LGBTQ-Inclusive Sexuality Education in Montana Public High Schools: An Assessment of the Needs of Health Enhancement Teachers

Andrew G. Johnson
University of Montana, Missoula

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LGBTQ-INCLUSIVE SEXUALITY EDUCATION IN MONTANA PUBLIC HIGH SCHOOLS: AN ASSESSMENT OF THE NEEDS OF HEALTH ENHANCEMENT TEACHERS

By

ANDREW GRIER JOHNSON

Bachelor of Arts Environmental Planning and Policy, Western Washington University, Bellingham, WA, 2009

Thesis

presented in partial fulfillment of the requirements for the degree of

Master of Science in Community Health and Prevention Sciences

The University of Montana
Missoula, MT

May 2017

Approved by:

Scott Whittenburg, Dean of The Graduate School
Graduate School

Dr. Annie Sondag, Chair
Health and Human Performance

Dr. Laura Dybdal
Health and Human Performance

Dr. Bryan Cochran
Psychology
LGBTQ-Inclusive Sexuality Education in Montana Public High Schools

Chairperson: Dr. Annie Sondag

BACKGROUND
LGBTQ youth face many unique health challenges. Rates of depression and suicide are exponentially higher for LGBTQ youth than for their heterosexual, cisgender peers. Rates of HIV and STI infection are rising among this demographic. Comprehensive sexuality education has demonstrated the potential to address some of these health challenges. Specifically, it has been shown to delay the onset of sexual intercourse, and to reduce pregnancy and transmission rates of HIV and STIs among youth. Several studies have looked at LGBTQ-inclusive sexuality education from the perspective of LGBTQ students, but few have looked at this issue from the perspective of teachers responsible for teaching sexuality education.

METHODS
An electronic questionnaire was sent by email to 168 high school Health Enhancement teachers in Montana. Survey data included what sexuality education content they cover, how important they believe each topic to be, how comfortable they feel teaching it, and what barriers they face in teaching LGBTQ-inclusive sexuality education.

RESULTS
Participants reported not having training in teaching LGBTQ sexuality education and not having experience with LGBTQ content as the top barriers to teaching inclusive sexuality education. Participants reported covering topics related to LGBTQ identities less frequently than standard sexuality topics such as anatomy and STI prevention.

CONCLUSIONS
Training teachers in how to teach sexuality education that is inclusive of LGBTQ students is necessary in order to increase the coverage of these topics and teachers’ comfort and effectiveness with this important content. The state department of education and school districts should develop a standard sexuality education curriculum and provide training in how to implement it in sexuality education classes.
ACKNOWLEDGEMENTS

I would like to express my gratitude to the people who participated in this project, especially the Health Enhancement teachers who took the time to share your experiences, ideas, and advice with us. Your dedication to your students was evident throughout this process. A special thank you to Nancy Stock for sending out the survey to SHAPE members on our behalf, and for your many other contributions to the development and distribution of the questionnaire.

To the Montana Department of Public Health and Human Services HIV Prevention Planning Group, thank you for the opportunity to conduct this needs assessment and for welcoming me into your community. I appreciate you giving me the chance to learn about your diverse projects and experiences. From your meetings I gained a better understanding of the respect, compassion, and humility it takes to collaborate across disciplines and backgrounds to serve historically marginalized populations.

To my committee chair, Dr. Annie Sondag, I am so grateful for your guidance, patience, and humor throughout the last two years. I learned many things from you in our time together that I will take with me into my life and career, but it is your overarching passion for the work you do and empathy for the people involved in that work that I will strive to emulate in my future endeavors. Thank you for being such a supportive mentor and friend.

To Dr. Laura Dybdal and Dr. Bryan Cochran, thank you for your valuable insight and feedback as my committee members. I truly appreciate all the time you have invested in the past year, and the experience and knowledge you both shared with me throughout the process. Your input strengthened this project in so many ways.

To my fellow graduate students, thank you for your humor, support, and most of all your friendship during the last two years. A special thank you to Mary Parrish for being my office companion and taking on many tasks in support of this project.

Finally, to my friends and family for your unwavering support and patience. I will be forever grateful for the encouragement you gave me at every step. Especially my partner, Ricard Patton; your endless supply of patience, love and support never ceases to amaze me and I am lucky to have you in my life.
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CHAPTER ONE: INTRODUCTION

SEXUALITY EDUCATION IN THE UNITED STATES

Sexuality education is one way to prevent unhealthy sexual behaviors among young people. Comprehensive sexuality education has been shown to delay the onset of sexual intercourse, and to reduce pregnancy and transmission rates of HIV and sexually transmitted infection (STI) among youth (Chin, Sipe, Elder, Mercer, Chattopadhyay, Jacob, & Griffith, 2012; Kirby, 2007, 2008; Waxman, 2004). However, lesbian, gay and bisexual youth are less likely to receive sexuality education that is relevant and comprehensive than their heterosexual counterparts (Kann, 2016). This results in higher rates of HIV and STI infection, as well as pregnancy and mental health challenges such as depression and suicidality.

Young men who have sex with men (MSM) are especially at risk of HIV infection (CDC, 2016). Several studies have looked at LGBTQ-inclusive sex education from the perspective of LGBTQ students (Pound, Langford, & Campbell, 2016), but few have looked at this issue from the perspective of those responsible for teaching sex education.

In most parts of the United States, the sexuality education needs of high school students are met through health education classes. According to the CDC, more than 95% of all teenagers in U.S. schools, churches, community centers and other places receive some form of formal sexuality education before they turn 18 (Guttmacher Institute, 2016). This formal sex education may include information about HIV and STI prevention, contraception, puberty and physical development, abstinence and/or communication skills. However, research has shown a decline in school-based sex education in recent years. According to a study conducted by the Guttmacher Institute, many U.S. teens are not receiving formal sex education, and fewer teens now than in 2006 are being exposed to important and timely information about a range of sex education topics (Lindberg, 2016). Researchers found that young people from rural areas in particular experienced declines in many areas of sex education. This is troubling because compared with their urban peers, rural teens are more vulnerable to negative sexual health outcomes: They use contraceptives at first
sex at lower rates than urban teens, and rural communities offer less access to sexual and reproductive health care services than urban communities (Ng, A. & Kaye, K., 2015).

In 2012, a non-profit organization called the Future of Sex Education (FoSE) developed new National Standards for Sex Education, in collaboration with the National Education Association, the American Association of Health Education, and the American School Health Association. The new standards outline the main components of comprehensive and inclusive sex education, and include content relevant to sexual and gender minority students (FoSE, 2012). Several states including Colorado, Georgia, Iowa, Washington, and Connecticut have recommended these new National Standards, but the State of Montana has yet to do so (FoSE, 2014).

In Montana, the standards for curriculum in health education classes provide little direction as far as what should be covered in sexuality education in public high schools. In fact, the only direction provided in the state standards is the following statement: at the end of grade 12 students are expected to “develop personal health-enhancing strategies that encompass substance abuse, nutrition, exercise, sexual activities, injury/disease prevention, including HIV/AIDS prevention, and stress management” (OPI, 2016). According to Montana’s Office of Public Instruction (OPI), the specific content of the human sexuality component of a Health Enhancement program is a decision for the local school board in each school district. School boards are typically comprised of parents and other community members. OPI dictates only that the contents of sex education curriculum reflect the “values of the community” (OPI, 2016). There is no mandate that sex education be comprehensive or inclusive of LGBTQ identities.

In the state of Montana, sexuality education is generally taught by the Health Enhancement teacher. This person also typically teaches Physical Education. Of particular interest in this study is the competence and comfort level of Health Enhancement teachers to address sexuality education content that is relevant to and respectful of LGBTQ-identified high school students. Few studies have looked at teacher comfort with LGBTQ topics as it relates to the content and quality of sex education in the United States. A study
of 336 teachers in elementary and middle schools in New Brunswick looked at teachers’ attitudes towards sex education in general, the importance they assign to sexual health topics, their knowledge about and comfort teaching these topics, and the grade at which they think these topics should be introduced. Homosexuality was briefly mentioned in the questionnaire. (Cohen, Byers, Sears, & Weaver, 2004). Another study in New Mexico used secondary data to analyze the preparedness of 183 school nurses, counselors and social workers to address the needs of LGBTQ students, but sex education was not directly assessed (Mahdi, Jevertson, Schrader, Nelson, & Ramos, 2013).

PURPOSE OF THE STUDY
The purpose of this study is to explore, from the perspective of Montana Health Enhancement teachers, the LBGTQ-relevant sex education topics they include in their curricula and determine the challenges and barriers to teaching comprehensive and LGBTQ-inclusive sexuality education in Montana public high schools. Additionally, this study will seek to examine teachers’ perceptions of their comfort level and preparedness for teaching topics related to LGBTQ youth.

STATEMENT OF THE PROBLEM
LGBTQ youth face a number of unique health challenges. Rates of HIV and STI infection are rising among this demographic (CDC, 2016). Rates of depression and suicide are exponentially higher for LGBTQ youth than for their heterosexual, cisgender peers (CDC, 2016). A nationally representative study of students in grades 7–12 found that lesbian, gay, and bisexual youth were more than twice as likely to have attempted suicide as their heterosexual peers (Russell & Joyner, 2001). Comprehensive sexuality education has been shown to reduce risky sexual behavior and improve health outcomes for young people. For LGBTQ youth, school curricula that are inclusive of LGBTQ topics have been linked to a safer and more accepting school climate (Kosciw, Palmer, Kull, & Greytak, 2013; Toomey, McGuire, & Russell, 2012). Unfortunately, the state of Montana does not mandate comprehensive or inclusive curriculum in sex education classes. As a result, little is known about the scope and practice of sex education curricula in Montana. This study intends to examine the current state of sexuality education in
Montana from the perspective of Health Enhancement teachers in order to determine the challenges and barriers to teaching content that is comprehensive and inclusive of LGBTQ students.

SIGNIFICANCE OF THE STUDY

Information from this study will be used to increase awareness of the current state of sex education curriculum in Montana’s public high schools and the barriers Health Enhancement teachers face in teaching content relevant to sexual and gender minority students. Health Enhancement instructors, public health workers and policy makers will gain a better understanding of the training and education needs of Health Enhancement teachers for serving this vulnerable population. Specifically, the Montana Department of Public Health and Human Services’ (MTDPHHS) HIV Planning Group (HPG) will use the information from this study to increase awareness of the need for sex education that addresses the unique needs of sexual and gender minority youth in order to reduce the risk for HIV and STI infection, as well as negative mental health outcomes.

RESEARCH QUESTIONS

1. What are the perceptions of Health Enhancement teachers regarding:
   a. The topics they cover in their sex education classes in high schools
   b. The importance of covering these topics
   c. The level of comfort they feel covering these topics
   d. How useful they feel their sex education classes are for heterosexual, cisgender students
   f. How useful they feel their sex education classes are for LGBTQ students
   g. The challenges and barriers to teaching content relevant to LGBTQ students

2. What do Health Enhancement teachers teach about HIV and STI transmission?
3. What type of training or education do teachers receive?

4. Where does the content of the curriculum come from?

5. Is there a relationship between the extent to which an LGBTQ related topic was covered and teachers’ perception of “lack of training in how to teach LGBTQ inclusive sex education?”

6. Is there a relationship between the level of comfort in teaching LGBTQ related content and teachers’ perception of “lack of training in how to teach LGBTQ inclusive sex education?”

7. Is there a relationship between the perceptions of importance of LGBTQ related topics and teachers’ perception of “lack of training in how to teach LGBTQ inclusive sex education?”

LIMITATIONS AND DELIMITATIONS

DELIMITATIONS

1. The study was limited to Health Enhancement teachers who teach sexuality education in Montana public high schools.

2. Data were collected through an electronic questionnaire distributed to Health Enhancement teachers in Montana.

3. Data collected from participants were self-reported.

4. Participants were volunteers who were able to exit the survey at any time.

LIMITATIONS

1. Data collected were limited to the experiences and memories of the participants. This could have potentially lead to some inaccurate results, if the participants did not fully remember or accurately represent what they cover in their high school sex education classes.
2. Data collected were limited to Health Enhancement teachers whose contact information researchers were able to obtain. This could have potentially lead to rural school districts having less representation in the survey data.

DEFINITION OF TERMS

Cisgender:
A person who identifies as the gender that they were assigned at birth (Merriam-Webster, 2015). For example, someone who is assigned male at birth would be considered cisgender if they identify as male throughout their lifetime.

Gender Identity:
A personal conception of oneself as female, male, both, neither, or another gender identity.

LGBTQ:
An acronym for Lesbian, Gay, Bisexual, Transgender, Queer/Questioning; encompasses anyone whose sexual and/or gender identity falls outside of heterosexual and cisgender identification.

Sexual and Gender Minority:
Anyone whose sexual orientation, gender identity or expression, or practice does not fit into the views of what is considered “normal” within a society (NIH, 2016).

Sexual Identity:
How an individual identifies their preference for a sexual partner or partners.

Transgender: An umbrella term for persons whose gender identity, gender expression or behavior does not conform to that typically associated with the sex to which they were assigned at birth (APA, 2016).

Queer: Queer is an umbrella term that individuals may use to describe a sexual orientation, gender identity, or gender expression that does not conform to dominant societal norms. Some youth may adopt
'queer' as an identity term to avoid limiting themselves to the gender binaries of male and female or to the perceived restrictions imposed by lesbian, gay, and bisexual sexual orientation identities (APA, 2016).
CHAPTER TWO: REVIEW OF THE LITERATURE

INCLUSIVE CURRICULA

Sexuality education is one way to prevent unhealthy sexual behaviors among young people.
Comprehensive sexuality education has been shown to delay the onset of sexual intercourse, and to reduce pregnancy and transmission of HIV and sexually transmitted infection (STI) rates among youth (Chin et al., 2012). However, lesbian, gay and bisexual youth are less likely to receive comprehensive and relevant sexuality education than their heterosexual counterparts (Kann, 2016). For the purposes of this study, we define inclusive curricula to mean sexuality education content and materials that are relevant to sexual and gender minority youth.

According to the Gay, Lesbian and Straight Education Network (GLSEN)’s 2013 National School Climate Survey, 17.5% of students reported being prohibited from discussing or writing about LGBTQ topics in school assignments. Only 18.5% of LGBT students were taught positive representations about LGBT people, history, or events in their schools; 14.8% had been taught negative content about LGBT topics. Only 4.6% of the over 7,000 students surveyed reported being taught positive representation of LGBT topics in health class (Kosciw et al., 2014). Research indicates that including positive representations of LGBT people, history and events in the school curriculum and providing LGBTQ-specific resources are associated with a safer, more accepting school climate for LGBTQ youth (Kosciw et al., 2014).

SEXUAL AND GENDER MINORITY YOUTH

The National Institutes of Health (NIH) defines sexual and gender minority as “an umbrella phrase that encompasses lesbian, gay, bisexual, and transgender populations as well as those whose sexual orientation, gender identity and expressions, or reproductive development varies from traditional, societal, cultural, or physiological norms” (2016). It is difficult to determine how many young people in the
United States fall under this category, because some are not “out”, or do not identify as part of this group to themselves or others. Some researchers estimate that approximately 2.5 percent of the youth population in high school identifies as part of the sexual and/or gender minority population, and that as many as one in ten students may be questioning their sexual or gender identity (Santelli et al., 2006). Another study conducted in Boston, Massachusetts of over 1,000 high school students found that 10% of students who answered the survey identified as part of the sexual or gender minority population (Almeida, Johnson, Corliss, Molnar, & Azrael, 2009). A recent study by GLAAD found that approximately 20 percent of 18-34 year olds in the United States identify as a sexual minority, and approximately 12 percent identify as a gender minority (GLAAD, 2017).

For this study, researchers make the assumption that Montana public high schools are representative of the youth population in the United States. Given that assumption, in a rural school consisting of 200 students, approximately 25 are likely to either identify as a sexual or gender minority or report struggling with their identity.

There are several unique issues that sexual and gender minority youth face, not the least important being their mental health. Sexual and gender minority youth tend to have higher rates of depression and suicidal ideation than their cisgender, heterosexual peers (Needham and Austin, 2010; Mayer, Bradford, Makadon, Stall, Goldhammer, & Landers, 2008). These higher rates have been partially attributed to negative social environments, where youth feel targeted for ridicule because of their sexual or gender identity (Birkett, Espelage, & Koenig, 2009). In addition to mental health issues, sexual and gender minority youth also have a higher risk of STI infection and transmission than cisgender and heterosexual youth. Young MSM are 22% more likely to contract HIV than any other youth population (CDC, 2015).
HEALTH ISSUES RELATED TO RISKY SEXUAL BEHAVIORS

HIV
In 2014, youth aged 13 to 24 accounted for an estimated 22% of all new HIV diagnoses in the United States. Most of those occurred among young gay and bisexual males (CDC, 2016). HIV-related deaths in youth increased 50% from 2005 to 2012. This increase in mortality is particularly alarming since the total number of HIV-related deaths in the population fell by about 30% during this time period (Lall, Lim, Khairuddin, & Kamarulzaman, 2015). The higher degree of risk in young sexual and gender minority populations is associated with behaviors such as not getting tested, not using condoms, not getting treatment, and not disclosing their health status to partners (Kurth, Lally, Choco, Inwani, & Fortenberry, 2014). The CDC cites inadequate sex education as one of the major barriers to HIV prevention in young people, along with high rates of STIs, stigma around HIV and feelings of isolation in LGBTQ youth (CDC, 2016).

STIs
In the United States, youth between the ages of 15 and 24 account for about half of all new STI reports, and one in four female youth are estimated to have an STI (CDC, 2015). An estimated 20 million new cases occur each year, and CDC estimates say there are more than 110 million total cases of STIs in the United States (CDC, 2015). Compared with older adults, sexually active adolescents aged 15–19 years and young adults aged 20–24 years are at higher risk of acquiring STDs for a combination of behavioral, biological, and cultural reasons (CDC, 2016).

In Montana, the state public health department mandates the reporting of three sexually transmitted infections: chlamydia, gonorrhea, and syphilis. Chlamydia is the most common STI in Montana; in 2014, 4,193 cases of chlamydia were reported, with 69% of reported cases occurring in females. Over 60% of new chlamydia cases reported in 2014 were among individuals in the 15-24-year-old age group (Montana State Department of Public Health and Human Services, 2015). Gonorrhea cases increased from 2013 to 2014 by almost 100% in Montana, with a total of 434 cases reported in 2014. Approximately 51% of
those cases were female, and approximately 70 of the new cases were in individuals younger than 20 years old (MTDPHHS, 2015).

Unfortunately, rates for chlamydia, gonorrhea and syphilis have increased over the past 10 years. According to MTDPHHS, about 4,600 cases of STIs were reported in 2014. In addition, there is a strong possibility that many cases go unreported because young people are not getting tested and are unaware of their health status (MTDPHHS, 2015).

TWO MAIN APPROACHES TO SEX EDUCATION IN THE UNITED STATES

ABSTINENCE-ONLY SEX EDUCATION

Abstinence-only sex education teaches students that the only way to prevent the negative psychological and physiological health consequences of sexual intercourse is to refrain from any sexual activity outside of a monogamous, heterosexual marriage (Weaver, Smith, & Kippax, 2005). Abstinence-only education may include limited information about birth control and safer sex methods, but the curriculum emphasizes that any sexual activity outside of marriage is dangerous and unhealthy for young people. The Affordable Care Act through the Title V State Abstinence Education Grant Program (AEGP) provides funding to states for abstinence education, and where appropriate, mentoring, counseling and adult supervision to promote abstinence from sexual activity. Projects funded through this grant support decisions to abstain from sexual activity by providing abstinence programming as defined by Section 510(b) of the Social Security Act, which states abstinence education must:

- Have as its exclusive purpose, teaching the social, psychological, and health gains to be realized by abstaining from sexual activity;
- Teach abstinence from sexual activity outside marriage as the expected standard for all school age children;
• Teach that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems;

• Teach that a mutually faithful monogamous relationship in the context of marriage is the expected standard of human sexual activity;

• Teach that sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects;

• Teach that bearing children out-of-wedlock is likely to have harmful consequences for the child, the child’s parents, and society;

• Teach young people how to reject sexual advances and how alcohol and drug use increases vulnerability to sexual advances; and

• Teach the importance of attaining self-sufficiency before engaging in sexual activity.

States may determine the relative emphasis to place on each of the Section 510(b) components, and may also use funds for mentoring, counseling or adult supervision programs to promote abstinence (Family & Youth Services Bureau, 2015).

COMPREHENSIVE SEX EDUCATION

Numerous studies and evaluations have looked at the efficacy of sexuality education programs. Comprehensive sex education teaches youth about both abstinence and methods of contraception and disease prevention. It also covers how to have conversations with partners about using birth control, and skill sets for how to keep oneself safe from STIs and HIV (Fonner, Armstrong, Kennedy, O’Reilly, & Sweat, 2014). Studies have shown that comprehensive education about sexuality is an effective strategy to help young people delay their initiation of sexual intercourse, reduce the number of sexual partners they have, and increase condom or contraceptive use when they do become pregnant (Sexuality Information and Education Council of the United States, 2016). Comprehensive sex education also helps empower youth by giving them the tools to take personal responsibility for keeping themselves healthy and safe, and by providing a sex positive atmosphere where students are able to ask questions and get the
information they need (Weaver et al., 2003). Comprehensive sex education programs that cover HIV and STI prevention help youth build skills to engage in useful problem-solving and practice healthy behaviors such as using condoms and having conversations about safety with partners (CDC, 2015). Several organizations provide specific guidelines for teaching comprehensive sexuality education for students in grades K-12 (Sexuality Information and Education Council, 2004).

The CDC provides funding and technical assistance for state and local prevention efforts. These efforts are increasingly focusing on including the sexual health needs of LGBTQ youth in comprehensive sex education curriculum. Some examples of program activities include providing training for district and school staff to make health curricula more inclusive, linking schools to community organizations that provide sexual health services for LGBTQ youth, and supporting schools in developing Gay-Straight Alliances (GSA) (CDC, 2016).

**CURRENT SEX EDUCATION POLICIES**

In January 2015, the National Conference of State Legislatures (NCSL) published a list of policies that are in place for each state (NCSL, 2015). Currently, 22 states are required to have sex education curriculums in public schools and 33 states require HIV and AIDS education (NCSL, 2015). However, only 19 states explicitly require that the information presented be “medically, factually, or technically accurate” (NCSL, 2015). Only 13 states require discussion of sexual orientation in sex education classes, and of those, 3 states require that homosexuality and other sexual orientations be discussed only in negative terms. These states are Alabama, South Carolina, and Texas (GI, 2016). Some states, such as California, have legislation in place requiring sex education curricula to include information about birth control methods and sexual orientation. Curricula in California must be age-appropriate, medically accurate, and culturally appropriate and unbiased. Montana does not have these guidelines (GI, 2016). While sex and HIV education are mandatory for the state, Montana legislation does not require that education be medically accurate or age appropriate (GI, 2016). Education also does not have to be culturally appropriate and unbiased, and schools are not explicitly forbidden from promoting religion if the teacher wishes (GI, 2016). Since there are few guidelines for Montana educators in terms of what
must be included in sex education curriculum beyond basic information about HIV and STIs, little is known about the nature of the current curricula in Montana.

OVERVIEW OF NATIONAL STANDARDS FOR SEX EDUCATION

Prior to the publication of The National Standards for Sex Education in 2012, the United States lacked guidelines for teaching about sex in public schools. A non-profit organization called The Future of Sex Education (FoSE) developed the new National Standards in collaboration with the National Education Association, the American Association of Health Education, and the American School Health Association. The new standards describe content that should be covered during sex education classes in grades K-12 as well as the knowledge and skills that students should master at each grade level (FoSE, 2012). The goal of the National Standards for Sex Education is to “provide clear, consistent, and straightforward guidance on the minimum core content for sex education that is developmentally and age-appropriate for students in grades K-12” (FoSE, p. 6). These standards were based on the National Health Education Standards (NHES) and the Center for Disease Control and Prevention (CDC)’s Health Education Curriculum Analysis Tool (HECAT) (FoSE, 2012).

The new standards outline the characteristics of effective and inclusive sex education. Some of these characteristics include focusing on specific behavioral outcomes, addressing social pressure and influences, building personal competence, providing adequate time for instruction and learning, and providing opportunities to reinforce skills and positive health behaviors (FoSE, 2012). These characteristics help improve the quality of education for students because they are able to personalize the information, making it more relatable to their own lives. Students are able to build and practice skills, understand the social norms, and build self-efficacy in making choices about their sexual experiences (FoSE, 2012).
There are seven topics that are covered by the National Standards for Sex Education. These are:

- Anatomy and Physiology
- Puberty and Adolescent Development
- Identity
- Pregnancy and Reproduction
- Sexually Transmitted Diseases and HIV
- Healthy Relationships
- Personal Safety (FoSE, 2012).

Each of these topics is addressed in accordance with the eight National Health Education Standards. Each topic contains the following core concepts: Analyzing Influences, Accessing Information, Interpersonal Communication, Decision-Making, Goal-Setting, Self-Management, and Advocacy (FoSE, 2012). These topics are then separated by grade level to ensure that they are age-appropriate. The final document is separated into tables to make it easier to read.

SEX EDUCATION IN THE STATE OF MONTANA

Because of the statutes that prevent the federal government from requiring sex education curriculum in public schools, each state is responsible for its own curricula when it comes to sex education (Weaver et al., 2005). The Montana Health Education standards, updated in 2015, are vague when it comes to describing what should be covered in sexuality education in the public schools. At the end of grade 12, before graduation, students are expected to “develop personal health-enhancing strategies that encompass substance abuse, nutrition, exercise, sexual activities, injury/disease prevention, including HIV/AIDS prevention, and stress management” (OPI, 2016). In the state of Montana, it is up to each individual school district to determine what curriculum and materials to teach. The Office of Public Instruction states that the content of the human sexuality component of a Health Enhancement program is a decision for each local school, and the content should “reflect the values of the community.” OPI supports a program that is “age-appropriate, abstinence-based, and includes strategies and skills practice in refusal skills.
negotiation skills, communication skills and resistance to peer pressure (OPI, 2016). There is no mention of the need for inclusive or comprehensive sex education.

Currently, the Montana Office of Public Instruction is working on new proposed Health Enhancement Standards. These new standards, if approved by the Board of Public Education, will go into effect on July 1, 2017. The new Health Enhancement Standards include the addition of topics such as mental health, respectful relationships, chronic diseases, substance use, environmental factors that affect health, wellness, or physical activity levels, and bullying (OPI, 2016). These are no changes proposed to the state requirements for sexuality education in the new standards.

SEXUALITY EDUCATION TEACHERS

The quality of school-based sex education depends on the effectiveness of the teachers who implement the curricula. How teachers implement sex education curricula in their classrooms is influenced by their attitudes towards the curricula (Stein & Wang, 1988). In a review of the effectiveness of sex education programs at reducing unprotected sex among adolescents, Kirby (2002) concluded that a distinguishing characteristic of effective curricula is that the teachers believe in the program they are implementing. Therefore, it is likely that teachers’ attitudes towards a sexuality education program will influence their coverage of sexual health topics as well as their use of teaching methods that are effective at promoting sexual health (Cohen, Byers, Sears, & Weaver, 2004).

A study of 336 teachers in elementary and middle schools in New Brunswick looked at teachers’ attitudes towards sex education, the importance they assign to sexual health topics, their knowledge about and comfort teaching these topics, and the grade at which they think these topics should be introduced. The teachers reported that the sex education curriculum should include a broad range of topics, yet, on average, they felt only somewhat knowledgeable about sexual health. Responses also indicated that teachers felt only somewhat comfortable teaching most topics. (Cohen et al, 2004). Little research has been done on the perceptions of preparedness and comfort of sex education teachers when covering topics
related to sexual and gender minority youth. In the New Brunswick study, the topic of homosexuality was included in the questionnaire. Teachers on average felt somewhat comfortable and somewhat knowledgeable about homosexuality, but 14-20% of teachers thought the topic should be excluded from sex education curriculum. Teachers reported feeling very comfortable with other topics including body image, reproduction and birth, abstinence, and puberty (Cohen et al, 2004).

Another study in New Mexico used secondary data to analyze the preparedness of 183 school nurses, counselors and social workers to address the needs of LGBTQ students. Researchers found that a majority of respondents (58.2%) reported limited or no experience discussing behavioral health risks with LGBTQ students (Mahdi, Jevertson, Schrader, Nelson, & Ramos, 2013).

In Montana, the Health Enhancement teacher is often also the Physical Education teacher. The National School Climate Survey asked students to identify the school employees with whom they felt most comfortable discussing LGBT-related topics. Of the eight options given, P.E. teachers and athletics coaches were rated lowest, with only 21.7% of students reporting that they were somewhat or very comfortable talking to these adults. Teachers in general were rated as the school employee with whom students felt most comfortable (Kocziw et al, 2014).

**LGBTQ TEACHERS AND SCHOOL STAFF**

Seeing and interacting with successful LGBTQ adults is a powerful way that sexual and gender minority youth can receive support, validation and encouragement. The number and presence of out LGBTQ personnel may also provide a visible indication of a more accepting and safe school environment. The 2013 National School Climate Survey found that well over a third (42.5%) of students could identify one openly LGBTQ school employee (Kocziw et al, 2014). LGBTQ-identified teachers are also more likely to teach inclusive curricula in their classes. Teachers’ personal values, beliefs and experiences can have a strong impact on the content they choose to include in their classrooms. A study of over 3400 Canadian educators on their perspectives on LGBTQ-inclusive education found that LGBQ teachers are more likely
to include LGBTQ content in the curriculum than straight teachers (83.6% vs. 55.2%). LGBQ teachers were also found to report participating more in LGBTQ-inclusive efforts in their schools (Meyer, Taylor & Peter, 2014). The researchers point to a need for greater inclusion of LGBTQ topics in both pre-service and in-service teacher education as well as policy reform in order to increase the percentage of teachers willing and able to teach inclusive curricula.

PERCEPTIONS OF LGBTQ STUDENTS

Studies looking at the perceptions and experiences with sexuality education of sexual and gender minority youth are limited. A qualitative synthesis of young peoples’ views of sex education across several countries looked at 48 separate studies. This study did not specifically look at the perceptions of LGBTQ students, but it did address all students’ experiences with LGBTQ-related content in sex education. The researchers found that students described their sex education as heteronormative, and students reported that homosexuality or other topics relevant to sexual and gender minority youth were barely mentioned. Students wanted homosexuality and other LGBTQ content to be discussed within sex education classes to facilitate discussion of same-sex relationships, help normalize these relationships, address homophobia, and support LGBTQ students (Pound, Langford & Campbell, 2016).

Another study in Michigan looked at what young gay, bisexual, and questioning men learned in school-based sex education, what they would change about their sex education experiences, and how they supplemented these experiences when they found information lacking. Researchers conducted interviews with 30 young men, gathering information about their sex education experiences as well as dating and sexual behavior. Participants reported receiving inadequate information in their sex education classes and felt that their sexual health needs were not being met (Pingell, Thomas, Harmell, & Bauermeister, 2013). In response to questions asking how these young gay, bisexual and questioning men would change their sex education, two main themes emerged: 1) make sex education more inclusive of LGBTQ students and 2) modify heteronormative language and curricula.
CHAPTER THREE: METHODOLOGY

INTRODUCTION

This study represents the second phase of a two-phase study assessing the sex education needs of sexual and gender minority youth in Montana public high schools. Phase One looked at sex education from the perspective of sexual and gender minority students. In Phase Two we gathered information about the experiences of teachers tasked with teaching sex education in high schools.

DESCRIPTION OF THE TARGET POPULATION

The target population for this study consisted of Health Enhancement teachers over the age of 18 who teach sex education in Montana public high schools. Health Enhancement teachers cover a variety of health-related topics, including physical education, nutrition and sex education.

PROTECTION OF HUMAN SUBJECTS

This study was conducted with approval from the University of Montana Institutional Review Board (IRB).

STUDY DESIGN

This study utilized a cross-sectional design. Cross-sectional studies typically use a one-time data collection effort and a self-report format. These types of studies can be used to assess the burden of disease or health needs of a population - in this case, a cross-sectional study design was used to assess the education and training needs of sex education teachers in Montana.

Cross-sectional studies have several advantages. They are relatively quick and easy to conduct because no follow-up is needed, data on all variables are only collected once, and prevalence for all factors under
investigation are able to be measured. In addition, multiple outcomes and exposures can be studied (Barratt, 2009).

Two types of analyses were used in this study- descriptive and inferential. Descriptive analysis was used to assess the frequency and distribution of the variables under consideration. A cross-sectional approach was used to investigate the association between variables.

PROCEDURES
Primary data for this study was collected from teachers via focus groups, interviews and an electronic questionnaire (see Appendix A). Interview and focus group data were used in the development of the questionnaire. The questionnaire underwent an expert review and pilot test prior to being distributed to Health Enhancement teachers.

DATA COLLECTION
Questionnaire
Instrument Development
The framework for the questionnaire was developed using content from the National Sexuality Education Standards. These comprehensive standards were developed in 2013 to address the inconsistent implementation of sex education nationwide. They provide an appropriate structure for this study because they outline the characteristics of effective and inclusive sex education and include questions about sexual and gender identity (FoSE, 2012). Standards that are relevant to sexual and gender minority youth were selected for inclusion in the questionnaire.

The questionnaire consists of the following three sections:

- Section one includes a series of questions describing sex education topics relevant to sexual and gender minority students. Respondents are asked to rate the extent to which they cover each topic
in their sex education classes, how important they think each topic is to cover, and how comfortable they feel teaching each topic.

- Section two includes a series of demographic questions asking respondents to provide information such as sexual and gender identity, race, size of high school, and region where the school is located.

- Section three includes questions asking respondents what they teach about HIV/AIDS, what resources they feel are most useful to LGBTQ students, and where they believe LGBTQ students should access sexuality information.

- The fourth and final section asks respondents to identify the challenges and barriers to teaching LGBTQ-inclusive sex education and to provide suggestions for ways to improve sex education in their high schools.

Expert Review

Faculty and key informants with experience teaching sex education reviewed a draft of the questionnaire. They provided feedback on the readability, content and structure of the survey. Feedback from these experts lead to questionnaire revisions and additional reviews by members of the target population.

Focus Groups

One focus group was conducted with Health Enhancement teachers at a public high school in Montana. The participants in this focus group reviewed a draft of the questionnaire and provided feedback on the readability, content and structure. They also provided suggestions for how best to distribute the questionnaire and how to motivate teachers to complete it. Focus group questions can be found in Appendix B.
Interviews

Interviews were conducted with five Health Enhancement teachers in various locations in Montana. Interview participants reviewed a draft of the questionnaire and provided feedback on the readability, content and structure. They also provided suggestions for how best to distribute the questionnaire and how to motivate teachers to complete it.

Pilot Testing

The questionnaire was pilot tested using the Qualtrics online secure survey platform. A small group of members of the target population were asked to take the questionnaire two separate times, and a test-re-test strategy was used to determine the reliability of the instrument.

Sample Selection

Participants for this study were recruited using three methods. First, the president of the Montana School Health and Physical Education Association (SHAPE) sent emails containing a link to the online questionnaire to all teachers who are members of the state organization. Second, a link to the questionnaire and an invitation to complete it was posted on various social media platforms frequently visited by Health Enhancement and other teachers, including Facebook and Twitter. Third, researchers searched the websites of Montana high schools and gathered as many health enhancement e-mail addresses as were available.

Data Collection

Participants who clicked on a link to the questionnaire were directed to Qualtrics, a secure online survey platform. The first page of the questionnaire contained information about the study, including the purpose, structure of the questionnaire and estimated time required to complete it. Participants were asked to read an informed consent and indicate their willingness to participate in the study by clicking “I Agree” at the end of the informed consent. Clicking this button directed participants to the beginning of the
questionnaire. A $10.00 gift certificate to Amazon was offered to individuals who agreed to participate. The questionnaire took between 10 and 15 minutes to complete.

Once the questionnaire was completed, the responses were recorded directly into the Qualtrics database. Participants’ identities remained anonymous. Participants were not required to answer all questions, and could exit the questionnaire at any time.

Data Analysis
Data from the Qualtrics platform were downloaded into the SPSS statistical package. Basic descriptive statistics were used to determine the frequency with which various topics relevant to LGBTQ students are included in sex education, how important respondents think is to cover these topics, and how comfortable they feel in teaching each topic. Barriers to teaching inclusive sex education, coverage of topics related to HIV/AIDS, and ideas for improving sex education were reported using frequency and percent.

Measures of association such as chi-square were used to determine the relationships among variables such as barriers to teaching LGBTQ inclusive sex education and content covered, comfort level and perception of importance of topics related to LGBTQ sexual health.

A final written report and presentation will be prepared for the Montana Department of Public Health and Human Services and the state HIV Planning Group featuring the results of the study.
CHAPTER FOUR: RESULTS

A total of 65 electronic questionnaires were completed by Health Enhancement teachers in Montana. Researchers sent a total of 168 emails containing a link to the questionnaire, leading to a 39% response rate. The data from these questionnaires are summarized in this chapter.

Demographics

Table 1. Age (N=61)

Participants were evenly distributed among the age ranges 20-29, 30-39, 40-49, and 50-59. Only two participants were over the age of 60.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>21.3%</td>
<td>(13)</td>
</tr>
<tr>
<td>30-39</td>
<td>24.6%</td>
<td>(15)</td>
</tr>
<tr>
<td>40-49</td>
<td>23.0%</td>
<td>(14)</td>
</tr>
<tr>
<td>50-59</td>
<td>27.9%</td>
<td>(17)</td>
</tr>
<tr>
<td>60-69</td>
<td>3.3%</td>
<td>(2 )</td>
</tr>
<tr>
<td>69+</td>
<td>0%</td>
<td>(0 )</td>
</tr>
</tbody>
</table>
Table 2. Race (N=63)

Approximately 90% of the participants identified as Caucasian non-Hispanic and 3% identified as American Indian/Alaskan Native. According to the 2015 census for Montana, about 89% of the population identified as Caucasian and 6% identified as Native American/Alaskan Native. It appears, therefore that Caucasians are slightly over-represented and Native American/Alaskan Natives are slightly under-represented in this study (United States Census Bureau, 2015).

<table>
<thead>
<tr>
<th>Race</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian (non-Hispanic)</td>
<td>90.4%</td>
<td>(57)</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>3.2%</td>
<td>(2)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>3.2%</td>
<td>(2)</td>
</tr>
<tr>
<td>African American</td>
<td>1.6%</td>
<td>(1)</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>1.6%</td>
<td>(1)</td>
</tr>
<tr>
<td>Multiracial</td>
<td>0%</td>
<td>(0)</td>
</tr>
<tr>
<td>Other (please describe)</td>
<td>0%</td>
<td>(0)</td>
</tr>
</tbody>
</table>

Table 3. High School Size (N=61)

Over half of the participants in this survey teach at a school with fewer than 300 students. Approximately one-quarter of participants teach at a school with 1,000 or more students. Only 18% of participants teach at a school with a student population between 300-1,000 students.

<table>
<thead>
<tr>
<th>Size</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100</td>
<td>23.0%</td>
<td>(14)</td>
</tr>
<tr>
<td>100 to 300</td>
<td>32.8%</td>
<td>(20)</td>
</tr>
<tr>
<td>300 to 500</td>
<td>13.1%</td>
<td>(8)</td>
</tr>
<tr>
<td>500 to 1000</td>
<td>4.9%</td>
<td>(3)</td>
</tr>
<tr>
<td>Over 1000</td>
<td>26.2%</td>
<td>(16)</td>
</tr>
<tr>
<td>Do not know</td>
<td>0%</td>
<td>(0)</td>
</tr>
</tbody>
</table>
Table 4. Region (N=60)

Nearly one-third of participants in this study reported teaching in the Northwest region of the state. Participants were fairly evenly distributed among the remaining four regions, ranging from approximately 14-17%.

<table>
<thead>
<tr>
<th>Region</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Eastern</td>
<td>18.3%</td>
<td>(11)</td>
</tr>
<tr>
<td>2- North Central</td>
<td>16.7%</td>
<td>(10)</td>
</tr>
<tr>
<td>3-South Central</td>
<td>18.3%</td>
<td>(11)</td>
</tr>
<tr>
<td>4-Southwest</td>
<td>15.0%</td>
<td>(9 )</td>
</tr>
<tr>
<td>5- Northwest</td>
<td>31.7%</td>
<td>(19)</td>
</tr>
</tbody>
</table>

Table 5. Size of Community (N=59)

Approximately two-thirds of participants in this study reported teaching in a community with fewer than 10,000 inhabitants. Approximately one-quarter of participants reported teaching in a community with more than 10,000 inhabitants.

<table>
<thead>
<tr>
<th>Size of Community</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1000</td>
<td>25.4%</td>
<td>(15)</td>
</tr>
<tr>
<td>1,000-10,000</td>
<td>42.4%</td>
<td>(25)</td>
</tr>
<tr>
<td>10,000-60,000</td>
<td>10.2%</td>
<td>(6 )</td>
</tr>
<tr>
<td>60,000+</td>
<td>16.9%</td>
<td>(10)</td>
</tr>
<tr>
<td>Unsure</td>
<td>5.1%</td>
<td>(3 )</td>
</tr>
</tbody>
</table>
Table 6. Teach Other Subjects (N=58)

Approximately half of the participants reported teaching other subjects in addition to Health Enhancement. Most participants reported teaching physical education as their other subject taught (17%). Other subjects taught include: anatomy and physiology; business; driver education; ELA; history; social studies; science; and Spanish.

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>51.7%</td>
<td>(30)</td>
</tr>
<tr>
<td>No</td>
<td>48.3%</td>
<td>(28)</td>
</tr>
</tbody>
</table>

Grade Level (N=59)

The majority of participants reported teaching grades 9-12 (54%), with a small number teaching only grade 9 (11%). 18% of participants reported teaching grades K-12, and 15% reported teaching grades 5-12.

College or University (N=59)

Participants reported receiving degrees from the University of Montana most frequently (26%). Other universities included Montana State University (14%), UM-Western (11%), and Rocky Mountain College (9%).

86.4% of participants received their degrees from colleges or universities in Montana.

Degree (N=59)

Approximately 70% of participants received a degree in HHP, Health Enhancement or a related field. Other degrees reported were: print Journalism; PE; special education; English; biology; zoology; education; science; and business administration.
Table 7. Years Teaching (N=59)

The greatest number of participants (40.7%) reported teaching for five years or less. The median length of teaching was 12 years, and 18.6% of participants reported teaching for more than 20 years.

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5</td>
<td>40.7%</td>
<td>(24)</td>
</tr>
<tr>
<td>6-10</td>
<td>13.6%</td>
<td>(8 )</td>
</tr>
<tr>
<td>11-15</td>
<td>13.6%</td>
<td>(8 )</td>
</tr>
<tr>
<td>16-20</td>
<td>13.6%</td>
<td>(8 )</td>
</tr>
<tr>
<td>20+</td>
<td>18.6%</td>
<td>(11)</td>
</tr>
</tbody>
</table>

Table 8. Sexual Orientation (N=61)

All but one participant identified as heterosexual/straight. This percentage of LGBTQ-identified participants (1.6%) is significantly less than the Gallup Poll estimate from 2016 that 4.1% of adults in the United States identify as LGBT.

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gay</td>
<td>0%</td>
<td>(0 )</td>
</tr>
<tr>
<td>Lesbian</td>
<td>1.6%</td>
<td>(1 )</td>
</tr>
<tr>
<td>Heterosexual/Straight</td>
<td>93.8%</td>
<td>(60)</td>
</tr>
<tr>
<td>Bisexual</td>
<td>0%</td>
<td>(0 )</td>
</tr>
<tr>
<td>Asexual</td>
<td>0%</td>
<td>(0 )</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>(0 )</td>
</tr>
</tbody>
</table>
Table 9. Gender Identity (N=61)
Slightly more participants identified as male than female. No participants identified with gender identities other than male or female.

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>47.5%</td>
<td>(29)</td>
</tr>
<tr>
<td>Male</td>
<td>52.5%</td>
<td>(32)</td>
</tr>
<tr>
<td>Transgender Female</td>
<td>0%</td>
<td>(0)</td>
</tr>
<tr>
<td>Transgender Male</td>
<td>0%</td>
<td>(0)</td>
</tr>
<tr>
<td>Non-binary</td>
<td>0%</td>
<td>(0)</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>(0)</td>
</tr>
</tbody>
</table>

Table 10. Ally to LGBTQ Community (N=61)
More than half of participants considered themselves allies to the LGBTQ community. Approximately 16% did not consider themselves allies, and nearly one-third were unsure of their status as allies to the LGBTQ community.

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>60.7%</td>
<td>(37)</td>
</tr>
<tr>
<td>No</td>
<td>16.4%</td>
<td>(10)</td>
</tr>
<tr>
<td>Unsure</td>
<td>23.0%</td>
<td>(14)</td>
</tr>
</tbody>
</table>
Table 11. Know LGBTQ People (N=61)

The majority of participants reported knowing one or more LGBTQ-identified people. A small number reported knowing no LGBTQ people, and two participants were unsure if they know LGBTQ-identified people.

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>88.5%</td>
<td>(54)</td>
</tr>
<tr>
<td>No</td>
<td>8.2%</td>
<td>(5)</td>
</tr>
<tr>
<td>Unsure</td>
<td>3.3%</td>
<td>(2)</td>
</tr>
</tbody>
</table>

Table 12. Extent topics are covered and importance and comfort rating (N=57-60)

Topics perceived as being fully covered by the fewest number of participants:
Topic #1: The differences between biological sex, sexual orientation, sexual behavior, and gender identity and expression
Topic #2: How friends, family, media, society and culture influence the expression of gender, sexual orientation and identity
Topic #3: How to advocate for school policies and programs that promote safe environments, dignity and respect for all students
Topic #4: The potential impacts of power differences (e.g. age, status or position) within sexual relationships
Topic #5: Ways to address being bullied, teased, harassed because someone thought you or a friend were gay, lesbian or bisexual

Topics perceived as being fully covered by the greatest number of participants:
Topic #6: Sexual consent and its implications for decision-making about sex
Topic #7: How to access medically-accurate prevention information about STDs, including HIV
Topic #8: Skills to communicate with a partner about STD and HIV prevention and testing
Topic #9: Types of situations and behaviors that may be considered sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence
Topics perceived as very important by the fewest number of participants:

Topic #1: The differences between biological sex, sexual orientation, sexual behavior, and gender identity and expression

Topic #2: How friends, family, media, society and culture influence the expression of gender, sexual orientation and identity

Topic #3: How to advocate for school policies and programs that promote safe environments, dignity and respect for all students

Topic #4: The potential impacts of power differences (e.g. age, status or position) within sexual relationships

Topic #5: Ways to address being bullied, teased, harassed because someone thought you or a friend were gay, lesbian or bisexual

Topics perceived as very important by the greatest number of participants:

Topic #6: Skills to communicate with a partner about STD and HIV prevention and testing

Topic #7: How to access medically-accurate prevention information about STDs, including HIV

Topic #8: Types of situations and behaviors that may be considered sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence

Topic #9: Sexual consent and its implications for decision-making about sex

Topics perceived as very comfortable to teach by the fewest number of participants:

Topic #1: The differences between biological sex, sexual orientation, sexual behavior, and gender identity and expression

Topic #2: How friends, family, media, society and culture influence the expression of gender, sexual orientation and identity

Topic #3: How to advocate for school policies and programs that promote safe environments, dignity and respect for all students

Topic #4: Ways to address being bullied, teased, harassed because someone thought you or a friend were gay, lesbian or bisexual

Topic #5: The potential impacts of power differences (e.g. age, status or position) within sexual relationships
Topics perceived as very comfortable by the greatest number of participants:

Topic #6: Skills to communicate with a partner about STD and HIV prevention and testing

Topic #7: Types of situations and behaviors that may be considered sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence

Topic #8: Sexual consent and its implications for decision-making about sex

Topic #9: How to access medically accurate prevention information about STDs, including HIV

<table>
<thead>
<tr>
<th>Topic</th>
<th>How well topic was covered?</th>
<th>How important this topic is to you?</th>
<th>How comfortable are you with this topic?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How to access medically-accurate prevention information about STDs, including HIV</td>
<td>Not at all 3.4% Partially 35.6% Fully 61.0%</td>
<td>Not Important 0% Somewhat 11.7% Very Important 88.3%</td>
<td>Not comfortable 1.7% Somewhat 33.3% Very comfortable 65.0%</td>
</tr>
<tr>
<td>2. Skills to communicate with a partner about STD and HIV prevention and testing</td>
<td>Not at all 16.9% Partially 45.8% Fully 37.3%</td>
<td>Not Important 0% Somewhat 21.7% Very Important 78.3%</td>
<td>Not comfortable 1.7% Somewhat 40.0% Very Comfortable 58.3%</td>
</tr>
<tr>
<td>3. Sexual consent and its implications for decision-making about sex</td>
<td>Not at all 3.4% Partially 32.2% Fully 64.4%</td>
<td>Not Important 0% Somewhat 5.0% Very Important 95.0%</td>
<td>Not comfortable 5.0% Somewhat 31.7% Very comfortable 63.3%</td>
</tr>
<tr>
<td>4. Types of situations and behaviors that may be considered sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence</td>
<td>Not at all 8.5% Partially 54.2% Fully 37.3%</td>
<td>Not Important 0% Somewhat 6.7% Very Important 93.9%</td>
<td>Not comfortable 3.3% Somewhat 35.0% Very comfortable 61.7%</td>
</tr>
<tr>
<td>5. The potential impacts of power differences (e.g. age, status or position) within sexual relationships</td>
<td>Not at all 35.6% Partially 37.3% Fully 27.1%</td>
<td>Not Important 1.7% Somewhat 39.7% Very Important 58.6%</td>
<td>Not comfortable 8.3% Somewhat 43.3% Very comfortable 48.3%</td>
</tr>
<tr>
<td>6. The differences between biological sex, sexual orientation, sexual behavior, and gender identity and expression</td>
<td>Not at all 47.5% Partially 40.7% Fully 11.9%</td>
<td>Not Important 3.4% Somewhat 54.2% Very Important 42.4%</td>
<td>Not comfortable 21.7% Somewhat 51.7% Very comfortable 26.7%</td>
</tr>
<tr>
<td>7. How friends, family, media, society and culture influence the expression of</td>
<td>Not at all 34.5% Partially 50.0% Fully 15.5%</td>
<td>Not Important 3.4% Somewhat 54.2% Very Important 42.4%</td>
<td>Not comfortable 15.3% Somewhat 44.1% Very comfortable 40.7%</td>
</tr>
</tbody>
</table>
gender, sexual orientation and identity

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Partially</th>
<th>Fully</th>
<th>Not Important</th>
<th>Somewhat</th>
<th>Very Important</th>
<th>Not at all</th>
<th>Partially</th>
<th>Fully</th>
<th>Not Important</th>
<th>Somewhat</th>
<th>Very Important</th>
<th>Not comfortable</th>
<th>Somewhat</th>
<th>Very comfortable</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. How to advocate for school policies and programs that promote safe environments, dignity and respect for all students</td>
<td>37.9%</td>
<td>46.6%</td>
<td>15.5%</td>
<td>1.8%</td>
<td>42.1%</td>
<td>56.1%</td>
<td>10.3%</td>
<td>44.8%</td>
<td>44.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Ways to address being bullied, teased, harassed because someone thought you or a friend were gay, lesbian or bisexual</td>
<td>20.7%</td>
<td>51.7%</td>
<td>27.6%</td>
<td>1.7%</td>
<td>22.0%</td>
<td>76.3%</td>
<td>8.5%</td>
<td>44.1%</td>
<td>47.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 13. Hours spent teaching (N=55)**

Approximately 70% of participants reported teaching fewer than 10 hours of sex education per unit or semester.

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>21.8%</td>
<td>(12)</td>
</tr>
<tr>
<td>6-10</td>
<td>47.3%</td>
<td>(26)</td>
</tr>
<tr>
<td>11-15</td>
<td>18.2%</td>
<td>(10)</td>
</tr>
<tr>
<td>16-20</td>
<td>7.3%</td>
<td>(4)</td>
</tr>
<tr>
<td>20+</td>
<td>5.5%</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**What topic do you spend the most time teaching? (N=54)**

The three topics participants reported spending the most time teaching were anatomy and physical development, HIV/STIs, and relationships. Other topics reported include abstinence, contraception, consent and orientation.
Table 14. Relevance of sex ed to heterosexual/cisgender students (N=60, 56)

Most participants believed the sex education taught in their schools to be somewhat or very relevant to heterosexual and cisgender students (83.1%). Slightly less than two-thirds of participants believed the sex education taught in their schools to be somewhat or very relevant to LGBTQ students (64.6%).

<table>
<thead>
<tr>
<th>Topic</th>
<th>% (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How relevant do you think the sex education taught in your high school is for your heterosexual and cisgender students?</td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>1.7% (1)</td>
</tr>
<tr>
<td>Not very</td>
<td>8.3% (5)</td>
</tr>
<tr>
<td>Somewhat</td>
<td>30.0% (18)</td>
</tr>
<tr>
<td>Very</td>
<td>60.0% (36)</td>
</tr>
<tr>
<td>How relevant do you think the sex education taught in your high school is for your LGBTQ-identified students?</td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>1.8% (1)</td>
</tr>
<tr>
<td>Not very</td>
<td>23.2% (13)</td>
</tr>
<tr>
<td>Somewhat</td>
<td>42.9% (24)</td>
</tr>
<tr>
<td>Very</td>
<td>32.1% (18)</td>
</tr>
</tbody>
</table>

Table 15. Received requests to teach LGBTQ content (N=58)

Only one participant reported receiving requests to teach LGBTQ content in their school.

<table>
<thead>
<tr>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1.7% (1)</td>
</tr>
<tr>
<td>No</td>
<td>94.8% (55)</td>
</tr>
<tr>
<td>Unsure</td>
<td>3.4% (2)</td>
</tr>
</tbody>
</table>

Table 16. Abstinence based (N=57)

Nearly all of the participants reported teaching sex education that is somewhat or strongly abstinence-based.

<table>
<thead>
<tr>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly</td>
<td>43.9% (25)</td>
</tr>
<tr>
<td>Somewhat</td>
<td>52.6% (30)</td>
</tr>
<tr>
<td>Not at all</td>
<td>3.5% (2)</td>
</tr>
</tbody>
</table>

34
Table 17. Standard curriculum (N=55)

Slightly more than one-third of participants reported using a standard curriculum to teach sex education (36.4%). More than half of participants reported using no standard curriculum (63.6%). For write-in responses see Appendix C.

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>36.4%</td>
<td>(20)</td>
</tr>
<tr>
<td>No</td>
<td>63.6%</td>
<td>(35)</td>
</tr>
</tbody>
</table>

Outside resources (N=45)

The outside resources most frequently used by participants were videos, including the Miracle of Life video, guest speakers, health care providers, and county health departments. Other outside resources reported include Planned Parenthood, healthy relationships organizations, the internet/online resources, books, and local wellness nonprofits.

Table 18. Would you be interested in using a sex educator trained and certified by the public health department? (N=56)

Over 80% of participants would be interested in using a sex educator trained and certified by the public health department to teach the sexuality education unit in their classes.

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>80.4%</td>
<td>(45)</td>
</tr>
<tr>
<td>No</td>
<td>3.6%</td>
<td>(2)</td>
</tr>
<tr>
<td>Unsure</td>
<td>16.1%</td>
<td>(9)</td>
</tr>
</tbody>
</table>
Table 19. Best way for LGBTQ youth to access sexuality information-Choices ranked as #1 (N=54)

The ways for LGBTQ youth to access sexuality information ranked as the top 3 most useful by participants were 1) LGBTQ community (79.6%); 2) Parents (58.5%); and 3) Health Classes (54.7%). Other responses included: GSA club; health department; reputable sites or people; and school health nurse or counselor.

<table>
<thead>
<tr>
<th></th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% (N)</td>
<td>% (N)</td>
<td>% (N)</td>
<td>% (N)</td>
</tr>
<tr>
<td>Internet/Websites</td>
<td>9.4% (5)</td>
<td>22.6% (12)</td>
<td>20.8% (11)</td>
<td>52.8% (28)</td>
</tr>
<tr>
<td>Health Classes</td>
<td>13.2% (7)</td>
<td>9.4% (5)</td>
<td>32.1% (17)</td>
<td>54.7% (29)</td>
</tr>
<tr>
<td>Parents</td>
<td>32.1% (17)</td>
<td>18.9% (10)</td>
<td>7.5% (4)</td>
<td>58.5% (31)</td>
</tr>
<tr>
<td>Friends</td>
<td>3.8% (2)</td>
<td>5.8% (3)</td>
<td>13.5% (7)</td>
<td>23.1% (12)</td>
</tr>
<tr>
<td>LGBTQ Community</td>
<td>29.6% (16)</td>
<td>33.3% (18)</td>
<td>16.7% (9)</td>
<td>79.6% (43)</td>
</tr>
<tr>
<td>Social Media</td>
<td>2.0% (1)</td>
<td>3.9% (2)</td>
<td>2.0% (1)</td>
<td>7.9% (4)</td>
</tr>
<tr>
<td>Spiritual/Religious Leader</td>
<td>7.7% (4)</td>
<td>5.8% (3)</td>
<td>11.5% (6)</td>
<td>25.0% (13)</td>
</tr>
<tr>
<td>Other</td>
<td>6.2% (4)</td>
<td>3.1% (2)</td>
<td>3.1% (2)</td>
<td>12.4% (10)</td>
</tr>
<tr>
<td>Total #</td>
<td></td>
<td></td>
<td></td>
<td>65</td>
</tr>
</tbody>
</table>
Table 20. What do you teach about HIV/AIDS? (N=58)

The majority of participants reported covering each topic related to HIV/AIDS in their sex education classes. The lowest number of participants (72.4%) reported teaching whether or not there are drugs available that can prevent HIV transmission. Other responses included history, relative risk for different kinds of sex, and testing locations.

<table>
<thead>
<tr>
<th>Topic</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether or not there is a cure for HIV/AIDS</td>
<td>86.2</td>
<td>(50)</td>
</tr>
<tr>
<td>Whether there are drugs available that can prevent HIV transmission</td>
<td>72.4</td>
<td>(42)</td>
</tr>
<tr>
<td>Whether there are drugs available that treat HIV</td>
<td>87.9</td>
<td>(51)</td>
</tr>
<tr>
<td>In which body fluids the virus that causes HIV are found</td>
<td>100.0</td>
<td>(58)</td>
</tr>
<tr>
<td>The types of activities that can lead to HIV transmission</td>
<td>94.8</td>
<td>(55)</td>
</tr>
<tr>
<td>Other</td>
<td>12.0</td>
<td>(7)</td>
</tr>
</tbody>
</table>
Table 21. Biggest challenges of teaching LGBTQ-inclusive sex education (N=51)

The barriers ranked as the top 3 most challenging by participants were 1) No training in how to teach LGBTQ sex ed (60.8%); 2) Lack of experience with LGBTQ content (47.1%); and 3) Lack of resources or materials (35.3%) and Community/parental disapproval (35.3%). “Other” responses included: inexperience and lack of knowledge; parental backlash in very conservative community; and required to teach abstinence, making covering important topics difficult to do.

<table>
<thead>
<tr>
<th></th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>Total #1-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training in how to teach sex ed.</td>
<td>13.7% (7)</td>
<td>9.8% (5)</td>
<td>2.0% (1)</td>
<td>25.5% (13)</td>
</tr>
<tr>
<td>No training in how to teach LGBTQ sex ed.</td>
<td>35.3% (18)</td>
<td>11.8% (6)</td>
<td>13.7% (7)</td>
<td>60.8% (31)</td>
</tr>
<tr>
<td>Lack of resources or materials</td>
<td>7.8% (4)</td>
<td>13.7% (7)</td>
<td>13.7% (7)</td>
<td>35.3% (18)</td>
</tr>
<tr>
<td>Lack of school district policies</td>
<td>11.8% (6)</td>
<td>9.8% (5)</td>
<td>9.8% (5)</td>
<td>31.4% (16)</td>
</tr>
<tr>
<td>Community/parental disapproval</td>
<td>11.8% (6)</td>
<td>11.8% (6)</td>
<td>11.8% (6)</td>
<td>35.3% (18)</td>
</tr>
<tr>
<td>Personal beliefs</td>
<td>2.0% (1)</td>
<td>3.9% (2)</td>
<td>2.0% (1)</td>
<td>7.8% (4)</td>
</tr>
<tr>
<td>Lack of experience with LGBTQ content</td>
<td>9.8% (5)</td>
<td>11.8% (6)</td>
<td>25.5% (13)</td>
<td>47.1% (24)</td>
</tr>
<tr>
<td>Lack of administrative support</td>
<td>2.0% (1)</td>
<td>7.8% (4)</td>
<td>3.9% (2)</td>
<td>13.7% (7)</td>
</tr>
<tr>
<td>Not enough time to add content</td>
<td>3.9% (2)</td>
<td>15.7% (8)</td>
<td>5.9% (3)</td>
<td>25.5% (13)</td>
</tr>
<tr>
<td>Concerns about bullying</td>
<td>2.0% (1)</td>
<td>2.0% (1)</td>
<td>11.8% (6)</td>
<td>15.7% (8)</td>
</tr>
<tr>
<td>Other</td>
<td>2.0% (1)</td>
<td>2.0% (1)</td>
<td>0.0% (0)</td>
<td>4.0% (2)</td>
</tr>
</tbody>
</table>

Respondents were asked to write in what they believe would be most helpful for them in teaching sexuality education that is inclusive of LGBTQ students. The top three themes from these responses were more training in how to teach this content, more information on LGBTQ issues, and better resources and materials such as textbooks and videos. Other responses included community and school board support, a state-mandated curriculum, and funding to bring in trained educators.
Finally, respondents were given the opportunity to provide advice to their school districts and principals for improving the quality of sexuality education. The most common advice given was that districts should prioritize facts and providing accurate information to students, recognize differences in students including differences in sexual and gender identity, and support teachers with more training and a standard curriculum. Full responses to these questions are included in Appendix C.

Measures of association such as chi-square were used to examine the relationship between barriers to teaching sex education and perceived levels of the importance, degree of coverage, and level of comfort in teaching LGBTQ specific topics, and whether respondents considered themselves to be allies to the LGBTQ community. A relationship was found between respondents who consider themselves to be allies to the LGBTQ community and respondents level of coverage of “Ways to address being bullied, teased, or harassed because someone thought you or a friend were gay, lesbian, or bisexual”, $x^2 (2, N=58)=12.2, p=0.002$. 
CHAPTER FIVE: MANUSCRIPT

ABSTRACT

BACKGROUND
LGBTQ youth face many unique health challenges. Rates of depression and suicide are exponentially higher for LGBTQ youth than for their heterosexual, cisgender peers. Rates of HIV and STI infection are rising among this demographic. Comprehensive sexuality education has demonstrated the potential to address some of these health challenges. Specifically, it has been shown to delay the onset of sexual intercourse, and to reduce pregnancy and transmission rates of HIV and STIs among youth. Several studies have looked at LGBTQ-inclusive sexuality education from the perspective of LGBTQ students, but few have looked at this issue from the perspective of teachers responsible for teaching sexuality education.

METHODS
An electronic questionnaire was sent by email to 168 high school Health Enhancement teachers in Montana. Survey data included what sexuality education content they cover, how important they believe each topic to be, how comfortable they feel teaching it, and what barriers they face in teaching LGBTQ-inclusive sexuality education.

RESULTS
Participants reported not having training in teaching LGBTQ sexuality education and not having experience with LGBTQ content as the top barriers to teaching inclusive sexuality education. Participants reported covering topics related to LGBTQ identities less frequently than standard sexuality topics such as anatomy and STI prevention.

CONCLUSIONS
Training teachers in how to teach sexuality education that is inclusive of LGBTQ students is necessary in order to increase the coverage of these topics and teachers’ comfort and effectiveness with this important content. The state department of education and school districts should develop a standard sexuality education curriculum and provide training in how to implement it in sexuality education classes.
Sexuality education is one way to prevent unhealthy sexual behaviors among young people. Comprehensive sexuality education has been shown to delay the onset of sexual intercourse, and to reduce pregnancy and transmission rates of HIV and sexually transmitted infection (STI) among youth (Chin, Sipe, Elder, Mercer, Chattopadhyay, Jacob, & Griffith, 2012; Kirby, 2007, 2008; Waxman, 2004). However, lesbian, gay, and bisexual youth are less likely to receive sexuality education that is comprehensive and relevant to their experiences than their heterosexual counterparts (Kann, 2016). This results in higher rates of HIV and STI infection, as well as pregnancy and mental health challenges such as depression and suicidality. Young men who have sex with men (MSM) are especially at risk of HIV infection (CDC, 2016). Several studies have looked at LGBTQ-inclusive sex education from the perspective of LGBTQ students (Pound, Langford, & Campbell, 2016), but few have looked at this issue from the perspective of teachers responsible for teaching sex education.

In most parts of the United States, the sexuality education needs of high school students are met through health education classes. In many cases, these classes are taught by individuals whose educational background includes teaching certifications in both physical education and health education. This is particularly true in Montana, where in the late 1980s as a part of a school reform effort conducted by the Board of Public Education, the traditional disciplines of ‘health’ and ‘physical education’ were combined into a single program and named Health Enhancement. The intent was to focus on the health needs of the students and reinforce concepts learned in the classroom in the gymnasium and vice versa (Office of Public Instruction, 2016). At the time, this merging of the two disciplines was viewed as a means for small rural schools to save money by hiring one teacher to teach both health education and physical education. Unfortunately, nearly 10 years after the creation of “health enhancement,” researchers found that health education was overshadowed by physical education, and teachers felt ill prepared to teach all of the content areas that are a part of a comprehensive health education curriculum. In fact, when asked to rank their level of preparation to teach a variety of health education content areas on scale of 1 to 5 with 1 being “not prepared” and 5 being “well-prepared,” teachers ranked their preparation in sex education as a 1.8 (Sondag & Burns, 1998).

Furthermore, in Montana, the standards for curriculum in health education classes provide little direction in regard to the content teachers should cover in sexuality education in public high schools. The state standards include the following statement: at the end of grade 12 students are expected to “develop
personal health-enhancing strategies that encompass substance abuse, nutrition, exercise, sexual activities, injury/disease prevention, including HIV/AIDS prevention, and stress management” (OPI, 2016). And, while the Montana Health Enhancement Standards Model Curriculum Guide delineates some content related to sex education (OPI, 2016), Montana’s Office of Public Instruction (OPI) makes it clear that the specific content of the human sexuality component of a Health Enhancement program is up to the discretion of the local school board in each school district. OPI dictates only that the contents of sex education curriculum reflect the “values of the community” (OPI, 2016a). There is no mandate that sex education be comprehensive or inclusive of LGBTQ identities.

The lack of state mandated curricular guidelines in regard to sex education is not exclusive to Montana. Currently, only 27 states and the District of Columbia mandate that, when provided, sex and HIV education programs meet certain general requirements such as being medically accurate and age appropriate (Guttmacher Institute, 2017). A nationwide decline in school-based sex education in recent years is illustrated by a study conducted by the Guttmacher Institute. This study revealed that fewer teens are being exposed to important and timely information about a range of sex education topics than they were in 2006 (Lindberg, 2016). Researchers found that young people from rural areas, in particular, experienced declines in many areas of sex education. This is troubling because compared with their urban peers, rural teens are more vulnerable to negative sexual health outcomes: they use contraceptives at first sex at lower rates than urban teens, and rural communities offer less access to sexual and reproductive health care services than urban communities (Ng, A. & Kaye, K., 2015). Not only are rural youth more likely to experience declines in sex education, but both rural and urban lesbian, gay and bisexual youth are less likely to receive sexuality education that is comprehensive and relevant to their experiences than their heterosexual counterparts (Kann, 2016). This results in higher rates of HIV and STI infection, as well as pregnancy and mental health challenges such as depression and suicidality. Young men who have sex with men (MSM) are especially at risk of HIV infection (CDC, 2016).

The Future of Sex Education Initiative (FoSE) was an attempt to counter the decline in sex education through the development of a set of National Standards for Sex Education. Several states including Colorado, Georgia, Iowa, Washington, and Connecticut, have recommended these new National Standards, but the State of Montana has yet to do so (FoSE, 2014). It is noteworthy that these standards
not only outline the main components of comprehensive and inclusive sexuality education, but also include content specifically relevant to sexual and gender minority students (FoSE, 2012).

Several studies have examined teacher comfort with LGBTQ topics as it relates to the content and quality of sexuality education in the United States. A study of 336 teachers in elementary and middle schools in New Brunswick looked at teachers’ attitudes towards sex education in general, the importance they assign to sexual health topics, their knowledge about and comfort in teaching these topics, and the grade at which they think these topics should be introduced. Most teachers believed that sexuality education should be introduced in elementary school. Teachers believed that a broad range of topics were important to cover in their sexuality education classes, yet they felt only somewhat knowledgeable and comfortable covering most topics (Cohen, Byers, Sears, & Weaver, 2004). Another study of 368 middle and high school sexuality education teachers in Minnesota found that structural barriers such as lack of time, financial resources, and curriculum, as well as restrictive school or district policies were inversely associated with teaching sexuality education topics. Researchers looked at the differences in which topics teachers actually cover compared with topics they believed should be covered in sexuality education classes. The largest differences were seen in the topic of sexual orientation, with two thirds of teachers reporting that it should be taught but only one third of teachers actually covering that topic (Eisenberg, Madsen, Oliphant, & Sieving, 2013). Teacher training and professional development appear to be critical components in determining the probability of a teacher covering topics associated with sex education. A study, utilizing a nationwide sample of high school health-education teachers, examined their attitudes, perceptions and instructional practices regarding teaching about HIV prevention. The most significant finding in that study was that being trained to teach HIV prevention significantly increased the probability that it would be taught (Herr, Telljohann, Price, Dake & Stone, 2012).

The relationship between teacher training and teaching is particularly relevant for health enhancement teachers tasked with teaching sex education in Montana. Only 12.2% of Montana high school health teachers report receiving professional development in teaching students of different sexual orientations or gender identities, while 59.7% of teachers report that they would like to receive professional development in this area (OPI, 2016). The purpose of this study was to explore, from the perspective of Montana Health Enhancement teachers, the LGBTQ-relevant sex education topics they include in their curricula, as well as their perceptions of the importance and of those topics and their comfort level in teaching them.
Additionally, this study sought to determine the challenges and barriers to teaching comprehensive and LGBTQ-inclusive sexuality education in Montana public high schools.

METHODS

Participants

The target population for this study consisted of Health Enhancement teachers who teach in Montana public high schools. Health Enhancement teachers in Montana typically teach both physical education and health education. Currently there are 171 public high schools in Montana with just over 212 teachers identified as Health Enhancement teachers (Montana Office of Public Instruction, 2017).

Instrumentation

Primary data for this study were collected from teachers via an electronic questionnaire (see Appendix A). The framework for the questionnaire was developed using content from the National Sexuality Education Standards. These comprehensive standards provide an appropriate structure for this study because they outline the characteristics of effective and inclusive sex education and include questions about sexual and gender identity (FoSE, 2012). Interviews with key informants (n=7) focus group members (n=7) were used in the development of the questionnaire. University faculty with experience teaching sex education also reviewed a draft of the questionnaire. They provided feedback on the readability, content, and structure of the survey. Minor revisions were made based on feedback. The questionnaire was then pilot tested with a small group of teachers (n=6). Four sections comprised the final questionnaire:

- Section one included a series of demographic questions asking respondents to provide information such as sexual and gender identity, race, size of high school, and region where the school is located.
- Section two included a list of nine content areas selected from the National Sexuality Education Standards. Content areas were included based upon their relevance to sexual and gender
minority students. For each of the nine content areas respondents were asked to rate the extent to which they cover the topic in their sex education classes, how important they think the topic is to cover, and how comfortable they feel teaching it.

- Section three included questions asking respondents what they teach about HIV/AIDS, how many hours they spend teaching sexuality education, what outside resources they use, and where they believe LGBTQ students should access sexuality information.

- The fourth and final section asked respondents to identify the challenges and barriers to teaching LGBTQ-inclusive sex education and to provide suggestions for ways to improve sex education in their high schools.

**Procedure**

This study utilized a cross-sectional design. Cross-sectional studies typically use a one-time data collection effort and a self-report format. These types of studies can be used to assess the burden of disease or health needs of a population - in this case, a cross-sectional study design was used to assess the scope and practice of high school based sex education in Montana. (Barratt, 2009).

Teachers for this study were recruited using three methods. First, the president of the Montana School Health and Physical Education Association (SHAPE) sent emails containing a link to the online questionnaire to all teachers who are members of the state organization. Second, a link to the questionnaire and an invitation to complete it was posted on various social media platforms frequently visited by Health Enhancement and other teachers, including Facebook and Twitter. Third, researchers searched the websites of Montana high schools and gathered as many health enhancement e-mail addresses as were available. Ultimately, 168 e-mail addresses were gathered.

Teachers who clicked on a link to the questionnaire were directed to Qualtrics, a secure online survey platform. The first page of the questionnaire contained information about the study, including the purpose, structure of the questionnaire and estimated time required to complete it. Teachers were asked to read an informed consent and indicate their willingness to participate in the study by clicking “I Agree” at
the end of the informed consent. Clicking this button directed teachers to the beginning of the questionnaire. A $10.00 gift certificate to Amazon was offered to individuals who agreed to participate. The questionnaire took between 10 and 15 minutes to complete.

Once the questionnaire was completed, the responses were recorded directly into the Qualtrics database. Teachers’ identities remained anonymous. Teachers were not required to answer all questions, and could exit the questionnaire at any time.

Data Analysis

Data from the Qualtrics platform were downloaded into the SPSS statistical package. Basic descriptive statistics were used to determine the frequency with which various topics relevant to LGBTQ students are included in sex education, how important respondents think it is to cover these topics, and how comfortable they feel teaching each topic. Barriers to teaching inclusive sex education, coverage of topics related to HIV/AIDS, and ideas for improving sex education were reported using frequency and percent. Measures of association such as chi-square were used to examine the relationship between barriers to teaching sex education and perceived levels of the importance, degree of coverage, and level of comfort in teaching LGBTQ specific topics.

RESULTS

A total of 168 e-mails containing a link to the survey were sent to health and physical education teachers in Montana. Six were returned as undeliverable. Sixty-five teachers responded to the survey for a return rate of 39 percent. Similar to the state census (2015), the overwhelming majority of respondents (88%) identified as White, while the state’s largest minority group, American Indian/Alaskan Native, were slightly under-represented at 3%. The rural, sparsely populated nature of the state is evident in the fact that approximately two-thirds of respondents reported teaching in a community with fewer than 10,000 inhabitants.
The majority of respondents teach grades 9-12 (54%), with a small number teaching only grade 9 (11%). One-third reported teaching elementary or middle school in addition to grades 9-12. The majority of respondents received degrees from colleges or universities in Montana (86.4%). Over 70% of respondents received a degree in Health Enhancement, the field of study in Montana for individuals who want to qualify for an endorsement to teach both health and physical education. The greatest number of respondents (41%) had been teaching for five years or less. Slightly more males than females responded to the study. None of the respondents identified as transgender and only one participant (1.6%) identified as lesbian, with the rest identifying as heterosexual/straight. See Table 1 below for a description of the sample population.

### Table 1. Description of the Sample Population

<table>
<thead>
<tr>
<th>Gender</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>47.5%</td>
<td>(29)</td>
</tr>
<tr>
<td>Male</td>
<td>52.5%</td>
<td>(32)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Group</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>21.3%</td>
<td>(13)</td>
</tr>
<tr>
<td>30-39</td>
<td>24.6%</td>
<td>(15)</td>
</tr>
<tr>
<td>40-49</td>
<td>23.0%</td>
<td>(14)</td>
</tr>
<tr>
<td>50-59</td>
<td>27.9%</td>
<td>(17)</td>
</tr>
<tr>
<td>60+</td>
<td>3.3%</td>
<td>(2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Students</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 300</td>
<td>55.8%</td>
<td>(34)</td>
</tr>
<tr>
<td>300-1000</td>
<td>18.0%</td>
<td>(11)</td>
</tr>
<tr>
<td>Over 1000</td>
<td>26.2%</td>
<td>(16)</td>
</tr>
</tbody>
</table>
### Years Taught

<table>
<thead>
<tr>
<th>Years Taught</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5</td>
<td>40.7%</td>
<td>(24)</td>
</tr>
<tr>
<td>6-10</td>
<td>13.6%</td>
<td>(8)</td>
</tr>
<tr>
<td>11-15</td>
<td>13.6%</td>
<td>(8)</td>
</tr>
<tr>
<td>16-20</td>
<td>13.6%</td>
<td>(8)</td>
</tr>
<tr>
<td>20+</td>
<td>18.6%</td>
<td>(11)</td>
</tr>
</tbody>
</table>

**Teachers’ Perception of the Extent to which They Cover Selected Sex Education Topics, Importance of the Topic and Comfort Level in Teaching the Topic**

Of the nine sex education content areas presented to teachers, the content most frequently reported as fully covered by teachers represented topics that are included in most standard sexuality education courses, including sexual consent, ways to access information about HIV/AIDS and STI prevention, and skills to communicate with a partner about HIV and STI risk and testing. The content least frequently reported as fully covered by teachers consisted of topics specifically related to sexual orientation and gender identity. Figure 1 below shows the frequency with which each topic was reported as fully covered.
Figure 1.
Teachers were asked to rate the importance of the nine selected topics. Topics related specifically to LGBTQ issues were less frequently rated as very important when compared to topics found in most standard sex education courses. Figure 2 below shows the frequency with which each topic was rated as very important.

Figure 2.
Teachers were asked to rate how comfortable they felt teaching the nine selected topics. As was the case when rating coverage and importance, comfort level teaching topics related to LGBTQ issues were less frequently rated as very comfortable. Figure 3 below shows the frequency with which each topic was rated “very comfortable.”

Figure 3.

Teachers were asked four questions related to education about HIV. They were asked if they teach about whether or not there is a cure for HIV/AIDS, whether there are drugs available to treat and/or prevent HIV, the body fluids in which the virus is found, and the types of activities that can lead to infection. The majority of teachers reported covering each of these topics in their sex education classes. The lowest number of teachers (72.4%) reported teaching whether or not there are drugs available that can prevent HIV transmission.
Most teachers believed the sex education taught in their schools to be somewhat or very relevant to heterosexual and cisgender students (83.1%). Slightly less than two-thirds of teachers believed the sex education taught in their schools to be somewhat or very relevant to LGBTQ students (64.6%). Only one teacher reported receiving requests to teach LGBTQ content in their school.

Approximately 70% of teachers reported teaching fewer than 10 hours of sex education per unit or semester. The three topics teachers reported spending the most time teaching were anatomy and physical development, HIV/STIs, and relationships. Other topics reported include abstinence, contraception, consent and orientation.

Slightly more than one-third of teachers reported using a standard curriculum to teach sex education (36.4%). More than half of teachers reported using no standard curriculum (63.6%). The outside resources most frequently used by teachers were videos, including the Miracle of Life video, guest speakers, health care providers, and county health departments. Other outside resources reported include Planned Parenthood, organizations that teach about how to have healthy relationships, internet/online resources, books, and local wellness nonprofits. Over 80% of teachers said they would be interested in using a sexuality educator trained and certified by the public health department. The most common barriers to teaching LGBTQ-inclusive sexuality education were no training in how to teach LGBTQ sexuality education (60.8%), lack of experience with LGBTQ content (47%), lack of resources or materials (35%) and community or parental disapproval (35%). No training in how to teach general sexuality education and LGBTQ sexuality education were ranked highest in terms of barriers by the most teachers (86%). Table 2 below shows the percentage of respondents rating each barrier among the top three challenges they experience.
Table 2. Barriers to Teaching LGBTQ-Inclusive Sexuality Education

<table>
<thead>
<tr>
<th>% (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training in how to teach LGBTQ sex ed</td>
</tr>
<tr>
<td>Lack of experience with LGBTQ content</td>
</tr>
<tr>
<td>Lack of resources or materials</td>
</tr>
<tr>
<td>Community/parental disapproval</td>
</tr>
<tr>
<td>Lack of school district policies</td>
</tr>
<tr>
<td>No training in how to teach sex ed</td>
</tr>
<tr>
<td>Not enough time to add content</td>
</tr>
<tr>
<td>Concerns about bullying</td>
</tr>
<tr>
<td>Lack of administrative support</td>
</tr>
<tr>
<td>Personal beliefs</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Respondents were asked to write in what they believe would be most helpful for them in teaching sexuality education that is inclusive of LGBTQ students. The top three themes from these responses were more training in how to teach this content, more information on LGBTQ issues, and better resources and materials such as textbooks and videos. Other responses included community and school board support, a state-mandated curriculum, and funding to bring in trained educators.

Finally, respondents were given the opportunity to provide advice to their school districts and principals for improving the quality of sexuality education. The most common advice given was that districts should prioritize facts and provide accurate information to students, recognize differences in students including differences in sexual and gender identity, and support teachers with more training and a standard curriculum.

Measures of association such as chi-square were used to examine the relationship between barriers to teaching sex education and perceived levels of the importance, degree of coverage, and level of comfort.
in teaching LGBTQ specific topics. A relationship was found between respondents who consider themselves to be allies to the LGBTQ community and respondents level of coverage of “Ways to address being bullies, teased, or harassed because someone thought you or a friend were gay, lesbian, or bisexual”, \( x^2 (2, N=58)=12.2, p=0.002 \).

**DISCUSSION**

Findings from this study indicate that high school sexuality education teachers in Montana cover topics related to sexual orientation and gender identity less thoroughly than “standard” sexuality topics such as anatomy and physical development, HIV/STI prevention, and relationship skills. Teachers also view these more controversial topics as less important to include in sexuality education, and report feeling less comfortable teaching topics that are relevant to their LGBTQ-identified students. These findings corroborate previous research looking at barriers to teaching specific topics in sexuality education, which found that sexual orientation was one of the least covered topics in high school sexuality education (Eisenberg et al, 2012).

In contrast to previous research findings, this study identified lack of training in teaching LGBTQ topics in sexuality education, and lack of training in teaching sexuality education in general, to be the greatest barriers to teaching inclusive sexuality education. While previous studies have identified lack of time as the greatest barrier, teachers in this study ranked lack of time relatively low compared with other barriers (Eisenberg et al, 2012).

Overall, teachers believed every content area to be somewhat or very important to teach. While the topics related to sexual orientation and gender identity were rated lower in terms of importance when compared to other sexuality education topics, only a small percentage of teachers believed them to be not important to cover at all. Although teachers reported covering LGBTQ content partially or fully, they felt that the sexuality education taught in their high schools was more relevant for their heterosexual and cisgender students than their LGBTQ-identified students. Since lack of time to include these topics and lack of administrative support are not major barriers to teaching topics inclusive of LGBTQ identities, a focus on teacher training and education will be the most effective method for improving sexuality education for LGBTQ students.
Only one participant identified as LGBTQ, making up 1.5% of the sample population. According to a 2016 Gallup Poll, the percentage of adults in the United States who identify as LGBTQ is 4.1%. Recent surveys of high school students estimate that approximately 10% of students identify as LGBTQ (Almeida, Johnson, Corliss, Molnar, & Azrael, 2009; Kann, 2016). Seeing and interacting with successful LGBTQ adults is a powerful way that sexual and gender minority youth can receive support, validation and information. The number and presence of out LGBTQ personnel may also provide a visible indication of a more accepting and safe school environment. LGBTQ-identified teachers are also more likely to teach inclusive curricula in their classes. Teachers’ personal values, beliefs and experiences can have a strong impact on the content they choose to include in their classrooms. Other research indicates that LGBTQ teachers are more likely to include LGBTQ content in the curriculum than straight teachers, and are more likely to participate in LGBTQ-inclusive efforts in their schools (Meyer, Taylor & Peter, 2014). The lack of LGBTQ-identified teachers in this study may help to explain the lower coverage of sexual orientation and gender identity in sexuality education in Montana. It may also contribute to a school environment that is less accepting of LGBTQ-identified students. Indeed, the fact that LGBTQ students report feeling least comfortable discussing topics related to sexuality with physical education teachers and athletic coaches when approximately 70% of health teachers in Montana also teach physical education is troubling, and could be an important aspect of the current state of sexuality education in Montana to address to better serve both teachers and students.

Limitations

Several limitations of this study should be kept in mind when interpreting the results. First, the response rate of 39% was a major limitation. A logical assumption is that health enhancement teachers who were more generally interested in teaching sex education and more open to exploring sexual health issues related to LGBTQ students were more likely to respond to the survey. This self-selection bias most likely resulted in study findings that are skewed toward teachers who report more coverage of topics that are LGBTQ specific, who report being more comfortable teaching those topics and who believe those topics to be more important than their non-respondents counterparts. In other words, non-respondents may hold different views or have different experiences than respondents. Unfortunately, while this study provides a glimpse into the content and process of sex education in Montana, the small sample size of 65
respondents is too small to generalize to the greater population. Second, data collected were limited to the experiences and memories of the participants. This could have potentially led to some inaccurate results, if the participants did not fully remember or accurately represent what they cover in their high school sex education classes. Social desirability bias may have prompted some teachers to over-report the degree to which they teach LGBTQ specific topics. And, finally, data collected was limited to Health Enhancement teachers in standard Montana public high schools whose current contact information researchers were able to obtain. This could potentially have led to rural school districts without websites or teachers without a presence on school websites having less representation in the survey data. Some special education or alternative high school teachers may have been left out of the sample.

Conclusions

Providing pre-professional training in how to teach sexuality education that is inclusive of LGBTQ identities is necessary for ensuring that LGBTQ students receive sexual health information that is relevant and appropriate. Health Enhancement teachers want a state-mandated sexuality education curriculum and adequate training in how to teach this curriculum, or the option of utilizing a sexuality educator trained and certified by the public health department. Students of all sexual orientations and gender identities have the right to accurate and inclusive sexual health information and most teachers believe these topics to be important to include in sexuality education classes.

IMPLICATIONS FOR SCHOOL HEALTH

The key finding in this study is that the major barriers to teaching sexuality education that is inclusive of LGBTQ-identified high school students centers around the lack of teacher training in how to cover content related to sexual orientation and gender identity and lack of experience with LGBTQ content. Participants in the study identified several approaches to this problem that have the potential for improving the quality and scope of sexuality education. These approaches include developing and implementing a state-wide mandated sexuality education curriculum that includes content related to sexual orientation and gender identity, and providing Health Enhancement teachers with the training and resources to teach this curriculum. Providing access to a sexuality educator trained and certified by the
state public health department to teach the sexuality unit in high school health classes would allow teachers not personally comfortable teaching sexuality content to provide their students with important knowledge and skills. Incorporating teacher training in LGBTQ content into Health Enhancement teacher education will address the barriers of lack of training in how to teach LGBTQ sexuality education and lack of experience with LGBTQ content for future Health Enhancement teachers. Current teachers should be provided with continuing education opportunities on these topics. Perhaps the most important step in making sexuality education relevant for and inclusive of LGBTQ and questioning high school students involves training teachers in recognizing and reframing heteronormativity and cisnormativity in sexuality content. Teachers should receive training in using gender-neutral language around anatomy and physical development, relationship structures, and sexual health risk behaviors in addition to training in how to teach LGBTQ-specific sexuality education. Creating a school environment that affirms the identities of all students and the rights of all students to accurate and relevant sexuality information will reduce the mental and physical health disparities currently faced by LGBTQ youth and young adults.

Human Subjects Approval Statement

This study was conducted with approval from the University of Montana Institutional Review Board (IRB).
REFERENCES


APPENDIX A: QUESTIONNAIRE

Q1 The purpose of this survey is to examine, from the perspective of Health Enhancement teachers, the strengths and challenges associated with sex education in Montana public high schools. If you are a Health Enhancement teacher, or any other school employee who teaches sex education, we welcome your participation in this survey. This online survey will ask you what you cover in your sex education classes and your perceptions of comfort and preparedness in covering topics related to LGBTQI youth. The survey should take about 10 minutes to complete. Participation is entirely voluntary, and responses are anonymous. You have the option to not respond to any questions that you choose or to quit the survey at any time. Submission of the survey will be interpreted as your informed consent to participate and that you affirm you are at least 18 years of age. If you have any questions about the research, please contact the Principle Investigator, Dr. Annie Sondag, phone (406) 243-5215 or via email at annie.sondag@umontana.edu. If you have any questions regarding your rights as a research subject, contact the UM Institutional Review Board (IRB) at (406) 243-6672. Please print or save a copy of this page for your records.

* I have read the above information and agree to participate in this research project.

☐ Yes

☐ No

If No Is Selected, Then Skip To End of Survey
Q2 Before you begin, we would like to provide definitions of terms frequently used in the survey:
LGBTQI: Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex-includes all sexual and gender minority identities
Cisgender: A person whose gender identity matches the sex they were assigned at birth
Transgender: A person whose gender identity does not match the sex they were assigned at birth
Heterosexual: A person who is sexually attracted to persons of the other binary gender

Q3 What is your age?
○ 20-29
○ 30-39
○ 40-49
○ 50-59
○ 60-69
○ >69

Q4 Following is a series of topics that could potentially be covered in sex education classes. Please indicate the degree to which you cover each topic in your high school sex education class, how important it is to cover each topic, and your level of comfort in teaching each topic.
Q5 The differences between biological sex, sexual orientation, sexual behavior, and gender identity and expression

- Not at all covered
- Partially covered
- Fully covered

Q6 How important is it to cover this topic?

- Not important
- Somewhat important
- Very important

Q7 How comfortable are you teaching this topic?

- Not comfortable
- Somewhat comfortable
- Very comfortable

Q8 How friends, family, media, society and culture influence the expression of gender, sexual orientation and identity

- Not at all covered
- Partially covered
- Fully covered
Q9 How important is it to cover this topic?

○ Not important
○ Somewhat important
○ Very important

Q10 How comfortable are you teaching this topic?

○ Not comfortable
○ Somewhat comfortable
○ Very comfortable

Q11 How to advocate for school policies and programs that promote safe environments, dignity and respect for all students

○ Not at all covered
○ Partially covered
○ Fully covered

Q12 How important is it to cover this topic?

○ Not important
○ Somewhat important
○ Very important
Q13 How comfortable are you teaching this topic?
- Not comfortable
- Somewhat comfortable
- Very comfortable

Q14 How to access medically-accurate prevention information about STDs, including HIV
- Not at all covered
- Partially covered
- Fully covered

Q15 How important is it to cover this topic?
- Not important
- Somewhat important
- Very important

Q16 How comfortable are you teaching this topic?
- Not comfortable
- Somewhat comfortable
- Very comfortable
Q17 Skills to communicate with a partner about STD and HIV prevention and testing
- Not at all covered
- Partially covered
- Fully covered

Q18 How important is it to cover this topic?
- Not important
- Somewhat important
- Very important

Q19 How comfortable are you teaching this topic?
- Not comfortable
- Somewhat comfortable
- Very comfortable

Q20 Ways to address being bullied, teased, harassed because someone thought you or a friend were gay, lesbian, or bisexual
- Not at all covered
- Partially covered
- Fully covered
Q21 How important is it to cover this topic?
- Not important
- Somewhat important
- Very important

Q22 How comfortable are you teaching this topic?
- Not comfortable
- Somewhat comfortable
- Very comfortable

Q23 Sexual consent and its implications for decision making about sex
- Not at all covered
- Partially covered
- Fully covered

Q24 How important is it to cover this topic?
- Not important
- Somewhat important
- Very important
Q25 How comfortable are you teaching this topic?

- Not comfortable
- Somewhat comfortable
- Very comfortable

Q26 Types of situations and behaviors that may be considered sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence

- Not at all covered
- Partially covered
- Fully covered

Q27 How important is it to cover this topic?

- Not important
- Somewhat important
- Very important

Q28 How comfortable are you teaching this topic?

- Not comfortable
- Somewhat comfortable
- Very comfortable


Q29 You are over halfway done with this survey! We appreciate your participation!

Q30 The potential impacts of power differences (e.g., age, status or position) within sexual relationships

- Not at all covered
- Partially covered
- Fully covered

Q31 How important is it to cover this topic?

- Not important
- Somewhat important
- Very important

Q32 How comfortable are you teaching this topic?

- Not comfortable
- Somewhat comfortable
- Very comfortable

Q33 How useful do you think the sex education taught in your high school is for your heterosexual and cisgender (identity matches gender assigned at birth) students?

- Very useful
- Somewhat useful
- Somewhat useless
- Very useless
Q34 How useful do you think the sex education taught in your high school is to your LGBTQI students?

☐ Very useful

☐ Somewhat useful

☐ Somewhat useless

☐ Very useless

Q35 What is your sexual identity? (Some examples of sexual identity include straight, lesbian, two-spirit, gay, bi-sexual, questioning, etc.)

Q36 If you are unsure, check this box.

☐ Unsure

Q37 What is your gender identity? (Some examples of gender identity include cisgender (identity matches the sex I was assigned at birth), transgender, gender fluid, gender queer, two-spirit, etc.)

Q38 If you are unsure, check this box.

☐ Unsure

Q39 With what race do you identify? Check all that apply.

☐ Caucasian (non Hispanic)

☐ Native American/American Indian/Alaskan Native

☐ Hispanic/Latino
☐ African American
☐ Asian/Pacific Islander
☐ Multiracial
☐ Other (Please describe) ____________________

Q40 About how many students attend your high school?
☐ Less than 100
☐ 100 to 300
☐ 300 to 500
☐ 500 to 1000
☐ Over 1000
☐ Do not know

Q41 In what region is your school located?
☐ 1-Eastern (green)
☐ 2-North Central (white)
☐ 3-South Central (light blue)
☐ 4-Southwest (purple)
☐ 5- Northwest (dark blue)
Q42 Do you teach other subjects?

- Yes (what other subject?) ____________________
- No
- Unsure

Q43 What do you believe is the best way for LGBTQI youth to access sexuality information?

- Internet/Websites
- Health classes
- Parents
- Friends
- LGBTQI Community
- Social Media
- Spiritual/Religious Leader
- Other ways to obtain information about sex: ____________________

Q44 What do you think is most helpful for LGBTQI youth, in regard to their sexual health as a high school student? (check all that apply)

- Nothing was helpful
- One of their teachers
- School counselors
- A friend
- Parents/guardians
Online support system (social media)

A school-based student group like Gay Straight Alliances, Gay Student Associations, or Diversity Clubs

Finding Information on the Internet

Please describe other things or people that were helpful ____________________

Q45 What do you teach about HIV/AIDS? Check all that apply.

Whether or not there is a cure for HIV/AIDS

Whether there are drugs available that can prevent HIV

Whether there are drugs available that treat HIV

In which body fluids the virus that causes HIV are found

The types of activities that can lead to HIV transmission

Other ____________________

Q46 What are the biggest challenges to teaching sex education that is comprehensive and inclusive of LGBTQI students? Check all that apply.

No training or inadequate training in how to teach sex education

No training or inadequate training in how to teach LGBTQI inclusive sex education

Lack of resources or materials to teach sex education (i.e. birth control kits, videos, current health textbook, etc.)

Lack of school district policies regarding sex education curricula

Community and/or parental disapproval of curricula that is inclusive of LGBTQI students

Personal beliefs
☐ Lack of experience with LGBTQI content or issues

☐ Lack of administrative support

☐ Not enough time to add content

☐ Concerns about bullying/other negative reactions from students

☐ Other challenges ____________________

Q47 If you were to give advice to your principal or school board regarding sex education in high school, what would that advice be?
APPENDIX B: FOCUS GROUP QUESTIONS

1. Could you review the Informed Consent and the definitions and give us feedback about them?
   a. Are there terminology or structural problems with those sections?
   b. After reading those sections would you be motivated to continue the survey?

2. Could you provide some feedback about the coverage, importance and comfort questions on the survey?
   a. Are there topic areas we should eliminate or add to the survey?
   b. How easy or difficult is it to answer those questions?

3. Can you give us feedback on each of the questions that follow?
   a. Are there questions that you would be uncomfortable answering?
   b. Are there questions that you feel you would not be able to answer?
   c. Would you be worried that you could be identified based on the questions about the size and location of the school?

4. Is the survey too long?

5. What is the best way to distribute it? Does anyone know how we can get the names of all health enhancement teachers?

6. How can we motivate teachers to take the survey? If we offered an incentive, what should that be?

7. What do you think are the biggest barriers to teaching sex ed that is inclusive of LGBTQ students?

8. What would be most helpful for you in order to cover topics relevant to sexual and gender minority students in your classes?

9. What kinds of training or education would you like to have offered to teachers?
   a. What kinds of trainings or workshops would you participate in?
APPENDIX C: WRITE-IN RESPONSES

Do you use a standard curriculum? If yes, please describe.

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>A large majority of my curriculum comes from the FLASH (Family Life and</td>
</tr>
<tr>
<td>Sexual Health) curriculum from King County, Seattle, WA</td>
</tr>
<tr>
<td>Glencoe Health Text</td>
</tr>
<tr>
<td>HPE OPI based</td>
</tr>
<tr>
<td>I incorporate then MT Health curriculums goals and objectives.</td>
</tr>
<tr>
<td>I use the Health Enhancement Curriculum as a guide on what should be</td>
</tr>
<tr>
<td>taught.</td>
</tr>
<tr>
<td>Montana State Learning Targets</td>
</tr>
<tr>
<td>OPI</td>
</tr>
<tr>
<td>Somewhat. We have specific topics that are avoided but have included</td>
</tr>
<tr>
<td>pregnancy prevention.</td>
</tr>
<tr>
<td>use the curr designed by our district at MCPS</td>
</tr>
<tr>
<td>We follow our District Standards.</td>
</tr>
<tr>
<td>We utilize the Glencoe Health book and follow OPI guidelines during sex</td>
</tr>
<tr>
<td>education.</td>
</tr>
</tbody>
</table>

What do you think would be most helpful for you to make your classes more comprehensive and inclusive of LGBTQ-identified students?

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator and District guidance</td>
</tr>
<tr>
<td>better text and information</td>
</tr>
<tr>
<td>Community and board support</td>
</tr>
<tr>
<td>Curriculum</td>
</tr>
<tr>
<td>district approved curriculum</td>
</tr>
<tr>
<td>Focus on topics that are applicable to all</td>
</tr>
<tr>
<td>For parents in this very conservative community to understand the</td>
</tr>
<tr>
<td>importance of the issue regardless of their personal beliefs.</td>
</tr>
<tr>
<td>I dont believe this topic belongs in public education.</td>
</tr>
<tr>
<td>I have no idea.</td>
</tr>
<tr>
<td>I would like more info on issues related to high school LGBTQ students</td>
</tr>
<tr>
<td>and what they want to know/discuss about sex.</td>
</tr>
<tr>
<td>If it was written in as a major component of the State Curriculum</td>
</tr>
<tr>
<td>Standards.</td>
</tr>
<tr>
<td>If the topic was outsourced and funded by the state so each school</td>
</tr>
<tr>
<td>district was teaching the same thing.</td>
</tr>
<tr>
<td>Information</td>
</tr>
<tr>
<td>Information materials/ workshop</td>
</tr>
<tr>
<td>Information, training, and material</td>
</tr>
<tr>
<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>More Information</strong></td>
</tr>
<tr>
<td>More information on what topics to include. There is a lot of information to put into the LGBTQ category, but not enough time.</td>
</tr>
<tr>
<td><strong>More knowledge on the topic</strong></td>
</tr>
<tr>
<td><strong>More resources</strong></td>
</tr>
<tr>
<td>more time</td>
</tr>
<tr>
<td><strong>More training</strong></td>
</tr>
<tr>
<td>N/A</td>
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<tr>
<td>Not sure</td>
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<td><strong>Professional Training, i.e. conferences</strong></td>
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<tr>
<td>Putting more details into the standards as that is what I am told I have to stick to.</td>
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<tr>
<td><strong>Reliable resources</strong></td>
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<td><strong>Resources</strong></td>
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<tr>
<td>school board approval</td>
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<tr>
<td>School board support, community support,</td>
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<tr>
<td>school district dictate</td>
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<tr>
<td><strong>SCHOOL WIDE SUPPORT-BOARD, ADMINISTRATION, COMMUNITY</strong></td>
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<tr>
<td><strong>Skilled Educators</strong></td>
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<td><strong>Speakers</strong></td>
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<td>The issue is still new the next step is parent education. So often people thing these situations do not occur Montana but they are everywhere</td>
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<td><strong>training</strong></td>
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<td><strong>Training</strong></td>
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<td><strong>Training and consistency within our district</strong></td>
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<td>Training and help in providing curriculum and how to do it correctly with understanding and compassion not to make it more difficult.</td>
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<tr>
<td><strong>Training on how to teach LGBTQ inclusive sex education</strong></td>
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<td><strong>Training or speakers</strong></td>
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<tr>
<td><strong>Training related to this population</strong></td>
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<tr>
<td>training- what to teach, how to teach it, do's and don't's.</td>
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If you were to give advice to your principal or school board regarding sex education in high school, what would that advice be?

- That sexual identity is different for each student. And informing students about all the info of STDs is extremely important.
- Abstinence it the best policy but there needs to be coverage of protection.
- Be confident and comfortable about teaching sex, it sets the tone for this mature topic.
- Be transparent to parents regarding curriculum before presenting to their kids.
- Continue to bring in outside sources (planned parenthood) along with more opportunities to learn through trainings and conferences.
- DEVELOP A CURRICULA FOR 6-12,
- Get a speaker to come do sex education for the younger kids.
- Get educated
- Have a better curriculum.
- I would provide some studies which demonstrate that the more students are given the opportunity to learn about sex and reflect about how sex impacts physical, mental and social health, the more likely they are to postpone sex until they are older and also practice safe sex.
- Information must be informative and based in fact. We are in the business of providing information to students to allow them to make choices based on facts, not opinions. The curriculum needs to be the driving force in the classroom.
- It is a controversial topic
- It is a very important subject that more teachers need training on.
- It is one of the most pertinent health issues facing students and their choices now will effect them the rest of their lives. Sexual history is one thing that will follow a person around the rest of their lives. They will be judged by those choices everytime they are in a relationship. The more accurate information we can give children the more opportunities to make excellent choices.
- It would be nice to have a guest speaker who is knowledgeable come and discuss with students.
- Knowledge is Power. They can either learn it from Professionals, or from their friends.
- More time needs to be given to teach these topics. Safe sex practices (not abstinence - we know our students aren't abstenent and me telling them to be won't change that) and understanding the rise of the LGBT community are areas where the school needs to place more focus. These two topics impact a lot of our student population and we need to take that into consideration.
- More training for educators
- More training, support of outside guest speakers, and them (school board/ admin ) being more informed.
- Need to be provided with direction regarding curriculum
- None--both are very supportive
- Not really sure, at this time they are supportive in anything I do.
- not sure.
Please don't buy into the indoctrination of a K-12 health curriculum, do the research, know the facts, include the parents and community in the information process. Parents need to be the main educational leaders for their kids with these serious issues.

Please know exactly what is being taught or presented in sex ed classes so they don't leave the educator to deal with outside resistance alone.

Principal and school board is very supportive and always available to offer support within the topic.

Provide support!

Sex ed needs to be inclusive of all and that means sex ed for the LGBTQ community. Teachers should be required/offered training in sexual education inclusive of LGBTQ students.

Start it earlier and do it every year. Kids need to hear it early and often.

Students can never be informed too much

Talk to parents

Teach the facts.

That the students need to know the hardship of being a teen parent and their are to many parents, grand-parents, and aunts, uncles rising their children.

The more information, the better. Every student is different, and we need to meet the needs of ALL of our students.

Train us with correct information, support us and allow us to teach

unsure

We do a pretty good job.

We do a very good job here. Our principal is very supportive of what we teach. We also have an opt-out clause that a parent can choose if they do not want their child to participate in the sex-ed class. State strong an encourage those to participate.

We need to be as inclusive as possible and address all populations. Although students may not be open about their sexuality, we may have students who don't identify as heterosexual & we need to be supportive of them as well. We can't have our heads buried in the sand and pretend that our students aren't participating in sex or experimenting with different sexual behaviors. Students need to know how to keep themselves safe on all levels.

We need to be proactive in helping our students make the best choices in their sexual development and decision making and current issues are not being addressed and as an Health educator I would like have support on what is appropriate in our classrooms.

We need to discuss all options so when these students graduate, they are properly functioning as Americans. Hopefully they can handle being bullied, questioning their sexuality, and becoming themselves. It is a changing world and we need to help prepare students for all aspects of life. Hopefully we can help students not be so anti-gay and more accepting of people being themselves. There are both sides of the spectrum that need to be addressed because it is the real world and outside of our small community these issues are very real. We have kids hiding who they are because they don't want to be ridiculed. How do we help them? They are who they are, accept them.