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Serving Our Students: Evidence-Based Sex Education Policies and Practices Needed in Ohio

Lily McKenzie Rosenberg
Bowling Green State University, lilyr@bgsu.edu

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LILY ROSENBERG

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_____,
Phillip Welch Department of Public & Allied Health

_____,
Margaret Zoller Booth School of Educational Foundations, Leadership, and Policy

SERVING OUR STUDENTS: EVIDENCE-BASED SEX EDUCATION POLICIES AND PRACTICES NEEDED IN OHIO

One of the most controversial subjects within the United States education system revolves around the subject of sex. According to the CDC's Resources for Adolescent Health, sex education is defined as a systematic and effective way schools can provide adolescents with the essential knowledge and critical skills needed to decrease sexual risk behaviors.[1] As prescribed by the U.S. Constitution, the role of creating and establishing education curricula is a state and local responsibility. Therefore, the federal government cannot mandate nationwide sex education, generating great inconsistency across states.[2] As of 2011, only 38 states had specific sex education laws. States have the power to mandate sex education and decide what topics schools can teach. On the local level, school boards play the largest role in determining the specifics of a curriculum, particularly approval of textbooks and dictating the sequence and comprehensiveness of the curricula.[3] For example, a state government may require schools in the state to teach STD prevention, but local school boards decide how they will do this, when, and to what extent. Because of this, sex education can vary greatly not only between states but within states as well, especially when state requirements are minimal. If state requirements are minimal, individual school boards must follow state law but can also add more to the curricula; however, oftentimes this leads to inequalities in sex education between wealthy and financially underprivileged school districts because districts must provide additional funding for sex education beyond state requirements. This makes state governments the most powerful entity in influencing sex education.[2]

Although the federal government has no power in dictating the curricula set out by state and local governments, the Centers for Disease Control and Prevention (CDC) has invested time

and money into developing recommendations for states to follow. The CDC has created a set of National Health Education Standards[4] to promote and support health-enhancing behaviors in grade levels from pre-Kindergarten through 12th grade. These standards uphold that students should learn things like decision-making skills, analyzing the influence of peers and media, using goal-setting skills, and accessing valid information to enhance health. Through these standards, the CDC asserts that students need to acquire functional health information and have opportunities to practice these protective behaviors so that they may gain confidence in their skills and increase the likelihood of transferring these skills to real-world settings.[4] The CDC also outlines twenty sexual health education topics they believe are critical to the health and wellbeing of students.[5] As seen through these sexual health topics such as teaching the efficacy of condoms, how to correctly use a condom, and where to obtain condoms, the CDC recommends a somewhat comprehensive approach to sex education because the topics listed include contraceptive methods other than abstinence.[6]

Abstinence-only education is one of two main types of school-based sex education that are employed and debated throughout the United States, the other is comprehensive sex education.[6] The main goal of abstinence-only education is to delay sexual activity until marriage.[3] Rather than presenting abstinence as an option, some laws require schools to present abstinence as the only reasonable choice for unmarried teens.[7] The federal definition of abstinence education requires that it:

1. Has as its exclusive purpose teaching the social, psychological, and health gains to be realized by abstaining from sexual activity
2. Teaches abstinence from sexual activity outside of marriage as the expected standard for all school-aged children

3. Teaches that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems
4. Teaches that a mutually faithful monogamous relationship in the context of marriage is the expected standard of sexual activity
5. Teaches that sexual activity outside the context of marriage is likely to have harmful psychological and physical effects
6. Teaches that bearing children out-of-wedlock is likely to have harmful consequences for the child, the child's parents, and society
7. Teaches young people how to reject sexual advances and how alcohol and drug use increase vulnerability to sexual advances
8. Teaches the importance of attaining self-sufficiency before engaging in sexual activity[6]

Ohio is among the 37 states that have required abstinence to be taught.[6] Some states even require that it be taught for the schools to receive federal funding.[3] There are multiple lines of evidence that confirm that abstinence-only education is ineffective. Research has shown that abstinence-only education does not lead to abstinence behavior, does not lower teen pregnancy, teen birth, and STD rates,[3] and does not delay first sex.[8] For example, a study conducted in 2011 showed that the level of abstinence education in each state was positively correlated with teen pregnancy and teen birth rates, so teens in states with stricter levels of abstinence education were more likely to become pregnant.[3] Reducing teen pregnancy is one main goal of sex education because it can threaten the health of adolescents as well as restrict their socioeconomic opportunities.[9] Proponents of abstinence-only education fear that inclusion of other safe sex practices and sexual health topics gives students mixed messages and promotes sexual activity through experimentation. On the contrary, researchers have found that

the message of abstinence is quite effective in combination with other information.[3] In keeping with this, another review by the Department of Health and Human Services of many federally funded abstinence-only programs found that the youth in these programs were not any more likely to abstain from sex than their peers.[10] Abstinence-only education is ideologically driven, and its effectiveness remains unsupported by research. Therefore, we should focus on comprehensive sex education.

Comprehensive sex education involves scientifically accurate instruction going beyond just providing information. It helps students to develop positive values about their sexual and reproductive health and rights by discussing eight important topics as laid out by the International Technical Guidance on sexuality education: relationships, values, rights, culture, and sexuality, understanding gender, violence and staying safe, skills for health and well-being, the human body and development, sexuality and sexual behavior, and sexual and reproductive health. Comprehensive sex education also requires that the information presented be medically accurate and age-appropriate.[11] Kirby's meta-analysis of 97 individual sexual education programs and Underhill et al.'s analysis of abstinence and HIV prevention programs in high-income countries have found that comprehensive sex education that includes abstinence as just one technique is most effective at reducing teen pregnancy and birth rates.[8,12] Evidence-based comprehensive sex education has also been linked to positive sexual health outcomes that include increased use of contraception, getting tested for sexually transmitted infections, healthier partnerships, delayed first sex, and a lower likelihood of unplanned pregnancy.[13]

Some advocates of abstinence-only education believe that it is still widely demanded across the United States. Evidence suggests that there is an incompatibility between the current sex education policies and the opinions of American adults and youth. A study from the *Journal of*

Adolescent Health surveyed parents of school-aged children and found that 89.3% of parents favored teaching abstinence in addition to other elements of safe sex. Researchers divided the surveyed population into categories considered most likely to object to comprehensive sex education and still found that more than 50% of parents who were Protestant, Catholic, and politically conservative supported the comprehensive option. Unfortunately, it is often the parents in the "vocal minority" that are responsible for influencing school curricula decisions and implementing abstinence-only curricula.[14] Instead of making decisions based off the vocal minority, school boards and policy makers should use this statistical evidence to inform decision making.

The purpose of this paper is to examine the state of Ohio's sex education laws and practices in public schools and the impact of that education on the students of Ohio. Ohio makes a good subject of study because indicators of sex education success across the state reveal that there are inadequacies in the educational system. In 2019 Ohio was ranked 19th in the country for teen birth rate (with 1 being the highest prevalence) and 26th in the country for teen pregnancy rate.[15] In the same year Ohio was ranked 14th and 22nd in the country, respectively, for Gonorrhea and Chlamydia.[16] These statistics become even more pertinent when considering youth. Young people ages 15 – 24 report chlamydia and gonorrhea in the United States at four times the rate of the total population.[17] These statistics show how the students of Ohio are in need of a comprehensive educational curriculum that has been proven to reduce teen pregnancy, teen births, and STDs.[8,12]

In this paper I will review the state of sex education in Ohio, both in law and in practice, in order to answer the question, what is the current state of sex education in Ohio? Then, I will examine the impacts of sex education on the students of Ohio through its impacts on LGBTQ+

students, impacts on sexual assault and harassment, and impact on students of color in Ohio to answer the question, how does sex education impact the students of Ohio? Finally, I will make recommendations after each section on how sex education, and the impacts of sex education, can be improved to answer the question what does Ohio need to do to improve sex education? Much of this paper will focus on my recommendation to implement comprehensive, age-appropriate, medically accurate, culturally sensitive, and religiously unbiased sex education curricula in Ohio schools through state law and local school board action. My recommendations follow the National Sex Education Standards (NSES) Second Edition.[18] These standards were created by a partnership between the Future of Sex Education (FoSE) Initiative, Advocates for Youth, Answer, and Sex Ed for Social Change (SEICUS) informed by social learning theory, social cognitive theory (SCT) and the social ecological model of prevention. The NSES is not a curriculum or lesson plan. It is a set of guidelines that schools can use to create curricula with learning objects that will help them meet the standards set by the NSES. The NSES is written to identify the key concepts and skills students should achieve in grades kindergarten through twelfth to be sexually healthy during their school-age years and throughout their lives. In the United States, 41.3% of districts have already implemented standards based on the NSES.[18] I will discuss how the NSES exemplifies necessary changes to the sex education system in Ohio.

All studies reviewed in this paper met specific requirements. All studies that were selected meet the following requirements: they must have had at least 50 participants or studies reviewed, been conducted after the year 1990, and be published in a peer-reviewed journal that does not have a clear political, religious, or monetary bias.

Sex Education in Ohio: The Law

To determine the state of sex education in Ohio law, I used authenticated information from the Ohio Legislative Service Commission's Ohio Revised Codes.[19,20] The codes do not mandate sex education courses[21] but outline the requirement for schools under their funding to teach the health education topics outlined below. The Ohio Revised Code that outlines these requirements are Section 3130.60 Prescribed Curriculum and Section 3313.6011 Instruction in venereal disease education emphasizing abstinence.[19,20] These outline minimum requirements, but local school boards are permitted to add curriculum in keeping with the state's requirements. These sections were updated as recently as September 30th, 2021, by the passage of House Bill 110.1 According to Section 3130.60 Prescribed curriculum,[19] schools must include health education instruction (not sexual education instruction) in the following areas that relate to sex education:

A. Venereal disease education, except that upon written request of the student's parent or guardian, a student shall be excused from taking instruction in venereal disease education;
B. In grades kindergarten through six, instruction in personal safety and assault prevention, except that upon written request of the student's parent or guardian, a student shall be excused from taking instruction in personal safety and assault prevention;
C. In grades seven through twelve, age-appropriate instruction in dating violence prevention education, which shall include instruction in recognizing dating violence warning signs and characteristics of healthy relationships.
D. Beginning with the first day of the next school year that begins at least two years after March 24, 2021, in grades six through twelve, at least one hour or one standard class

period per school year of evidence-based social inclusion instruction, except that upon written request of the student's parent or guardian, a student shall be excused from taking instruction in social inclusion.[19]

Ohio Laws and Administrative Rules Section 3313.6011 Instruction in venereal disease education emphasizing abstinence[20] requires course instruction in the following:

A. Stress that students should abstain from sexual activity until after marriage;
B. Teach the potential physical, psychological, emotional, and social side effects of participating in sexual activity outside of marriage;
C. Teach that conceiving children out of wedlock is likely to have harmful consequences for the child, the child's parents, and society;
D. Stress that sexually transmitted diseases are serious possible hazards of sexual activity;
E. Advise students of the laws pertaining to financial responsibility of parents to children born in and out of wedlock;
F. Advise students of the circumstances under which it is criminal to have sexual contact with a person under the age of sixteen pursuant to section 2907.04 of the Revised Code;
G. Emphasize adoption as an option for unintended pregnancies.[20]

The guidelines above follow closely to what is federally defined as abstinence education.[21] These are the only state-wide laws in Ohio pertaining to sex education. Because of this, the level of sexuality education for students across the districts of Ohio varies greatly because schools can choose to implement more (but not less) than the minimum requirements. Not only are the guidelines for health education extremely limited, but there is no requirement in Ohio for the information taught to students to be medically accurate, free from religious promotion, culturally sensitive, or age appropriate.[22] As of 2020, only 19 states required that sex education be age-

appropriate, only eight required that it be culturally appropriate, only 15 required that it be medically accurate,[23] and only three required that it be free from religious promotion.[22] According to the CDC's Ohio Summary Report, laws in Ohio also do not require instruction to be sequential across grade levels, include any instruction on strategies or skills needed to navigate sexual risks, sexuality, and relationships, or be delivered by trained instructors.[24] Legislation needs to be passed in Ohio that requires sex education to be age-appropriate, medically accurate, free from religious promotion, and culturally sensitive. Age-appropriateness will be further discussed in a subsequent section related to Ohio's practices of sex education. Cultural sensitivity will be discussed in a subsequent section related to impact of sex education on people of color. Here I will discuss why legislation related to requiring medical accuracy and free from religious promotion are necessary.

Recommendation #1: Sex Education Free from Religious Promotion

Making sexual education curriculums free from religious promotion is vital because the current laws in Ohio are inundated with religious messages. Some of this religious rhetoric can be seen in Ohio Laws and Administrative Rules Section 3313.6011 Instruction in venereal disease education emphasizing abstinence. Teachers are required to "stress that students should abstain from sexual activity until after marriage," and "teach that conceiving children out of wedlock is likely to have harmful consequences for the child, the child's parents, and society."[20] Not only is this information subjective but it is heavily based on religious values of marriage. If we examine the principles of abstinence-only education, which has already been proven ineffective by research, compared to principles of Christianity, we can see that the messages are almost identical: abstinence until marriage is the morally correct course of behavior, premarital sex can emotional and physiological consequences that cannot be prevented with contraception,

and traditional sex roles should be respected.[25] These messages follow closely with the Ohio laws from Section 3313.6011.[20] Furthermore, many argue that the intense involvement of religiosity in sexual education in public schools violates the establishment clause of the first amendment. This clause bans any laws that have the purpose or effect of endorsing religion. If we consider the striking similarities of messages from abstinence-only education and Christian views, it is clear to some researchers that abstinence-only curricula are rooted in the purpose of endorsing these conservative Christian views.[26] Although the state of Ohio is unlikely to eliminate the use of abstinence-only education through state-wide legislation, a law that requires sex education to be free from religious promotion would be just as effective in requiring schools to choose curricula that are not religiously biased such as those that follow the NSES.

Recommendation #2: Sex Education that is Medically Accurate

A medical accuracy law is needed in Ohio because according to the CDC, medically accurate comprehensive sex education has been proven to decrease the frequency of sexual activity, reduce the number of sexual partners, and increase condom and contraceptive use.[27] The NSES define medical accuracy as "information relevant to informed decision-making based on the weight of scientific evidence; consistent with generally recognized scientific theory; conducted under accepted scientific methods; published in mainstream peer-reviewed journals; or recognized as accurate, objective and complete by mainstream professional organizations and scientific advisory groups."[18] Medical accuracy brings about a clear and confident understanding of sex, sexuality, reproduction, etc. If the information taught is clandestine and subversive, as it is when we leave out relevant or medically accurate facts, the sexual behavior and risk taking of the child may also tend to be clandestine and subversive.[28,29] Schools can make a meaningful and

healthy contribution to the sexual development of children if the education is realistic and truthful, leading them to be open and honest about their sexuality as well. In addition, research has found that school sex education programs that do not include medical accuracy requirements often present harmful stereotypes about girls and boys as scientific facts, causing students to become confused about the line between religious and opinion-based ideology and medically accurate information.[30]

Medical accuracy is one of the core requirements of curricula that follow the NSES. Some of the standards that are included in the curricula that ensure medical accuracy of information include:

1. Core concept: In grades K – 2, students should be able to list medically accurate names for body parts, including the genitals – AP.2.CC.1
2. Accessing information: In grades 6 – 8, students should be able to define medical accuracy and analyze medically accurate sources of information about puberty, adolescent development, and sexual health – PD.8.AI.1
3. Accessing information: In grades 6 – 8, students should be able to access medically accurate sources of information about gender, gender identity, and gender expression – GI.8.AI.1
4. Accessing information: In grades 9 – 10, students should be able to demonstrate the ability to determine whether a resource or service is medically accurate or credible – SH.10.AI.1
5. Accessing information: In grades 9 – 10, students should be able to identify medically accurate sources of information about and local services that provide contraceptive

methods (including emergency contraception and condoms) and pregnancy options (including parenting, abortion, adoption, and prenatal care) – SH.10.AI.2

6. Accessing information: In grades 11 – 12, students should be able to access medically accurate and credible information about pregnancy options, including parenting, abortion, and adoption – SH.12.AI.1[18]

Although the NSES do an excellent job of presenting medical accuracy and freedom from religious promotion, the state government cannot mandate that all schools implement the NSES because specific curricula are left up to local school districts. Specific laws related to medical accuracy and freedom from religious promotion therefore need to be passed in Ohio at the state level because school districts cannot be entrusted to select curricula that reflect these principles if they are not mandated by the state government, as we will see in the next section.

Sex Education in Ohio: In Practice

Sex education laws in Ohio do not necessarily reflect the practices of sexual education instruction within school districts because individual school districts can implement additional sex education curricula. To examine implementation of sex education in Ohio, I used data from the CDC's School Health Profiles from 2018 to compare Ohio's implementation of sex education to the median of all 43 surveyed states and the highest-ranking state for each topic (leading state). The surveys used by the CDC for this school health profile had a 71% response rate for both students and teachers in Ohio.[5]

Figure 1 shows the percentage of secondary schools that require sex education courses in any grade and Figure 2 shows a breakdown of percentage of schools requiring sex education courses in each grade sixth through twelfth. Notice that data is not available for schools before

6th grade. Ohio's averages fell below the national median in every single case except in requiring only one health education course, which is a measure of lack of education rather than presence of it. Figure 2 shows that sex education is taught most frequently in Ohio in 9th grade. In both the preceding and subsequent grade levels, there is a decrease in sex education courses taught trending from 9th grade towards 6th grade and 12th grade. In Ohio, 71.9% of students received sex education instruction in 9th grade, but only 20.9% received it in 6th grade and only 15.8% received it in 12th grade whereas as 94.6% of 6th graders in West Virginia and 98.9% of 12th graders in New Jersey received health education instruction. Based on Figure 1, only 35.2% of schools in Ohio are providing more than one sex education course.[5]

Figure 1. Percentage of Secondary Schools Requiring Health Education Courses[5]

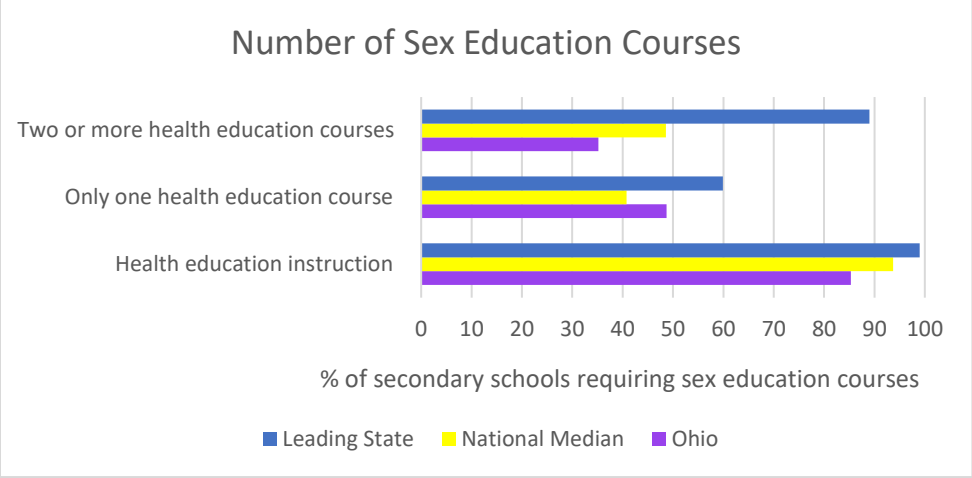
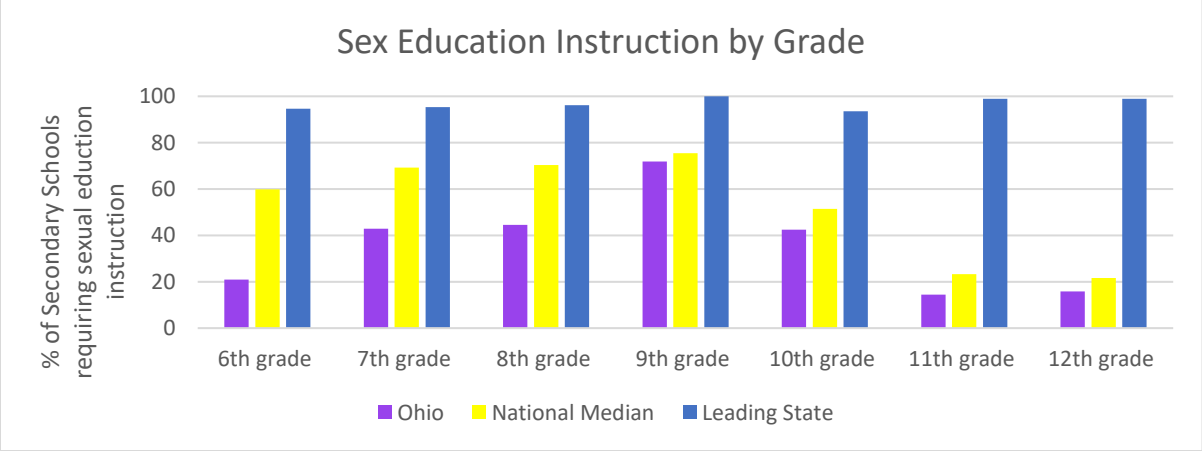


Figure 2. Percentage of Secondary Schools Requiring Sex education in Grades 6th – 12th[5]



The CDC surveyed schools for the 20 specific sexual health topics that they recommend be included in classroom instruction across grades six through twelve. Table 1 shows that the instruction of any one of these 20 topics in grades six, seven, and eight was not greater than 68.4% throughout Ohio. The top end of the range at 68.4% reflects the topic middle schoolers are most likely to receive instruction in; how to create and sustain healthy and respectful relationships. The percentage of middle schoolers receiving instruction drops down to only 15.4% in Ohio for a more comprehensive topic such as how to use a condom. Comparing this data to the percentage of schools that require instruction on the importance of using condoms consistently and correctly, inconsistencies in instruction become apparent. 32% of middle schools in Ohio taught students the importance of using condoms consistently and correctly, but only 15.4% demonstrated how to correctly use them, and only 16.8% instructed on how to obtain-condoms. Since only 50% of the schools that taught the importance of condoms taught where to find them and how to use them, it is evident that even the most basic curriculums are lacking practical skills and knowledge for students. When comparing this data to the states with the highest scores, Ohio is far behind in educating its middle school students on sexual health topics. The percentage of middle schoolers that received all 20 health topics stood at only 7.2% compared to the national average of 17.6% and the state leader of 39.9% in California. Although California leads in teaching a wide range of topics, it is Maryland that has highest scores for 14 of the 20 sexual health topics with figures well over 90% in over half of the 20 topics. In addition, prevalence of teaching any one of the 20 topics in Ohio never exceeded the national median or the state leader, exceeding the prevalence in Ohio by 9.5% and 34.5% respectively.[5]

In reviewing middle school versus high school, it is evident that higher value is placed on instruction in high school. The percentage of high schools that received instruction in each of the

20 topics in Ohio is higher than middle schools in every single case. The percentage of schools that taught each topic in high schools is also lower than the national average in 13 of the 20 health topics and is lower than the state leaders in every single case. Maryland was the leader in coverage of sexual health topics in middle schools but the leader in high schools was New Jersey with 100% coverage of 11 of the 20 sexual health topics and 86.8% of its schools having taught all 20 topics. This can be compared to the national median of 42.8% and to Ohio where only 33% of high school students received all 20 health topics. States that rank higher than Ohio in instruction on all 20 topics range from only 6% higher for how HIV and other STDs are transmitted to 41% higher for how to correctly use a condom. In addition, Ohio is 53.8% behind the leading state, New Jersey, in school teaching of all 20 sexual health topics. Like middle schools, high school data on the prevalence of teaching the importance of condoms versus the prevalence of teaching how to correctly use a condom demonstrates that students are receiving basic knowledge, but schools are not following up with practical skills to use this knowledge. 74.1% of high schools taught students the importance of using condoms consistently and correctly, but only 51.4% taught how to correctly use condoms and only 54% taught where to find condoms. However, high schools are teaching certain topics with greater consistency than middle schools. For example, the percentage of schools that taught any of the 20 topics in middle schools was not higher than 68.4% for the topics of how to create and sustain health and relationships, whereas the leading topic in high schools is the health consequences of HIV, other STDs, and pregnancy at 94.8%.[5]

Table 1. Percentage of School Districts in Grades 6 – 12 that Cover 20 Sexual Health Topics[5]

	Grades 6 – 8			Grades 9 – 12		
% of secondary (grades 6 – 12) schools in which teachers taught…	Ohio	National Median	Leading State	Ohio	National Median	Leading State
Benefits of being sexually abstinent	65.9	73.3	93.4 Maryland	92	93	100 New Jersey, New York

How to access valid and reliable information, products, and services related to HIV, other STDs, and pregnancy	54.3	63.5	90.6 Maryland	92	91.2	100 New Jersey, New York
Influence of family, peers, media, technology, and other factors on sexual risk behaviors	64.3	70.8	94.1 Maryland	92.4	90.8	100 New Jersey
Communication and negotiation skills	55.5	66.9	90.7 Maryland	87.6	89.6	100 New Jersey
Goal setting and decision-making skills	60.9	65.4	92.8 Maryland	86.7	87.5	100 Rhode Island
Influencing and supporting others to avoid or reduce sexual risk behaviors	56.1	65	89.2 Maryland	84.1	87	99 New Jersey
The relationship between alcohol and other drug use and sexual risk	63.9	70.5	88.6 Rhode Island	92.8	91.5	100 New Jersey
Importance of using condoms consistently and correctly	32	44	72.5 Maryland	74.1	79.7	98.2 Vermont
Importance of using a condom at the same time as another form of contraception to prevent both STDs and pregnancy	31.1	45	73.2 North Carolina	73.4	79.6	100 New Jersey
How to create and sustain healthy and respectful relationships	68.4	75.9	94.4 Rhode Island	92.5	92.5	100 New Jersey
Importance of limiting the number of sexual partners	58.9	62.6	82.8 Maryland	90.6	87.5	100 New Jersey
Preventative care that is necessary to maintain reproductive and sexual health	51.6	58.9	81.5 Maryland	89.1	87.4	97.8 New Jersey
How HIV and other STDs are transmitted	67.8	70.7	93.4 Maryland	94	94.2	100 New Jersey, New York
Health consequences of HIV, other STDs, and pregnancy	67	70.9	92.8 Maryland	94.8	93.2	100 New Jersey, New York
Efficacy of condoms	41	51.4	81.4 Maryland	80.5	82	98.9 New Jersey
How to obtain condoms	16.8	36.2	58.3 Maryland	54	66.8	94.7 Vermont
How to correctly use a condom	15.4	27.6	56 North Carolina	51.4	62.1	92.6 New Jersey
Methods of contraception other than condoms	28.8	47.9	79.4 Maryland	77.9	81.6	98.9 New Jersey
Sexual orientation	25.8	36.2	67.8 Rhode Island	60.7	61	95.9 New Jersey
Gender roles, gender identity, or gender expression	26.1	38.5	69.8 Vermont	55.4	61.7	94.8 New Jersey
All 20 Sexual health topics	7.2	17.6	39.9 California	33	42.8	86.8 New Jersey

The analysis of practices of sex education in Ohio reveals two things: there needs to be laws at the state level that require both age-appropriate sex education and comprehensive sex education. The table shows that less than 10% of middle school students are receiving all 20 health topics that the CDC surveyed for middle and high school-aged students. These statistics reveal that the sex education students are receiving in Ohio is not only not comprehensive enough but is not comprehensive enough at an early age.

Recommendation #3: Age-Appropriate Sex Education

The need for sex education to be age-appropriate has two elements; sex education needs to begin at an early age and needs to be developmentally appropriate. Sex education should begin early because it provides students with accurate, scientifically driven information before they have access to misinformation in media and elsewhere. Students now have abundant access to and inundation from media sources and are surrounded by sexual stimuli daily. These may include provocative content in movies, TV, and advertisements, readily available internet access including pornography, peers spouting misinformation,[31] and everyday sexual harassment that 81% of women have experienced according to the National Sexual Violence Resource Center.[32] If children are not receiving sex education in schools, they are getting mixed messages and often inaccurate information elsewhere. Researcher Rhiannon Lucy Cosslett asserts that we need to "equip children and young people with the information, skills, and values to have safe, fulfilling, and enjoyable relationships and to take responsibility for their sexual health and wellbeing."[33] In failing to offer students specifics at an early age, we fail to counter the messages young people find in pornography and other media. Research also shows that students are not receiving sex education before encountering sexual situations, leaving them unprepared. One study from the National Survey of Family Growth reviewed the percentage of students that received sex education before first incidence of sex. Between 2011 and 2013, only 57% of females and 43% of males received formal instruction on methods of birth control, only 70% of females and 68% of males on how to say no to sex, and only 46% of males and 31% of females on where to get birth control before first sex.[34] Other researchers find that introduction of sex education at an early age is critical because it allows students to learn consent, anatomy, and healthy

relationships before they are adolescents where their attitudes, opinions, and emotions become more important than facts. At an early age, these facts can be acquired without embarrassment, threat, or personal involvement.[28] In addition, research shows that most people support starting sexual education in elementary school. A study from the Journal of Adolescent Health found that over 50% of parents of school-aged children believe reproductive anatomy and puberty should be introduced in elementary school.[14]

Based on research, the NSES recommends that sex education should begin in kindergarten.[18] Some countries such as the Netherlands have already implemented sex education beginning in kindergarten. In these classrooms, there is never an explicit reference to sex. Students are introduced to topics of sexuality, love, and relationships. Even though sex education begins earlier, teens in the Netherlands do not have sex any earlier than teens in other European countries or the United States. In fact, the Netherlands leads the world in lowest teen pregnancy rates, they are top users of the birth control pill, and nine out of ten teens reported using contraception during the first incidence of sex. Because teens already have the foundational topics of sex education, they are able to instead focus on exploring their attitudes and values and to practice the decision-making skills needed to make responsible sexual decisions. Lessons that begin in kindergarten are designed to teach children these basics through everyday feelings such as talking about consent and body autonomy by describing if hugging a classmate feels good and affirming that they have the right to decide if they want to be hugged.[35]

Age-appropriate sex education also needs to be developmentally appropriate. In specific, adolescents need sex education that fits their rapidly changing sexual, social, emotional, and cognitive needs. Adolescents are typically defined by the onset of puberty, which occurs around 9 to 12 years of age.[36] Along with physical development, there are major developments in

cognitive ability where[37] adolescents not only begin to question who they are,[38] but also begin to define themselves according to the world around them by questioning social conventions and pushing the boundaries of labels and roles.[39,40] Without proper education, adolescents are left vulnerable to negative outcomes physically, emotionally, and socially.[41] Researcher Sara Casemiro Silverio Marques found that adolescent sexuality development is very intertwined with psychosocial development. While adolescents are growing, not only do their hormones and bodies are changing, but their cognitive abilities are as well, giving them further ability to think introspectively, reflect on their sexuality, make sexual decisions, and form sexual relationships.[42,43] In the United States, however, these attributes are looked at as sexual risk-taking because of fear of HIV, STDs, and pregnancy, rather than as a part of normal, healthy, sexual development that should occur during adolescence.[38] Our strategies in the United States, and in Ohio specifically, focus on behavior management and behavior change goals[38] rather than education to develop sexually healthy adults. The adolescent development framework provides a guideline for what is developmentally appropriate to teach adolescents. This framework asserts that strategies introduced in sex education should include relevant information about biological, cognitive, and social changes. The curriculum should also be able to educate through each domain of psychosocial development which includes achievement, autonomy, emotion, identity, intimacy, morality, and sexuality. Marques' research shows that the NSES delivers age-appropriate information that aligns with the adolescent developmental framework for middle school students by covering biological, cognitive, and social changes.[38] Once again, the NSES has age-appropriateness built into its foundation.[18] If school districts were to implement the NSES, they would be implementing developmentally appropriate curricula that begin early enough to make a significant impact on students' lives. However, because there is great

inconsistency between school districts when the state government does not provide guidelines for curricula selection, the Ohio state legislature needs to pass a requirement for sex education in Ohio to be age-appropriate whether schools choose to implement the NSES or not.

Recommendation #4a: Comprehensive Sex Education

The lack of consistency across Ohio among topics reported by the CDC in Table 1[18] exemplifies why Ohio needs a law requiring that sex education be comprehensive. This lack of coverage of topics leads to severe risks and negative social and health outcomes for much of Ohio's youth as demonstrated by the lower rates of STD and teen birth in states that do not have comprehensive sex education.[3,8,12] Further negative outcomes of non-comprehensive education will be demonstrated in subsequent sections.

Schools that implement a curriculum based on the NSES could easily provide comprehensive sex education for their students. To implement comprehensive sex education, the NSES upholds that sex education should include medically accurate information and skills related to the following topics:

1. Consent and healthy relationships
2. Puberty and adolescent development
3. Sexual and reproductive anatomy and physiology
4. Gender and gender expression
5. Sexual identity and orientation
6. Interpersonal and sexual violence
7. Contraception, pregnancy, and reproduction
8. HIV and other STD/STIs[18]

The NSES also upholds that sex education should go beyond simply presenting information, it should provide students with the skills necessary to use the information, opportunities to practice those skills, and the opportunity to explore their own identities and values as well as those of their families and communities.[18] While some of these topics are included in many curricula across Ohio, such as puberty and adolescent development, other topics such as gender and gender expression are rare to find in public school sex education programs. Because these topics are more controversial, I will review why gender and sexuality-related topics and consent and healthy relationship instruction need to be included in a comprehensive curriculum in subsequent sections. These sections will also serve as a justification for Ohio to pass a state law requiring sex education to be comprehensive.

Considering the Impact of Sex Education on LGBTQ+ Students

LGBTQ+ stands for lesbian, gay, bisexual, transgender, and questioning,[44] with a "+" to denote the possibility of other identities. Non-heterosexual or non-cis-gender identities are greatly stigmatized in the United States.[44] As of 2020, eight states had laws explicitly requiring teachers to portray LGBTQ+ people in a negative light during sex education or prohibit teachers from mentioning LGBTQ+ individuals.[23] As a result of this medically inaccurate and religiously biased education, there continues to be an intense societal stigma that leads to harassment, bullying, and exclusion of these individuals in the hallways, classrooms, locker rooms, and bathrooms of schools.[44] Not only does the lack of inclusion lead to intense stigmatization, but LGBTQ+ individuals are often stuck with sex education that is not inclusive of differences in bodies, sexual orientations, gender identities, and gender expressions. This creates and perpetuates ideologies of strict gender and sexuality roles and norms.[45] In this section, I will

investigate the laws and practices in Ohio related to the teaching of gender, sexuality, and identity, as well as the presence or lack thereof of supplemental sex education material for LGBTQ+ students and its effect on the students of Ohio.

Table 1 shows that there is a general lack of focus and instruction on gender, gender identity, gender expression, sexual orientation, and curricula specific to the needs of LGBTQ+ students throughout all grades. In middle schools in Ohio, the prevalence of teaching sexual orientation was only 25.8% and 26.1% for teaching gender roles, gender identity, or gender expression and sexual orientation, respectively. In high schools, these figures only jump up to 60.7% and 55.4% respectively, making them two of the four least taught topics in Ohio. Ohio ranks far below leading states, with 95.9% and 94.8% of schools in New Jersey having taught the two topics, respectively.[5] Apart from these 20 sexual health topics, the CDC also surveyed schools to determine if they provided a curricula or supplementary material related to LGBTQ+ individuals. This means instruction on any topics where information may differ based on gender or sexual orientation. There are no requirements in Ohio for the sex education curriculum to be inclusive of the needs or experiences of LGBTQ+ individuals.[46] In practice, only 42.8% of schools in Ohio provided these supplemental materials compared to a national median of 45.8% and the leading state (New York) at 76.3%.[5]

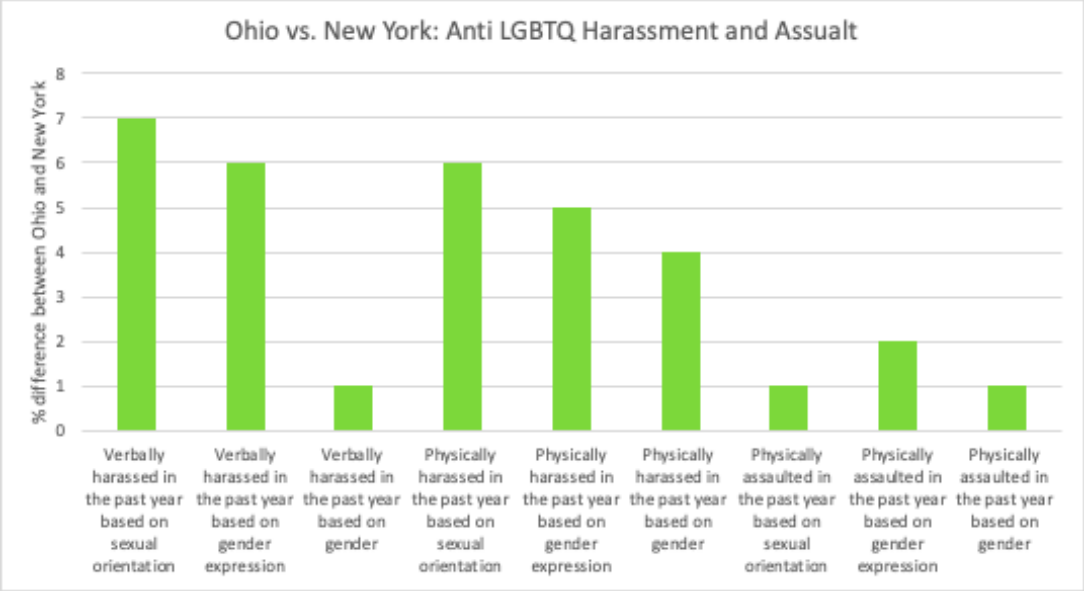
Table 2. Gender and Sexuality Related Topics from the CDC's School Health Profiles 2018[5]

	Grades 6 – 8			Grades 9 – 12		
% of secondary (grades 6 – 12) schools in which teachers taught…	Ohio	National Median	Leading State	Ohio	National Median	Leading State
Methods of contraception other than condoms	28.8	47.9	79.4 Maryland	77.9	81.6	98.9 New Jersey
Sexual orientation	25.8	36.2	67.8 Rhode Island	60.7	61	95.9 New Jersey
Gender roles, gender identity, or gender expression	26.1	38.5	69.8 Vermont	55.4	61.7	94.8 New Jersey

To analyze the impact of sex education on LGBTQ+ students in Ohio, I used data from the Gay, Lesbian, and Straight Education Network's (GLSEN) state profiles[47,48] to compare how two states, Ohio and New York, differ in Anti- LGBTQ harassment and assault. These measures will be indicators of negative outcomes LGBTQ+ youth experience due to stigmatization and discrimination perpetuated by non-inclusive sex education programs. New York was chosen as a specific comparison to Ohio because it had the highest incidence of supplemental material provided for LGBTQ+ individuals according to the CDC's School Health Profiles.[5] Secondly, to investigate the impact of sex education on LGBTQ+ youth in Ohio as opposed to heterosexual youth, I used data from the CDC's High School Youth Risk Behavior Survey from 2017 to compare these groups for suicide, mental health, and bullying outcomes.[49]

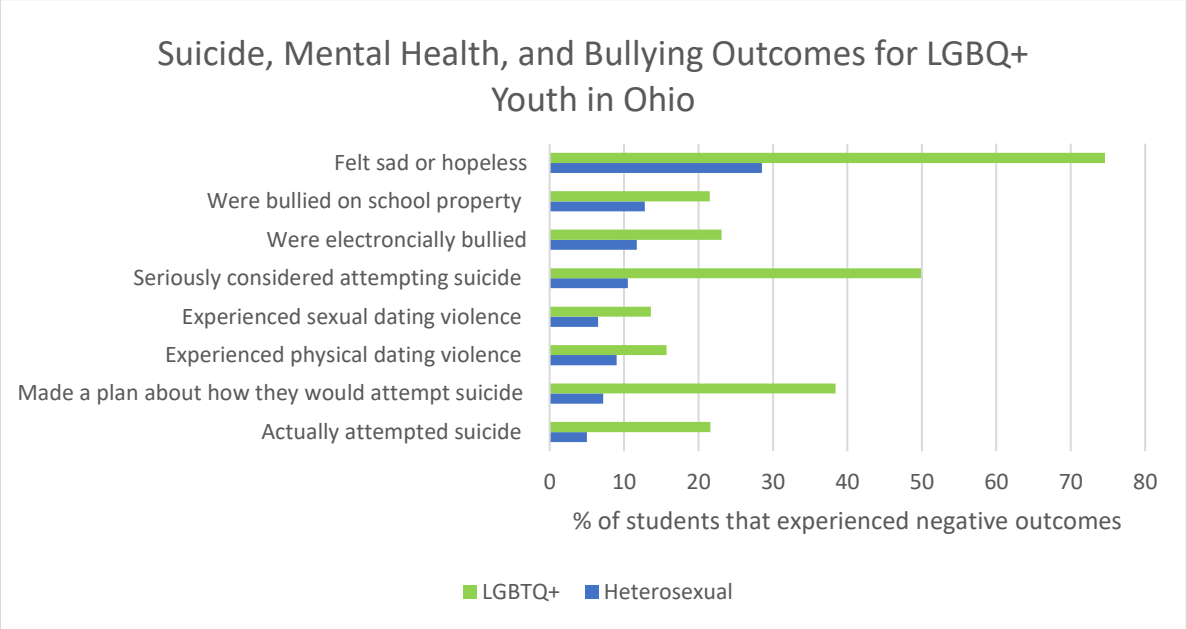
Figure 3 shows that LGBTQ+ youth experience increased negative outcomes related to harassment and assault in Ohio than in New York in every single case. Interestingly, data collected by GLSEN's School Climate Survey[47,48] revealed that the states are not providing the inclusive curricula that they claim to in the CDC's School Health Profiles. In Ohio, teachers and principals in 42.8% of districts claim to provide supplemental material for LGBTQ+ students,[5] yet when asked by the GLSEN survey, only 18% of students report receiving an inclusive instruction.[48] Similarly, although 76.3 % of districts in New York claim to provide supplemental material,[5] only 28% of students reported receiving inclusive instruction. Once again, this shows inconsistencies between state laws and the actual practices of instructors.[47,48]

Figure 3. Percent Difference in LGBTQ Harassment/Assault Data in Ohio and New York[47,48]



Bullying, harassment, and family rejection of LGBTQ+ youth can cause them to miss school more frequently and even drop out at a higher rate, causing them to more frequently become homeless or unemployed. Research also shows that the stigma and discrimination can have adverse health effects for LGBTQ+ members such as increased incidence of major depressive disorder, binge drinking, and substance abuse. Furthermore, bullying and rejection from family have been linked to a greater risk of school dropout, suicide, and substance use among LGBTQ+ youth.[50] Figure 4 shows the percentage of heterosexual teens that experienced several negative outcomes related to suicide, mental health, and bullying compared to LGBTQ+ teens. LGBTQ+ youth experienced elevated levels of bullying, violence, and negative mental health outcomes in every single case. In some cases, such as electronic bullying, bullying on school property, and sexual dating violence, LGBTQ+ youth experienced these negative outcomes at twice the rate of their heterosexual classmates. In other cases, such as considering suicide attempts, planning to commit suicide, and attempting suicide, the rates for LGBTQ+ students are more than four times higher than their heterosexual peers.[49]

Figure 4. Comparison of Suicide, Mental Health, and Bullying Outcomes for LGBTQ+ Youth versus Heterosexual Youth in Ohio, 2019[49]



My investigation of sex education practices in Ohio shows the lack of attention in sex education curricula on topics related to gender and sexuality and how this lack of education leads to negative impacts for the LGBTQ+ community. These outcomes can be improved by making sex education more comprehensive. Research from a Dutch 2017 study found that the level to which a school is inclusive of LGBTQ+ individuals in their sex education curricula is an indicator of a positive school climate, leading to less bullying, harassment, and assault of LGBTQ+ individuals. This is because when non-hetero and non-cis identities become normalized and the stigmas are removed, peers are less likely to negatively target these individuals and are more likely to intervene in situations where they are being targeted as well.[51]

Lack of gender and sexuality education has impacts that extend beyond the LGBTQ+ community. Teaching gender and sexuality in a medically accurate way that is free from religious bias can help to reduce gender norms and roles that are also harmful to cis-

gendered and heteronormative individuals. Regardless of sex, gender identity, or expression, individuals are each unique with a wide range of traits that we assign to masculine or feminine categories. Realistically, there is no perfect combination of traits that make up the perfect man or woman and even if there was, there is no percentage of those traits a person must have to be considered "man" or "woman." These expectations to fit into a binarily separated gender tradition create stereotypes and norms that even the most masculine man or most feminine woman may find hard to live up to.[45] By expanding our sex education curricula to include more comprehensive coverage of gender and sexuality, we can escape this cycle of stigmatizing individuality and upholding confining binary systems.

Objections to the inclusion of proper gender and sexuality education in schools are rooted in the fear that this instruction will convince students to switch genders or sexualities. But the introduction to other sexual and gender identities is in no way meant to force students to identify any singular way. Comprehensive gender and sexuality education gives students the tools to explore their sexuality and acknowledges their right to make their own sexual decisions. California schools have already adopted these topics into their classrooms where the instruction cannot be subjective or structured in a way that indoctrinates students into taking any moral stances around the subject, both positively and negatively.[52] In addition, the information presented in these lessons is already easily accessible through the internet. Teaching these lessons in school would ensure students do not get biased or untrue information. Furthermore, the title IX law in the United States has mandated that schools cannot discriminate based on sexual orientation and gender identity,[9] meaning that equal opportunity to applicable, necessary, and pertinent sex education information that is relevant to the individual student's needs should be given to all students, regardless of identity. This law means that students who do not fit into

the binary standard have as much of a right to inclusive sex education as heteronormative children do.

Recommendation #4b: Comprehensive Sex Education with Gender and Sexuality Included

Although the CDC presents an LGBTQ+ curriculum as if it should be supplementary to an existing curriculum (and possibly only presented to LGBTQ+ individuals), I assert that the inclusive gender and sexuality education needs to be integrating into a state-wide sex education curriculum that is presented to all students. Existing subjects should also be examined for cis-gendered and heteronormative biases. Biased viewpoints related to sexuality and gender can often be infused into many topics in sex education from education on consent, healthy relationships, and pleasure, to topics like HIV and STDs. These topics often look different for LGBTQ+ individuals, especially since they may have different relationship structures, sexual needs and desires, and needs as far as STD and HIV protection.[53] By mandating that sex education be comprehensive across the state of Ohio, the state government can ensure that all students in Ohio receive education related to gender and sexuality. However, school districts can take this a step further by implanting a curriculum based on the NSES, which is founded on principles of respecting and honoring the diversity of students, including gender and sexual orientation diversity. In addition, one of the main aspects of the NSES is the importance of language inclusivity. Language inclusivity ensures that all identities and orientations are respected because no person is qualified to label or judge another person's identities. Below are several key standards from the NSES that exemplify how a curriculum, if implemented by Ohio, could be inclusive of gender and sexuality:

1. Core concept: In grades 3 – 5, students should be able to define sexual orientation – SO.5.CC.1
2. Core concept: In grades 3 – 5, students should be able to define and explain differences between cisgender, transgender, gender nonbinary, gender expansive, and gender identity – GI.5.CC.2
3. Analyzing influence: In grades 6 – 8, students should be able to analyze how peers, family, and a person's intersecting identities can influences attitudes, beliefs, and expectations about gender, gender identity, gender roles, and gender expression – GI.8.INF.1
4. Accessing information: In grades 6 – 8, students should be able to access medically accurate sources of information about gender, gender identity, and gender expression – GI.8.AI.1
5. Interpersonal communication: In grades 6 – 8, students should be able to demonstrate ways to communicate respectfully with people of all gender identities – GI.8.IC.1
6. Analyzing influence: In grades 11 – 12, students should be able to explain how support from peers, families, schools, and communities can improve a person's health and wellbeing as it relates to gender identity and gender expression – GI.12.INF.1[18]

Although the NSES has specific standards relating to gender and sexuality, it is important that it is also inclusive of diversity in topics that are not inherently related to the teaching of gender and sexuality. Below are some ways that the NSES exemplifies this:

1. Core concept: In grades K – 2, students should be able to identify different kinds of families (e.g., nuclear, single parent, blended, intergenerational, cohabitating, adoptive, same-gender, interracial) – CHR.2.CC.4

2. Core concept: In grades 3 – 5, students should be able to describe the role hormones play in the physical, social, cognitive, and emotional changes during adolescence and the potential role of hormone blockers on young people who identify as transgender – PD.5.CC.4
3. Core concept: In grades 11 – 12, students should be able to describe the characteristics of unhealthy relationships that media, including sexually explicit media, may perpetuate (e.g., inequality between partners, lack of communication and consent, strict gender stereotypes) – CHR.12.CC.1
4. Analyzing influence: In grades 11 – 12, students should be able to describe the impacts of power and privilege within romantic or sexual relationships (e.g., age, race, ethnicity, sexual orientation, gender, gender identity, economic status, immigration status, ability) – CHR.12.INF.3[18]

By implementing curricula based on the NSES, Ohio school districts could not only address gender and sexuality education itself, but also address topics that could benefit from gender and sexuality inclusivity. The Ohio state legislature should ensure that all students are at least receiving some form of medically accurate gender and sexuality education by mandating comprehensive sex education.

Consider the Impact of Sex Education on Sexual Assault and Harassment

Sexual assault and harassment are very important behaviors that can be influenced by sexual education. Just as pregnancy and STDs are impacted by sex education, there should be equal concern about the impact of education on sexual assault and violence. The CDC does not include healthy relationships or consent in its list of most important sex education topics,[5] so data

must be acquired elsewhere. For this section, data from multiple organizations will be included to report on the statistics related to nationwide and Ohio sexual assault and harassment and child sex abuse. I will be using data from the SIECUS's Sex Ed State Law and Policy data,[23] Ohio's Revised Codes,[19,20] the National Crime Victimization Survey (NCVS),[54] the Sexual Assault in Ohio report from the Ohio Office of Criminal Justice Services,[55] the FBI's 2019 Crime in the United States report,[56] the Public Children Services Associations of Ohio Factbook,[57] Ohio State University's Annual Crime report,[58] and the U.S. Department of Education's Campus Safety and Security database.[59]

Sexual assault and harassment can result from a lack education about healthy relationships. The four aspects of healthy relationship instruction identified by SIECUS include communication skills, decision-making skills, violence prevention, and consent. As of 2020, 24 states require instruction of communication skills, 26 states require instruction of decision-making skills, 28 states require instruction of violence prevention, and only nine states require instruction on consent.[23] Ohio does not mandate instruction in any of these topics. The only requirement related to healthy relationships and consent in current Ohio law is that instructors "advise children of the circumstances under which it is criminal to have sexual contact with a person under the age of sixteen."[20]

As I review sexual assault and harassment data from Ohio, it is important to keep in mind that more than two out of three sexual assaults go unreported.[54] In 2015, the most recent crime data for sexual assault that is available in Ohio, the Ohio Incident-Based Reporting System agencies reported 7,815 incidents of sexual assault. The average age of sexual assault victims was 18.9 years with a third of the victims being between the ages of 12 and 17. 83% of victims were female and 93% of suspected perpetrators were male.[55] In 2019, Ohio had the 18th highest

number of rapes by state, with 49 rapes per 100,000 people and 5,731 rapes total.[56] In Ohio in 2019, there were 9,137 reports of child sexual abuse,[57] but only roughly a third of children victims tell anyone about the abuse.[60] Sexual assault and harassment are also major issues on college campuses in Ohio. For example, The Ohio State University (OSU) reported that incidences of rape on campus increased from 93 in 2018 to 118 in 2019.[58] Rape is not the only issue on college campuses. In 2019, 1,260 students reported fondling instances and 35 instances of dating violence, much of which took place in university residence halls.[59]

There are two important factors in reduction of sexual assault and harassment through education. One important factor is the reduction of sexual risk-taking behaviors for those that are potential victims of sexual assault and violence. A study conducted in 2018 of over 1,500 individuals showed that having received formal sex education about refusal skills before the age of 18 was a protective factor against penetrative sexual assault in college.[61] Without the knowledge and skills required to make decisions about their reproductive and sexual health, students are left vulnerable to coercion.[62] Sexual harassment or assault occurs for women at twice the rate it does for men,[63] so studies often focus on how women can reduce their risk-taking behaviors to reduce the incidences of these acts. For example, a 1990 study analyzing the reduction of risk-taking behaviors in women who received a personalized Acquaintance Rape Prevention Program found that the program reduced risk-taking behaviors as measured by behavioral intent. The program included information, discussion, and role-playing that concerned rape myths, risk-taking behaviors that led to increased vulnerability to rape, nonverbal messages and how the opposite sex view them, expectations, and communication.[64]

To reduce sexual assault and harassment through education, the second important factor is the education and reduction of risk-taking behaviors for those that may be the

perpetrators of sexual assault and harassment. Research has shown that comprehensive sexual education in secondary school is associated with a reduction in sexual risk-taking behaviors among adolescents. Reducing sexual risk-taking behaviors is important because sexual risk taking is a risk factor for perpetration of sexual assault and violence according to the CDC's Violence Prevention page.[65] Researchers use Alfred Bandura's social cognitive theory to explain how aggressive behavior is a product of cognitions that make reprehensible conduct socially acceptable, misconstrue the consequences of the behavior, or devalue or attribute blame to the victim. In order to combat these cognitions, interventions should include altering rape supportive cognitions, decreasing problematic rape outcome expectations, and increasing victim empathy. A study conducted in 1996 used Bandura's social cognitive theory to exposed male subjects to training on victim empathy, outcome expectations, and correcting rape supportive cognitions by increasing subjects' knowledge concerning sexual communication, rape myths, and disastrous effects of sexual victimization. Results showed that subjects exposed to the behavioral exercise used empathy and consequence-based arguments to convince a hypothetical man not to rape a woman, while control subjects used rape-myth information.[64] Not only did the subjects use the education they received to change their opinions and cognitions related to sexual assault and harassment, but they also learned bystander intervention skills.

A 2020 study from Montclair State University showed that early comprehensive sex education can prevent child sex abuse and intimate partner violence. After analyzing 30 years of research on school-based sex education programs, the researchers found that sexual education, like any other subject, is most effective when it built on a basis of knowledge and students will feel most comfortable openly discussing important topics if they are introduced early. If we expect children and teens to make safe sexual choices, we need to give them the foundational

concepts such as personal boundaries, family structures, healthy friendships and relationships, respecting others, and the socio-emotional skills needed to deal with these complex topics.[66] Not giving students this information and skills means they must find it on their own, often from the internet, particularly pornography. This is problematic because pornography is more often than not, a false depiction of real sexual interactions and can often increase the instances of sexual violence and intimate partner violence towards women.[67] For example, a 2010 study found that only 77% of young men between the ages of 18 and 25 believed that having sex with someone who said "no" constituted rape, meaning that 23% of men potentially believe it would be okay to continue having sex with someone after they have said no. It is conceivable that some of these ideas have come from pornography, where seeing a woman struggle or resist sex is often portrayed as foreplay.[33]

Recommendation #4c: Comprehensive Sex Education with Consent, Healthy Relationships, and Interpersonal and Sexual Violence Included

Ohio should mandate that sex education be comprehensive and include healthy relationship and consent instruction based on the multitude of evidence that it can help to prevent sexual assault and harassment. With or without this mandate, districts can easily implement healthy relationship and consent instruction using the NSES which covers both consent and healthy relationships and interpersonal and sexual violence. The NSES emphasize that education on these topics should start in kindergarten to introduce the idea of consent to students without entanglement with sex. This is a similar idea to what is presented in the Netherlands, where education on consent starts in kindergarten in order to establish children's bodily autonomy and keep them safe from child predators, as well as lay the groundwork for understanding of consent

when sex is introduced much later. This can help students navigate not only sexual relationships, but also relationships with peers, family members, and superiors. Below are ways in which the NSES provides students with a framework to develop understanding of consent, healthy relationships, and interpersonal and sexual violence:

1. Interpersonal communication: In grades K – 2, students should be able to demonstrate how to communicate personal boundaries and show respect for someone else's personal boundaries – CHR.2.IC.1
2. Self-Management: In grades K – 2, student should be able to identify healthy ways for friends to express feelings, both physically and verbally – CHR.2.SM.1
3. Interpersonal communication: In grades 3 – 5, students should be able to identify strategies a person could use to call attention to or leave an uncomfortable or dangerous situation, including sexual harassment – IV.5.IC.1
4. Interpersonal communication: In grades 3 – 5, students should be able to explain that some survivors are not believed when they disclose sexual abuse or harassment and that it is important to keep telling trusted adults until one of the adults takes action – IV.5.IC.2
5. Core concept: In grades 6 – 8, students should be able to define sex trafficking, sexual exploitation, and gender-based violence – IV.8.CC.3
6. Analyzing influence: In grades 6 – 8, students should be able to identify factors (e.g., body image, self-esteem, alcohol and other substances) that can affect the ability to give or perceive consent to sexual activity – CHR.8.INF.3
7. Goal setting: In grades 9 – 10, students should be able to develop a plan to get out of an unsafe or unhealthy relationship – CHR.10.GS.1

8. Analyzing influence: in grades 11 – 12, students should be able to analyze how media portrayals of healthy and unhealthy relationships impact societal norms about romantic and/or sexual relationships and pleasure – CHR.2.INF.1[18]

Consider the Impact of Sex Education on Students of Color

To analyze the influence of sex education on students of color, I used a variety of databases including the Thomas Fordham Institute's Ohio Education by the Numbers,[68] the CDC's HIV and African American People Report,[69] the Ohio Department of Health's HIV Among Blacks/African Americans in Ohio, 2019 report,[70] and the Journal of Race and Social Problems.[71]

Black people in the United States have less access to sex education and the sex education they do receive is overwhelmingly incomprehensive.[72] Further, this sex education usually lacks a sense of cultural sensitivity and is whitewashed in its messages and content. Only eight states require that sex education be culturally appropriate.[23] Ohio's laws do not have any requirements for cultural sensitivity. These laws are necessary because the current model of sex education was created for White people. Think of how hard it is to find anatomically correct anatomy pictures of darker skin-tones in textbooks for example.[73] In addition, the sexual health theories developed in the twentieth century were guided by White fears of moral impurity and immigration, leading to a field of sexuality that has a horrific history of eugenics and sterilization of Black people.[72] One example of the unethical treatment of Blacks is the Tuskegee Syphilis Study in which Black males with syphilis were given misleading promises of free treatment but were actually given heavy metals therapy while being denied antibiotic therapy without their informed consent.[74] Another issue arises in the fact that sexuality research is performed by primarily White

researchers who prioritize the sex education information and needs of White students resulting in the exclusion of topics that are pertinent to Black communities. Cultural sensitivity is imperative because Black students have different sex education needs in many subjects. For example, one student of color points out that she did not feel that the sex education she received was sensitive to her culture in issues of consent, trauma, cultural expectations for sexual activity, body acceptance, or the social realities of sex.[72] Cultural sensitivity is important in Ohio specifically because Black students make up 16.8% of the student population and students that are not White make up 31% of the student population.[75]

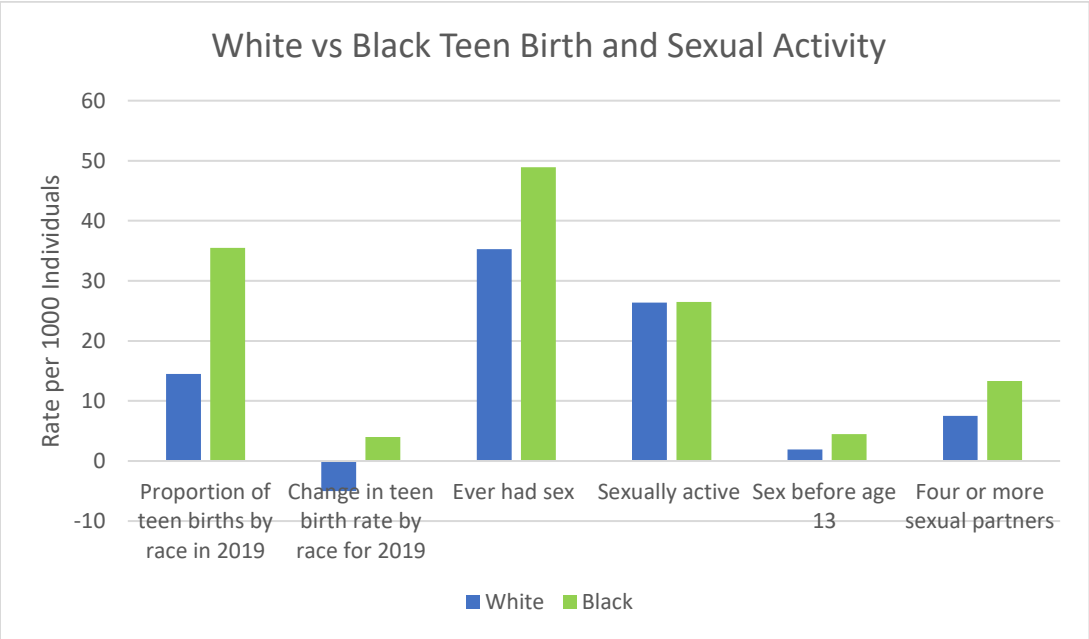
I have demonstrated that STD rates are negatively correlated with sex education. To expand on this, Blacks are disproportionally affected by the lack of education. Only 11 out of 25 states with the highest Black populations mandate sex education, and most do not mandate that the education be comprehensive.[76] Although Blacks only made up 13% of the United States population in 2018, they accounted for 42% of the new HIV diagnoses.[69] In Ohio in 2019, 13% of the population identified as Black and yet this group made up 48% of new HIV diagnosis. This stays consistent from 2015 – 2019 with Blacks in Ohio consistently making up the highest rates of newly reported HIV infections, making them seven times more likely to be diagnosed with HIV than Whites.[70] These increased rates negatively impact black communities because STDs come with both a physical, social, and economic burden. Physically STDs can contribute to infertility, ectopic pregnancy, chronic pelvic pain, newborn disease, and increased risk of HIV infection. And socially, burdens of STDs include economic burden, shame, and stigma.[77] Additionally, one study found that Whites have a clearer picture of sex, sexuality, and reproductive health because they have received more sexual knowledge through school-based sex education. The study showed that Blacks were more likely to believe misconceptions

including the belief that the use of birth control does not matter, called pregnancy fatalism. Fatalism is the belief that using contraception to control pregnancy is unnatural and that childbearing will take place when it is the right time according to God's plan. A study of unmarried young adults' beliefs regarding pregnancy risks, pregnancy fatalism, and contraceptive side-effects revealed that pregnancy fatalism is twice as common among Blacks than among Whites. This puts Black teens at greater risk for believing pregnancy fatalism and therefore, at greater risk for unintended pregnancy. Comprehensive, culturally relative sex education can reduce these risks by addressing beliefs like pregnancy fatalism that are more common in Black communities.[71]

Figure 5 shows how teen birth and sexual activity were disproportionate among Whites and Blacks in 2019 in Ohio. The proportion of teen births per 1000 girls aged 15 – 19 was 14.5 for Whites and 35.5 for Blacks. The teen birth rate for Whites decreased by 5% since 2018 increased by 4% for Blacks. Black teens engaged in more sexual activity than White teens with 48.9% of Blacks having ever had sex compared to 35.3% of Whites, 26.5% compared to 26.4% for being currently sexually active, 4.5% compared to 1.9% for having had sex before the age of 13, and 13.3% compared to 7.5% for having four or more sexual partners, respectively.[15] Although Black culture generally attributes less stigma to early sexual activity and teen pregnancy than White culture,[78] teen pregnancies can be dangerous for teens' health as well as restrict their socioeconomic opportunities.[9] One study found that nearly half of all teen child bearers do not earn a high school diploma or GED and young mothers specifically have lower average yearly earnings over their first 15 years of parenthood. Access to income from spouses is also quite limited, so social burden becomes great through the need for public assistance which is used by teen parents for an average of a third of their parenting years. Early childbearing also has

impacts on the children of teen parents who are more likely to report chronic health conditions and generational teen pregnancy.[79]

Figure 5. Comparison of White and Black Teen Birth and Sexual Activity[15]



Black students often receive unequal sex education because of the harmful stereotypes and biases imposed on them. Young Black girls are particularly targeted because of the intersectionality of being both Black and female. Systematic biases often lead people to believe that Black girls know more about sex than White girls of the same age, leading to sex education that is not age-appropriate for young Blacks.[80] In addition, Black girls are often fetishized, objectified, and exoticized because of ideologies perpetuated in media and in pornography in particular. Furthermore, the idea of Black girls being labeled as "at-risk" is used in many classrooms which leads to the image that they need saving. This creates the narrative among young Black students who internalize these messages, believing that they are problems or that they are broken.[76] This perpetuates the stereotypes that lead to increased risk taking and adverse health outcomes such as STDs and teen pregnancy. Sex education also affects Black women

beyond the classroom. In the United States, Black women are four times more likely to die from childbirth or related complications than White women.[81] This is likely due to many medical students holding the belief, conscious or not, that Black patients have a higher tolerance for pain than White patients.[82]

Recommendation #5: Culturally Sensitive Sex Education

Based on this evidence, work needs to be done to ensure that Black youth not only have equal access to comprehensive sex education but also receive sex education that is culturally sensitive. Even though law-based segregation was outlawed decades ago, many school districts are still highly segregated. Research has found that non-White school districts receive an average of $23 million less than White school districts that serve the same number of students.[83] With this limited funding, research has found that Black students are more likely to receive abstinence-only education,[84] which we have seen to be ineffective in delaying sexual activity and preventing STDs and pregnancy.[3] If comprehensive sex education is mandated across Ohio, differences in school funding would need to be reconciled so that schools receive the same quality of sex education across the state. Furthermore, the state legislature should work to pass laws requiring that comprehensive sex education be culturally sensitive in order to implement curricula that acknowledge and work to correct histories of racism in sex education and the field of sexuality. Although teaching histories of racism can be uncomfortable, teaching accurate history is important for people of all races. It can help us examine the current systematic racism in sex education and acknowledge and correct the inequities it creates such as STD and teen pregnancy rates. Ohio schools need to implement curricula that recognize how Black students differ culturally and cater to their personal, interpersonal, social, and economic needs.

The NSES provides a curriculum that calls for acknowledgement of structural and contextual factors that influence an adolescents' sexual motivations and behaviors as well as the removal of economic and racial disparities in adolescent sexual health. To accomplish this, the curriculum calls to attention the overt and covert discrimination that effects young people of color in sex education. The standards also focus on conscious and unconscious biases that perpetuate stereotypes, such as the idea that students of color are troublemakers. Some examples of how this type of instruction is included in the NSES curriculum are listed below:

1. Interpersonal communication: In grades K – 2, students should demonstrate ways to treat all people with dignity and respect (e.g., race, ethnicity, socio-economic status, differing abilities, immigration status, family configuration) – IV.2.IC.1
2. Advocacy: In grades 3 – 5, students should demonstrate ways to promote dignity and respect for all people (e.g., race, ethnicity, socio-economic status, differing abilities, immigration status, family configuration) – IV.5.ADV.1
3. Core concept: In grades 6 – 8, students should be able to define racism and intersectionality and describe their impacts on sexual health – SH.8.CC.11
4. Core concept: In grades 6 – 8, students should be able to describe how power differences, such as age, gender, socio-economic status, immigration status, race, or unequal position (e.g. student/teacher, supervisor/employee) may impact relationships – CHR.8.CC.2
5. Analyzing influence: In grades 9 – 10, students should be able to describe the impact of racism and inequality on sexual health – SH.10.INF.1
6. Analyzing influence: In grades 11 – 12, students should be able to analyze cultural and social factors (e.g. sexism, homophobia, transphobia, racism, ableism, classism) that can influence decisions regarding sexual behaviors) – CHR.12.INF.2

7. Advocacy: In grades 11 – 12, students should be able to advocate for school and community policies that promote safety, respect, and equity for all people (e.g., race, ethnicity, socio-economic status, differing abilities, immigration status, family configuration) – IV.12.ADV.1[18]

The NSES was designed with the goal of being culturally competent, meaning that it teaches and recognizes aspects of students' culture, race, socio-economic status, gender, gender identity, gender expression, sexual orientation, sexual identity, sexual experience, ability, faith, educational status, physical appearance, and/or youth popular culture. The curriculum was also designed with the goal of being culturally responsive, meaning that it teaches students to embrace, actively engage, and adjust to various cultural identities around them.[18] Although, this curriculum is not yet the perfect model. For example, it does not mention anything about many topics related to racial equity such as inclusion of people of color in textbook models. Yet it is a major step towards achieving increased racial equity in and through sex education programs.

Future Directions

Throughout my study on both the policies and practices of sex education in Ohio as well as the impact of this education on vulnerable populations, I discovered five key recommendations. Sex education in Ohio needs to be 1) free from religious promotion, 2) medically accurate, 3) age-appropriate 4) comprehensive including topics of gender, sexuality, consent, healthy relationships, and interpersonal and sexual violence, 5) culturally sensitive. The Ohio state legislature needs to take steps to pass legislation requiring schools to use sex education curricula that follow these requirements. This will ensure that all schools in Ohio choose curricula that provide the most benefit for their students. Local school boards can also take steps to implement

these elements of sex education without mandates from the state government by implementing curricula based on the NSES. This can benefit local school districts but to ensure equitable sex education across the state of Ohio, it needs to be mandated state-wide.

In analyzing the state of sex education in Ohio through the CDC's 20 most important sex education topics, another area of potential study and reconciliation emerges. This review of sex education in Ohio was limited because of the lack of accessible data regarding which school districts have implemented the NSES. It would have been most effective to analyze the percentage of school districts in Ohio that have implanted the topics recommended by the NSES, rather than the CDC, however this data, if it exists, is not accessible. The NSES report addresses the percentage of schools in the United States that have implemented curricula based on the NSES but does not go into further detail. Since almost 50% of school districts have implemented curricula based on the NSES, it is pertinent that more research be done into the practices of sex education in Ohio schools based on NSES guidelines. It would also be advantageous to work towards more consistency between the CDC's sex education recommendations and those set out by the NSES.

Through my review, it is apparent that sex education in Ohio needs to be improved in several ways. Through state law Ohio can take steps to ensure that all students receive equal opportunity to sex education that is comprehensive, medically accurate, religiously unbiased, age-appropriate, and culturally sensitive. By passing laws that require sex education to have these elements, the state legislature can be sure that all school districts select curricula that have the greatest potential to impact students in a positive way. Through my analysis of impacts of sex education on Ohio students, it is evident that these changes could help in reducing STD, teen birth, and teen pregnancy rates, reducing stigmatization and bullying of LGBTQ+ students,

reducing racial inequities between Black and White students, and reducing incidences of sexual assault and harassment across the state. School districts can implement these changes to benefit their students with or without action from the state legislature by implementing curricula that closely follow the NSES. Although, to ensure that all students of Ohio receive the same benefits from this education, state laws should be passed that set requirements for all school districts to choose effective curricula. Future areas of research should focus on the implementation of these guidelines into law and into schools. Not only does the state of Ohio need to implement these guidelines into state policy, but equitable funding and instructor training needs to be secured across school districts.

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