Building a Foundation for Sexual Health Is a K–12 Endeavor

Evidence Underpinning the National Sexuality Education Standards
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Schools play a critical role in building a foundation for sexual health and an extensive body of research underscores the importance of comprehensive sexuality education (CSE) in school settings. In 2012, the National Sexuality Education Standards, Core Content and Skills, K–12 (NSES) were published to provide clear, consistent, and straightforward guidance on age-appropriate, minimum core content and skills schools should help their students acquire in each grade, K–12.

Sexuality education, guided by these standards, can help improve academic success; prevent child sexual abuse, dating violence, and bullying; help youth develop healthier relationships; delay sexual initiation; reduce unplanned pregnancy, HIV, and other sexually transmitted diseases (STDs) and related disparities among youth; and reduce sexual health disparities among lesbian, gay, bisexual, transgender, and queer (LGBTQ) youth.

The NSES were developed and reviewed by more than 40 professionals with expertise in public health, child and youth development, education, and sexual health, including youth sexual development. Further, three areas of evidence were considered when drafting these standards:

1. Research from child and youth development, including youth sexual development, informed recommendations for age-appropriate scaffolding of the learning objectives;

2. Research from health education, health behavior and the broader field of education guided the inclusion of tenets of social learning theory, social cognitive theory, and the social ecological model of prevention to assist students in acquiring both functional knowledge related to sexuality as well as the specific skills necessary to adopt healthy behaviors; and

3. Evidence regarding factors associated with sexual health promotion was drawn from multiple literature bases including psychology, public health, sociology, gender studies, and child and adolescent development to inform the topics and key indicators included in the NSES.

The following research highlights the latter of these three areas—evidence drawn from multiple literature bases that supports the inclusion of a K–12 approach to sexuality education that meets the NSES. While several of the areas outlined below warrant further research, and there are noticeable research gaps, this summary of the evidence confirms that providing CSE lays a foundation for sexual health for young people.

COMPREHENSIVE SEXUALITY EDUCATION PROMOTES SOCIAL AND EMOTIONAL COMPETENCIES THAT CONTRIBUTE TO ACADEMIC ACHIEVEMENT, REDUCED RISK-TAKING, AND HEALTHY RELATIONSHIPS.

CSE, guided by the NSES, includes core content and skills to help young people acquire important knowledge, attitudes, and skills that are often called social and emotional learning (SEL). These skills include: self-awareness (the ability to recognize one’s emotions and thoughts and their influence on behavior); self-management (the ability to regulate one’s emotions, thoughts, and behaviors); social awareness (the ability to take the perspective of and empathize with others); relationship skills (communication, cooperation, active listening, and conflict negotiation); and responsible decision-making.

Acquisition of these skills comprises a core component of early elementary CSE and learning objectives from subsequent grade levels are designed to help students further hone these skills as they mature. CSE guided by the NSES teaches youth by the end of 2nd grade to identify healthy ways to express feelings, show respect, and control their behaviors. By the end of 5th grade, students practice recognizing and managing their emotions, learn healthy ways to communicate differences of opinions, explore the differences between healthy and unhealthy relationships, and practice skills necessary to treat themselves and others with dignity and respect. By the end of 8th grade, students learn to communicate respectfully, negotiate conflict fairly, apply effective decision-making strategies,
and demonstrate ways to show empathy and treat each other with dignity and respect.

There is a growing body of research linking social and emotional competencies to improved academic, physical and mental health outcomes, as well as healthy and satisfying relationships. A 2015 Centers for Disease Control and Prevention (CDC)-led meta-analysis of programs to prevent school dropout echoed findings from a 2011 study showing that social-emotional skills programs led to significant reductions in dropout rates, from an average of 21.1% in control groups to 10.2% in program groups. A 2011 meta-analysis of studies of SEL programs for students ages 5–18 found that, compared to control groups, participants in social-emotional learning programs had higher social and emotional competencies; improved attitudes toward self, others, and school; more positive social behavior; fewer conduct problems; lower emotional distress; and improved academic performance.

Growing research also links social and emotional competencies to reduced sexual risk taking and greater relationship satisfaction. A study focused on sexually active teenage girls found that those with higher social-emotional skills had improved protective behaviors for pregnancy, including fewer male partners, better communication with partners about risk, and more consistent condom use. A 2016 study using data from the National Longitudinal Study of Adolescent to Adult Health found self-acceptance and emotional stability are factors that contribute to couple relationship satisfaction. Finally, a 2014 meta-analysis of six studies involving more than 600 participants found a significant association between emotional intelligence or competency and romantic relationship satisfaction.

**COMPREHENSIVE SEXUALITY EDUCATION SUPPORTS THE PREVENTION OF CHILD SEXUAL ABUSE.**

CSE, guided by the NSES, includes core content and skills to help young people reduce their risk of child sexual abuse. The ability for a young person to prevent and/or report child sexual abuse is dependent, in part, on their understanding of their bodies, including the correct names of body parts, the recognition that they have bodily autonomy, and the skills to communicate with a caring adult regarding perceived or real danger. Young children are particularly vulnerable to child sexual abuse, but only a small fraction knows the correct names of their genitals. Further, the American Academy of Pediatrics recommends that children learn about the names of genitals along with other body parts to understand that, “the genitals, while private, are not so private that you can’t talk about them.”

Helping young people to acquire the knowledge and skills they need to fend off or report child sexual abuse is an important component of CSE guided by the NSES. By the end of 2nd grade, children receiving CSE learn the correct names of their body parts and that they have the right to tell others not to touch their bodies when they do not want to be touched; students identify a parent or other trusted adults in whom they can confide if they are feeling uncomfortable about being touched; and they practice how to respond if someone touches them in a way that makes them uncomfortable.

Research shows that these skills are essential components of child sexual abuse prevention. In fact, in one study, convicted child sex offenders told researchers that they were better able to take advantage of children with inadequate information about sex, including inadequate understanding of body parts. Further, a meta-analysis of 24 studies of school-based programs that included child sexual abuse prevention, found that these programs increased children’s protective behaviors and knowledge and children in these programs were more likely to disclose their abuse than non-participants.

**COMPREHENSIVE SEXUALITY EDUCATION ADVANCES GENDER EQUITY.**

Around the world, gender inequality continues to impede girls and women from achieving their individual hopes and dreams and has been linked to economic and health disparities, including HIV and other STDs. CSE, guided by the NSES, fosters gender equity and advances sexual health. By the end of 2nd grade, young people taking CSE, guided by the NSES, discuss the similarities and differences in how boys and girls may be expected to act and provide examples of how friends, family, media, and culture can influence the ways girls and boys think they should act. By the end of 8th grade, students explore gender expression and analyze the potential impact of individual, family, and cultural expectations on gender, gender roles, and gender stereotypes. Students also begin to analyze the impact of gender inequities on relationships, including on power dynamics, communication, and decision-making.

Research across multiple disciplines has demonstrated that gender norms and inequities are key factors in shaping health generally and sexual health specifically. In a study of African-American adolescent females, those who reported having less power in their sexual relationships with males were more likely to engage in risky behaviors, and 3.9 times more likely to test positive for an STD, than those reporting having more power in their relationships. Among a primarily African-American and Latino cohort of young men in another study, those who agreed with statements reflecting traditional male gender roles were significantly more likely to have perpetrated intimate partner violence in the prior year. An analysis of data from Mexican-American and Puerto Rican women from the National Survey of Family Growth found that those with
more traditional attitudes about sex roles were less likely to have partners who consistently use condoms. A survey of students at a Midwestern college found that exposure to sexual double standard messages from parents and peers was associated with lower comfort with sexual communication among women, higher endorsement of rape “myths” (such as blaming the victim) among both men and women, and higher rates of perpetrating sexual coercion among men.

A recent meta-analysis looked at rigorous reviews of curriculum-based sexuality and HIV-, other STD-, and/or pregnancy-prevention programs for youth (excluding abstinence-only programs), with the majority of included studies based on programs in the U.S. The analysis found that among the programs that explicitly addressed gender and power, 80% were associated with decreases in pregnancy or STD rates, compared to only 17% of the programs that did not address gender and power.

COMPREHENSIVE SEXUALITY EDUCATION PROMOTES HEALTHY RELATIONSHIPS AND REDUCES RISK OF SEXUAL ASSAULT AND INTIMATE PARTNER VIOLENCE

The development of healthy relationships is a significant developmental milestone that has implications for young people’s health and wellbeing. Trust, respect, communication, and boundaries are essential components of any healthy relationship—platonic or romantic. CSE, guided by the NSES, teaches essential skills to support these healthy relationship attributes.

Healthy Relationships is one of seven key topic areas covered in the NSES, including 31 learning objectives spanning Kindergarten through 12th grade. Students who receive CSE guided by the NSES learn by 2nd grade the characteristics of healthy friendships along with healthy ways to express feelings—both foundational for developing healthy friendships as well as healthy romantic relationships later in life. By the end of 5th grade, students learn to compare healthy and unhealthy relationships, communicate differences of opinions while maintaining friendships, and demonstrate ways to treat others with dignity and respect. By 8th grade, youth learn to describe the potential impact of power differentials in relationships, analyze the similarities and differences between friendships and romantic relationships, communicate personal boundaries and show respect for the boundaries of others. By the end of 12th grade, students learn to describe the characteristics of healthy and unhealthy romantic and sexual relationships, analyze the media’s influence on how people define healthy relationships, describe and explain consent, effectively communicate personal boundaries, and demonstrate effective strategies to avoid or end an unhealthy relationship.

Emphasizing the importance of building healthy relationships is vital to the promotion of adolescent sexual health in part because of the many negative outcomes related to intimate partner violence (IPV). The CDC estimates that nearly 1.5 million high school students are affected by dating violence annually. While prevalence rates vary, the consensus among scholars is that IPV in teen relationships is common, has lasting detrimental effects on future relationships, physical and sexual health, and affects both boys and girls.

Research indicates that when schools take measures to educate their students about dating violence, as well as enact school policies aimed at prevention, teens are less likely to be victimized, more likely to intend to avoid perpetrating IPV, and sexual harassment on school property is significantly reduced. A number of studies, across a variety of disciplines, also have found that when young people experience connectedness, intimacy, and communication about contraception in their romantic relationships, they are more likely to engage in protected sex and have more positive sexual experiences. Teens’ likelihood of using a method of birth control is associated with relationship-based activities and connectedness.

Youth are more likely to use a contraceptive method at first sex if they have more communication about sexual matters in their intimate relationships and communication about contraception is more likely to happen when teen partners are satisfied with their relationships and report greater intimacy.

COMPREHENSIVE SEXUALITY EDUCATION THAT IS INCLUSIVE OF LGBTQ PEOPLE AND ISSUES IMPROVES THE HEALTH AND ACADEMIC ACHIEVEMENT OF LGBTQ YOUTH, DECREASING DISPARITIES AND BULLYING.

LGBTQ youth face disproportionate risk for school victimization, which has been linked with decreased academic achievement, increased suicide ideation, increased rates of absenteeism, and negative impacts on their emotional health.

CSE, guided by the NSES, helps young people understand sexual orientation and gender identity, promotes respect for all youth, and provides students with lesson plans and activities inclusive of, and relevant to, LGBTQ youth. Gender identity is one of seven key topic areas covered in the NSES, offering 17 age-appropriate learning objectives from Kindergarten through 12th grade. By the end of 2nd grade, students learn about gender and gender roles; by the end of 5th grade they can define sexual orientation and demonstrate ways to show respect and treat others with dignity. By the end of 8th grade students can differentiate between sexual orientation and gender identity; they have learned to access accurate information regarding these topics and can demonstrate respectful communication with people of all gender identities, gender expressions, and sexual orientations. Additionally, quality CSE offers inclusive lesson plans, models respectful and safe interactions, and creates a safe classroom environment.
Education that is inclusive of the needs of LGBTQ youth can improve their health and wellbeing. Young gay, bisexual, and questioning men reported in one study that sex education that was inclusive of LGBT people, including both information about risk prevention and broader discussions of LGBT sexuality and identity, would be helpful to them. Further, an analysis of LGB youth receiving school-based HIV-related instruction found that LGB youth with teachers who had a high degree of sensitivity to the needs of gay youth engaged in fewer risk behaviors than those with less-sensitive instruction: they had fewer partners, were less likely to have had sex within the previous three months, and were less likely to report using drugs or alcohol before the last time they had sex. Another study found that transgender youth report feeling safer in schools with certain protective factors, among them the inclusion of LGBT issues in curricula across the school. Further, there is a growing body of evidence that creating a safe and supportive school environment helps combat LGBT victimization, including bullying.

### Comprehensive Sexuality Education Delays Sexual Initiation

On average, young people in the U.S. have sex (heterosexual vaginal intercourse) for the first time at around age 17 and early sexual initiation is relatively rare, with only 11 percent of young people having had sex prior to age 15. Although most young people initiate sex at a developmentally appropriate age and in a consensual context, sexual initiation prior to age 15 has been linked to increased risk behaviors, such as having multiple sex partners, being involved in a pregnancy, forcing a partner to have sex, having frequent intercourse, and having sex while drunk or high.

CSE, guided by the NSES, includes lessons about the importance and effectiveness of delaying sexual initiation, is sensitive to the experiences of young people who have been coerced into sexual activity, and does not shame students who are already sexually active. Young people also learn about the health benefits of condoms and contraception. By the end of 8th grade, students learn the meaning of sexual abstinence and delay, apply a decision-making model to help them examine the benefits of delaying sexual initiation and learn to communicate effectively about their personal boundaries. They also learn to assess the health benefits, risks and effectiveness rates of various methods of contraception, including abstinence and condoms. By the end of 12th grade, students analyze influences that impact people’s decisions regarding sexual activity, examine laws related to minors and their ability to consent to sex, apply a decision-making model to various sexual health decisions, demonstrate ways to show respect for the personal boundaries of others, and practice refusal and negotiation skills to help them avoid unwanted sexual activity.

A 2012 CDC-led meta-analysis included 66 studies of group-based school or community sex education that included information about the health benefits of abstinence as well as contraception and condoms. The analysis found that two-thirds of the programs had positive behavioral effects, including a 12% reduction in sexual activity among students in these programs. Research further demonstrates that the provision of sexuality education does not hasten the onset of sexual activity and, in fact, teens that receive education that includes contraception are more likely than those who receive abstinence-only programs to delay sexual activity.

### Comprehensive Sexuality Education Results in Greater Contraceptive Use and Fewer Unintended Pregnancies

Pregnancy and birth rates among young women ages 15–19 in the U.S. reached historic lows in 2011. Since 2008 alone, the national pregnancy rate among women in this age group declined by 23% to 52.4 pregnancies per 1,000 women in 2011. Despite these historic declines, the U.S. continues to have the highest teen birth rate among comparable countries. In addition, disparities across racial and ethnic groups and geographic regions persist, and 77% of pregnancies among 15–19 year olds are unplanned. Access to information regarding reproduction and pregnancy prevention is crucial in order to provide young women with the information they need for their own reproductive planning, address unintended teen pregnancy and birth rates, and help to reduce disparities.

CSE, guided by the NSES, addresses how pregnancy happens and decision-making to avoid a pregnancy if unwanted, including information about abstinence and contraception. Pregnancy and Reproduction is one of seven key topics covered in the NSES. Additional related learning objectives are woven through other key topic areas of the standards. By the end of 2nd grade, students learn that all living things reproduce. By the end of 5th grade, young people learn about puberty and the process of human reproduction. They begin to explore concepts including ovulation, fertilization, and implantation. By the end of 8th grade, young people can describe the relationship between sexual intercourse and human reproduction, have learned the signs and symptoms of pregnancy, and can describe the health benefits, risks and effectiveness of various methods of contraception, including abstinence. They have also demonstrated effective communication and negotiation skills regarding pregnancy prevention, applied a decision-making model to situations regarding sex and sexual health and learned the steps to using a condom correctly. By 12th grade, CSE builds upon these learning objectives to help students assess the advantages and disadvantages of abstinence and other contraceptive methods, learn about prenatal practices that can contribute to or threaten healthy pregnancies, and understand the laws related to accessing...
health care services, pregnancy, adoption, abortion, and parenting.48

The 2012 CDC-led systematic review cited above found that two-thirds of the 66 “comprehensive risk reduction programs” (including contraception and/or condom information in addition to abstinence) assessed had positive behavioral effects, including a 40% increase in contraception and condom use and a 40% reduction in unprotected sex.49 Though not statistically significant, these programs also led to an 11% decrease in pregnancy rates. In a large national survey, teens who reported participating in similar instruction that addressed both birth control and “how to say no to sex” in a formal setting were significantly less likely to experience teen pregnancy than teens with no formal sex education and 50% less likely to experience pregnancy than teens who participated in abstinence-only programs.50

**COMPREHENSIVE SEXUALITY EDUCATION INCREASES CONDOM USE AND LOWERS INCIDENCE OF HIV AND OTHER STDs.**

Youth face disproportionate risk of acquiring HIV and other STDs in the U.S. compared to other age groups. Among the estimated 47,500 new HIV infections in 2010, 26% were among youth ages 13–24 years old.51 In 2014, the same age group accounted for one out of every five new HIV diagnoses.52 Young men who have sex with men (YMSM), particularly young black/African American men, bear a disproportionate burden, representing four out of five of these new diagnoses.53 Of the nearly 20 million new STDs each year, including HIV, nearly 50% occur among youth ages 15–24.54 Among the prevention challenges facing youth, the CDC specifically names “inadequate sex education” that “varies substantially throughout the United States,” and states that sex education does not start early enough or properly address the needs of young gay and bisexual men.55

CSE, as guided by the NSES, offers age-appropriate information and promotes skills development related to the prevention of HIV and other STDs. In fact, “Sexually Transmitted Diseases and HIV” is one of seven key topics addressed in the NSES, providing 22 age-appropriate learning objectives that scaffold from Kindergarten through 12th grade. In grades three through five, core concepts include defining HIV and other STDs. By the end of 8th grade, students learn about transmission methods as well as the signs and symptoms of various STDs; compare and contrast the health benefits, risks and effectiveness of prevention methods including abstinence and condom use; and learn to apply their communication and decision-making skills to sexual situations. They also learn the steps to using a condom correctly and explore ways to access accurate information and services regarding STD testing and treatment. By the end of 12th grade, learning objectives reinforce previous knowledge and skill acquisition and assist students in communicating effectively with a partner about STD and HIV prevention and testing, analyzing individual responsibility regarding STD testing, and exploring laws related to consent, accessing sexual health care services, and purchasing condoms.

An analysis of a national youth survey found that school-based HIV education was associated with fewer risk behaviors for HIV and other STDs. Students who reported having been taught about HIV in school reported increased condom use (if sexually active), less injection drug use, and less alcohol or drug use before last sexual intercourse.56 A meta-analysis of evaluations of a range of school- and community-based HIV-prevention programs for adolescents found that, relative to comparison conditions, the interventions significantly reduced STD rates and risk behaviors for STDs, while increasing condom use and communication skills.57 Additionally, the previously-cited 2012 CDC meta-analysis of 66 studies of group-based school or community programs that included instruction on both abstinence and contraception and condoms found a 35% reduction in STD incidence.58 According to the CDC, “school health programs can help youth adopt lifelong attitudes and behaviors that support overall health and well-being—including behaviors that can reduce their risk for HIV and other sexually transmitted diseases.”59 CSE guided by the NSES includes the instruction necessary to promote sexual health among youth, increase condom use and reduce sexual risk behaviors to prevent HIV and other STDs.

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