group Questions - Adapted from LGBT-CAT (Leitch et al., 2021)*
<u>Directions:</u> Respond to each open-ended question. There are no right or wrong answers. Please provide as much information as you feel comfortable.

Note. LGBTQ+ = Lesbian, Gay, Bisexual, Transgender, Queer, Other
1.) As a teacher or school staff member, what can you do in your interactions with LGBTQ+ students to make them more comfortable and build rapport?

2.) What questions would you ask to understand how your students define their gender identity?

3.) How would you help LGBTQ+ students manage discrimination or oppression they face in their day-to-day lives?

4.) What referral resources might you use in working with LGBTQ+ students? (If you don't know names of specific resources, how would you find them?)

5.) As a teacher or school staff member, what steps would you take to help create an inclusive, gender-affirming school climate?