An Analysis of Comprehensive Sex Education in the US

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Table of Contents

Abstract **3**
Chapter 1: Understanding Sex Education in the US 3
Abstinence-Only Until Marriage (AOUM) 4
Comprehensive Sex Education (CSE) 10
Conclusion 17
Chapter 2: Sex education laws in the US 19
Federal 19
State 21
Local 22
Chapter 3: Sex education programs 24
Peer to Peer 24
Tech applications 25
Facilitator oriented CSE programs 26
Chapter 4: Internship with Anne and Robert H. Lurie's CSE 27
Background 27
Methods 31
Results 34
Discussion 49
Chapter 5: Sex education in the US 56
Supplementary figures 59
References 64
Chapter 1 64
Chapter 2 68
Chapter 3 69
Chapter 4 70

Abstract: An Analysis of Comprehensive Sex Education

Objective: To provide in-depth analysis of Comprehensives Sex Education (CSE) in the US.

Methods:

To understand the context of CSE, by comparing and contrasting evidence for CSE and abstinence-only until marriage (AOUM) curriculums, laws concerning sex education, and three different CSE delivery methods.

Internship with Anne and Robert H. Lurie's Sexuality Education Program gave an insight into local CSE implementation. The program provides CSE sessions for schools. At the end of every session, students complete a survey and write a question on a sticky note. Quantitative and qualitative analysis of this data was conducted.

Results:

Both sex education curriculums were implemented with the hope of reducing unintended adolescent pregnancies and decrease high rates of STI and HIV/AIDS among youths. CSE is the only program that has been successful in reducing these factors. It is also inclusive of sexual minorities. Funding for sex education flows from federal grants and guidelines; states allocate the money to schools and local organizations. There are three types of CSE delivery methods include peer to peer, utilizing technology, and health educator run programs.

Lurie's program is an example of a health educator run program. Survey data were available for three schools, and sticky notes for five schools. Quantitative analysis of the five items on the survey found statistical significance for Kruskal-Wallis and Fischer's exact test for question three, "I am able to communicate my differences to another person." Qualitative analysis was conducted by grouping comments by the National Sexuality Education Standards (NSES) seven topics of pregnancy and reproduction, healthy relationships, STI &HIV, anatomy & physiology, personal safety, puberty, and identity.

Discussion:

CSE is effective because it emphasizes abstinence but also provides medically, accurate information about contraception. It has been shown that CSE increases rates of safe sex practices but has no impact on the sexual debut of adolescents. The curriculum is inclusive of sexual minorities ignored in the AOUM model. Its primary aim is not to dissuade youth from sex, but to create a foundation. CSE is a progressive curriculum that teaches age-appropriate information about the physical, biological, and emotional aspects of the seven NSES topics.

Through qualitative analysis, students were affirmed of their identity "thank you for helping me feel safe for being bisexual." Youth learned skills on how to approach situations concerning personal safety. This is seen in the comment, "I liked how we don't always have to say yes without being rude." Students discovered the diverse manifestations of puberty and felt that they were "more knowledgeable about my body." The analysis illustrated how students wanted to learn the different aspects of health. Quantitatively, there was one question with statistical significance, which represents a need to teach skills to help adolescents communicate their differences to another.

On the ground, the perspective of a CSE program illustrated the importance of teaching more than just abstinence and puberty. By having an inclusive curriculum of sexual minorities, it affirms a vulnerable population that is more likely to experience bullying and depression. It increases safe sex practices, which contributes to a reduction of STI rates. Adolescents disproportionately experience high rates of STIs in the US. By teaching personal safety and healthy relationships, the curriculum builds a foundation that can decrease interpersonal violence, which is high among students. CSE implementation is a vital method of primary prevention of many of the issues that face adolescents today.

Chapter 1: Sex Education in The US

The publication of *Women and Their Bodies* in 1970 was the culmination of women and health care advocates' efforts to create a book that would help educate women on anatomy, menstruation, pregnancy, and venereal diseases.[1] Before the progressive era of the 60s and 70s, sex education was centered around family values, marriage, and home economic classes. It prioritized sexual restraint until marriage.[2] Knowledge of anatomy, puberty, and menstruation issues was considered to be strictly a physician's domain. Therefore, a book with explicit details educating women was unique during this time. It transferred information that was staunchly a doctor's expertise to be easily understood by anyone. It sparked a conversation. Individuals learning more about their bodies meant they were not solely dependent on their physicians. During the civil rights and women's liberation movement, there was a shift from sex education being an ethics discussion to the need for individuals to become sexually literate. For youth, opinions of sex education in the US became a conversation about the extent of knowledge that should be available to them.

With the high rates of sexually transmitted infections (STI) in youth, high unintended adolescent pregnancies, and the HIV/AIDS pandemic, the need for health education, specifically sex education, became apparent.[3] In the 1980s, it came in the form of the Adolescent Family Life Act, which provided grants and funding for programs based on abstinence-only until marriage education (AOUM).[3] The central tenet of this curriculum is to teach adolescents to avoid any sexual behavior until marriage as the only way to be healthy and prevent STIs, HIV/AIDS, and unintended adolescent pregnancy.[3]

The push for comprehensive information about sex and sexuality continued. The term comprehensive sex education (CSE) became the language used in the 1990s to describe the antidote to AOUM programs.[4] The core principle was to provide information, foster safe decision-making capabilities, and build communication skills regarding healthy relationships, identity, contraception, abstinence, HIV/AIDS, and sexually transmitted infections (STI). Both AOUM and CSE are unique in their goals and approaches to teaching students about sex education. To understand both requires a deep dive into understanding both approaches, evidence for and against, and the current perspectives of Americans on sex education.

Abstinence-only until marriage

AOUM's primary aim is to promote sex avoidance in youth. Its secondary objectives include "teach[ing] personal responsibility, self-regulation, goal setting, healthy decision-making, a focus on future and prevention of youth risk behaviors such as drug and alcohol." [5] The curriculum is centered on the individual's obligation to avoid sex because the consequences can include depression, emotional turmoil, and drug use. [5] Therefore, it hypothesizes that practicing regulation would lead to a happier life. This curriculum provides scenarios of temptation and illustrates the decision-making process of saying no.[5] It demonstrates that an individual bears the responsibility since, in every situation, a "no" can be used to avoid any sexual behavior.

Evidence for AOUM is limited. One study, a randomized control trial structured in a multi-arm format, aimed to understand the effect of an abstinence-only intervention on self-reported rates of sexual intercourse. Six hundred sixty-three black students in 6th and 7th-grade from four low-income public schools were enrolled in the study with parental consent.[6] The four arms include on 8-hour abstinence-only and safer sex-only interventions, a 12-hour CSE branch,

and a control group that received health-promotion education. The abstinence-only arm emphasized abstinence as the only method to avoid pregnancy, STIs, and HIV/AIDS. It taught techniques to say no in social situations to sex, and how adolescents are not ready to handle the consequences of sex until adulthood.[6] The safer sex-only intervention provided information on using condoms as a contraceptive method to reduce the risk of pregnancy, STIs, and HIV/AIDS. CSE intervention teaches both abstinence and different contraceptive methods.[6] It illustrates the positive benefits of both. It provides ways on how to communicate abstinence or condom use. The health-promotion group provided information that was not sex-related, including information about chronic diseases such as stroke, diabetes, and certain cancers.[6] Post-intervention, surveys were provided at 3,6, 12, 18, and 24-month follow-up that included self-reported rates of sexual behavior.[6] The study found that in the abstinence-only arm, there was a 33% decrease in sexual activity compared to the control group. CSE and safer-sex interventions also saw a reduction in risky STI/HIV behaviors. The study has significant weaknesses. Unlike most AOUM programs that have to adhere to the federal 8- point abstinence definition, this program did not. The protocol uses self-reported methods of sexual behavior in adolescents, which have been shown to be widely inaccurate.[7] The study shows that abstinence might be useful. However, CSE and safer-sex only curriculums were also effective in reducing risky behavior. [6]

Proponents of AOUM argue that increasing incidence of depression in youth is due to an increase in sexual behavior rates, illicit drug use, and alcohol consumption.[8] Still, contradictory information on the directional relationships was found. Researchers found that studies did not control for adolescents with depressive symptoms before their sexual debut and into adulthood by analyzing the signs of depressive symptomatology and sexual debut.[8] They

found that females experienced increased depressive symptoms than their male counterparts after sexual debut. Still, the difference was attributed to social and environmental reactions, sanctions, and social norms for both genders. Males are commended on sexual activity while females fall into the dichotomy of Mary vs. Eve. Women are categorized as chaste with no sexual experiences or promiscuous with one or more sexual encounters.[9] This was proposed as a reason for higher rates of depression in females post a sexual debut. Therefore, the connection between depression and high rates of sexual behavior in adolescents has crucial underlying factors that must be taken into account.[9]

While abstinence is a form of contraception, a curriculum solely based on abstinence-only until marriage has been found to be ineffective. Mounting evidence has illustrated that it does not cause a decrease in unintended adolescent pregnancies. It increases STI and HIV/AIDS diagnosis rates in youths and does not delay sexual onset.[10] It emphasizes harmful gender stereotypes, leaves out vulnerable populations including LGBTQ youth, and is often medically inaccurate.

Since the AOUM curriculum's primary aim is to dissuade adolescents from sexual behavior, medical accuracy is never a priority. Many syllabi are curated and molded to fit the narrative that a) sex has grave consequences such as pregnancy, STI and HIV/AIDS, and causes psychological harm b) the only way to handle these ramifications is to abstain from sexual activity c) youths are not equipped to handle these consequences and must wait for marriage.[10-12] In 2004, after two decades of abstinence-only education, the *Waxman Report* was published.[13] It analyzed three commonly used AOUM curriculums for medical accuracy. The curriculums were found to be inaccurate, omitted information, gravely undercut or minimized the effectiveness of condoms in preventing STIs and HIV/AIDS, and used outdated or redacted information. For

example, in *Me, My World, My Future* curriculum, the use of condoms is compared anecdotally to Russian Roulette.[13] A person using condoms is playing a game of Roulette. Like in the Russian Roulette, a person is at risk of getting killed, i.e., getting pregnant or diagnosed with STIs.[13]

> The chamber with the bullet will ultimately fall into position under the hammer, and the games ends as one of the players dies. Condoms are like Russian roulette. Condoms do not prevent pregnancy, STDs or AIDS; they only delay them. Theoretically, the longer one relies on them, they will fail [,] and the "game" is over.[13]

When the primary goal is to stop a specific behavior, it is not always conducive to being accurate. Breakage and slippage are indeed higher in adolescents. [14,15] Still, research has found that teaching students how to use them decreases this likelihood.[16] One curriculum quote by Dr. Robert Noble, "condoms don't hack it. Passing them out is futile" illustrates the perspective of the curriculum on condom usage. [13] Even though this view directly contradicts accepted medical practice and knowledge that condoms are effective.[17]

Another insidious aspect is presenting arbitrary numbers, percentages, or outdated statistics as facts. Vulnerable youth are receiving information from a trusted adult, and to have a curriculum littered with curated data is harmful. For example, it adds that condoms breakage occurs frequently and seems to add arbitrary percentages such a 7.3% or 25.5% when used as a form of prevention with males who have sex males (MSM). In contrast, the experimental and evidenced number ranges from 3.3 to 4.8%.[13,14]

Discussion questions are presented in a biased manner, such as "[w]hat effect does condom instruction result in positive or negative effects on future stability and economic success? Could it not be harmful to young people, or the rest of us, to follow this course."[13-14] Although the question is posed in an "or," the second question essentially intimates that the

curriculum views condom instruction as harmful. Although research has repeatedly illustrated that condom instruction does not increase sexual behavior in youth and has been shown to decrease STI and HIV rates.[13-16]

It provides false information about abortion.[13] It states that after an abortion, individuals can become sterile, experience premature birth, and can experience tubal or cervical pregnancies after an abortion. According to the Mayo Clinic, in the US, risks for a medical abortion include heavy bleeding, infection, fever, or digestive discomfort.[18] The possible harms stated in the curriculum do not apply to medical abortions conducted in the US.

Proponents of abstinence-only education can say that curriculums can be easily adapted for newly found data and improved with the above criticisms. Since AOUM's goal is to persuade all adolescents to abstain from sex, if successful, it would result in a decrease of unintended adolescent pregnancies, delay in age of onset, and a reduction in adolescents engaging in sexual relationships.[19,20] Instead, evidence has shown this is not the case.

An analysis of sex education laws in the US was conducted.[21] States were categorized into levels. Level zero classifies states with no sex education provisions. Level 1 is when laws combine abstinence as part of a CSE curriculum that includes contraception and is medically accurate.[21] Level 2 is abstinence stressed can consist of STD/HIV and contraception. Level 3 states require abstinence-only until marriage curriculums. The analysis found states that categorized level three had significantly higher unintended adolescent pregnancies, even when accounting for socioeconomic status, education, and race.[21] This corresponds to other evidence; AOUM teaching does not impact the rates of adolescents engaging in sex.[22] Still, it harmfully decreases the number of youths who practice safe sex,[21-22] which is the product of consistently minimizing the effectiveness of condoms, providing inaccurate statistics, and saying that it is a

"hack." Proponents of abstinence-only sex education believe its curriculum will dissuade adolescents from initiation of sexual behavior. Instead, studies have shown that it has no such effect, and increases unsafe sex practices.[21]

While youths 16-25 make up 25% of the population engaging in sex, they represent 48% of newly diagnosed STI cases.[20] If AOUM is successful, then states that have staunch AOUM guidelines would have a decrease in STI rates, but there is no such effect.[21,22] Instead, youths that receive abstinence-only sex education are less likely to get testing for STIs.

A metanalysis in 1996 concluded that AOUM "range from barely adequate to completely inadequate."[22] The curriculum has been shown to increase unintended adolescent pregnancies, have no effect on sexual behavior, and less likely for youth to get testing. It also has more insidious long-term consequences. Its curriculum is oriented towards gendered stereotypes and paints women as gatekeepers, "portraying girls as naturally chaste and casting them as the gatekeepers of rampant male sexuality."[23] The onus of any sexual activity is placed on women. The harms of gendered stereotypes include the distortion of sexuality, sex, and self-esteem.[23,24] AOUM's curriculum ignores the spectrum of gender identity/ sexuality and is strongly tinged with homophobic sentiments. This further supplements an antiquated notion that sex and relationships are only between a man and a woman.[23] Examples of this teaching include anecdotes to depict individuals that choose to have sex before marriage as "chewed up-gum," and if they have sex before marriage, they become less valuable.[24] This kind of teaching has a lasting impact on a person's psyche, especially women and girls, who are considered the gatekeepers of sex in this education model. There is undue harm on individuals who are trans-gendered or non-binary, and those whose sexuality is not hetero by having a curriculum structured around relationships between cis-gendered, men, and women.[23,24]

Abstinence is valid contraception, but it is not the only one. AOUM deprives youth the right to scientifically accurate knowledge that is comprehensive. They have the right to be afforded the respect to make decisions and not have their choices minimized. They have the right to be given a curriculum that is evidence-based and shown to improve rates of unintended adolescent pregnancies, reduce STI and AIDS, sensitive towards heteronormative and gender stereotypes, and inclusive of all students.

Comprehensive Sex Education

CSE was formalized in 1991 by the National Guidelines Task Force. Its core tenant is that medically accurate sex education is a human right.[25-27] CSE guidelines recommend providing youth with knowledge, skills practice, and health-seeking attitude development in a progressive manner from kindergarten to 12th grade that is age-appropriate.[26] It teaches the "physical, biological, emotional, and social aspects of sexuality, relationships, and safety."[27, 28] The skills to critically understand external influences, communicate with others, build healthy relationships, and develop decision-making capabilities.[29] It helps youth develop attitudes such as confidence, self-esteem, and a "positive attitude toward their sexual and reproductive health." Evidence for CSE is extensive. It has been shown to decrease unintended adolescent pregnancies, decrease STI/HIV transmission rates, decrease or not impact the age of first sexual debut, and increase safe sex practices.[30] It is inclusive of LGBTQ youth.

Comprehensive sex education provides knowledge

CSE believes that youths have the right to medically accurate information.[30] It provides information on anatomy, normalizes changes during puberty, and provides accurate information about contraception and risks of engaging in sexual activity.[30,31] It teaches students abstinence is the most effective way to prevent pregnancy and STI/HIV but also outlines the effectiveness of various methods of contraception deviating from AOUM's curriculum.

This method has been found to increase knowledge about contraception and STI/HIV, perceived risk, and self-efficacy.[32] A systematic review of CSE interventions, found that such interventions increase self-efficacy, knowledge of contraception, and STIs.[33] They also raise a youth's perceived risk of contracting a STIs.[31-33] Students that receive CSE recognize the danger of STI/HIV as more severe than those that receive abstinence-only education.[34] By acquiring accurate information, they are more likely to get tested than their AOUM counterparts.[35,36] They are more likely to engage in safe-sex practices, such as using condoms.[35] A study found that cisgender male students were more likely to use contraception when sex education included contraception.[37] When CSE is combined with parental intervention it can delay sexual debut in middle schoolers.[38]

CSE teaches students the various changes during puberty. It emphasizes the unique and individual manifestation of puberty in youth. Most crucially, teachings, especially during adolescence, are gender-inclusive.[39] This method brings in previously ignored voices of sexual minorities. It describes the different components of sexuality that adolescents are experiencing, whereas AOUM minimizes these feelings; it provides acceptability.[40-42]

By providing information to students, there is an increase in autonomy, but this does not lead to an increase in sexual behavior as hypothesized by dissidents of CSE.[43] Instead, students are provided with medically accurate knowledge while emphasizing abstinence methods. Those that choose to engage in sexual behavior are cognizant of contraceptive methods and safe sex practices. CSE offers comprehensive and diverse manifestations of puberty to engender acceptance during a difficult time.

Sexual behavior and sexual debut

CSE curriculum establishes a foundation of healthy relationships, from friendships in kindergarten to romantic relationships. It emphasizes that individuals have the autonomy to make decisions in relationships and illustrates how to navigate societal pressures.[27] Some concerns about CSE include whether teaching the curriculum and presenting in-depth information about sex and contraception would increase the number of adolescents who engage in sex, and result in an earlier sexual debut.[21,43] They worry that such a curriculum would endorse adolescent sexual relations. Research demonstrates that teaching contraception, which includes abstinence, did not result in earlier sexual debut.[21]

A similar effect is seen in a study where 1,200 sixth graders were randomized into a comprehensive sex education curriculum known as *Get Real*.[43] The second arm, the control group, received the baseline sex education presented at their respective schools.[43] The study found there was a 30% increase in sexual behavior in the control group when surveyed a year after the intervention was delivered. By having a CSE introduced earlier in schools, the authors hypothesized that individuals who would engage in sex early would delay onset.[43] These youths that engage earlier are more likely to practice unsafe sex practices, and more likely to engage in sexual behavior while consuming alcohol or drugs.[45]

By providing knowledge and skills, CSE emphasizes that adolescents can choose, but most crucially, this is within the context of teaching empowerment, healthy relationships, and personal safety.

Healthy relationships, Gender & Sexuality, and personal safety

CSE, although divided into seven topics, there is an overlap.[28] The combination of gender and sexuality, healthy relationships, and personal safety are crucial to building a

foundation in adolescents.[28] Students learn gender stereotypes and the influence of society and interpersonal relationships. They learn the features of a healthy parental, friendships, and romantic relationships. Also, they learn skills to establish boundaries, communicate consent, ways to handle bullying, and how to address interpersonal violence. All four topics are crucial because all are connected to intimate partner violence, which is high among adolescents.

Intimate partner violence (IPV) is prevalent in the US. According to the Centers for Disease Control and Prevention (CDC), "[m]ore than 1 in 3 women (35.6%) and more than 1 in 4 men (28.5%) in the United States have experienced rape, physical violence, and/or stalking by an intimate partner in their lifetime." [46] Among female adolescents, the estimated IPV is 25%.[46] Females that believe relationships are crucial tend to participate in riskier sexual behaviors, have "less perceived power." [47] Females that are at higher risk for IPV are also at higher risk for STIs.[47] A study of black, cisgender female adolescents concluded that those who were exposed to interpersonal violence were more likely to be diagnosed with an STI, and not practice safe sex such as using a condom.[48,49] A majority of unintended pregnancies of young females ages 16 to 24 have been found to be subject to pregnancy intimidation and birth control destruction.[48] Females that experience IPV, when accounting for confounding factors including demographics, are at an increased likelihood to engage in unhealthy eating habits, attempted suicide, and have an earlier sexual debut.[50]

With high IPV in adolescents, it is essential to address the underlying factors that prompt partners to perpetrate violence and help individuals identify unhealthy relationships. A substantial factor is gender stereotypes. For males and females, relationships with parents and peers influence gender stereotypes.[50-53] Teachers also change perspectives. The most successful interventions took a multipronged approach: peers, teachers, parents, and the community itself

worked together to dismantle harmful gender stereotypes.[51] Preventative strategies include early education of healthy relationships, how to communicate with others, and how to address external influences. CSE addresses this by teaching elements of healthy friendships in kindergarten, slowly building towards romantic relationships. It teaches how youth can communicate their boundaries and respect others'.[52] It outlines external influences such as societal standards of masculinity and femininity.

Research has demonstrated that violence occurs due to various underlying factors. A significant one is the influence of interpersonal relationships and modeling.[53] CSE ensures that students learn early-on what healthy relationships should look like and helps students understand external factors. With a goal to mitigate factors that contributes to the IPV. Although there is no long-term data on the effect of CSE on IPV, elements of effective programs are present in CSE curriculum.[53]

Psychosocial Development: Self-esteem and Confidence

CSE places emphasis on empowerment, which significantly diverges from AOUM, where heteronormative perspectives are entrenched in strict, exclusive binary roles. By presenting the diversity of families, genders, sexualities, and the ability to decide, CSE empowers individuals to build a sense of self.[28,54-55]

CSE has been shown to foster a healthy self-image and positive attitudes.[55] It has been connected to increased self-confidence. Confidence and high self-esteem have been related to later sexual debut, fewer sexual partners, and higher rates of safe sex practices.[55-56] It decreases IPV. Having a psycho-social impact is crucial because puberty is a sensitive time, and youths are more likely to experience social pressure, anxiety, and depression.[55] Therefore, building a sense

of self from kindergarten builds a foundation that helps address the confusing times of puberty, foster healthy relationships, understand the influences present in social media and society.

Inclusive to all voices

CSE guidelines are inclusive to all individuals with diverse family situations, genders, and sexualities.[28] It makes an effort to illustrate that diversity adds to the group than it does to detract. It also addresses how gender stereotypes are harmful to everyone. Leaving out any voice in a curriculum means that students do not receive information that is tailored to their sexuality and gender expression. By not including the diverse gender and sexualities, gender stereotypes are reinforced. It does not reflect the realities of you and their peers. Especially when LGBTQ are at a higher risk for unsafe sex practices, eating disorders, depression, higher rates of STI/HIV, and higher rates of attempted suicide.[58-60] According to the Trevor Project, LBG youth are three times more likely to have suicidal ideation.[59]

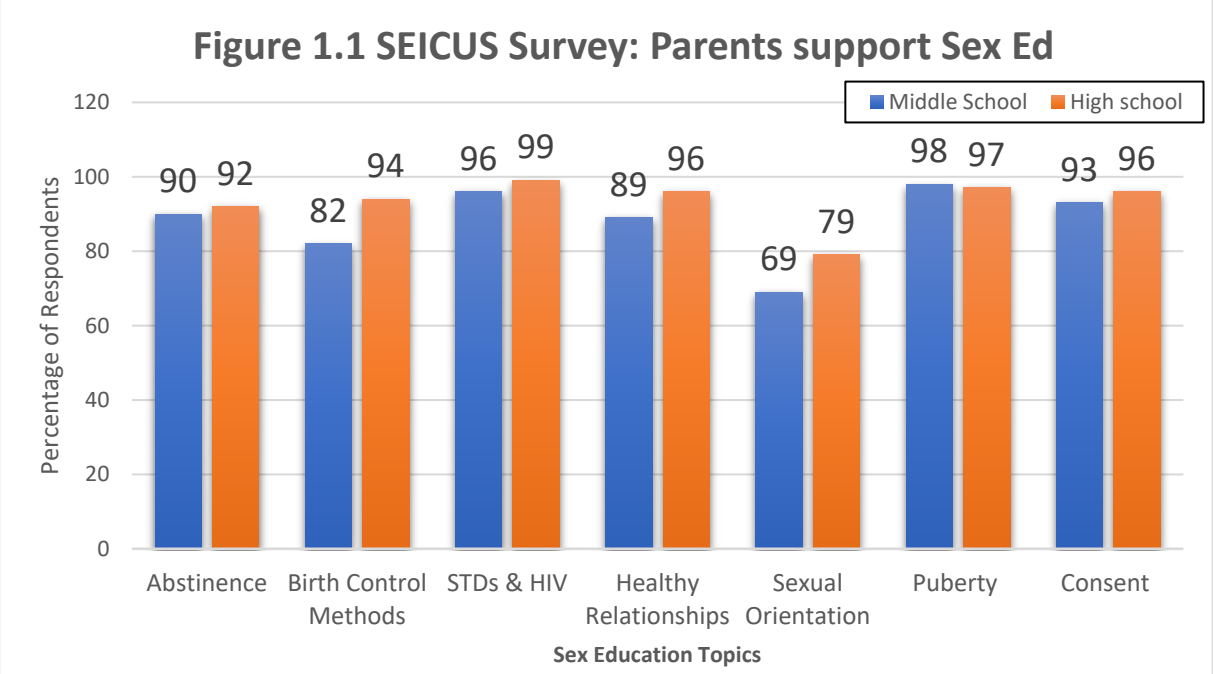
CSE, being inclusive of these voices, is successful in increasing intervention by staff, youth, and individuals themselves in cases of bullying of LGBTQ youths.[57] Implementation has been shown to decrease in the teasing of LGBTQ by name-calling.[61] Adolescents felt this contributed to a safer school environment.[61] Although the study was in Dutch schools, it demonstrates the possibility that CSE is useful if implemented in the US, where there is currently a deficit.[61, 62]

Evidence against CSE

Proponents against CSE point out that there is no longitudinal data for behavioral change.[5] Others cite a survey study where students from a catholic high school responded that sex education should be taught within the context of religious morals.[63] Most importantly,

evidence referenced by those against CSE is often curated and molded to fit a narrative that the curriculum is ineffective instead of a rigorous scientific study.[56] There are no studies that measure whether CSE, implemented from kindergarten to 12th grade, results in a maintained behavioral change to adulthood. [63] This type of implementation requires resources, which many schools are lacking. Instead, single one-year studies have shown an effect and change in attitudes and knowledge. Intimating that consistent, progressive, age-appropriate curriculum would be valid.

While there is limited evidence against CSE, resistance to implementation in the US is due to firmly held societal norms that educating youths about sex and contraception leads to a higher number of students engaging in sexual behavior. However, mounting evidence has shown that perspectives have evolved.[34] Majority of parents support the topics that the CSE curriculum is comprised of such as birth control methods, consent, and healthy relationships.[64] This



From Eisenstein Z. Survey says (again): People overwhelmingly support sex ed. SIECUS. https://siecus.org/survey-says-people-support-sex-ed/. Published August 23,

perspective has been consistent form 2004 until now regardless of geographical location or political party.[65,66]

For youths, a branch of health education beginning from kindergarten provides a foundation to discern resources for accurate information and skills for healthy decisions making. Both are crucial since a majority of adolescents are increasingly receiving data from the internet, including social media.[67-69] Individuals that utilize social media for health information are more likely to have used contraception.[69] Therefore, it illustrates the importance of using the internet as a tool for health promotion and teaching youths to have a critical eye when consuming such information as part of sex education. [69]

Conclusion

AOUM methods have been shown to be ineffective at the primary goals of reducing unintended adolescent pregnancies and rates of STI and HIV/AIDS. It is egregiously and harmfully inaccurate. It increases unsafe sex practices and substantiates harmful gender stereotypes with long-term harm. On the other hand, CSE methods integrate abstinence as a contraceptive option and are entrenched in the reality that adolescents might engage in sexual activity and promotes the right to have accurate health information. CSE has been shown to reduce unintended adolescent pregnancies and HIV/STI rates. It is adaptable to local needs and targets the psycho-social, biological, and mental components of health, sexuality, and sex. It has been shown to delay the age of sexual debut, develops a sense of self, has the potential to address high rates of adolescent intimate partner violence, and is inclusive to previously ignored experiences of sexual minorities. It is an effective method of primary public health prevention.

Dissidents point to a sentiment that parents do not support this type of sex education. Still, surveys have shown that the overwhelming majority do support elements that exist in CSE

guidelines. By providing knowledge, attitudes, and skills to the youth, it shifts the dynamic and empowers youth. This shift is similar to *Women and Their Bodies*; it respects the autonomy of the individual while providing a context to make informed decisions. It recognizes the right of students to have medically accurate knowledge about their health and well-being.

Chapter 2: Laws

Federal Level

U.S. sex education is guided by laws at the federal, state, and local levels. At the national level, there are six programs instituted from 1981 to the present.[1,2] Federal level consists of programs and policies that provide grants to states and communities that adhere to program specifications. As mentioned in Chapter 1, the rates of unintended adolescent pregnancies and HIV/AIDS pandemic prompted the implementation of The Adolescent Family Life Act, which provided funding to organizations that taught abstinence-only until marriage curriculum.[1,3,4] This program was subject to various lawsuits because a majority of grants went to religious groups that combine scripture with the abstinence-only program.[1,4] The lawsuits were settled with stipulations that the curriculums need to be non-secular in its dissemination. They could not have religious affiliations or occur at a religious venue. Under the new requirements, programs had to be medically accurate.[4]

Table 2.1: Title V 8 point 'A-H' Definition for Abstinence Education

A.	Exclusively teach that social, psychological, and health gains to be realized by abstaining from sexual activity
B.	Teaches abstinence from sexual activity outside marriage as the expected and only standard for all school-age children
C.	Abstinence is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems
D.	Sexual activity within a mutually faithful monogamous relationship is the expected standard
E.	Sexual activity outside of marriage is likely to have harmful psychological and physical effects
F.	teaches having out-of-wedlock children is likely to have harmful consequences for the child, the child's parents, and society
G.	Teaches young people how to reject sexual advances and how alcohol and drug use increase vulnerability to sexual advances
H.	Teaches individuals to attain self-sufficiency before engaging in sexual activity

Adapted from Section 510 (b) of Title V of the Social Security Act, P.L. 104–193; Kaiser Permanente *Funding and impact on Teen Sexual Behavior*

In 1996, AOUM was reintroduced under title V of the Welfare Reform Act. States allocate funding to programs that meet the eight-point abstinence-only until marriage definition (Table 2.1).[5,6] States contribute three dollars for every four federal dollars received. The act presents AOUM as the only expected standard, and contraception was ineffective. This program was transformed in 2018 into the "Sexual Risk Avoidance Program."[7] Now it requires plans to be medically accurate but cannot teach how to use condoms or other contraception.

Although by 2012, any AOUM curriculum was proven to be ineffective. The Title V AOUM was transformed into an independent branch called Sexual Risk

Avoidance Education Initiative (SRAE).[1,7] Instead of the federal government providing funding to states like AOUM under Title V, the program provides grants directly to the community.[7] Funding for this program was increased in 2017.[1]

With the HIV/AIDS pandemic and higher rates of HIV in males who have sex with males (MSM) in 1988, DASH, a Division of Adolescent and School Health, was created.[1,6] It began providing funding for sex education to prevent HIV and STI transmission for young adolescent MSM.[6] The funding goes to state education departments and school districts to allocate to programs and schools within their respective areas.[1]

Recently, two programs were created under the Affordable Care Act (ACA). First, the Teen Pregnancy Prevention Program (TPPP) and the Personal Responsibility Education Program (PREP).[1] PREP provides grants to state health departments and community organizations for "medically- accurate, evidence-based, and age-appropriate sex education programs that teach abstinence, contraception, condom use, and adulthood preparation skills."[1] This program provides grants to community organizations. State health departments calibrate school funding by the number of adolescents ages 10 to 19.

TPPP was created to reduce unintended adolescent pregnancy, which had declined in the late 90s and early 2000s but was still high when compared to other industrialized countries. [1] The TPPP provides grants for programs that help populations that are at risk and have the same medically accurate and evidence-based approach of PREP. [1] It provided guidelines for 44 evidence-based programs.[2] The current administration in 2017 aimed to cancel these grants but was unsuccessful.[9] Instead, they changed the approved curriculums to two abstinence-only programs.

In general, the Federal government provides grants and funding to states and communities. The grant regulations and guidelines are subject to the stances of the current administration. This shifting tide of AOUM vs. CSE was felt at the ground level during my internship. One of my first assignments at Lurie's was to provide minimal support for a federal grant. The guidelines for the grant were littered with AOUM only guidelines and specifications that they would not offer grant money to organizations that teach condom usage. It was a first-hand experience of how a federal stance can impact a local, foot on the ground, organization.

State

While the federal government provides guidelines and grants, the states implement and allocate funding, pass new laws, and provide guidance to school districts. This structure results in the highly variable implementation of sex education. Twenty-seven states require sex education, but not all states require the programs to be medically accurate.[5] This means that states' methods of sex education vary significantly from state to state and, like at the federal level, are subject to the stance of the administration voted into office. For example, Texas' sex education has to adhere to a strict AOUM standard, but be medically accurate, whereas California adopted an extensive CSE policy for students from middle school to high school.[9,10]

Illinois has implemented the Illinois Critical Health Problems and Comprehensive Health Education in 2016.[11,12] The law was a small step. While it did not require sex education to be taught in schools, if taught, it should be medically accurate, emphasize abstinence-only until marriage and contraception.[13-15] It does not mandate curriculums to be inclusive to sexual minorities but requires that "honor and respect for monogamous heterosexual marriage" be taught.[15] This vague wording led to a significant variance in sex-ed implementation.[16] Illinois funding streams in 2017 reflect this. The state and local entities received around three million in

AOUM funding through SRAE and Title V AOUM programs, five million through TPPP and PREP programs, and seven hundred thousand through DASH funding.[15]

In 2019, a law (HB 3550) was signed into action for schools that teach sex education to provide a broad definition of consent from 6th to 12th grade.[15,17] Implementation of this law was the product of the #Metoo movement, and reflective of the progressive shift towards comprehensive sex education. Uniquely, Illinois passed a bill to teach sex education to individuals that are admitted to a developmental disability facility. They will be assessed on their ability to give consent and provided developmentally appropriate health education.[18] In 2020, HB660 introduces the tenant of CSE, which believes that "every student has the right comprehensive sex education." Whereas HB3788 would require sex education to include healthy relationships, gender identity, pregnancy, and contraceptive methods, which are the elements of the CSE curriculum.[15] During this period, the Illinois State Board of Education decided to still apply for AOUM funding since, in some areas, that is the only sex education available.[15,16] As a state and during the current administration, sex education is moving towards adopting CSE, but is in direct conflict with federal aims of supporting AOUM guidelines.

Local

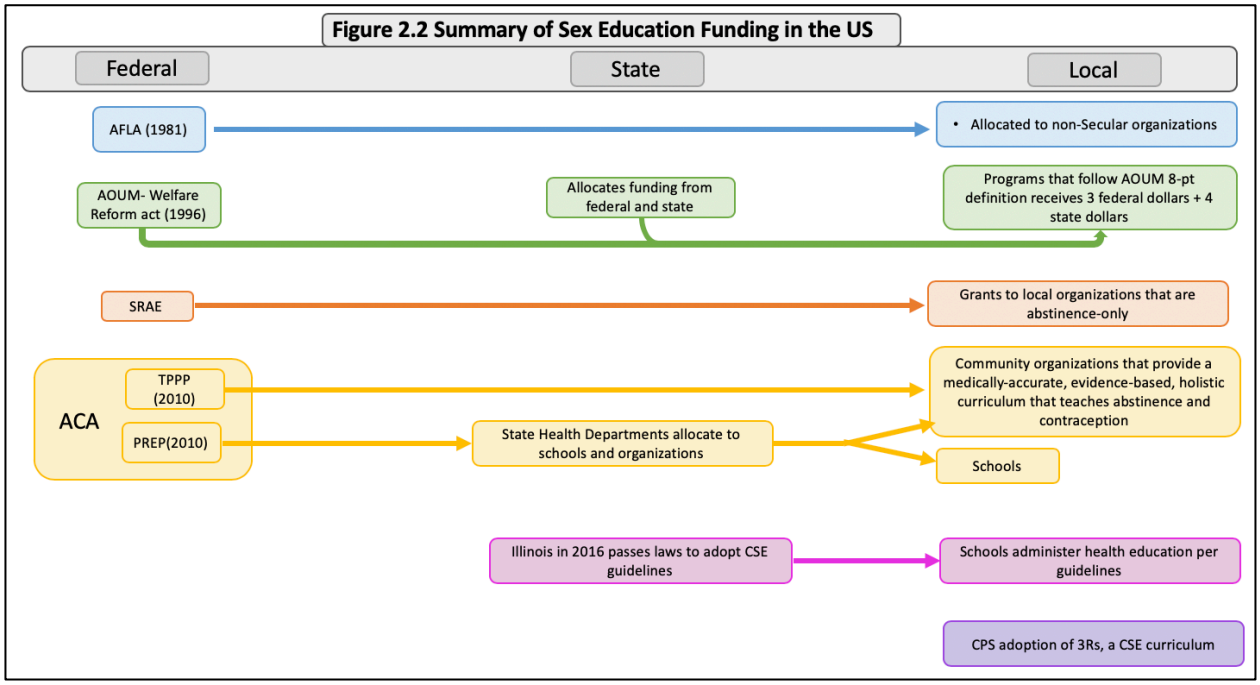
At the local level, school districts adopt specific curriculums. In Chicago, the Chicago Public Schools (CPS) integrated CSE and approved 3Rs, which provides detailed curriculum and resources based on NSES guidelines.[19] Although comprehensive sex education has been adopted, implementation has been difficult due to a resource deficit, limited teacher training, and time availability. Therefore only 28% of schools completed the required minutes.[20] In 2019, CPS was cited for having "failed to report sexual harassment and abuse at every systemic level."[21]

Due to the deficit of resources, time, and instructor availability, local organizations provide crucial support. These groups receive funding from both federal and state governments.

These organizations utilize various methods such as peer-to-peer, technology such as apps, and health educators.

Conclusion

Laws at the federal, state, and local level guide sex education priorities. Therefore, change at any level effects on the ground organizations. Figure 2.2 outlines how every level impacts the other. With no standardized sex education law, it means that funding is subject to change as per an administration's political priorities. The combination of federal vs. state and changing priorities has led to inconsistent implementation of sex education in the US.



Chapter 3: Programs that administer sex education

Organizations on the ground level work to help schools implement sex education curriculums. The programs are diverse. They include peer to peer education where trained senior high schoolers or college students teach their younger person. Some employ internet and phone applications to deliver medically accurate information, and others implement a multipronged approach of trained health educators. The latter deliver CSE to students, teachers, and parents.

Peer to Peer Education

One method has been to train adolescents to teach their peers about sex education. The underlying theory behind this method is to have youths be more engaged in the curriculum.[1] One study found that students who received peer-to-peer education are more likely to use contraception, be more self-sufficient to communicate abstinence, knowledgeable when visiting a doctor's office, and more aware of resources available to youths.[1,2] The peer educators themselves have reported an increased willingness to speak with friends about risk reduction, healthy relationships, and have more knowledge about contraception and health.[3,4]

In Chicago, Peer Health Exchange places trained college students to deliver a curriculum that aims to "reduce risky decision making, contraception, communication skills, and address mental health."[7,8] The program found students that receive this format are more likely to visit health care centers, use contraceptives, detect signs of deteriorating mental health, and identify consent in sexual situations.[7]

The benefits of this method are students receive information from a trained expert, who is relatable, have shared experiences, and not likely to judge them.[3] It benefits the educators themselves and empowers them to initiate conversations with their peers, parents, and teachers. This is an innovative approach that addresses the scarcity of trained health educators and has bidirectional benefits to both trained students and recipients.

Tech Applications

Youths are increasingly getting information from the internet, making it a perfect tool for interventions and also empower students to have a critical eye towards discerning medically-accurate information.[8,9] Many applications and websites have been developed with this in mind. These diverse applications have unique pros and cons.

Amaze.org is a website developed by Advocates for Youth that breaks down the "multi-dimensional aspects of puberty for tweens and their parents".[10] The site has a range of animated videos on different topics, such as personal safety, period, and contraception. By having it animated, it works to remove barriers regarding uncomfortable topics. However, the animation can be seen as childish for students who have had access to the internet since they were young. Amaze.org provides information on a whole host of topics and is inclusive of different gender identities and sexualities.[10]

CRUSH, on the other hand, provides information for heterosexual women.[11] In an app form, the user goes through three categories love&sex, bodyworks, and STIs. The love&sex module has several situations, such as what should be done when a romantic text is nonconsensually shared with others. The user works through a quiz on whether their relationship is healthy and safe.[11] Most importantly, these situational quizzes make the user think and connect them to crucial resources such as clinics or local organizations that help individuals leave abusive relationships. The app is phenotypically a mix of photos and sophisticated animations. CRUSH broaches several sensitive topics but is only applicable to only heterosexual women making it a less general application.

While AMAZE and CRUSH have cataloged videos and quizzes, Juicebox is a phone application that provides the expertise of licensed sex therapists and health educators. Users ask

questions in a chat box where experts reply with medically accurate advice.[12] Forums where other user questions and stories can be read. Applications like My Sex Doctor and Real Talk function in a similar way.

The applications fill a need for medically-accurate information in a space that youths are increasingly utilizing. They provide a forum to ask anonymous questions and see the information that would otherwise be embarrassing. It is a synergistic combination of these applications and the groundwork of health educators that would be the most effective.

Facilitator Led Organizations

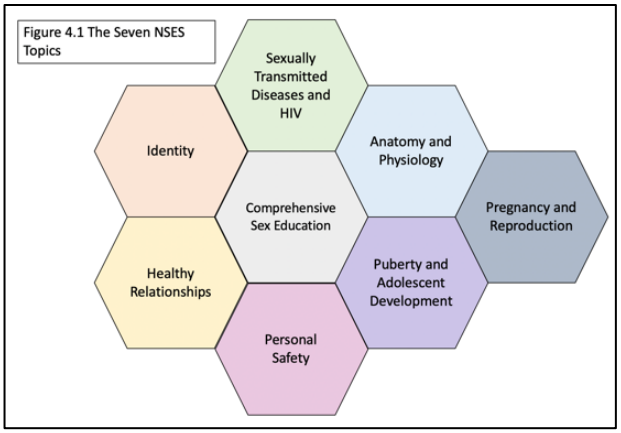
While a peer-led and tech apps provide information, CSE with trained facilitators provides sessions from kindergarten has been found to be the best method.[7,13,14] These organizations provide sex education sessions to schools by trained educators. They fill a need for schools that do have the resources to train teachers and implement an effective sex education curriculum. One such organization is Anne and Robert H. Lurie's Sexuality Education Program (Lurie's program). The program is based on the 3Rs curriculum created from NSES guidelines and approved by the Chicago Schools Board of Education. The internship with Lurie gave insight into how the CSE curriculum functions on the ground.

Chapter 4: An Analysis of Anne and Robert H. Lurie's Sex Education Program

Background

Anne and Robert H. Lurie's Sexuality Education Program (Lurie's program) was instituted in January 2019 with a primary aim to provide equitable CSE to Chicago schools. The program uses 3R's evidence-based curriculum, which was developed from the National Sexuality Education Standards (NSES).

NSES's mission is to provide "consistent and straightforward minimum, core content for sexuality education that is developmentally and age-appropriate for students in grades K–12."[1] The guidelines were created for schools with limited time, resources, and teacher availability to increase standardization and utilization.



The guidelines include seven topics (Figure 4.1) that are taught from kindergarten to 12th grade with progressively higher-order cognitive contents.[1] Anatomy and physiology outline both the colloquial terms and scientific names for body parts (Supplementary figure 1.1).[1] Puberty and adolescent development module begin later in elementary and provides information, support, and resources during a difficult period (Supplementary figure 1.2). For Pregnancy and Reproduction, students first learn that all living beings reproduce, understand how communication is essential in relationships, discern different choices, learn about contraception, and advance to learning about the decision-making process to become a parent (Supplementary figure 1.4). Sexually transmitted diseases and HIV section begins later in elementary and middle school (Supplementary figure 1.5). Students learn how germs can transmit and progress to learning how various STDs spread and understand individual

responsibility.[1] Personal safety establishes that children have the right to tell another person, whether a parent or a stranger, if they feel uncomfortable (Supplementary figure 1.7). It progresses to defining harassment, sexual assault, and bullying, and how to respond when in these situations. Healthy relationships teach students to identify traits of good relationships, which include friendships, parental figures, and other relations (Supplementary figure 1.6). Identity begins with gender stereotypes and then moves onto sexuality and gender identity (Supplementary figure 1.3). The topics are also structured around seven domains, including information, analyzing influences, and decision-making skills (Table 4.1 National Sex Education Standard Domains).

Table 4.1 National Learning Standard Domains

NHES Standards	Initials	Definition
Core Concepts	CC	Standard 1 Students will comprehend concepts related to health promotion and disease prevention to enhance
Analyzing Influences	INF	Standard 2 Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.
Accessing Information	AI	Standard 3 Students will demonstrate the ability to access valid information and products and services to enhance health.
Interpersonal Communication	IC	Standard 4 Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
Decision-Making	DM	Standard 5 Students will demonstrate the ability to use decision-making skills to enhance health.
Goal Setting	GS	Standard 6 Students will demonstrate the ability to use goal-setting skills to enhance health.
Self Management	SM	Standard 7 Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
Advocacy	ADV	Standard 8 Students will demonstrate the ability to advocate for personal, family and community health.

***Table modified SEICUS.org's National Standard of Sex Education**

The NSES guidelines are used to build CSE curriculums. One such curriculum is 3Rs created by Advocates for Youth. The three Rs stand for rights, respect, and responsibility.[2] All youth has the right to sex education. They deserve respect to be involved in the implementation

of health education. It is society's responsibility to provide this information, and youth have the responsibility and autonomy to protect and decide.[2] The curriculum provides detailed lesson plans and handouts.

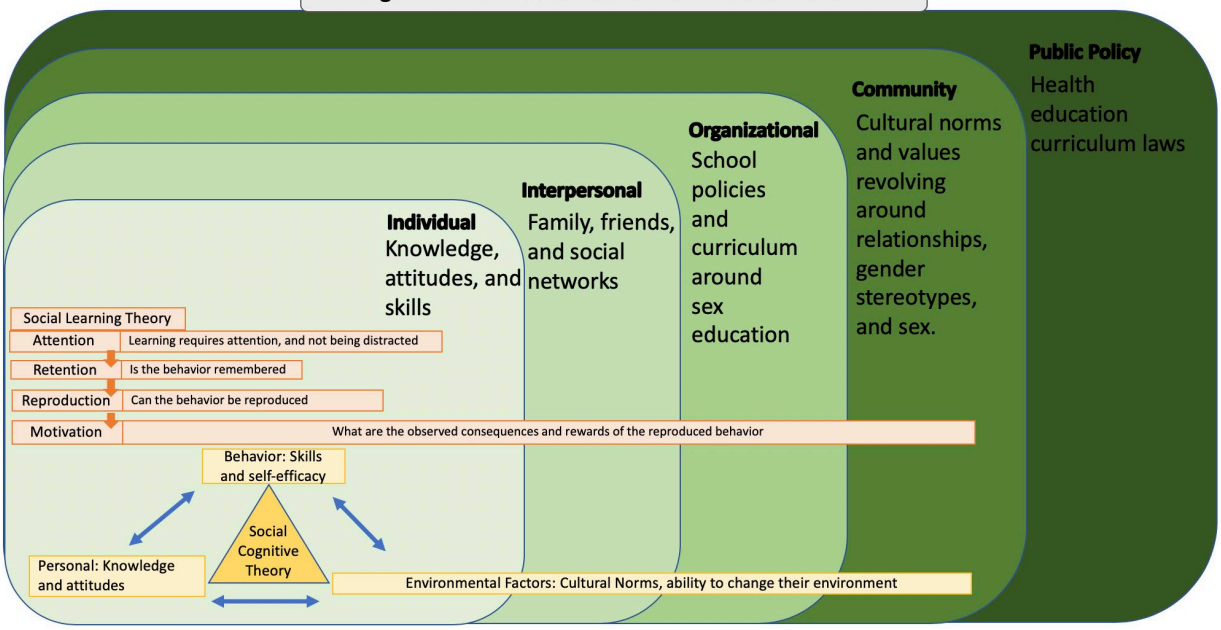
Both NSES and 3Rs are based on behavioral theories of the Social Learning Theory, Social Cognitive Theory, and the Socio-Ecological Model.[1,2] Social Learning Theory(SLT) believes that to learn a behavior; an individual has to first pay attention to it, remember the action, be able to reproduce. To have the motivation to replicate it, they must be able to observe the consequences and rewards of the behavior.[3] For comprehensive sex education, the skills must be practiced, given the opportunity to reproduce them, and show the positive rewards for making healthy decisions.

The Social Cognitive Theory (SCT) postulates that personal, behavioral, and environmental factors influence one another, leading to behavior change. Individual factors include beliefs and knowledge.[4] It could be beliefs about gender roles. Environmental factors include social norms and the influence of society, media, and the local community.[5] Social media and cultural norms can portray unhealthy relationships that can influence behavior. Behavioral factors include skills. Self-efficacy is an individual's belief in themselves in producing the action, and it underpins both SCT and SLT.

The socio-ecological model theorizes that there are different levels of influences that affect behavior.[6] The different levels include individual, interpersonal, organizational, community, and public policy. At the individual level, a person's knowledge and attitude affect their behavior. The interpersonal level includes relationships with family, friendships, and social networks. Organizational include influences such as a school or work environment. At a community level, local cultural values and norms. Finally, public policy entails laws. All these

levels coalesce into a specified behavior. All three theories guided the NSES guidelines, the framework for the CSE curriculums.

Figure 4.2 The Combined Behavioral Model of CSE



Lurie's program utilizes the evidence-based curriculum of 3Rs to provide comprehensive sex education and support to schools in the Chicago area. Lurie is an approved vendor for Sexual Health Education in CPS schools, allowing schools to count Lurie's sessions in their overall number of required educational minutes per grade. It is multipronged, offering lessons not only to students, but to teachers, administrators, and parents. Although the lessons are fee-for-service, the fee scale is equitable. Resource-rich schools pay more to help subsidize resource-poor schools. The staff is a dynamic composition of health educators, ages, expertise, ethnicities, sexualities, and support interns. As an intern for Lurie's program from May to December 2019, I provided onsite support, shadowed various facilitators to CSE sessions, and conducted qualitative and quantitative analysis on feedback surveys intending to understand comprehensive sex education implementation at a local level.

Methods

My internship with Lurie's can be divided into Phase I: Observation & program support, and Phase II: Data collection and mixed-method analysis. The first phase consisted of observing CSE sessions administered to students and teachers in schools around the Chicago area, and providing onsite support at the Lurie's Dayton branch. The second phase included the observations from Phase I CSE sessions and data from program evaluation surveys administered at the end of every session for data analysis.

Phase 1: Observation

To understand how CSE sessions are developed and administered, I provided aid with a grant application, assisted in building a logic model, submitted a protocol exemption, and assisted in preparing for upcoming CSE sessions onsite. Lurie's program serves both CPS and non-CPS schools. Therefore, a CPS a volunteer application and background check were submitted and subsequently approved, while non-CPS schools did not have a similar process.

While the program serves students from K-12th grade, parents, teachers, and administrators, but I was able to observe student and teacher sessions. Onsite volunteering at Lurie's Division of Adolescent Medicine provided insight into how curriculums are individualized for each school and the underlying aims for each session. On location at each school, I observed the implementation of CSE utilizing the 3Rs curriculum and meeting the objectives of NSES.

Phase II: Data collection and combined analysis

As a newly implemented program, Lurie was in the nascent stages of data collection and database assembly. The primary goal was to develop a REDCap database and to access the data. We submitted a protocol exemption to Northwestern IRB mid-July, which was granted (Supplementary 2. Northwestern Prompt Exemption) at the end of July. The reasons for approval include a) survey data would be used for program evaluation b) they were approved by

CPS c) were anonymous. The protocol was resubmitted for Lurie's IRB to allow for data input into Lurie's REDCap at the end of august and the beginning of September. Approval for Redcap was received mid-October. Due to the delay, survey data was preliminarily added to excel, and a data dictionary developed for easy import into REDCap once approved.

The majority of data consisted of the CPS approved surveys distributed at the end of each session. They were created before the internship began. These evaluations are modified depending on whether the recipient is a student, teacher, parent, or administrator. The first half of the student surveys are structured as five questions with responses structured on a Likert scale of "strongly agree," "agree," "disagree," and "strongly disagree." A neutral option was not provided. Every question corresponded with one or more NSES aims.

Table 4.2 Student Survey Questions Connected to

Questions #	Student Evaluation Questions	NSES Code	NSES topics	Grade	NSES Standards	NSES AIMS
1	I can identify trusted adults in my life	ID.5.AI.1	Identity	5th	Accessing information	Identify parents or other trusted adults of whom students can ask questions about sexual orientation
		HR.5.AI.1	Healthy Relationship	5th	Accessing information	Identify parents and other trusted adults they can talk to about relationships
		PS.5.AI.1	Personal Safety	5th	Accessing information	Identify parents and other trusted adults they can tell if they are being teased, harassed or bullied
2	I am able to treat people with respect and dignity	HR.5.IC.1	Healthy Relationship	5th	Interpersonal communication	Demonstrate positive ways to communicate differences of opinion while maintaining relationships
3	I am able to communicate my differences to a person	ID.5.SM.1	Identity	5th	Self management	Demonstrate ways to treat others with dignity and respect
		HR.5.SM.1	Healthy Relationship	5th	Self management	
4	I feel more knowledgeable about the topics we covered	PS.5.IC.2	Personal Safety	5th	Interpersonal communication	Demonstrate refusal skills (e.g. clear "no" statement, walkaway, repeat refusal)
5	I was able to ask the questions I wanted to ask.	NA	NA	NA	NA	NA

The second half of the survey is a blank space where students write their feedback. In conjunction with surveys, individuals are also encouraged to ask a question or write a statement on a sticky note. This information was also collected.

Quantitative Analysis

Data were analyzed using STATA software. For all quantitative testing, the alpha level was set at 0.05. Since the responses were structured in a Likert format, therefore, an ordinal manner, non-parametric, and a sampling of three independent populations, the Kruskal-Wallis H test was used. **The null hypothesis- there is no difference in the distribution of responses between the three schools for each of the five questions.** Specific responses have multiple answers since individual surveys were not available to understand responses to other questions; these responses were marked as missing. The same was done for items with no response.

To include some of the multiple answers that were marked as missing in the Kruskal-Wallis test, the following Likert scale options were regrouped. For individuals that answered strongly agree=1 and agree=2 were categorized into a category of agree. For individuals that choose strongly disagree=3 and disagree=3 were grouped in to disagree. Since the survey does not have a neutral or "neither agree nor disagree" option, responses that included both a version of agree and disagree were classified as neutral. This categorization transformed the data. It became nominal and non-parametric. Therefore, a chi-squared test for homogeneity was chosen. **The null hypothesis- the distribution of responses between the three schools, is the same for each of the five questions.**

Both CPS and non-CPS have statistics for ethnicities/races on their website for the 2019 to 2020 school year. This was extracted from the respective websites. Schools were categorized as Hispanic Majority or non-Hispanic Majority and analyzed through a fisher's exact test. **The null hypothesis- the proportions of agree, disagree, and neutral responses are independent of whether it was a Hispanic Majority versus non-Hispanic majority school.**

Qualitative Analysis

Feedback (FB) of the student survey combined with sticky note questions (SNQ) were first grouped by NSES topics (Figure 4.1 The Seven NSES Topics) and then categorized by the seven NSES domains (Table 4.1 National Learning Standard Domains). The FB and SNQ that could not be assorted by the seven topics were then grouped by the unique ideas. For example, students that provided curriculum changes would be categorized as a single group.

Additional Stalled Project

Due to the limited data from surveys and having attended only one CSE teacher session, in-person teacher interviews were proposed. An interview guide was developed. Ultimately, with the teacher strike in November, and no further responses from teachers who were contacted led to a stalled project.

Results

Phase I Observations:

Onsite Location

Onsite support gave insight into the inner workings of the program. The courses for each school are adaptable to administrator/teacher needs. The school and Lurie's team work together to determine frequency, length, time, and aims. Once established, facilitators work together to determine the flow of sessions, games, and discussion questions.

Two opportunities, assisting in building a logic model and providing minimal support for a grant application, gave insight into the breadth of the program, diversity of operations, and connections to the community. The inputs of the program include a diverse staff with a mix of ages, ethnicities, gender identities, experiences, and sexualities. A network of community partners includes Advocates for Youth, Chicago Women's Health Center, and Illinois Caucus for Adolescent Health. The output activities include utilizing a 3R curriculum to teach students and a fiscally just model where resource-rich schools subsidize resource-poor schools. Outreach to

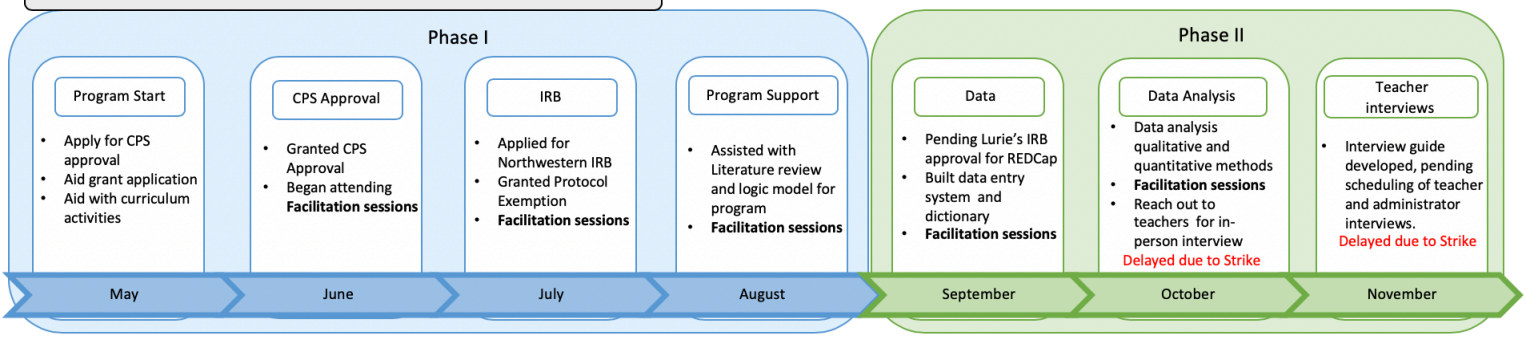
help educate teachers and parents by creating videos to help parents and children have fruitful conversations about healthy relationships, personal safety, and identity. The program participants are students, teachers, school administrators, parents, and CPS.

The program's short-term outcomes include an increase in knowledge, a holistic perspective of health and well-being, and developing decision-making skills for increased parent/child communication. By partnering with Lurie's, schools will increase their awareness of CSE content and be more able to reinforce these messages throughout the school year. Its primary outcomes include a decrease in risky health behaviors, unintended adolescent pregnancies, and STI/HIV rates. In addition to promoting a positive school atmosphere, it can possibly reduce adolescent intimate partner violence.

The grant application was under the Personal Responsibility Education Program (PREP), a federal program, which provides grants to curriculums that are medically-accurate and holistic. While minimally assisting in this process, Advocates for Youth cautioned against applying for this grant application, which emphasized abstinence-only teaching and refused to provide funding for programs that provided information on condom utilization. The primary aim of the grant was to reduce rates of STI and unintended adolescent pregnancies in high-risk populations, which overlapped with Lurie's long-term outcome for the program. The primary objective of the program to provide funding for abstinence-only funding was littered throughout; therefore, the grant application was dropped. It offered a real-time perspective of how federal priorities can affect organizations on the ground.

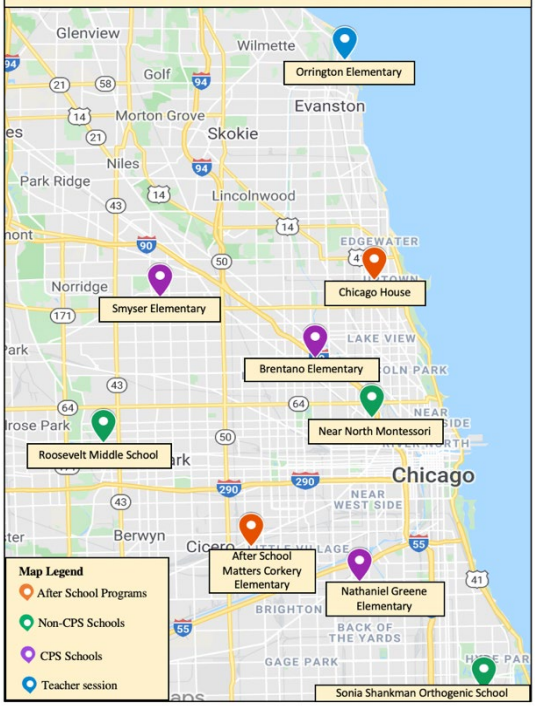
Other onsite activities included assisting with prep for upcoming sessions. Onsite work gave insight into how sessions are tailored for each school, age group, and administrator concerns. Curriculums were carefully individualized and built off of an increasing bank of games. Sessions also include poignant discussion question sessions. Figure 4.3 illustrates the flow of the internship.

Figure 4.3 Lurie's Comprehensive Sex Education Project Progression



Session Observation

Figure 4.4 Distribution of Lurie's CSE sessions



Of the eight school sessions held, I got the opportunity to observe five student sessions at Near North Montessori, After School Matters at Corkery Elementary, Brentano Elementary, Roosevelt Middle School, and Nathaniel Greene Elementary in Chicago area. One teacher session at Orrington Elementary in Evanston. Figure 4.4 illustrates the geographical distribution of the schools, their classification as a non-CPS or CPS school, and delineates some as after school programs or the single teacher session. Observing these sessions, I was able to see the 3Rs, an evidence-informed curriculum in action. The sessions were diverse in their objectives, but they overlapped in similar games

and themes. All sessions were mixed gender. The perspective behind this is that knowing the experience of others who are peers, friends, adults, and parents are essential. Below are two games that were frequently included in all the sessions.

Gender stereotypes

During this section, facilitators prompt students for examples of things that boys are expected to do, and things girls are supposed to do. Regardless of the age group, this part of the session always has active participation from fourth graders to high schoolers. Usually, one of the first games played; this often created an environment of interest and involvement. This module outlines the stereotypes that exist that students, regardless of their biological sex or gender expression, can do anything.

The flow of this session is the condensed version of the Gender Roles and Gender Expectations, which is a 50-minute module.[2] In it, youths are given an imaginary scenario of describing boys and girls to an alien with prompts such as "boys are" and "girls are".[2] Students are then asked to provide general impressions of the list they made and are asked if there are things that "apply to some boys and girls, but not all." [2]Then are asked whether it is "okay a girl is [athletic; funny; strong]?" and vice versa.[2] The students are then asked to complete homework that includes one thing that is a gender stereotype that fits and one example where it does not fit. This activity encourages the student to study how gender stereotypes are applied and how society influences this binary. It ensures students that it is okay to follow and not follow because they were able to find examples of this themselves.

Definition and terms

Two decks with terms and definitions are separated. Students match the right term with the description. The categories of matched cards include sex assigned at birth, gender identity, gender expression, and sexual orientation. The activity works to illustrate the differences

between all four and show that a person's physical appearance should not be used to make assumptions about their identity. This activity is designed to decrease stigma and increase empathy around identities.

During my first session at Near North Montessori and this activity, one youth pointed at another and mouthed “gay” in a derogatory manner. The facilitator saw this interaction and gently stated that sexuality is not something another person can tease each other about, but something a person cannot change. In the first session, having a facilitator not necessarily point the students out, but gently providing recompense had affected. These two games were played frequently, but sessions included videos, discussion questions, and various activities. Each session’s agenda is determined by the number of meetings and minutes that the school would like. Therefore, the 3Rs evidence-informed curriculum is usually modified to fit within this time frame

Teacher Session

I was able to observe one teacher session at Orrington Elementary, where two facilitators went through a gender upstander and overview for a group of teachers. Included in this session were activities where participants practice using non-gendered language. The session was about shifting perspective. To shows that there are substitutes such as partner, spouse, or significant other to describe relationships. Instead of splitting the class up into boys and girls, to use other ways such as birthday months or shirt color. During this session, a facilitator described the importance of being sensitive to pronouns used because pronouns represent the gender they are expressing. By someone not using the preferred pronouns, an individual could feel they are not aptly expressing their gender and can perpetuate feelings of insecurities. Although it was a

small snapshot into a teacher session, I was able to observe the importance of Lurie's multipronged approach.

Phase II: Facilitation Sessions and Data Collection

Table 4.3 School Characteristics

	Schools		
Characteristics	Brentano	Corkery: After School Matters	Near North Montessori
Number of students	105	33	106
Number of Lessons	3	1	.
Minutes Spent	90	90	.
Grades *	5; 7; 8	4,5 ; 6,7; 9,10	4; 5;6
Cirriculum Taught	Brave space/ identity/Jeopardy	Gender Upstanders	Overview
CPS vs Non-CPS	CPS	CPS	Non-CPS
Ethnic/Racial Breakdown			
White	28	1.1	49
Black	4	10.6	6
Asian	1.7	0	10
Hispanic	60.3	87.4	6
Multiracial	NA	NA	28
Other	5.9	0.9	NA
CPS Charactertistics			
Low income	49.3	92.2	NA
diverse learners	10.2	14	
limited english	12.6	48.2	
mobility rate**	6.1	14.1	
chronic truancy***	17.8	18.8	

NA= Not available

* X,X; Y,Y - Semicolon separates combined classes and comma seperates combined grade sessions

"." Data missing, not available

** Perecentage of students that experience one or more transfers during the school year, only available for 2018

***A student that missed 5% of schools days without a valid excuse of absence, only available for 2018

The characteristics of student sessions are outlined in Table 4.3. There was a total of n=243 surveys distributed over three schools. While After School Matters (ASM) had a cohort of mixed grades, they were split into groups to allow for appropriate, tailored, and age-appropriate curriculum, but this was considered one lesson. On the other hand, Brentano was a series of 3 days of lessons for both 5th, 7th, and 8th graders. Surveys were given at the end. Near North Montessori had missing information on the number of lessons and time spent, this was input as a "." to indicate missing.

For the three schools, the curriculums were unique and adapted from 3Rs. The Brave space/identity/Jeopardy was the combination of three different workshops delivered separately. Brave space focuses on consent and healthy relationships. Identity explores the different domains of gender and sexuality. Jeopardy is a review of key elements of NSES topics. The feedback surveys were given at the end of the third session. Gender upstanders work 1) to disassemble gender norms and stereotypes 2) to create awareness of gendered language and actions 3) build empathy and develop tools for how to be a gender upstander. Gender upstander is when individuals are empowered to intervene in cases of bullying related to gender identity. The overview is a snapshot of the seven unique topics of the National Standard of Sex Education. Demographic

information for all three schools was extracted from either the CPS database or Non-CPS school. This was used to categorize the Hispanic majority versus Non-Hispanic majority for further quantitative analysis. While characteristics of low income, diverse learners, limited English, mobility rate, and chronic truancy was not available for the non-CPS school, Near North Montessori, it was available for CPS schools, Brentano and ASM.

The survey questions were structured with five Likert scale questions. Table 4.2 lists the items with connected NSES aims. The responses while structured as a Likert scale purposefully did not include neutral due to the worry that if provided the option, most children would choose neutral as an option. Responses to each question were coded as followed, strongly agree and agree were coded as 1, while strongly disagree and disagree were coded as 2. A freeform question to elicit feedback follows the five questions. It is formatted as follows:

> "We want to hear from you! Was there a video or an activity you really liked? Tell us about it! Is there something you think we could do better? Let us know! Write your feedback in the box below ☺"

The surveys are anonymous but are grouped by the school, grades, curriculum, the number of sessions, and minutes spent. CPS and individual non-CPS schools approved the survey.

Quantitative analysis

For each question, our null hypothesis is that there is no difference in response between the schools. This is based on the theory that the curriculum is taught equitably. So, all youths can identify adults in their life, be given skills to treat people with respect and dignity, provided methods to communicate differences to another person, feel more knowledgeable about topics covered, and were able to ask the questions they wanted to ask. Three unique data analyses were conducted.

Since the data were ordinal because of its Likert nature, with three independent sample populations and non-parametric data, the Kruskal-Wallis test was chosen. The hypothesis is that there was no difference in the distribution of responses between the three schools. Respondents that gave multiple answers or did not respond; this data was recorded as missing data. For example, patients who responded strongly agree and agree to one question were coded as missing. For the Kruskal-Wallis test, each item was the dependent variable and was grouped by school. The following results are listed in Table 4.3. Of the five questions, only for question 3, "I am able to communicate my differences to a person" was the null hypothesis rejected with a p-value of 0.0068. For this question, the distribution of the three schools was not the same. Indicating that not all students felt they could communicate their differences to another person; this falls under the NSES topic of healthy relationship and domain of self-management.

Table 4.4 Kruskal-Wallis Equality of population rank test

Question	School	Obs	Rank-Sum	Df	χ^2	P-value
Q1. I can identify the trusted adults in my life.	Brentano	104	12538	2	0.625	0.73
	ASM	32	3556			
	NNM	100	11872			
Q2. I am able to treat people with respect and dignity.	Brentano	104	13200	2	3.66	0.16
	ASM	32	3565			
	NNM	101	11439			
Q3. I am able to communicate my differences to a person.	Brentano	104	11448	2	9.982	0.0068
	ASM	32	3095			
	NNM	97	12718			
Q4. I feel more knowledgeable about the topics we covered.	Brentano	102	11569	2	1.994	0.37
	ASM	31	3329			
	NNM	99	12131			
Q5. I was able to ask the questions I wanted to ask.	Brentano	101	10848	2	3.084	0.214
	ASM	32	3740			
	NNM	96	11748			

Since missing data could have affect on analysis, data were categorized into three groupings of agree, disagree, and neutral. Neutral was categorized when respondents choose a variation of agree (strongly agree or agree) and disagree (strongly disagree or disagree). This transformed the data from ordinal to nominal. Chi-square test of homogeneity was run. The null hypothesis was that there would be no difference in the distribution of respondents for each

Table 4.5 Chi-square Analysis of School Responses

Questions	Schools n(%) Brentano (n=105)	Corkery: After School Matters (n=32)	Near North Montessori (n=106)	Total (n=243)	Chi-square p-value
Q1. I can identify the trusted adults in my life.					
Agree	102 (97)	31 (97)	104(98)	237 (98)	0.757
Disagree	2(1.9)	1 (3.0)	1(0.94)	4(1.6)	
Neutral	0(0)	0	1(0.94)	1(0.41)	
NA	1(0.95)	0(0)	0(0)	1(0.41)	
Q2. I am able to treat people with respect and dignity.					
Agree	101(96)	32(100)	106(100)	239(98)	0.254
Disagree	3(2.9)	0	0	3(1.2)	
Neutral	0(0)	0	0	0(0)	
NA	1(0.95)	0	0	1(0.41)	
Q3. I am able to communicate my differences to a person.					
Agree	93(89)	31 (97)	82(77)	206(85)	0.085
Disagree	11(10)	1 (3.0)	19(18)	31(13)	
Neutral	0(0)	0	3(2.8)	3(1.2)	
NA	1(0.95)	0	2(1.9)	3(1.2)	
Q4. I feel more knowledgeable about the topics we covered.					
Agree	96(91)	30(94)	88(83)	214(88)	0.364
Disagree	5(4.8)	1 (3.0)	12(11)	18(7.4)	
Neutral	3(2.9)	0	3(2.8)	6(2.5)	
NA	1(0.95)	1 (3.0)	3(2.8)	5(2.1)	
Q5. I was able to ask the questions I wanted to ask.					
Agree	88(84)	30(94)	85(80)	203(84)	0.191
Disagree	13(12)	2(6.0)	12(11)	27(11)	
Neutral	1(0.95)	0(0)	7(6.6)	8(3.3)	
NA	3(2.9)	0(0)	2(1.9)	5(2.1)	

categorical variable of agree, disagree, and neutral. There was no statistical significance for any of the five questions, therefore accepting the null hypothesis of no difference in participant responses.

Using the racial/ethnic data from both CPS and non-CPS, schools were categorized as Hispanic majority schools (Brentano and ASM) or a non-Hispanic majority (NNM). Since the data were nominal, non-parametric, and the samples per cell were small, a fisher's exact test used for posthoc analysis. The null hypothesis: responses to either of the five questions is independent of whether the school has a Hispanic or non-Hispanic majority. The only question 3 was statistically significant, with a p-value of 0.011. The question, "I am able to communicate my differences to a person." Therefore, the null hypothesis was rejected. The responses were not independent of whether the school has a Hispanic or non-Hispanic majority. This is the same question that was statistically significant for the Kruskal-Wallis

Table 4.6 Further Demographic Analysis

Questions	Schools n(%) Hispanic Majority: Bretano and Corkery After School Matters (n=137)	Non-Hispanic Majority: Near North Montessori (n=106)	Total (n=243)	Fischer's Exact Test p-value
Q1. I can identify the trusted adults in my life.				
Agree	133(97)	104(98)	237(98)	0.605
Disagree	3(2.2)	1(0.94)	4(1.6)	
Neutral	0(0)	1(0.94)	1(0.4)	
NA	1(0.73)	0(0)	1(0.4)	
Q2. I am able to treat people with respect and dignity.				
Agree	133(97)	106(100)	239(98)	0.259
Disagree	3(2.2)	0(0)	3(1.2)	
Neutral	0(0)	0(0)	0(0)	
NA	1(0.73)	0(0)	1(0.4)	
Q3. I am able to communicate my differences to a person.				
Agree	124(91)	82(77)	206(85)	0.011
Disagree	12(8.8)	19(18)	31(13)	
Neutral	0(0)	3(2.8)	3(1.2)	
NA	1(0.73)	2(1.5)	3(1.2)	
Q4. I feel more knowledgeable about the topics we covered.				
Agree	126(92)	88(83)	214(88)	0.147
Disagree	6(4.4)	12(11)	18(7.4)	
Neutral	3(2.2)	3(2.8)	6(2.5)	
NA	2(1.1)	3(2.8)	5(2.1)	
Q5. I was able to ask the questions I wanted to ask.				
Agree	118(86)	85(80)	203(84)	0.085
Disagree	15(11)	12(11)	27(11)	
Neutral	1(0.73)	7(6.6)	8(3.3)	
NA	3(2.2)	2(1.5)	5(2.1)	

test. These three analyses combined represent the quantitative analysis for the first five questions of the feedback questionnaire given to students.

Qualitative Analysis

The feedback was from three schools (Brentano, NNM, ASM), and sticky notes of what students asked at the end of the session from other schools were also available for qualitative analysis. The sticky notes were from Brentano, ASM, Coles Elementary, and Roosevelt. The comments and questions (C&Q) were first categorized by the NSES' seven topics. Within each topic, they were then chunked by NSES domains. Any other topics were categorized by their main idea. Groupings were created when a new main idea was presented.

Table 4.71 Identity

School	Grade	Qoute	Format
Coles	6	Why aren't we asexual	SNQ
ASM	9,10	Yes I liked when we learned about identities that people use on a day to day basis	FB
Roosevelt	5 to 8	What does pan - sexual mean?	SNQ
Roosevelt	5 to 8	What is the difference between gay and queer?	SNQ
ASM	9,10	I lked how we are able to learn more about sexuality and genders	FB
Roosevelt	5 to 8	Why would a person be attracted to same sex? Is it in their gene? (Not meaning to sound rude)	SNQ
Roosevelt	5 to 8	I think this class was very informing and I learned a lot about terms and other people around . What does emotionally attracted to mean? How come people think that being lesbian / gay is?	SNQ
UN	6	Is it possible if you have penis you can have sex with other man	SNQ
UN	6	Is it possible for people to have both genders?	SNQ
Bretano	5	Thank you for helping me feel safe for being bisexual	FB
UN	6	What if I didn't wanna have sex for rest of my life	SNQ
UN	8	How do you deal with disrespect involving your identity	SNQ
Coles	7	When did the word girl or boy started going around	SNQ
Roosevelt	5 to 8	Why in clothing stores there are "Boy Sections" or "Girl Sections"	SNQ
Roosevelt	5 to 8	Why do other people tease other people that are gay or LGBTQ	SNQ
Roosevelt	5 to 8	Don't bully people that are trans. Are'nt you a grirl (girl's pic drawn) . I am who I wanna be	SNQ
Roosevelt	5 to 8	This was very helpful to me and why do people use gay and lesbian as bad things?	SNQ
Roosevelt	5 to 8	Why does being gay or lesbian affect others emotionally	SNQ
Coles	7	Why are people making fun of gay people	SNQ

When it comes to identity, students wanted to know more information. Highlighted in red is grouped FB and SNQ that relates to the NSES core concepts domain. For identity, this includes the range of gender and sexuality. This is seen in FB " I liked when we learned about identities that people use on a day to day basis," "what does pan-sexual mean," and "why aren't we asexual." Highlighted in pink corresponds to the NSES self-management domain. Students learn how to affirm themselves. This is seen in FB of "Thank you for helping me feel safe for being bisexual." This domain also teaches students skills on "how to deal with disrespect involving your identity." Indicating that this skill should be further emphasized in a future session.

Highlighted in orange relates to NSES analyzing influences, where students understand the external influences of media and social norms. This section provides context to things that students notice but also teaches skills to differentiate external influences. “When did the word girl or boy started going around” represents the need to provide social context. Whereas “why in clothing stores there are “Boy Sections” or “Girl sections”” illustrates the student’s ability to question an external norm.

When it comes to identity, students are aware of the teasing and bullying of LGBTQ individuals, such as “why are people making fun of gay people.” This was categorized as interpersonal communication and highlighted in blue. This domain includes skills to diffuse teasing and bullying situations. Comments illustrate that students want to learn the reasoning behind the teasing, but it can also be an opportune time to teach these skills to diffuse such situations.

Table 4.72 Personal safety

School	Grade	Qoute	Format
UN	8th	What is the difference between compliments + sexual harassment	SNQ
UN	8th	Wat is the difference between sexual assualt and when someone insults in a sexual bad way.	SNQ
Bretano	5th	information about your life	FB
UN	7th	What id we don’t give people "consent" but touch us anyway	SNQ
Bretano	5th	When you are being bullied you can ask a trusted adult	FB
Roosevelt	5 to 8	I think that a strategy as like to stand up to people	SNQ
Bretano	8th	I liked how we learned that we don’t always to say yes without being rude. I felt safe talking about this and asking questions	FB
Bretano	7th	I liked the video when the boy asked the girl for nudes because it showed the reason that he did it.	FB
Bretano	8th	It was a video on saying no when a guy asked for nudes	FB
NNM	4th	What we had to do incase of emergency	FB

The responses in personal safety illustrate the progression of how CSE is taught. In elementary, students learn what to do in case of an emergency and learn how to ask adults when being bullied. Whereas 7th grade and later on, students learn how to approach intimate photos and relationships. Core concepts of personal safety teach youth how to set boundaries, let others know when they feel uncomfortable, and identify a trusted adult. In the comments, students want to know how to discern the actions of others, and this is seen “what is difference between compliments+ sexual harassment.” Highlighted in blue signifies the interpersonal domain of NSES. This module

teaches skills on how to handle interpersonal communication. Students liked learning skills on how to set boundaries that they do not always "have to say yes without being rude." They learn how to identify trusted adults, "if they are bullied you can ask a trusted adult." Most importantly, consent is a crucial topic to teach youths seen in the SNQ from a 7th grader "what i[f] we don't give people "consent," but they touch us anyway." Highlighting a need to teach students how to handle such scenarios and approaching a trusted adult. Youths are learning what to do in various situations, including "in cases of emergency" and "handling nudes" are part of the decision-making domain.

Table 4.73 Healthy Relationship

School	Grade	Qoute	Format
Coles	7	What does a healthy relation look like	SNQ
Bretano	8	Something that I really liked was that we talked about healthy relationships	FB
Coles	8	Why do buys have sex, have babies and then feel like they can do it to everyone or feel like they are grown	SNQ
Roosevelt	5 to 8	Do people discriminate against you?	SNQ
UN	7	What would happen if you have sexuality consent with more than one person?	SNQ
Coles	7	Is it right to have sex @ age like this?	SNQ
Coles	6	How would you handle sex?	SNQ
Coles	7	When boys have sex with girls and she gets pregnant why do boys leave the baby and the girl?	SNQ
Coles	7	Is it right to have sex so many times?	SNQ

The core concepts (red) include identifying characteristics of a healthy relationship. Students want to know "healthy relation[ship] look like" and "really liked was that we talked about healthy relationships." Analyzing influences (orange) includes societal norms. This is seen in the Coles SNQ from an eighth-grader "Why do b[o]ys have sex, have babies and then feel like they can do it to every or feel like they are grown." Facilitators would address the underlying norms that can cause these actions and feelings. For interpersonal communication (blue) addresses how to deal with discrimination and consent seen in SNQ "do people discriminate against you" and "if you have sexuality consent with more than one person." The decision-making (green) SNQ was grouped together, "is it right to have sex so many times" and "how would you handle sex." Although "when boys have sex with girls[,] and she gets pregnant

why do boys leave the baby and the girl" question can be used to demonstrate aspects of healthy relationships and how to handle such a situation.

Table 4.74 Puberty and Adolescent Development & Pregnancy and Reproduction

School	Grade	Qoute	Format
NNM	4	I learned about what to use when I have my period	FB
NNM	6	I think it was good. I am now knowledgable about my body	FB
Coles	7	Why does everyone want us to learn puberty and sex ed in grades 6-8	SNQ
Coles	7	How do both genderx have sex?	SNQ
Coles	7	Why do some girls mature faster than some boys?	SNQ
Coles	7	What is masturbation	SNQ
Coles	7	Why do guys like big boobs	SNQ
Coles	7	Wy do boys use in like girls when their butt is big	SNQ
Coles	7	Why do people think having sex makes them grown up	SNQ
Coles	7	What is the importance of having sex? Have a nice day 3 smileys drawn	SNQ
Coles	7	Why do buys have sex, have babies and then feel like they can do it to everyone or feel like they are grown	SNQ
Coles	7	Why do u need 2 people to have a baby	SNQ
Coles	7	Why do some girls not shave their private	SNQ

For Puberty and Adolescent Development & Pregnancy and Reproduction, students learn the different aspects of puberty. Comments and questions illustrate the need to explain the reason for having sex education "why does everyone want us to learn puberty and sex in 6-8th grade." Students want to understand the different physiological and biological manifestations of puberty, such as "I learned what to use when I have my period" and "Why do some girls mature faster than some boys." It is vital also to outline the external influences (orange) that affect individual preferences such as "why do boys use in like girls when their butt is big," "why do u need 2 people to have a baby," and " why do some girls not shave their private" all exemplify this need.

Table 4.75 Sexually Transmitted Diseases and HIV

School	Grade	Qoute	Format
Coles	6	How would you handle STD?	SNQ
Coles	7	Would you get HIV if you suck their penis?	SNQ
UN	8	How do you prevent STD	SNQ
UN	8	How do you prevent STD	SNQ
Coles	7	Can you get sick or disease when having sex with multiple people	SNQ
UN	8	To not get any diseases you should wear condoms	SNQ

Students, when it comes to STIs and HIV, want to know more information. The core concepts of the module include how to prevent STD, mode of transmission, and contraception.

Table 4.76 Pregnancy and Reproduction, Anatomy and Physiology			
School	Grade	Qoute	Format
Coles	6	What is an orgasm?	SNQ
Coles	7	Why do people have consentual sex then get abortions?	SNQ
Coles	7	How do the nut from the box make a baby?	SNQ
Coles	7	How do girls come	SNQ
Coles	7	How do girls and boys come	SNQ
Coles	7	If a girl sucks a penis more where does the nut go	SNQ
Coles	7	Why do we reproduce	SNQ
UN	8	I want to learn about birth control	SNQ
UN	8	Where can you buy condoms? Just wondering which type is good or bad?	SNQ
Coles	8	How do babies come out	SNQ
Coles	8	How are babies made	SNQ
Coles	7	When boys have sex with girls and she gets pregnant why do boys leave the baby and the girl?	SNQ
Coles	6	Why is it important to reproduce kids?	SNQ
Coles	7	Why are there so many slip ups aka babies	SNQ
Coles	7	Why don't people use protection?	SNQ

Students are interested in understanding the core concepts of pregnancy and reproduction "how do babies come out" and "why do we reproduce." They are interested in contraception and birth control. A reoccurring theme is that students want to know why "boys have sex [..] leave the baby and the girl." Making it crucial to address the underlying societal cause for such situations.

Youth also want to know about "why is it important to reproduce kids," and why there are unintended pregnancies "slip ups aka babies." As part of the decision-making domain, teaching students when individuals decide to have babies and options, including abstinence and contraception, to avoid unintended pregnancies is essential because students are aware that it happens. Also, outlining the decision-making processes for why protection is essential even though others might "[not] use protection."

Youth learning about their bodies and the unique transformation that occur during puberty will help them handle uncomfortable situations and understand what their peers are going through. This includes anatomical and physiological dimensions of sex, reproduction, masturbation, and pregnancy. Students wish to know more.

Not all feedback and questions could be categorized within the NSES topics. Instead, they grouped into unique categories. This includes comments related to "liked" certain aspects of the session, recommended changes to the curriculum, students that did not like the sessions or felt uncomfortable, and curiosity regarding the teaching staff.

Table 4.81 "I liked"			
School	Grade	Qoute	Format
Bretano	5	I really likes this activity because it lets us learn a lot of the new topic. Same thing for the questions.	FB
Bretano	5	I like the games	FB
Bretano	5	I liked the game we played today	FB
ASM	9, 10	I liked the scenarios we got today. It was fun having you guys here today	FB
ASM	9, 10	I really enjoyed the cards activity because it helped clarify certain terms. I also enjoyed the questions section because it was very helpful & informative	FB
ASM	9, 10	I really liked how there was other sheets to keep us doing something while listening the same time	FB
UN	8	Yall did good	SNQ
Roosevelt	5 to 8	I licked it a lot	SNQ

A majority of students liked the curriculum, especially the games, videos, and situational scenarios. During the session, students are given paper and drawing utensils. This is so that when students feel uncomfortable, they can still listen but can put their heads attend to another activity. This is something many students appreciated.

Table 4.82 Changes to the Curriculum			
School	Grade	Qoute	Format
Bretano	5	No Videos	FB
Bretano	7	Maybe have a longer break	FB
Bretano	7	This took too long out. The tea video was alright. So maybe next time should be able to have gym.	FB
Bretano	8	I think you guys did a great job! and it was very fun experience, I would just recommended shorter visits, because it is hard to stay intrestered so long	FB
Bretano	8	I would talk just a bit less but I learned a lot	FB
Bretano	8	Sex Ed Jeopardy. It was very fun but emjoyable. It needs more categories. No... because this is the hospital I go to once a year. But I can't critisize because it might hurt your feelings	FB
Bretano	8	There was no video but pictures plus I would like more games.	FB
Bretano	9,10	I think getting into small groups helped us communicate better than a large group. I think what the speakers talk us about is really importanat so we can know all the dufferent genders there is	FB
NNM	4	It was very informative. I feel like I was not able to ask the questions I would like to ask because there was no private way to ask that	FB
NNM	5	Maybe separate boys + girls when you talk about private parts?	FB
NNM	5	Separate genders for class	FB
NNM	5	Boys and girls separatly.Bring the pizza back to *sap *sex and pizza	FB
UN	8	Is this class weekly	SNQ
UN	8	I feel bad for you leaving because am learning new things that never heard of and wish you can teach me more on sex ed	SNQ

Some students provided recommendations on how to improve the sessions. They preferred shorter sessions and multiple visits “I would recommend shorter visits, because it is hard to stay interested so long.” Youths want more games, videos, and scenario examples to break up the session, “I would like more games.” Many felt that smaller discussion groups would be better “ I think getting into small groups helped us communicate better.”

Instituting methods for private questions is something that students preferred “I would like to ask [questions] because there was no private way to ask that.” Regardless of the grade, students are always in a mixed-gender class. First, it helps students learn changes that their peers, friends, and family go through. Second, it helps vulnerable sexual minorities, such as those that are trans, intersex, or gender non-conforming.

Feedback shows that some students want to separate the boys and girls. They also want more sessions to learn more and have "class weekly."

Students did feel uncomfortable and "hated it." Some felt that the session was "weird." This indicates how sensitive topics such as sex education can be uncomfortable, and these feelings are warranted.

Table 4.83 "Did not like it" and "Uncomfortable"

School	Grade	Qoute	Format
Brentano	5	I don't really like newth class. But think you our teaching us	FB
NNM	5	I hated it	FB
NNM	5	This was weird	FB
NNM	5	I felt uncomfortable	FB

Students have the right to understand why sex-ed is being taught and why the information is helpful and vital (table 4.84). Youths were also curious about the facilitator's life and sexual activity. It highlights the vulnerabilities of both the students and facilitators.

Table 4.84 "Why is it called Sex Ed"

School	Grade	Qoute	Format
Coles	6	What is the point of sex ed?	FB
Coles	7	Why is it called sex ed?	FB
Coles	7	Why is sex ed important?	FB

Table 4.85 Curiosity about facilitators

School	Grade	Qoute	Format
UN	7	Do you have kids	SNQ
UN	7	Do you grow face hair	SNQ
Coles	8	How old is yall? Does you have kids? Yall how long have you been working this job?	SNQ
Coles	8	I really like the male. Whats his nameand sexual liking? Not to be rude?	SNQ
UN	6	Did one of yall have sex before	SNQ
UN	6	How long have you worked in the hospital	SNQ
UN	7	why did you want this job	SNQ

The qualitative analysis illustrates the breadth of CSE, and the topics covered. It demonstrates multi-dimensional teaching knowledge, empowerment, and skills to self-manage and decides. It shows that youths want to learn about all aspects of CSE and are interested in having a more permanent curriculum.

Discussion:

CSE guidelines are broad and range seven topics. It teaches lessons by providing knowledge, skills, and attitudes. Combining both the data analysis and observations gave insight into how such a program is implemented. The available data of three schools, including Brentano, Near North Montessori, and After School Matters, is a small snapshot. The goal of quantitative analysis was to understand whether there was a difference between the three schools

in response. Two of the analysis, the Kruskal-Wallis and Fisher's exact test, found statistical significance with a p-value of 0.0068 and 0.011 respectively for question three "I am able to communicate my differences to a person."

Kruskal-Wallis test was chosen because of its ability to test non-parametric, ordinal, and multiple populations. The populations selected from each school were not random; therefore, conclusions cannot be generalized. Since ASM has only 33 respondents, combining Hispanic and non-Hispanic majority gave an opportunity to combine two schools' results in 137 and 106, respectively. The same question was found to be statistically significant. It highlights a need to develop skills to communicate differences, and how to approach such situations in youth.

It is important to note; however, the questions and aims of the survey were associated with fifth-grade NSES standards (Table 4.2), but the population characteristics of the three populations are diverse. They range in age groups, with Brentano is 5^{th}, 7^{th}, 8^{th}. Near North Montessori 4^{th}, 5^{th}, 6^{th}, and Corker ASM was a mixture of $4^{th}/5^{th}$, $6^{th}/7^{th}$, and $9^{th}/10^{th}$. Each of the schools has varied curriculums between the three schools. The time and number of lessons also differ. The combination of these three characteristics tested against a single stationary parameter for 5^{th} grader NSES aims might have also affected the analysis. Since Chi-square analysis took into consideration the missing data from the Kruskal-Wallis data set and was found not significant can intimate this.

The quantitative analysis illustrates the limitations of the survey. A singly stationary tool with five questions cannot take into account the diverse aims of both Gender Upstander and Brave Space curriculums and the different aims per grade. At the same time, to have surveys individualized to each session would not be helpful for combined program feedback since each session is tailored to the school's needs at the time.

Through the qualitative analysis of both the feedback and the sticky note questions, the broadness NSES can be seen. Learning of four aspects of identity affirms sexual minorities, whose voices were ignored in the AOUM curriculum.[9,10] This effect can be seen in the comment "Thank you for helping me feel safe for being bisexual," especially at the vulnerable age of 10-11. It shows the importance of early implementation of CSE, especially when gender and sexuality identification has been shown to begin in later part of an elementary school around ages 9-10.[11] By affirming at a young age, it helps sexual minorities who are more vulnerable to depression, bullying, and a higher rate of suicide attempts.[12-14] The FB and SNQ also exhibit youth awareness of bullying and teasing of LGBTQ youth, and a need to understand why. This gives a chance for facilitators to explain why and dismantle information students have received from the media. This is something that was observed in the first session at Near North Montessori when a student derogatorily called another student gay. The facilitator halted the session and explained why teasing in such a manner is wrong. The facilitator did two things. First, it dismantles the notion that calling someone gay is not an insult, which might be against what they have observed or saw. Second, a staff intervention helps those that are part of the sexual minority can feel affirmed. By the behavioral model SLT, showing negative consequences can decrease the student's motivation to tease in such a manner, reducing the likelihood that the behavior will be reproduced.

Increased staff intervention in incidents of bullying of LGBTQ has been correlated with CSE curriculum implementation.[14,15] It also means Lurie's multipronged approach of training teachers and administrators would help teach skills and knowledge on how to approach such situations. It also helps the teachers understand student perspectives concerning gender sexuality.

This was seen in the Orrington teacher session, where at the end of the session, teachers commented they had not realized how gendered their language was, and to be more inclusive.

By teaching personal safety, youth learn how to identify trusted adults, what to do when bullied, and how to establish boundaries. Personal safety highlighted how CSE teaches age-appropriate information. Fourth and fifth graders learned how to deal with emergencies, while middle schoolers learned how to establish boundaries with others. The three NSES domains of core concepts, interpersonal communication, and decision-making represent the importance of teaching different levels of information. It alludes to NSES's goal of teaching knowledge, skills, and attitudes. Students want to learn how to identify "difference between compliments + sexual harassment," how to "ask a trusted adult" when being bullied, and what to do in situations of emergency.

The implementation of a broader definition of consent through Public Act 101-0579, is the first step.[16] FB comment from a 7th grader " what i[f] we don't give people "consent" but touch us anyway" demonstrates a need to help students identify such situations, how to set boundaries, and approach trusted adults. Primarily since CPS has been found to gravely fail students that experience sexual abuse, emphasizing its importance.[17] By helping students learn, it standardizes knowledge of consent. It empowers youth to go to trusted adults.

Personal safety and healthy relationships overlap. While healthy relationships module describes characteristics of good relationships and outlines to students the external influences that can result in behaviors such as " why do b[o]ys have sex, have babies, then feel like they can do it to everyone or feel like they are grown." It also describes steps on how to approach and "handle sex." Both the combination of personal safety and healthy relationships provide tools that are crucial in situations of interpersonal violence (IPV), which is high in adolescents.[18]

Students learn how to identify unhealthy relationships, different physical, sexual, and emotional harassment and abuse. Since IPV has been associated with higher rates of unintended adolescent pregnancies, STI/HIV, and depression.[19-21] Teaching such skills early is crucial.

The last three topics of puberty, STI, and pregnancy & reproduction teach the dynamic manifestations of puberty, how to approach and prevent STI, and the mechanics of pregnancy. While AOUM stresses abstinence, CSE believes that youths have the right to medically accurate holistic information, including contraception. Feedback shows that individuals are interested in learning about contraception (Table 4.76). They want to know how to prevent STDs (Table 4.75). Youths are already able to discern media influences on certain body types "why do guy like big boobs" and "why do some girls not shave their private" (Table 4.74). These influences are essential to explain and affirm different body types since cis-gendered females are more likely to experience a decrease in self-esteem and depressive symptoms. Therefore CSE can preventatively help address this.

Students want to have CSE at more frequent and shorter levels, as constant as "class we have every week" (Table 4.82). Although CSE is adopted both at the state and local levels, for programs like Lurie's to be effective, resources are needed from both the federal and state governments. As an equitable fee-for-service program, Lurie, to increase the number of sessions, it would need the number of resource-rich schools to increase to allow funding for resource-poor schools. The funding from government institutions would help fill the gap. The movement of Illinois state towards more comprehensive sex education is crucial, but without support and funding from the federal government, a holistic implementation is not possible.

The questions demonstrate that students need a resource that provides medically accurate information even after a Lurie's session. The facilitators offer links to websites such as

AMAZE.org and utilize some of the videos during the class. So, students know how the site looks, but also can see how helpful it is. Many of the facilitators range in gender expression, age, ethnicity, and sexuality. While it does not necessarily provide peer to peer education, the diversity of facilitators illustrates that it is, in fact, safe space with no judgment.

The structure of the program is also conducive to a welcoming atmosphere, even when students might feel uncomfortable. By having mixed-gender class, a session filled with games, and group discussions, youths learn the perspective of others. Although some students did not like the course "I felt uncomfortable," "I hated it," and "I disliked it," the program always provides coloring, fidget spinners, or the alike so students can act distracted but still be able to listen. This is seen in feedback " I really liked how there was other sheets to keep us doing something while listening[at] the same time" (table 4.81). The feedback also highlights the vulnerabilities of staff. Students are curious about their lives, whether about their jobs, "why did you want this job" or "do you have kids" (Table 4.85). They are receiving information from diverse staff, which helps them see another perspective.

The comprehensive nature of CSE also means topics covered are broad; therefore, students wondering why the sessions are called "sex ed" (table 4.84) alludes to this confusion. Whereas AOUM specifically concentrates on puberty and abstinence from sex, CSE approaches the health of the individual.

The internship with Lurie's illustrated the effectiveness of a CSE program. While the long-term evidenced effect of a decrease of unintended adolescent pregnancies and rates of STI/HIV rates were not seen, it gave insight into how effective it was in its multi-dimensionality by teaching identity, personal safety, contraception, and healthy relationships. By teaching these topics, there is a public health relevance, It has the capacity to reduce interpersonal violence and

rates of LGBTQ bullying. It is important to have consistent health education from an early age and support from a federal, state, and local governments. Most importantly, the internship showed it is the right of adolescents to be taught medically accurate knowledge, and it is society's duty to teach health skills. Like the women and activists who fought to create a book shifting the domain of knowledge, the same must be done for sex education.

Chapter Five: Understanding CSE and Final Thoughts

This project gave me insight into the history of sex education, the laws, and how a CSE program is implemented locally. Through it, I understood the importance of teaching comprehensive health education, implementing an equitable intervention, being responsive to local needs, and having a multipronged approach.

By having a broad curriculum that includes topics from personal safety to a healthy relationship, CSE emphasizes a need to move from a binary perspective of abstinence versus contraception sex education. CSE has crucial elements that benefit all youth, such as how to handle bullying, healthy friendships, and diversity of families. It teaches skills from kindergarten, creating a foundation of safe decision making that will contribute to sex education delivered during puberty. Due to firmly entrenched social norms in the US about sex education, it is essential to reimagine health education and apply the same level of importance as any other subject. Participating in a teacher session, I was able to see how teachers' perspectives transformed when given an opportunity to ask questions in a safe space and presented with the underlying reasons for specific modules. This emphasized the importance of a multipronged approach.

The National Sexuality Education Standards were developed for districts and schools that are resource-poor, and programs like Lurie's that can support schools by creating an equitable scale for fees create an environment where sex education implementation can be more consistent. The standards also stress how curriculums should be responsive to local needs, cultures, and norms. A growing majority of the Hispanic population emphasizes the need for programs to attenuate the curriculum to cultural and language aspects. This need was seen in After School Matters at Corkery Elementary, where sometimes students would explain or

translate into Spanish facilitator conversations, which highlighted a need to have a facilitator who can speak Spanish and be able to help students.

The implementation of an intervention is extensive. It highlighted the importance of program evaluation to improve the program itself, applying for grants, and providing a bank of information to show school administrators. It allowed me to see how behavioral models guide program guidelines seen in the NSES and 3Rs curriculum. When seeing the combined model of Figure 4.2, Lurie does attend to every level of the socio-ecological model from cultural norms to personal knowledge. It also works with community organizations to advocate for policy changes, including Illinois laws that were presented this year.

This experience made me reflect. I became aware of the language I use and how it manifests unconscious prejudices. Whether using they/them pronouns or understanding the innate heteronormative perspectives I hold. It evolved my language and attitude. Observing the CSE sessions and combined with the data analysis, I saw how students want to know more about the facilitators, whether it is if they have kids, their sexuality, or their sex life. This curiosity illustrated the vulnerabilities of facilitators.

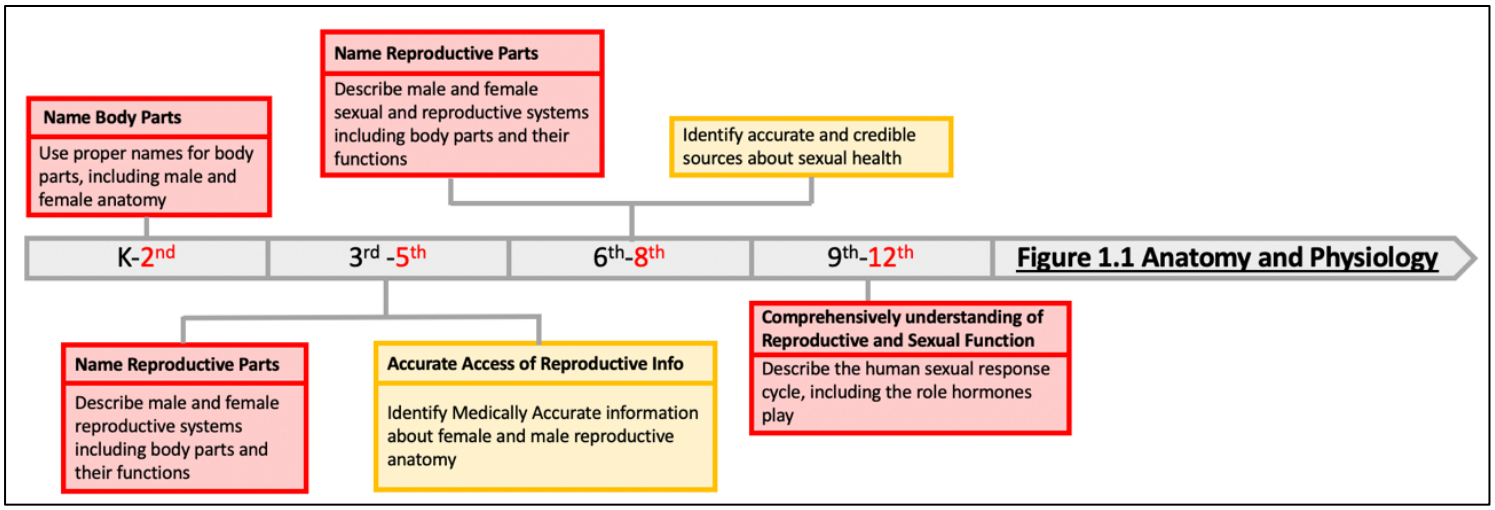
Both Lurie's and a review of other programs have given insight into the impact of a useful CSE. It is inclusive, includes healthy relationships, and provides tools of how to address bullying, harassment, and consent. Its aim is more than reducing the rates of STIs and unintended adolescent pregnancies. While school is about education and increasing a person's knowledge, the CSE curriculum provides information for a healthy, inclusive atmosphere and well-being, which is integral to the development of youth.

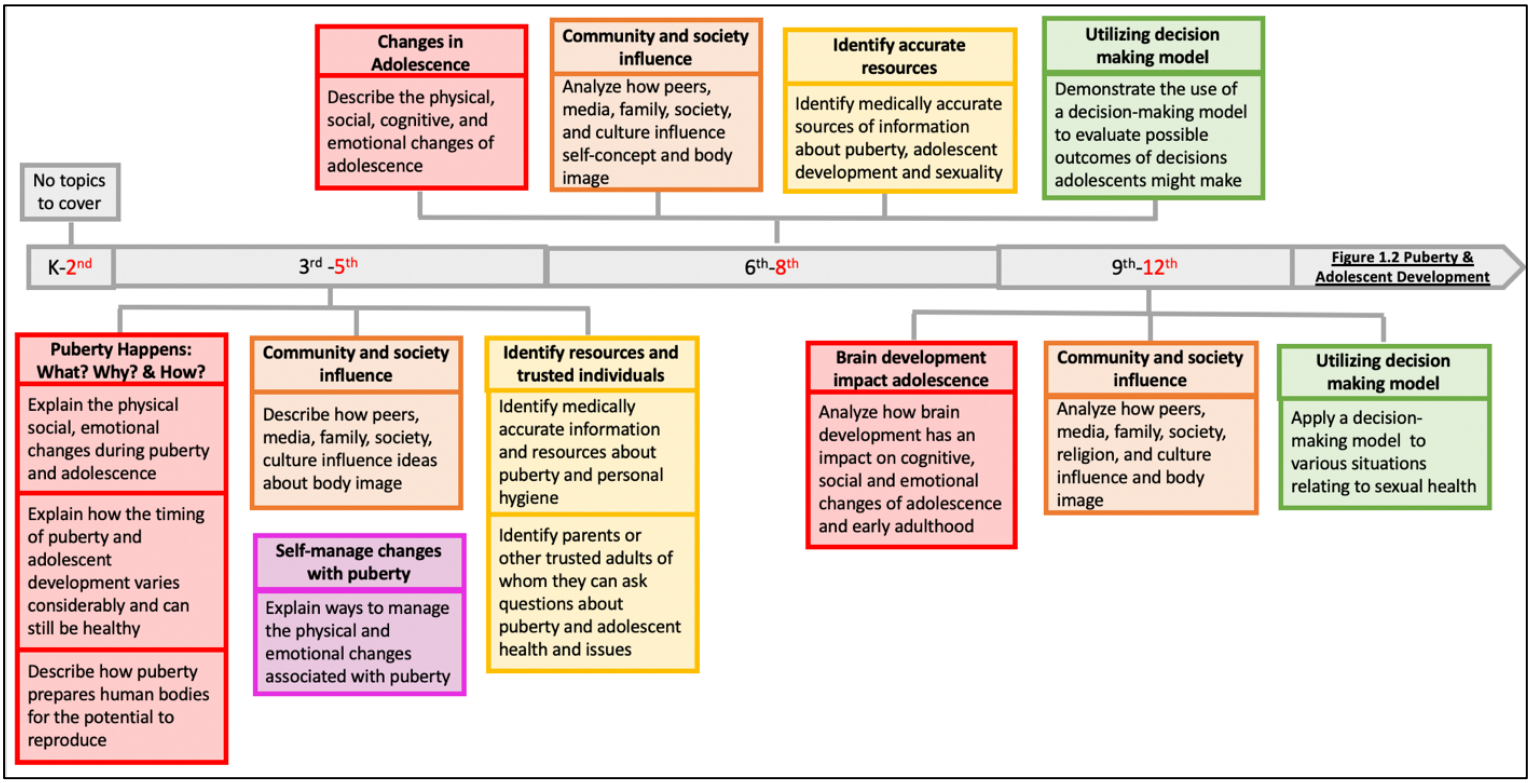
For this invaluable experience, I want to thank the Lurie team for allowing me to shadow you, pepper you with questions, and sharing with me your personal stories. Thank you to

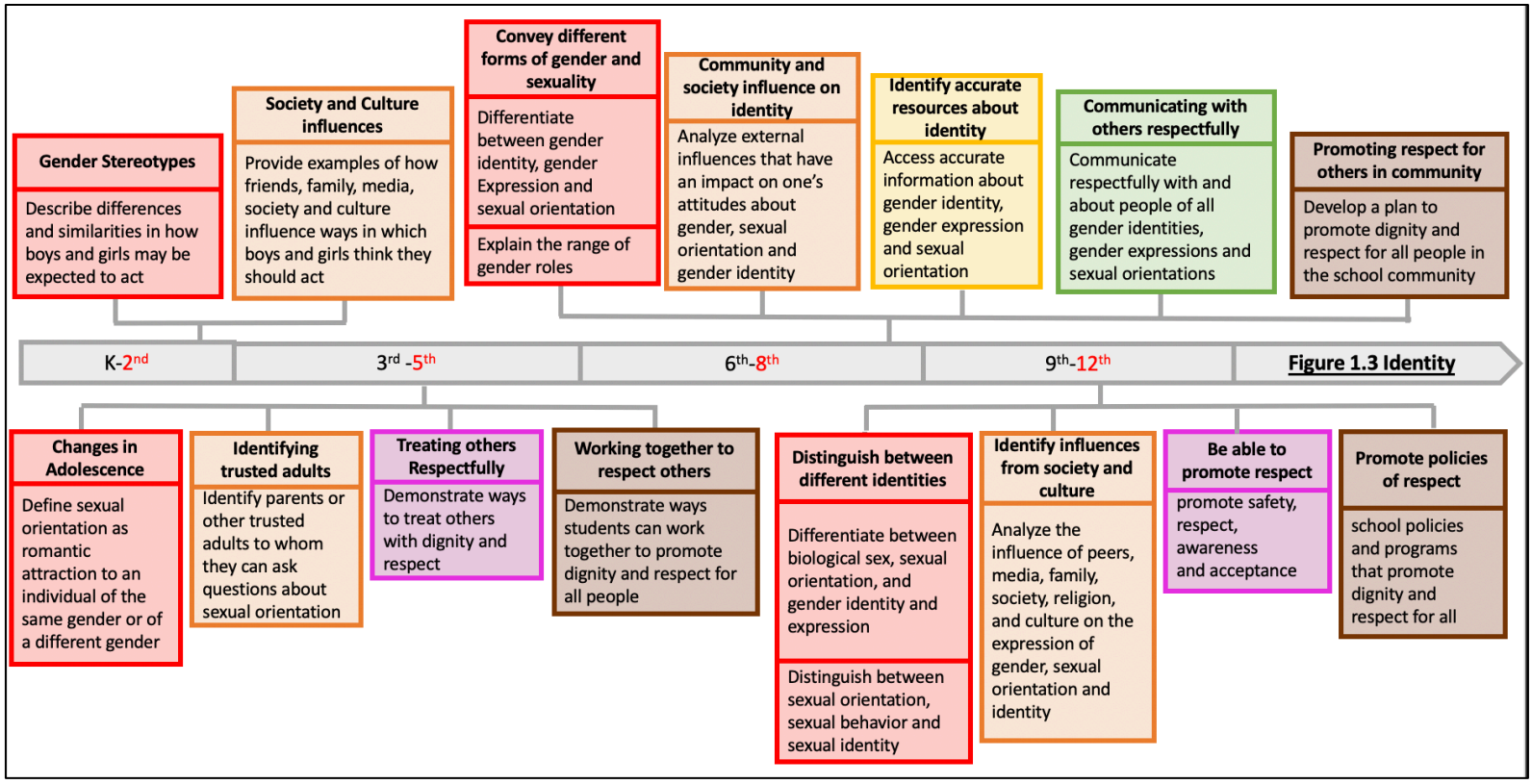
Dr. Amy Johnson for giving me direction and perspective on how to integrate my public health knowledge with the practicality of the program. I want to thank my site preceptor Dawn Ravine for giving me this opportunity to intern, providing me with behind the scenes perspectives of the curriculum and methods, a space to ask questions, and helping me to practice deconstructing and evolving my perspectives.

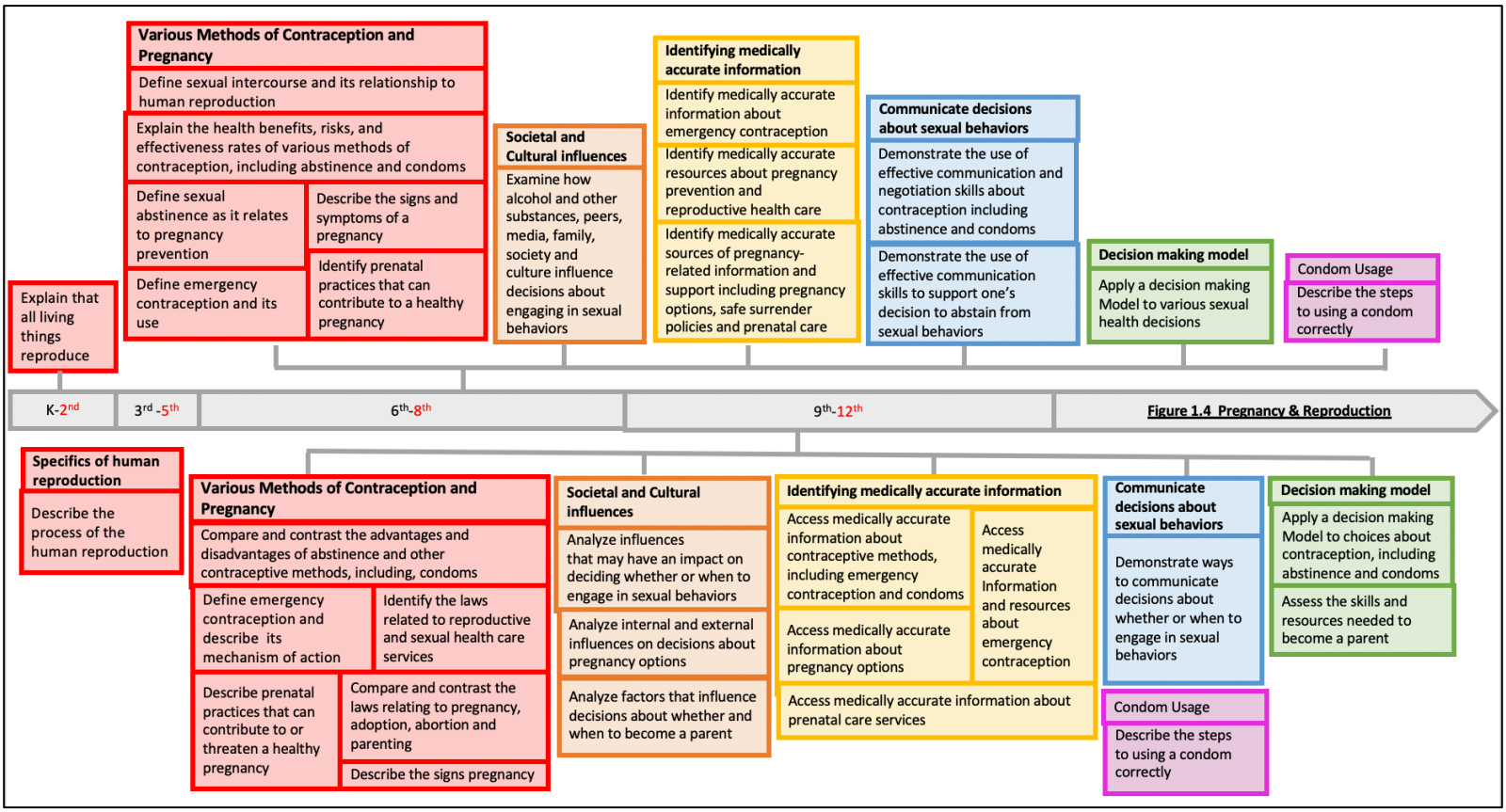
Supplementary Figures

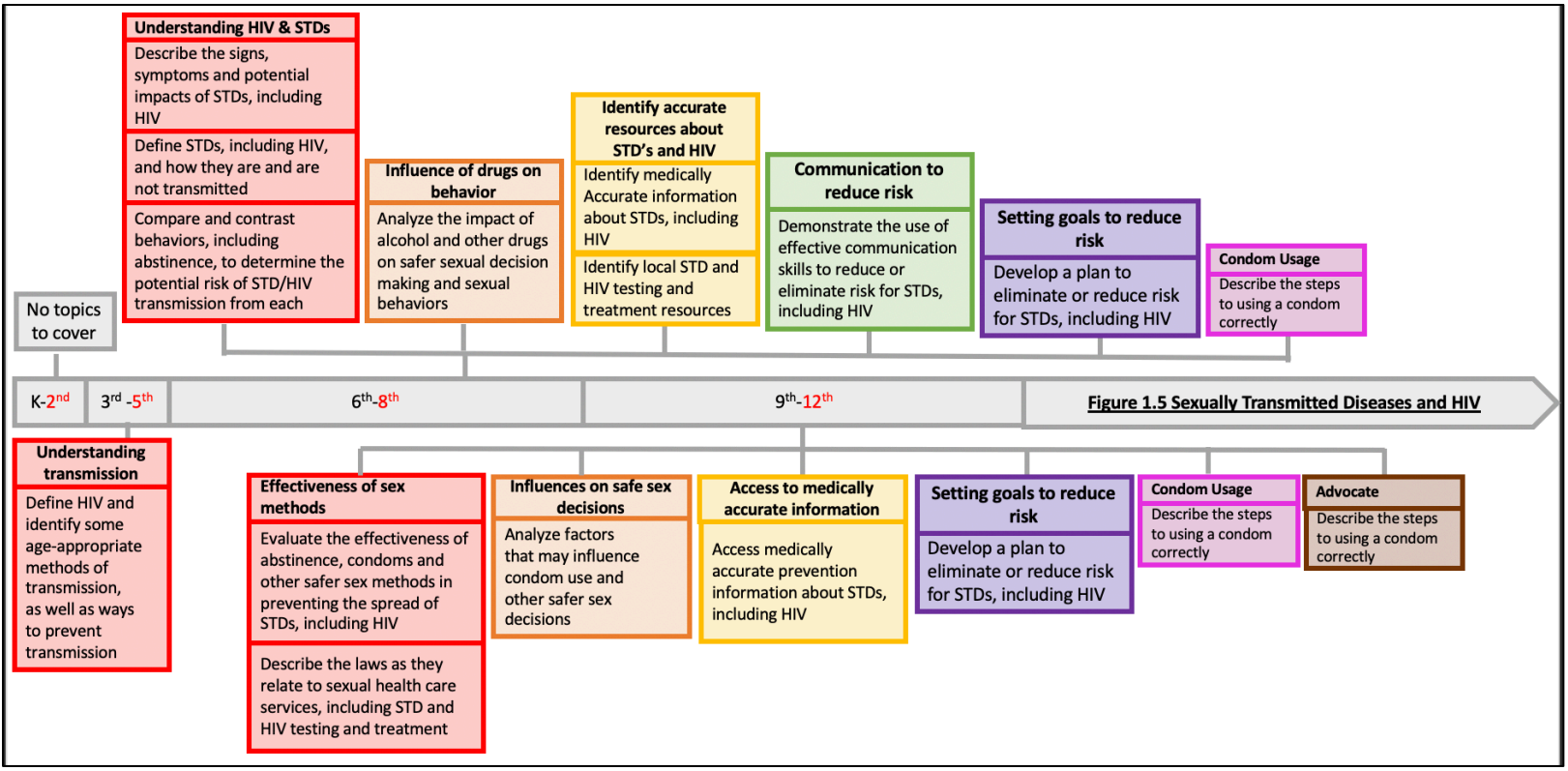
Supplementary Figure 1. National Sexuality Education Standards Aims Per Topic

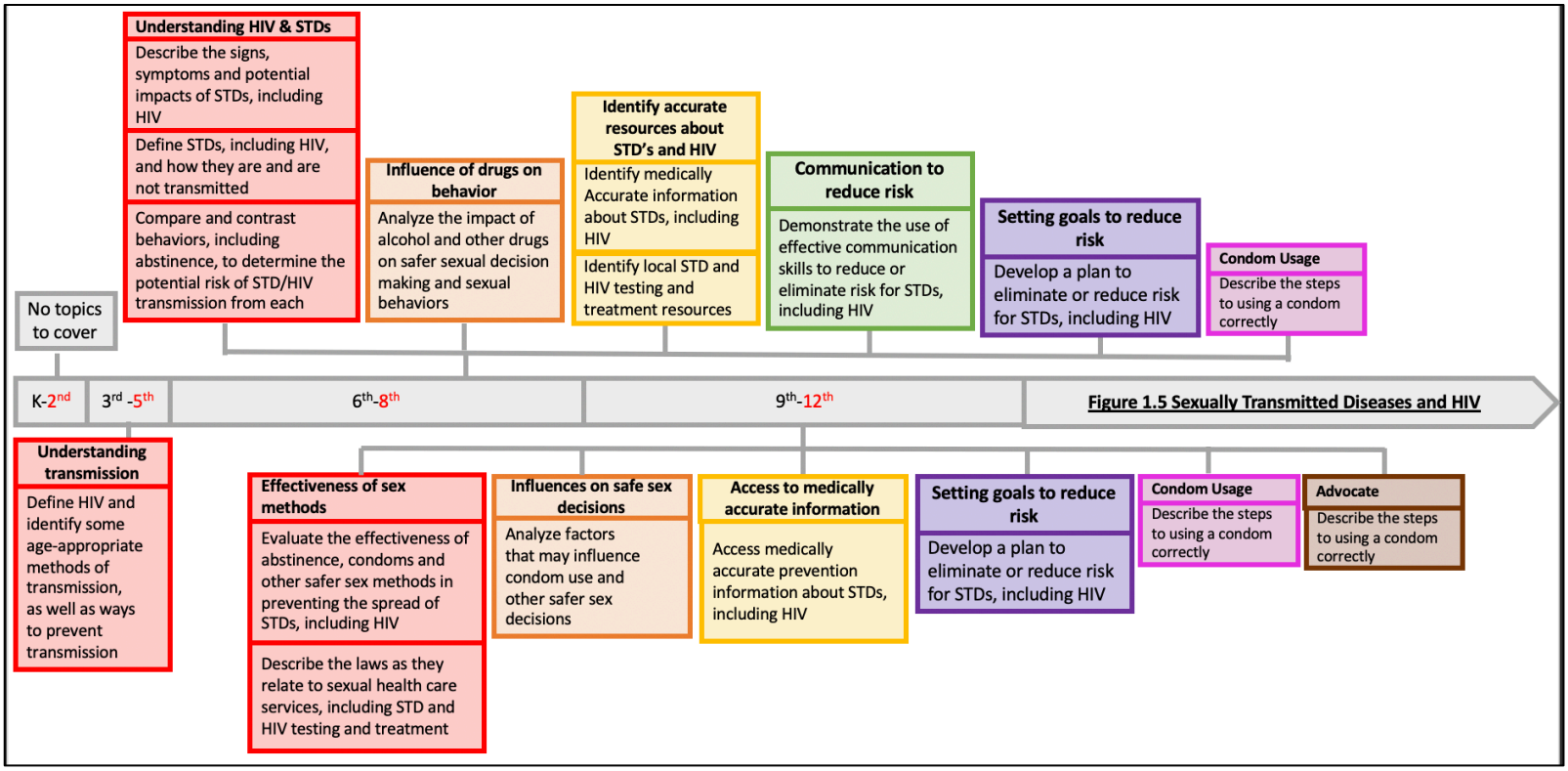


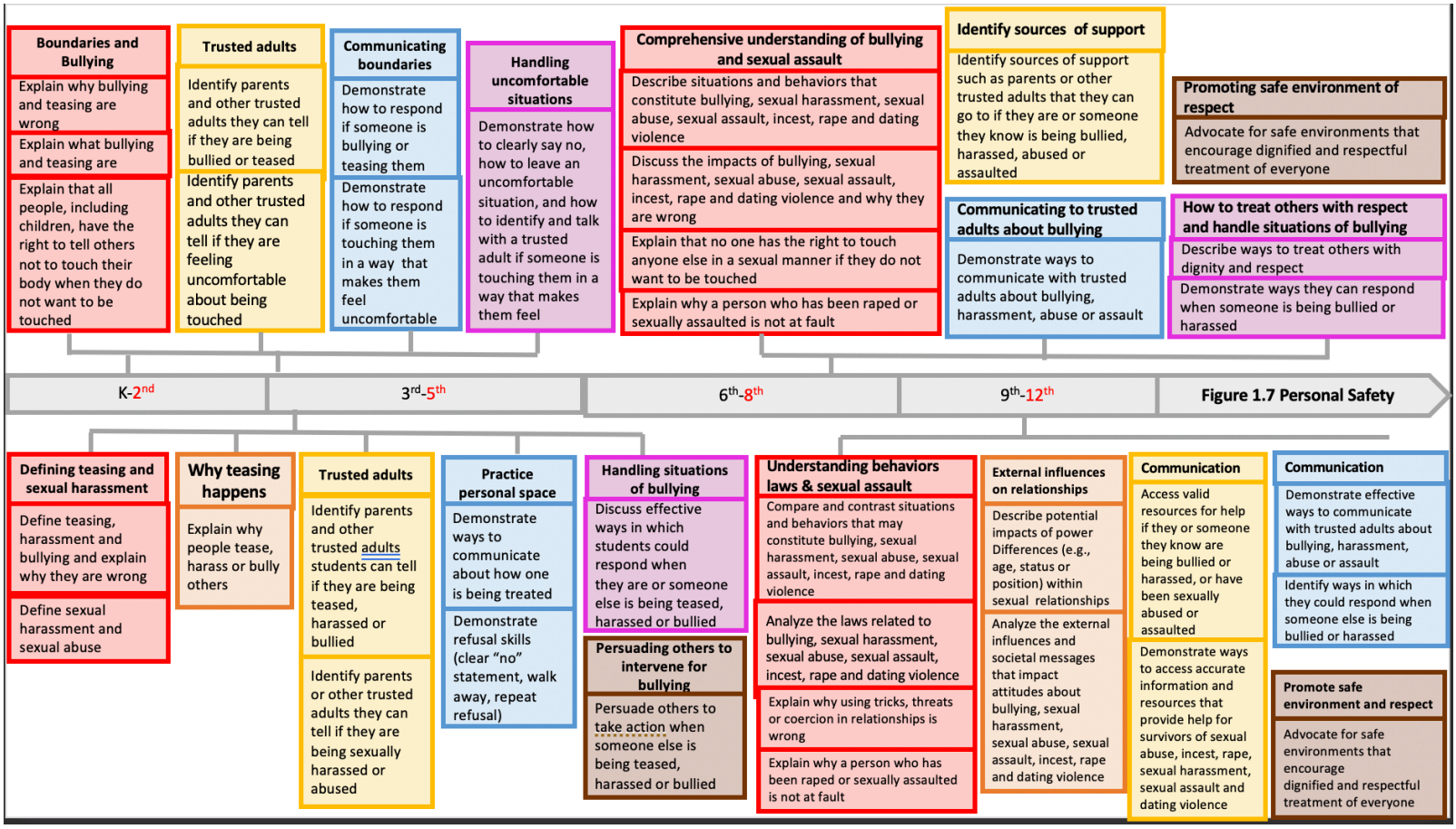



Gender Stereotypes
Describe differences and similarities in how boys and girls may be expected to act
Society and Culture influences
Provide examples of how friends, family, media, society and culture influence ways in which boys and girls think they should act
Convey different forms of gender and sexuality
Differentiate between gender identity, gender Expression and sexual orientation
Explain the range of gender roles
Community and society influence on identity
Analyze external influences that have an impact on one's attitudes about gender, sexual orientation and gender identity
Identify accurate resources about identity
Access accurate information about gender identity, gender expression and sexual orientation
Communicating with others respectfully
Communicate respectfully with and about people of all gender identities, gender expressions and sexual orientations
Promoting respect for others in community
Develop a plan to promote dignity and respect for all people in the school community
K-2nd
3rd -5th
6th-8th
9th-12th
Figure 1.3 Identity
Changes in Adolescence
Define sexual orientation as romantic attraction to an individual of the same gender or of a different gender
Identifying trusted adults
Identify parents or other trusted adults to whom they can ask questions about sexual orientation
Treating others Respectfully
Demonstrate ways to treat others with dignity and respect
Working together to respect others
Demonstrate ways students can work together to promote dignity and respect for all people
Distinguish between different identities
Differentiate between biological sex, sexual orientation, and gender identity and expression
Distinguish between sexual orientation, sexual behavior and sexual identity
Identify influences from society and culture
Analyze the influence of peers, media, family, society, religion, and culture on the expression of gender, sexual orientation and identity
Be able to promote respect
promote safety, respect, awareness and acceptance
Promote policies of respect
school policies and programs that promote dignity and respect for all


Various Methods of Contraception and Pregnancy
Define sexual intercourse and its relationship to human reproduction
Explain the health benefits, risks, and effectiveness rates of various methods of contraception, including abstinence and condoms
Define sexual abstinence as it relates to pregnancy prevention
Describe the signs and symptoms of a pregnancy
Define emergency contraception and its use
Identify prenatal practices that can contribute to a healthy pregnancy
Societal and Cultural influences
Examine how alcohol and other substances, peers, media, family, society and culture influence decisions about engaging in sexual behaviors
Identifying medically accurate information
Identify medically accurate information about emergency contraception
Identify medically accurate resources about pregnancy prevention and reproductive health care
Identify medically accurate sources of pregnancy-related information and support including pregnancy options, safe surrender policies and prenatal care
Communicate decisions about sexual behaviors
Demonstrate the use of effective communication and negotiation skills about contraception including abstinence and condoms
Demonstrate the use of effective communication skills to support one's decision to abstain from sexual behaviors
Decision making model
Apply a decision making Model to various sexual health decisions
Condom Usage
Describe the steps to using a condom correctly
Explain that all living things reproduce
K-2nd
3rd -5th
6th-8th
9th-12th
Figure 1.4 Pregnancy & Reproduction
Specifics of human reproduction
Describe the process of the human reproduction
Various Methods of Contraception and Pregnancy
Compare and contrast the advantages and disadvantages of abstinence and other contraceptive methods, including, condoms
Define emergency contraception and describe its mechanism of action
Identify the laws related to reproductive and sexual health care services
Describe prenatal practices that can contribute to or threaten a healthy pregnancy
Compare and contrast the laws relating to pregnancy, adoption, abortion and parenting
Describe the signs pregnancy
Societal and Cultural influences
Analyze influences that may have an impact on deciding whether or when to engage in sexual behaviors
Analyze internal and external influences on decisions about pregnancy options
Analyze factors that influence decisions about whether and when to become a parent
Identifying medically accurate information
Access medically accurate information about contraceptive methods, including emergency contraception and condoms
Access medically accurate Information and resources about emergency contraception
Access medically accurate information about pregnancy options
Access medically accurate information about prenatal care services
Communicate decisions about sexual behaviors
Demonstrate ways to communicate decisions about whether or when to engage in sexual behaviors
Condom Usage
Describe the steps to using a condom correctly
Decision making model
Apply a decision making Model to choices about contraception, including abstinence and condoms
Assess the skills and resources needed to become a parent




Understanding HIV & STDs
Describe the signs, symptoms and potential impacts of STDs, including HIV
Define STDs, including HIV, and how they are and are not transmitted
Compare and contrast behaviors, including abstinence, to determine the potential risk of STD/HIV transmission from each
Influence of drugs on behavior
Analyze the impact of alcohol and other drugs on safer sexual decision making and sexual behaviors
Identify accurate resources about STD's and HIV
Identify medically Accurate information about STDs, including HIV
Identify local STD and HIV testing and treatment resources
Communication to reduce risk
Demonstrate the use of effective communication skills to reduce or eliminate risk for STDs, including HIV
Setting goals to reduce risk
Develop a plan to eliminate or reduce risk for STDs, including HIV
Condom Usage
Describe the steps to using a condom correctly
No topics to cover
K-2nd
3rd -5th
6th-8th
9th-12th
Figure 1.5 Sexually Transmitted Diseases and HIV
Understanding transmission
Define HIV and identify some age-appropriate methods of transmission, as well as ways to prevent transmission
Effectiveness of sex methods
Evaluate the effectiveness of abstinence, condoms and other safer sex methods in preventing the spread of STDs, including HIV
Describe the laws as they relate to sexual health care services, including STD and HIV testing and treatment
Influences on safe sex decisions
Analyze factors that may influence condom use and other safer sex decisions
Access to medically accurate information
Access medically accurate prevention information about STDs, including HIV
Setting goals to reduce risk
Develop a plan to eliminate or reduce risk for STDs, including HIV
Condom Usage
Describe the steps to using a condom correctly
Advocate
Describe the steps to using a condom correctly


Boundaries and Bullying
Explain why bullying and teasing are wrong
Explain what bullying and teasing are
Explain that all people, including children, have the right to tell others not to touch their body when they do not want to be touched
Trusted adults
Identify parents and other trusted adults they can tell if they are being bullied or teased
Identify parents and other trusted adults they can tell if they are feeling uncomfortable about being touched
Communicating boundaries
Demonstrate how to respond if someone is bullying or teasing them
Demonstrate how to respond if someone is touching them in a way that makes them feel uncomfortable
Handling uncomfortable situations
Demonstrate how to clearly say no, how to leave an uncomfortable situation, and how to identify and talk with a trusted adult if someone is touching them in a way that makes them feel
Comprehensive understanding of bullying and sexual assault
Describe situations and behaviors that constitute bullying, sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence
Discuss the impacts of bullying, sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence and why they are wrong
Explain that no one has the right to touch anyone else in a sexual manner if they do not want to be touched
Explain why a person who has been raped or sexually assaulted is not at fault
Identify sources of support
Identify sources of support such as parents or other trusted adults that they can go to if they are or someone they know is being bullied, harassed, abused or assaulted
Communicating to trusted adults about bullying
Demonstrate ways to communicate with trusted adults about bullying, harassment, abuse or assault
Promoting safe environment of respect
Advocate for safe environments that encourage dignified and respectful treatment of everyone
How to treat others with respect and handle situations of bullying
Describe ways to treat others with dignity and respect
Demonstrate ways they can respond when someone is being bullied or harassed
K-2nd
3rd-5th
6th-8th
9th-12th
Figure 1.7 Personal Safety
Defining teasing and sexual harassment
Define teasing, harassment and bullying and explain why they are wrong
Define sexual harassment and sexual abuse
Why teasing happens
Explain why people tease, harass or bully others
Trusted adults
Identify parents and other trusted adults students can tell if they are being teased, harassed or bullied
Identify parents or other trusted adults they can tell if they are being sexually harassed or abused
Practice personal space
Demonstrate ways to communicate about how one is being treated
Demonstrate refusal skills (clear "no" statement, walk away, repeat refusal)
Handling situations of bullying
Discuss effective ways in which students could respond when they are or someone else is being teased, harassed or bullied
Persuading others to intervene for bullying
Persuade others to take action when someone else is being teased, harassed or bullied
Understanding behaviors laws & sexual assault
Compare and contrast situations and behaviors that may constitute bullying, sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence
Analyze the laws related to bullying, sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence
Explain why using tricks, threats or coercion in relationships is wrong
Explain why a person who has been raped or sexually assaulted is not at fault
External influences on relationships
Describe potential impacts of power Differences (e.g., age, status or position) within sexual relationships
Analyze the external influences and societal messages that impact attitudes about bullying, sexual harassment, sexual abuse, sexual assault, incest, rape and dating violence
Communication
Access valid resources for help if they or someone they know are being bullied or harassed, or have been sexually abused or assaulted
Demonstrate ways to access accurate information and resources that provide help for survivors of sexual abuse, incest, rape, sexual harassment, sexual assault and dating violence
Communication
Demonstrate effective ways to communicate with trusted adults about bullying, harassment, abuse or assault
Identify ways in which they could respond when someone else is being bullied or harassed
Promote safe environment and respect
Advocate for safe environments that encourage dignified and respectful treatment of everyone

Supplementary Figure 2. Prompt exemption from Northwestern IRB

Northwestern | RESEARCH

Northwestern University
Institutional Review Board
Biomedical IRB
750 N. Lake Shore Dr., 7th Fl.
Chicago, Illinois 60611

irb@northwestern.edu
Office 312. 503. 9338

Social & Behavorial Sciences IRB
600 Foster St., 2nd Floor
Evanston, Illinois 60208

sbsirb@northwestern.edu
Office 847. 467. 1723

NOT HUMAN RESEARCH

DATE: July 22, 2019

TO: Dr. Joe Feinglass
FROM: Office of the IRB

DETERMINATION DATE: 7/22/2019

The Northwestern University IRB reviewed the submission described below and determined that the proposed activity is not research involving human subjects. Further IRB review and approval is not required.

Type of Submission:	Initial Study
Review Level:	
Title of Study:	Analyze anonymized feed back survey data of Lurie's Comprehensive Sex Education to guide program evaluation
Investigator:	Joe Feinglass
IRB ID:	STU00210485
Funding Source:	Name: Feinberg School of Medicine (FSM)
Grant ID:	
IND, IDE, or HDE:	None
Documents Reviewed:	• Parent Evaluation, Category: Recruitment Materials; • CPS IRB feedback , Category: Other; • Student evaluation, Category: Recruitment Materials; • Teacher Training Evaluation, Category: Recruitment Materials; • Rose Diskin Citi Certificate, Category: Training Documents; • Protocol for Lurie's Sex Education Survey Data , Category: IRB Protocol;

This determination applies only to the activities described in the eIRB+ submission and does not apply should any changes be made. If changes are being considered and there are questions about whether IRB review is needed, please contact the IRB Office to discuss those changes. You may be asked to submit a new study in eIRB+ for a determination.

This determination does not constitute or guarantee institutional approval and/or support. Investigators and study team members must comply with all applicable federal, state, and local laws, as well as NU Policies and Procedures, which may include obtaining approval for your research activities from other individuals or entities.

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