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### Health Educators Perceptions of Comprehensive Sex Education

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# **Health Educators Perceptions of Comprehensive Sex Education**

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## **Abstract**

This study looked at health educators' perceptions of comprehensive sex education (CSE) through the lens of nine middle school and high school health educators in Massachusetts. Since the overturn of *Roe v. Wade* (Totenberg & McCammon, 2022), sex education has been highly contested, specifically in more conservative states like Florida (Branigin, 2022). The purpose of this study is to find health educators' perceptions of CSE. This qualitative study included nine interviews of teachers across four Massachusetts public school districts using an 11 question interview guides. Data analysis included three rounds of deductive coding on all nine interviews completed. The study finds that overall, educators fell on a spectrum with their definitions and understandings of CSE, some had a more narrow and simple view of CSE while others had a broader and in-depth view of CSE. Overall teachers perceive CSE to have a positive impact on their students. Teachers who perceive a positive impact in addition to having a strong understanding of CSE could see a sustained impact of the curriculum in their students. Finally, teachers who had a perceived positive impact of CSE could critically think about curriculum, what is included and what could be improved. This research creates implications for future studies done on the relationship between teachers and the impact of their teaching of comprehensive sex-education. A future study could look to further understand the overall United States perceived impact of CSE through interviews of health educators from around the country.

**Key Words:** Comprehensive Sex Education, Perception, Educators, Impact, *Roe v. Wade*

## **Health Educators Perceptions of Comprehensive Sex Education**

### **Introduction**

The overall aim of this qualitative interview study of ten middle school and high school health educators across multiple Massachusetts public school districts is to understand teachers'

beliefs regarding the perceived impacts that comprehensive sex education has on students. The study also seeks to explain, through the context of teacher perceived impacts, the importance of comprehensive sex education for students from middle school to high school. Comprehensive sex education (or CSE) will generally be defined as health programs that “should be based on an established curriculum; scientifically accurate; tailored for different ages; and comprehensive, meaning they cover a range of topics on sexuality and sexual and reproductive health, throughout childhood and adolescence” (*Comprehensive Sexuality Education*, 2023).

Across the United States legislative changes have been made regarding bodily autonomy, as well as what students are allowed to learn and read about in the classroom. These changes have real negative implications for the safety of adolescents when it comes to sex education and more importantly, comprehensive sex education. With the overturning of *Roe v. Wade* by the Supreme Court in 2022 (Totenberg & McCammon, 2022) active steps have been made to decrease reproductive rights for women (and individuals with female reproductive organs) across the country. The only true solution to decreasing the number of abortions given is to increase individuals in the United States access to sex education and affordable birth control (*Federal and State Bans and Restrictions on Abortion*, n.d.). This proposed solution indicates a need to better and create more accessible sex education around the country.

If sex education is a proposed solution to decreasing rates of teen and unwanted pregnancies and abortions, it is critical that we understand the impact of health educators on their students in the classroom. This study aims to understand health educators perceptions and how those perceptions may influence the teachers CSE framework by answering the questions: How do a sample of middle and high school health educators in Massachusetts define sex education?; Do these teachers curriculum align with “comprehensive sex education” theory, framework, and

research?; If/When teachers are using CSE framework, what are health educators perceptions and experience when teaching comprehensive sex education?; How do they (health educators) describe the impacts of comprehensive sex education on their students? Exploring these questions through qualitative analysis allows the personal experience and knowledge of teachers to help understand an important issue in the field of comprehensive sex education.

## **Literature Review**

### **What is Comprehensive Sex Education?**

Comprehensive sex education as defined previously consists of a range of topics regarding an individual's sexuality and their sexual and reproductive health, this education should span throughout adolescents as well as childhood (*Comprehensive Sexuality Education*, 2023). Previous literature has continued to define comprehensive sex education explaining what it is, how it works, and why it is important for children and adolescents. Understanding what comprehensive sex education allows a teacher to understand why it is so critical for it to be taught in schools. An article posted in the Journal of Public Law & Policy written by Amy Schwarz in 2007 stated that around 750,000 teen pregnancies occur each year in the United States, this is about eight times higher than countries including Japan and the Netherlands (Schwarz, 2007). This striking number aimed to exhibit how negatively impactful funding abstinence-only education can be to adolescents. Schwartz also shared that abstinence only programs promoted medical inaccuracies including exaggerated failure rates of consumer use and contraception (Schwarz, 2007).

Understanding what encompasses comprehensive sex education can help health educators to distinguish what their classroom curriculum needs to look like. In an article written by Joan Helmich she offers a way for society to expand their definition of comprehensive sex education

by sharing nine principles that embody what comprehensive sex education is. Ideally comprehensive-sex education would be client-centered, broad, skill based, value based, research and theory based, long term, integrated, collaborative, and positive (Helmich, 2009). CSE must be client-centered meaning the curriculum should be centered based on what the students are needing at that time and the questions they have. It should also be broad, meaning that you cover broad topics including anatomy, social and emotional health, health and safety, and society and culture. Including all these topics gives a range of education instead of just discussion prevention and condom usage. CSE must then be skill based, meaning teachers must provide students with a set of skills including critical thinking, decision making, intrapersonal and interpersonal, mechanics (ex. using a condom), and finding resources that are available to them. Value's must also be incorporated into the classroom including respect and responsibility when it comes to sexual health. Curriculum surrounding CSE must be research and theory based to ensure it is accurate and complete as well as being diverse. CSE should also be long term, as it should be taught throughout development from grades K-12. Sexual reproduction would not be taught till much later, whereas topics such as bodily autonomy and consent could be taught at a much younger age. It is important that CSE be integrated into other classrooms and programs, not only health classrooms, because topics like sexuality affect an individual in all aspects of their lives. Another critical factor for CSE is it must be collaborative with parents and organizations beyond the classroom. Finally, comprehensive sex education needs to be framed positively. CSE cannot only focus on the potential harmful aspects of sexuality and sexual behaviors, students also need to be taught about the potential positives that sexuality, life, as well as pleasure bring to individuals (Helmich, 2009). A combination of these principles that Helmich has outlined should be seen in health classrooms around the United States as well as around the world.

There has been research going on for decades surrounding the importance of comprehensive sex education for students and the topics that CSE should include. In a review of research from multiple decades of CSE, Goldfarb & Lieberman study 218 articles that meet their criteria focused on comprehensive sex education. Goldfarb & Lieberman define comprehensive sex education as a set of curricula that includes consent and healthy relationships, anatomy and physiology, puberty and adolescent sexual development, gender identity and expression, sexual orientation and identity, sexual health, and interpersonal violence. These definitions were heavily influenced by the National Sex Education Standards (NSES) which about more than 40% of school districts in the United States use in their classrooms (Goldfarb & Lieberman, 2020). It is critical to have a deep understanding of the practices that should be included in health classrooms in the United States. By studying research that followed their definitions of CSE Goldfarb & Lieberman were able to exhibit the importance CSE holds. The results of their in-depth research found that comprehensive sex education was responsible for lowering homophobia and related bullying, increasing students understand of gender and norms surround it, improving students' knowledge and skill that are helpful in supporting a healthy relationship, increasing prevention skills regarding child sex abuse, and reducing levels of dating and intimate partner violence (Goldfarb & Lieberman, 2020). This research analysis is critical in understanding what CSE is because it focuses on topics of discussion that are often thrown to the side, as individuals think of CSE as sexual intercourse and the teachings of safety around it.

As seen in Schwarz, 2007; Helmich, 2009; and Goldfarb & Lieberman, 2020; comprehensive sex education is a multifaceted curriculum that goes beyond sexual intercourse and puberty which is typically thought of when talking about sex-education. The first step to

incorporating CSE into more classrooms around the United States is to have a clear set of definitions regarding what CSE framework is made up of.

### **Comprehensive Sex Education vs. Abstinence**

When discussing issues surrounding health education there is an ongoing conversation of why CSE is more effective than teaching Abstinence. As stated previously, CSE standards cover a range of topics that are based on “an established curriculum; scientifically accurate; tailored for different ages; and comprehensive, meaning they cover a range of topics on sexuality and sexual and reproductive health, throughout childhood and adolescence” (*Comprehensive Sexuality Education*, 2023). Abstinence on the other hand focuses on teaching individuals that sex should not happen until marriage and information regarding contraception is limited or discussed as ineffective (Kohler, 2008). Much of the previous research has looked at why comprehensive sex education is more beneficial to developing individuals versus the abstinence alternative.

#### *Why is CSE more effective than teaching abstinence?*

Comprehensive sex education is more effective than teaching abstinence in health classrooms. Past research has looked at the comparison of CSE and abstinence-only teaching to exhibit why CSE is proven to be more beneficial for adolescents going through development. Kohler and his colleagues in 2008 conducted a study that looked at how sex education plays a role in the beginning of an adolescent's sexual activity. This study looked at adolescents from the ages of 15-19 who identified as heterosexual and had received formal sex-education before they became partaking in sexual activity. Kohler et al., then compared this group to a group of adolescents who only received abstinence-only education or no sex-education at all. The study found that individuals who received comprehensive sex education had a lower risk of pregnancy than adolescents who completed abstinence-only teaching or no sex-education at all (Kohler et



al., 2008). The findings of this study are extremely important to understand the real-life implications of these two types of teaching. Although this study focused on sexual activity and pregnancy rates, which are an important aspect of teaching CSE, it is still important to consider that the study did not look at other factors that are often included in CSE like consent and sexuality teaching.

Other literature has also reviewed data comparing comprehensive sex education and abstinence-only teaching. In an article written by Malone & Rodriguez in 2011 looked at landmark studies that examined CSE programs versus abstinence-only programs. It was found that there was no evidence found that abstinence-only programs increased individuals' rates of partaking in abstinence. It was also found that individuals who were given abstinence-only education had a similar number of sexual partners, similar ages of first sexual intercourse experiences, and similar numbers of unprotected sex reported to their CSE counterparts (Malone & Rodriguez, 2011). Abstinence-only programs focus solely on an individual abstaining from sexual intercourse. Unlike CSE it does not share information that is important to building and maintaining respectful relationships, consent, topics on gender or sexuality and more. If programs like the ones highlighted in Malone & Rodrigues, 2011 are only focused on telling adolescents to not have sex, their students are missing out on critical education.

In the United States there are some states which offer CSE are more effective in lowering rates of sexual activity and increasing levels of safe sex than states who teach abstinence-only. In a study done in 2018 by Atkins & Bradford the researchers looked at the two types of sex-education that is typically offered in public schools in the United States: comprehensive sex education and abstinence-only. They looked to find a consensus on which practice was more effective in state-level or district-level interventions. The study found that states and local school

districts that required HIV/STD education as well as sex-education had statistically significant effects. The states where laws required CSE decreased sexual activity while also raising contraception use. States where schools were mandated to teach abstinence only were found to have an increase in sexual activity and a lower rate of hormonal contraception use (Atkins & Bradford, 2018). This study examines how vital CSE can be for adolescents and their sexual safety.

### **The impact of comprehensive sex education**

It is pivotal for future educational legislation to understand the impacts that comprehensive sex education has on its students. Past research has looked to understand potential impacts of comprehensive sex education through many different lenses. In one study completed in 2012 by Grossman et al., looked at the impact of the role of a family homework component of a comprehensive sex education intervention program. The research done by Grossman et al., was a mixed-methods study of 6th and 7th graders from 11 different middle schools who were being given sex-education intervention to delay the adolescent's sexual initiation. The study found that the adolescents who completed more of the family homework assignments were less likely to engage in (vaginal) sexual intercourse than individuals who completed a lesser amount of the family homework assignment. The purpose of looking at family homework assignments was to examine how an increase of family communication surrounding sexual issues can create a delay in sexual initiation and be a contributing factor to having more school-based sex education programs (Grossman et al., 2012). Comprehensive sex education does not just happen in the classroom, it needs to be a constant conversation with development adolescents who are learning to make big decisions regarding their sexual health. This study aimed to find how impactful sex-education curriculum interventions can be on

students regarding their decisions to the initiation of sexual activity and found that these interventions had a large impact on lowering rates of middle schooler's sexual activity. This article really exhibits the importance of comprehensive sex education. CSE, while it encompasses information regarding sexual activity, it also encourages students to create relationships with family members to create a conversation about sexual initiation and activity. This study by Grossman et al., clearly outline the potential positive impacts sex-education can have on adolescents' sexual behaviors.

Research surrounding the impactfulness of comprehensive sex education has looked at the associations of sex-education and contraception use. In a study done by Jaramillo et al., in 2017 looked at adolescent males in the United States who were sexually active prior to the age of 18. The purpose of the study was to look to see if there was an association between receiving education on sex (that being either abstinence only teaching or comprehensive sex education) and the use of contraception methods. The study used cross-sectional data from the 2011-2013 National Survey of Family Growth, where they looked at heterosexual males from the ages 15 to 20 years old. They looked at seven variables that are commonly seen in sex-education including: information on HIV/AIDS, how to say no to sex (consent), dual barrier and female-controlled effective contraception methods, as well as female controlled effective method only, barrier methods only, and no method. Based on this criterion, Jaramillo et al., (2017) the researchers found that 99% of the participants had sex-education on at least one of these topics. The researchers found that individuals who had more exposure to the seven common topics of sex-education were more associated with the report of dual contraception methods (Jaramillo et al., 2017). Research suggests that comprehensive sex education has a greater impact on adolescents resulting in them making smarter sexual decisions. Studies like Jaramillo et al., 2017, allow us to

see the direct implications of what comprehensive sex education can do for the adolescent population. Education results in more knowledge and knowledge is power, especially in situations like sexual activity that could have potential negative outcomes such as STI/STDs and pregnancy. Jaramillo et al., 2017, clearly exhibits the impact that comprehensive sex education has on adolescents regarding sexual activity.

Sexual activity, protection, and the initiation of sexual activity are all important when discussing the impact of comprehensive sex education, but CSE is also critical to understand the impact and the role that gender, and power can play. In a study done in 2021 by Sell et al., research was done on looking at past literature's underlying mechanisms of impact that affect the implementations of sex education programs through the lens of gender and power. This study looked at over 9,000 articles in their review of literature where they conducted an analysis and synthesis on a narrative review of implementation studies and a thematized synthesis of qualitative research that looked at impact of programs. The study found that only 19 articles met their inclusion criteria. Each of the 19 studies Sell et al., looked at exhibited the critical role of teachers to have skills training for the classroom, need for flexibility in programs, and a supportive environment to provide to students. The second set of studies they looked at revealed the importance of empowerment, transformation of gender norms, and meaningful contextualization of students' experiences regarding impact. Overall, the researchers concluded that CSE teachers and programs need to address gender and power to make sure their students are engaging and getting the full impact of the material (Sell et al., 2021). This study distinctly exhibits the important factors that can be attributed to comprehensive sex education's impact on students.

### **Teachers' beliefs and perceptions regarding comprehensive sex education**

Understanding teachers' beliefs and perceptions regarding comprehensive sex education is extremely important. Around the world studies have been done looking at how teachers perceive sex education in the classroom. In a study done by Abolghasemi et al., in 2010, the research team looked at sex education in primary schools in Western Tehran, Iran. The qualitative study recruited 22 teachers from select schools in the area, where data was collected in four focus group sessions. The study found from the points of view of participants that schools and families are two important institutions that play a role in children's sex education. Although participants believed schools were important for children's sex education, they believed the teachers did not have sufficient knowledge to teach sex education. The teachers who participated believed certain things needed to be prioritized to be successful when teaching including changing cultural and attitudes in organizations and institutions for example cultural diffusion, sound training approaches on sex-related topics, having and providing sufficient resources, improving knowledge and skills of teachers around sex education, and have effective interactions between families and schools (Abolghasemi et al., 2010). This study clearly exemplifies the importance of understanding the way teachers perceive sex education and the way it is taught. Teachers are the ones offering guidance to their students. If teachers do not feel prepared, then they will not be qualified to then teach their students.

When looking at teachers' beliefs and perceptions regarding comprehensive sex education is it important to understand how teachers' beliefs and perceptions differ depending on the group of students they are working with. In this topic of research, it is important to understand that impact could and oftentimes does look different for different groups of identifying students. In a study done by Sondag et al., in 2020, researchers looked at how inclusive sex education in Montana's high schools and some of the challenges teachers faced

when providing sex education that could be relevant for LGBT youth. To collect data on perception in an electronic questionnaire, 237 participants were adult alumni (about half of which identified as LGBT) and 64 participants were health enhancement teachers who taught health education. The results of the study found that 90% of the study rated the nine topics of sex education topics listed in the questionnaire to be either “somewhat” or “very important”. But when asked if the same information was relevant to LGBT youth only 30% recalled topics being fully covered regarding the LGBT community. Although 30% said that the material covered was relevant to LGBT youth, overall, the importance of sex education was affirmed within the study. To understand why there was such a gap in this area, most teachers believed it was due to a lack of teacher training. The study suggests that teachers should be required to go to professional training and development sessions where comprehensive sex education and delivering inclusive information is the topic (Sondag et al., 2020). This study is important when understanding teachers' impact. Not all students identify in the same way so educators must understand that their perceptions on impact could be different depending on how students identify. This is something to consider when looking at research done on teachers' perceptions of comprehensive sex education. While this study is not qualitative, the results of the study are still significant when looking at research done on teachers' perceptions of sex education.

If future research studies want to look at the impact of comprehensive sex education, it is critical to look at past research that studies the beliefs and perceptions of teachers regarding comprehensive sex education. Teachers are the vessels that carry the information to students which makes it significant to understand the way they believe students are affected by the information that is taught to them. In a study done by Iyer & Aggleton in 2012, Iyer & Aggleton looked to explore the role teaching has when delivering curriculum about sex education to

students in a Ugandan secondary school. A qualitative study was done exploring teachers' perceptions and beliefs of sex education in these Ugandan secondary schools. The research looked to see how conservative attitudes and gender stereotyping effects limits students' learning regarding topics on sexual and reproductive health information. The study's findings suggest that teachers' attitudes and beliefs must be considered when creating sex education programs because teachers are not neutral delivery mechanisms, they are in fact extremely impactful (Iyer & Aggleton, 2012). Research done on teachers' perceptions of sex education is critical to understanding the overall impact sex education has on students and Iyer & Aggleton qualitative study exhibits why this is an area that needs to be researched further.

### **Gaps in the literature**

Previous research and literature have looked at what comprehensive sex education (CSE) is, the differences in CSE versus teaching abstinence only, and the impacts and beliefs regarding sex-education. Looking at past literature, there are clear gaps in the research of teachers' believed impacts of CSE in the United States. The current study focuses on Massachusetts health educators to contextualize their thoughts around CSE and link those thoughts to their perceived impacts of their classroom curriculum.

### **Methods**

The current study aims to understand Massachusetts health educators' perceptions of comprehensive sex education. It is important to note that previous literature on teachers' perceptions of comprehensive sex education is quite limited especially regarding the United States as readers can see above within the review of prior research.

### **Methodology**

This study incorporates qualitative interviews with health educators from middle schools and high schools in Massachusetts to see what they define sex-education as, what their beliefs of comprehensive sex education are, and their perceived impact on comprehensive sex education (if it is applicable based on their answers to the two parts above). Open-ended interviews are the most appropriate for this qualitative interview and overall topic and research question. This type of qualitative research allows for teachers to go in depth into their personal perceptions of comprehensive sex education by sharing real life experience (Creswell, 2017). Interviews created room in the study to understand teachers' personal thoughts, values, and beliefs about their sex-education curriculum and how they believe it affects their students. The benefits of this research method are getting direct opinions from teachers that clearly outline and answer the research question of this study. One limitation of using this method is that there is only data from teachers who are in Massachusetts, since interviews were conducted instead of a questionnaire. Massachusetts is a more liberal state, but schools do not require health classes to teach sex-education (*Massachusetts*, n.d.). This is a limitation because there is only data from a very small portion of teachers in the United States. If this research was duplicated, data would be collected from teachers in all different regions from the United States making the data more generalizable.

### **Participants**

There were a total of nine middle school and high school health teachers from Massachusetts who participated in the study. The selection criteria were based on the grade level of the teacher and the state in which they teach in. There was not a focus on how long participants have been teaching, the gender of the teacher, or the type of district they work in for example socio-economic status of community (although it happened organically through who opted to participate). To recruit participants to be a part of the studies sample emails (Appendix



A) were sent out that were IRB approved to ask if individuals would be interested in partaking in an interview about their perceived impacts of CSE. To find participants' emails, research was done on which schools in Massachusetts offered health classes. Based on whether the school had health classes, emails were taken from the school districts website to recruit participants. This sample of participants was appropriate since they were all either middle school or high school health educators in Massachusetts public schools. Middle school is where students start to learn about sex-education and then in high school it is further talked about in more detail. Getting a range of experience from middle school to high school allowed the data from the interviews to have a range of information. Using teachers from the same district, which did occur, allowed the research to have interesting findings since the teachers from the same school districts did not have the same answers to the set of interview questions. This group of Massachusetts public middle school and high school health educators allowed a greater understanding of the Massachusetts area regarding health educators perceptions of comprehensive sex education.

### **Data Collection**

Interviews were used to collect data from the sample of middle school and high school health educators. The first step was reaching out to participants who were health teachers in public school districts in the Massachusetts area. There were nine participants who took part in the 11-question interview (Appendix B), which only took participants around 30 minutes of their time (depending on how thoroughly they answered the question). The interview questions were based on prior research done on comprehensive sex education. To get teachers to participate and get data to analyze their districts website were used to find emails to reach them by. Once emails were sent out that were IRB approved and responses were received from each of the participants willing to participate, a zoom interview was set up. Each teacher was told prior to the interview

how many questions they would answer and the approximate length of time the interview would take. In the initial emails it was also stated that there was minimal risk, and all identifiable information would be deidentified. The next step of this portion of the study was the interview on zoom once the teacher agreed on a date and time. Proper consent was then received from the participants at the time of interview with a consent form (Appendix C) that was given prior to the interview as well as before the interview. As a part of the consent form, participants agreed to begin recording on the zoom interview where the transcript would be saved. All teachers were told that names of all teachers, students, and school names that were used in the interview would be identified and that no information shared in the study would be identifiable. Anything that could have been identifiable was changed for the greater safety of each of my participants.

**Data Analysis:**

After the data collection portion of the study was completed, and interview transcripts for all participants were all cleaned, coding the data was used as the data analysis method (Creswell, 2017). Three rounds of deductive coding, or the setting of predetermined codes and assigning those codes to your qualitative data set (Medelyan, n.d.), were needed for the purpose of this study. The first round of coding was based on the three different sections of their interview questions to look at how teachers understood sex education, how they understood comprehensive sex education, and finally how they perceived the impacts of comprehensive sex education (Appendix D). The second round of coding was deduced based on teachers' responses to question number 9 and 9a (Appendix B) about their perceived impacts of CSE. The codes for this round were sectioned into two (based on the teacher's response to question 9 and 9a), Positive Impact or Positive/Neutral Impact, to judge whether teachers have a substantial understanding of CSE, an adequate understanding of CSE, or an unsatisfactory understanding of CSE (Appendix E).

The third and final round of coding was deduced from the findings of the second round of coding. This round of data analysis was split into three sections that organized teachers into three categories: Substantial Understanding of CSE, Adequate Understanding of CSE, or Unsatisfactory Understanding of CSE. Based on these categories teachers were being judged based on their levels of thinking including Critical Thinking, Applied Thinking, or Understanding Thinking (Appendix F). The final round of codes was based on the University of North Carolina's Higher Order Thinking Bloom's Taxonomy (*Higher Order Thinking: Bloom's Taxonomy – Learning Center*, n.d.). Using deductive coding for the nine interviews allowed patterns and themes to arise which resulted in this research studies findings. By the end of the third round of coding there were specific quotes from all the participants that led to the four major findings of the research. It should be noted that a limitation of qualitative interviews and coding can arise. When coding inferences are made based on what the participant said throughout the interview. When coming up with findings from the data analysis this limitation was taken into serious consideration.

### **Limitations**

As the study was being completed it was clear that there were some limitations regarding the research method as well as the pool of participants. When doing qualitative interviews to collect data, there is a lot of data that is collected and then analyzed. During the data analyzing portion of the study, inferences had to be made based off what the participant had said. As well as thinking about how accurate the information each teacher was sharing. Since teachers knew that the study was looking at comprehensive sex-education based off the consent form, there was no way to tell if they were giving answers based on what they thought the interviewer wanted to hear. The participants were also given a definition of comprehensive sex education which could

have then skewed their answers to the interview questions further. It is important to be mindful that qualitative interviews could run into these problems of accuracy. There are also potential limitations regarding the participants and the schools that they work at. Since this was a short-term study, only a small sample was interviewed which could skew results one way or the other. Massachusetts was the chosen state to be studied and it should be noted that it is a predominantly liberal state especially regarding education. This could impact the overall views of the teachers. Within Massachusetts, the schools that I emailed were limited based on which schools offered health education. This brings up a potential limitation of socioeconomic inequality regarding the pooled sample. Since the study looked at health teachers, health programs need to be offered in the schools. The school districts that offered health programs in middle school and high school ended up participating were notably some of the wealthiest towns in Massachusetts. Working for a school district with a multitude of resources could then change the teachers' perceptions of comprehensive sex education.

### **Findings**

The use of qualitative research and data analysis using (deductive) coding resulted in the current study finding that educators exhibited a range of definitions and understandings of comprehensive sex education. Some educators had more baseline and narrow views while other educators had more complex and broad views. Middle school and high school health educators who have shown more considerable knowledge on topics regarding comprehensive sex-education exhibited more substantial perceived positive impacts than teachers who have brief knowledge sets of comprehensive sex-education. Educators who have a deeper understanding of comprehensive sex-education displayed the ability to critically analyze their taught curriculum: what is done well in the classroom and what areas could be improved.

### **Finding 1: The Spectrum of Comprehensive Sex Education Among Educators**

After interviewing all participants of the study, it was clear that health educators fell on a spectrum regarding their definitions and understandings of comprehensive sex education. Some educators had more baseline or a starting point view of CSE, while others had more complex and broad views of CSE. In question five of the interview (Appendix B) all educators were given the same definition of comprehensive sex education given by the World Health Organization (WHO). The six main tenets of this definition stated that CSE should include: families & relationships, consent & bodily autonomy, contraception & pregnancy, STIs, and HIV (*Comprehensive Sexuality Education, 2023*). After reading the definitions teachers were asked to state if their classroom followed this definition of CSE and if they could give an example of when they have used CSE in their classrooms. Through the data analysis process of coding, it was clear that there was a spectrum of teachers' understanding of CSE. On one side of the spectrum, you have teachers who have a complex view of what CSE entails, sharing a broad umbrella of knowledge on topics that should be taught. The other side of the spectrum exhibits teachers who had a very narrow view of what CSE encompasses. While all these teachers claimed to teach and practice comprehensive sex education in their classrooms it was clear that while some were able to apply the definition into practice others were not. The first step to having a positive CSE experience is having a teacher who cares about the topic. It should be noted that all these teachers who participated in the study appeared to put their best effort to give students proper CSE curriculum but through interviewing showed varying levels of comprehensive sex education. This spectrum of understanding was seen specifically between two high school teachers from two Massachusetts public school districts: Taylor and Tyler. Both teachers believed that they taught and followed the guidelines of comprehensive sex education

given by the WHO, but they had quite different answers of how this definition was put into practice.

Taylor was a teacher who would be categorized on the side of complex and broad understanding of the CSE spectrum. Taylor was clearly able to understand how broad comprehensive sex education can be, and this was shown through her description of how she incorporates CSE into her classroom and the curriculum. When asked if Taylor could give an example of how she uses the CSE framework in her classroom she stated: “Well, we are constantly changing our curriculum due to whatever’s going on in the world. I often refer to WHO, for a lot of my information, whatever topic I am talking about in health. Like I am talking about health equity right [in one of my classes] and I use the World Health Organization’s definitions of health equity. So, it’s something where I am constantly looking at my curriculum and websites like WHO just to make sure I am in line” (Taylor, Personal Communication, October 4, 2023). Part of having a strong understanding of comprehensive sex education is being able to continuously update curriculum to make it the most relevant it can be for students, especially regarding what is going on in the world. To have a broad definition of CSE first it must be understood that this definition is fluid and is changing constantly based off relevant issues. Of course, sexual intercourse and contraception is a constant within the CSE curriculum, but it does not make it whole. Being able to realize certain topics regarding student bodies and the choices they make in certain contexts of the real world reveals how complex CSE can be. Taylor also mentions health equity, as she discusses using CSE framework, which according to the World Health organization is determined by the conditions in which people are born, grow, live, work, play and age, as well as biological determinants (*Health Equity*, n.d.). While this topic is often not associated with sex education curriculum by the masses, it is critical for

students to understand that there are systematic inequalities regarding health systems and how it plays a role into their own positionality and privilege. Discussing health equity in passing, while discussing how often her curriculum is updated, exhibits the complex definition Taylor has regarding comprehensive sex education.

Tyler on the other hand was a teacher who would be categorized on the side of the baseline and narrow understanding of CSE spectrum. While it was clear that Tyler was passionate about comprehensive sex education and used the term when describing his curriculum, he did not exhibit complex thinking or implement the definition when discussing his understanding of CSE throughout the interview process. When asked if Tyler could give an example of when he has used a comprehensive sex education framework as a part of his curriculum in the classroom he stated: “We do like an egg project where each kid must take care of an egg for a week. You know, because it’s more just a reflection on responsibility, and they must get a babysitter if they have to go somewhere...” (Tyler, Personal Communication, November 2, 2023). To put in context Tyler gave an overview of his classroom how they go over cycles of childbirth, conception, contraception, consent, and the building of healthy relationships. But what he chose to elaborate on was the interesting part. Tyler seemed to be reading back the definition of CSE that was given earlier in the interview when listing topics that his class covers. When he was asked to give an example of curriculum he chose “the egg project”, which reveals a very elementary thought pattern surrounding CSE. His decision to talk about the egg project where students have to “parent” and egg shows narrow thought patterns surrounding what CSE encompasses. This project that Tyler chose to focus on in the interview suggests that a large part of sex education should focus on sexual activity, contraception, and pregnancy. While it cannot be stressed enough that these topics are so critical for the safety of students it is just one piece of

the puzzle. This choice of sharing this part of the curriculum exhibited Tyler's narrow view of understanding comprehensive sex education regarding the spectrum of understanding CSE.

These two teachers are very important for understanding the next three findings of this current study. All the teachers who participated in this study believed that they offer comprehensive sex education in their classrooms, so it is important to recognize the differentiating understandings of what CSE is. Situating teachers' understanding of comprehensive sex education early on allows the contextualization of how they believed CSE's impact on students, how that impact could be sustained, and how they could think critically about CSE curriculum in their classroom.

### **Finding 2: Does Comprehensive Sex Education have a Positive Impact on Students?**

Overall teachers perceive comprehensive sex education to have a positive impact on students. This was an overwhelming finding within the current study. Out of nine participants, when asked questions #9 and #9a (Appendix B) on teachers' perceived impacts, eight out of the nine participants stated that they perceived comprehensive sex education to have a positive impact on students. One out of the nine participants stated that comprehensive sex education has a positive/neutral impact on their students. It should be noted that the teacher who stated CSE has a positive/neutral impact on students was because they could not confidently state that it had a positive impact without asking students. But if they could ask students and they believed it to be positive then they would categorize the impact to be overall positive, which was their explanation for stating the impact was positive/neutral. For data analysis and the overall findings of the study comprehensive sex education has a perceived positive impact on students who engage in it.

The overall perceived positive impact of comprehensive sex education on students can be



seen through many of the interviews given to participants. This perceived positive impact can be seen through the interview given with Sara, a middle school health educator who teaches grades six to eight. When asked if she would categorize the impact of CSE on her students, Sara stated: [It's] positive, and like I said, I have them evaluate the course at the end [of the quarter]. I cater my goals around these [evaluations], you know how teachers make their teaching goals. And I really focus on you know, how [the students] are evaluation sex ed. Curriculum, and what I can do to make them more comfortable...So majority of the students, even when students are uncomfortable at the beginning [of the class] are at least able to be there, ask questions, absorb the information, and learn something" (Sara, personal communication, October 25, 2023). In Sara's interview it was clear from the beginning that she believed CSE was positively impacting her students. She discussed the context of being a middle school health teacher after previously teaching high school health, and how those look different because of what is appropriate to be teaching at this age. Sara exhibited that students could show the impact of CSE through teacher and course evaluations. Using these evaluations allows Sara to adapt her classroom structure and curriculum to make the class more impactful for students in a positive manner. Student-teacher interactions like these evaluations are a great way to understand how students are interacting with the curriculum but also gaging how students feel about the curriculum. The evaluation example Sara used to describe why she believes CSE has a positive impact on students is a critical finding.

Another teacher who shared in the interview that comprehensive sex education had a positive impact on students was Tom, a high school health teacher who teaches freshman health. Throughout the interview with Tom, it was clear that he was extremely passionate about his job as a health teacher who seeks to educate students on making healthy and proactive decisions

surrounding comprehensive sex education. When asked how he perceives the impact of CSE, Tom stated: “I mean, I think [CSE’s impact] is huge. It’s not just the education. It’s the relationship with people that they’re getting the education from...It is absolutely positive. I mean I stay in touch with these kids” (Tom, personal communication, October 27, 2023). Tom goes into the idea of how the relationship of the student and the teacher can influence the overall impact of comprehensive sex education. As the interview goes on, Tom contextualized the previous quote by sharing his beliefs that if there is a better relationship between teacher and student the material will be able to resonate better with the student because they trust the teacher. This insight on why Tom categorizes CSE to have a positive impact on students is important when discussing perceived impacts of CSE curriculum. Tom creates a well thought out point that the more teachers can connect with their students the more impactful the material can be. When teachers shared their perceptions of impact it was important to contextualize this perception with the rest of the interview that they gave. It is one thing for a teacher to state that comprehensive sex education has a positive impact on students, but it is another to make a statement and then share an explanation of why the teacher really believes the impact is positive. Tom went above and beyond to share the thought process behind his claim and even started to lay the groundwork of the next finding: the idea of sustained impact.

### **Finding 3: A Sustained Impact of Comprehensive Sex Education**

Teachers who perceived a positive impact in addition to having a strong understanding of comprehensive sex education could see a sustained impact of CSE in their students. It should be noted that teachings exhibiting sustained impact on their students goes a step further than positive impact, by acknowledging that students are being impacted even after they leave their health classroom. Once there was an established and overwhelming sense of teachers who

believed CSE had a positive impact on students, a pattern emerged. It was clear that teachers who showed they had a strong and complex understanding of CSE then saw the impact to be sustained in their students after the course was done and students graduated. This pattern was seen in the second round of coding (Appendix E). Out of nine participants, seven teachers showed a deeper understanding of comprehensive sex education resulting in a longer perceived impact. Two out of the nine teachers did not meet this standard, as they only exhibited an adequate understanding of CSE and did not reveal any knowledge of a sustained impact. Sustained impacts of comprehensive sex education can be seen in interviews done by Gwen and Taylor, two high school health teachers. Gwen and Taylor both exhibited a deep understanding of CSE which then contributed to the lasting impacts on their students. Both teachers themselves described this lasting impact, but it could also be seen throughout their interviews by the way in which they discussed their classroom.

When a teacher has a strong understanding of what comprehensive is and what it looks like in a classroom setting as well as perceiving their class to have a positive impact, it results in sustained impact of the class for students. This was directly seen when discussing with Taylor how she perceived the impact of her class. Taylor stated: “I think what happens with kids from Pine Tree Schools is they go away, and they leave Pine Tree, and they have a lot more knowledge than a lot of kids and I think they are really lucky to have that” (Taylor, personal communication, October 4, 2023). Teachers who can give students appropriate and in-depth knowledge on topics included in CSE are setting their students up to succeed in decision making around these topics outside of the classroom. Taylor uses her knowledge set not only to teach but to prepare students for situations that they are likely to encounter as they graduate high school and enter the real world. The same can be said for Gwen, as she also uses her knowledge set of

CSE to help prepare her students for life outside the classroom. Gwen stated in her interview: “I give a whole list [in addition to the course curriculum] of sexual health resources to the students because I am not always going to be there with them to teach them (Gwen, personal communication, October 10, 2023). Similarly, to Taylor, Gwen discussed resources that she gives to her students that they can keep with them once they are no longer in the health classroom. Gwen is clearly a teacher who wants her students to succeed and make healthy decisions is a teacher who prepares their students to take the next step in life. Not only does Gwen give her students a list of resources, but she also actively makes it with her students through projects they do throughout the class. She actively creates an environment where her students are critically thinking about information and the resources, they are getting it from. Allowing her students to participate in engaging activities that they can then use later as resources when they are faced with challenges regarding CSE put students in positions to have a sustained impact of the information taught in the classroom. Through these interviews, specifically with Gwen and Taylor, there is a clear relationship between having a strong understanding of comprehensive sex education and then seeing a sustained impact of your students. Although all teachers did believe they were engaging with students in a manner that led to a positive impact for their students. Two out of the nine teachers did not exhibit a quality understanding of comprehensive sex education through their interviews; they also did not display the opportunity for sustained impact in their student body. The two teachers, Nora, and Tyler, who were categorized in the second round of coding as having an adequate understanding of CSE (Appendix D) did not show the same strong understanding in their interviews of CSE than the seven other teachers. While both Nora and Tyler believed CSE had a positive impact on their students their explanations as to why were only adequate. These two teachers focused

particularly on the basic tenets of what people think of sex education like sexual activity and contraception and they only briefly discussed more complex topics when they were prompted by interview questions. As mentioned in finding one, Tyler's thought process around CSE focused primarily on contraception. Tyler brought up the importance of consent and relationship violence briefly, before then bringing it all back to sexual activity. Like Tyler, Nora, a high school health teacher focused a lot on protection methods students could use. Her answers to the interview questions were very limited. When asked to describe an activity or unit where she used the CSE framework, Nora chose to discuss the protection methods unit. Here Nora stated: "Take for example, the protection methods unit. I'll go over a PowerPoint that has 16 total protection methods...I'll go over that in a PowerPoint and it'll be percentages that it's going to be effective, reasons for failure, advantages, disadvantages...And I believe that is right in line with you know comprehensive health education" (Nora, personal communication, October 26, 2023). In the example of the curriculum used in her classroom Nora does not show a deeper understanding of CSE. The answer she gave was coded as adequate because it was a relatively simple answer. She did not connect this activity to how students could use it in the future and did not engage with students when teaching the material like for example Gwen had done. There is a clear difference between teachers who had a richer understanding of CSE and teachers who had a baseline understanding, and how it can impact students in the future.

#### **Finding 4: The Impact of Critical Thought**

Teachers who had perceived positive impacts of comprehensive sex education could critically think about curriculum: what is included and what could be improved. Like finding number three the same seven out of nine teachers were able to critically think about their curriculum. To frame the way the participating teachers were categorized based on their levels of

thought, their answers to the questions regarding what they include in their own definitions of CSE and how they used it in their classroom was analyzed in the third round of coding. As well as the question regarding what they wish they could add upon or improve on in their classroom to make the class more impactful on students (Appendix F). The seven out of nine teachers who were categorized on the ability to think critically shared in depth thought processes on the changes they would make, versus the two teachers (Nora and Tyler) who did not show that they could think critically since they kept referring to stereotypical topics of sex education. In quotes from Sara, Brad, and Taylor it is clear that teachers who in addition to believing in comprehensive sex education had a positive impact on students and had a strong understanding of CSE had more analytic thinking regarding curriculum than the two teachers (Nora and Tyler) who believed CSE had a positive impact on students but did not have a deep understanding of CSE and could not think critically about curriculum.

The way a teacher can critically think about their classroom curriculum exhibits the ability to take their class a step further in terms of the impact on students. When teachers can look at their curriculum and critically think about what they do well and what they could improve on it shows that the teacher takes the time to think about what is and what isn't impactful for students to learn. In the interview with Sara, a middle school health teacher, she states: "I could definitely improve on doing more on relationships and family relationships. That's often something that I don't have enough time for. And it's truly so important, because we only get the kids for a [certain] amount of time. If they could build a relationship with their parents, older cousins, [or] you know, whomever else I think that's something we're lacking" (Sara, personal communication, October 25, 2023). Sara was able to critically think about what she does in her classroom and what she needs to improve on. In the example she gives about

family relationships and the skill of building relationships, Sara recognized that this is an aspect of her class that she could improve. As a teacher it is imperative to be able to be critical regarding your teaching and curriculum, as it allows for you to not stay stagnant. It would be problematic if Sara believed that her curriculum was perfect just as it was. Educators always have room to improve, and it is a part of their jobs to be able to critically think about what their curriculum offers to students and what it doesn't offer. Comprehensive sex education is constantly being updated and changed based off the world around us, and as these changes are being made it should be expected that teachers are changing and growing along as well.

Critical thinking regarding curriculum is also important when thinking about hot button topics that people often disagree on when having discussions about what should and what should not be included in a comprehensive sex education curriculum. In the interview done with Brad, another middle school health teacher, Brad was right on point with his criticism of his lack of adult material that children have access to nowadays because of the internet. Brad stated: "We don't necessarily talk about sexting enough...And honestly, pornography like that's again, those two are kind of buzzwords. I feel like my student body, a majority of them, are finding adult material online. I do. Do I feel like their parents and guardians know about it? I don't. I think that kids can really be sneaky with things" (Brad, personal communication, November 9, 2023). Brad recognized that in his CSE curriculum there is not much of a discussion on sexting, pornography, and other explicit materials that children and adolescents may come across or even go looking for. Brad went beyond discussing sexual activity and contraception and actively thought about why it would be important to add other topics such as adult content into his curriculum. In his interview, Brad exhibited a deep understanding of CSE resulting in a positive perceived impact, and then could critically analyze what his classroom does well and what it does not. With this

thought process Brad can adjust his curriculum (within the limits the school gives him) to what his students should be learning based on what is relevant to their lives. This topic is often not thought of when discussing sex education because it is a relatively new phenomenon that has emerged.

Even with topics that are often taught in comprehensive sex education courses like consent, it is vital that teachers have a critical thought process on how these are taught in the classroom. When Taylor was asked about question #10 (Appendix B), if she had to improve her CSE curriculum to make it more impact what she would do. Taylor answered with the statement: “I think that we [as a district] need to teach consent a lot earlier...I would love to see some teachers back in the classroom. We had a program where we had a [high school] health teacher in each of the elementary schools, and it was all about skill-based building, and I think consent is super important to start teaching at younger ages” (Taylor, personal communication, October 4, 2023). In this part of her interview, Taylor exhibits her ability to critically think about what she is teaching and how she could make it better so students could be benefitted. The answer given went beyond her own classroom and into the entire school district. Discussing consent earlier could have a great impact on the way children grow up and make decisions. Taylor has made the connection between starting the CSE curriculum earlier and in an appropriate manner for younger children. It was impressive to hear Taylor discuss this idea of teachers getting back in the classroom because it reveals her awareness of teaching and how learning never stops even for teachers.

Teachers Gwen, Brad, and Taylor had excellent responses to question #10 (Appendix B) that exhibited their understanding of the importance of critical thinking regarding a comprehensive sex education curriculum. While teachers Nora and Tyler were coded based off



the applied thinking code (Appendix F). Nora had very different answers to the question: how you would improve your sex education curriculum to make it more impactful for students than the rest of the teachers who were categorized as critical thinkers. Nora stated: “I mean, we’re constantly looking at the health curriculum, I would say, like every two years we look at it under a microscope. And we [the other health teachers and I] stop doing things that...we’re just like this isn’t effective, or we could tweak this, or you know let’s add this” (Nora, personal communication, October 26, 2023). While this is a wonderful sentiment that the school and department are changing curriculum every few years, Nora did not show that she could think critically or outside the box when asked how *she* would change something within the curriculum. What isn’t effective? What is effective? Why does it work or why doesn’t it work? Nora showed that she could use applied knowledge to answer this question by stating that there are changes to be made. But Nora did not exemplify that she could critically think about things that need to change and why.

### **Discussion**

This study looks to understand health educators’ perceptions of comprehensive sex education. After interviewing nine high school and middle school health educators it was clear that: overall teachers had a spectrum of knowledge about what comprehensive sex education is; teacher’s perceived CSE to have a positive impact on their students; teachers who have a perceived positive impact as well as having a strong understanding of CSE could see a further sustained impact on students; and teachers who believed CSE had a positive impact on students could think critically about their curriculum. As these major findings started to appear it was clear that they would build off one another. If a teacher had a strong understanding of CSE they were more likely to believe it had a positive impact on students that could be sustained as well as

being able to critically think about what their curriculum was missing. These results met the expectations of what was being researched. Since teachers who were being interviewed were from Massachusetts, a rather liberal state regarding sex education curriculum, there was a high likelihood that the participants would have a positive association and feelings towards comprehensive sex education and the impact that it has on their students. This research adds to other bodies of literature that have been done regarding sex education and perceptions and beliefs of teachers, especially since there is little research on this topic that takes place in the United States. The current study starts to fill this gap with the research and results that were found. In addition to creating research regarding the beliefs and perceptions of United States educators this study creates opportunities for future research. Since the study was only completed with Massachusetts health educators there is a lot more room to look at other regions around the United States to see how other states perceive comprehensive sex education. Although this study has implications of adding new literature into the overall topic there are clear limitations to the study. An overall limitation of the study was the length of time that was offered to complete the research. If this study had lasted longer three months more participants could have been reached as well as other states. One limitation of the study was that it was only done in Massachusetts and there was a very small population being interviewed resulting in the findings to not be generalizable. Another limitation of the study is that when choosing teachers, research had to be done on which Massachusetts public school districts offered health classes. Most of the schools that offered health classes had a higher socioeconomic status raising issues of educational inequalities within school districts in Massachusetts. For future research, there should be further research done on the relationship between a district's socioeconomic standing and the courses they offer within the topics of sex education. The inclusion of more teachers and the perspective

of students from around the United States should also be considered when thinking about future research regarding this topic.

### **Conclusion**

This research aimed to understand how teachers perceived the impact of comprehensive sex education on their students. This current research was based off of the research questions that looked to answer: How do a sample of middle and high school health educators in Massachusetts define sex education?; Do these teachers curriculum align with “comprehensive sex education” theory, framework, and research?; If/When teachers are using CSE framework...What are health educators perceptions and experience when teaching comprehensive sex education?; How do they (health educators) describe the impacts of comprehensive sex education on their students? Based on the qualitative interviews that took place it can be concluded that overall health educators perceive comprehensive sex education to have a positive impact on their students. The study used interviews to understand the perspectives and perceptions of educators firsthand. Future and continued research on this topic is needed to see the greater impact of comprehensive sex education around the United States, exhibiting how important it is to have it in schools. The current study Health Educators’ Perceptions of Comprehensive Sex Education overall contributes to the field of research around sex education and comprehensive sex education and emphasizes the importance of this topic.

### **Recommendations**

After completing this study there are a few recommendations for future researchers that should be considered based on the findings and limitations of this study. One, this study could be replicated and given to teachers across the United States to look for a greater understanding of the way teachers perceive comprehensive sex education across the country. In a future study

there could also be context given regarding states and their educational policies around sex education. Second, this study could then be further replicated and reviewed to be given to students, from the same schools as the educators participating, to further understand the way they perceive their own comprehensive sex education. This could be an interesting way to compare the way teachers and students understand educational impacts of CSE. Putting together a research study that understands both perspectives could reinforce the importance of making sure comprehensive sex education is taught in schools.

## References

- Abolghasemi, N., MerghatiKhoei, E., & Taghdissi, H. (2010). Teachers' perceptions of sex education of primary school children. *Journal of School of Public Health & Institute of Public Health Research*, 8(2).
- Atkins, D. N., & Bradford, W. D. (2021). The effect of state-level sex education policies on youth sexual behaviors. *Archives of Sexual Behavior*, 50(6), 2321-2333.
- Branigin, A. (2022, July 22). *Miami-Dade rejects sex-ed textbook in test of state's anti-LGBTQ law*. Washington Post. Retrieved December 15, 2023, from <https://www.washingtonpost.com/nation/2022/07/22/miami-dade-sex-ed-textbook/>
- Comprehensive sexuality education*. (2023, May 18). World Health Organization (WHO). Retrieved December 11, 2023, from <https://www.who.int/news-room/questions-and-answers/item/comprehensive-sexuality-education>
- Creswell, J. W. (2017). *Research design. qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Federal and State Bans and Restrictions on Abortion*. (n.d.). Planned Parenthood Action Fund. Retrieved December 11, 2023, from <https://www.plannedparenthoodaction.org/issues/abortion/federal-and-state-bans-and-restrictions-abortion>
- Goldfarb, E. S., & Lieberman, L. D. (2021). Three decades of research: The case for comprehensive sex education. *Journal of Adolescent Health*, 68(1), 13-27.
- Grossman, J. M., Frye, A., Charmaraman, L., & Erkut, S. (2013). Family homework and school-based sex education: delaying early adolescents' sexual behavior. *Journal of School Health*, 83(11), 810-817.

*Health equity*. (n.d.). World Health Organization (WHO). Retrieved December 17, 2023, from [https://www.who.int/health-topics/health-equity#tab=tab\\_1](https://www.who.int/health-topics/health-equity#tab=tab_1)

Helmich, J. MA (2009). What is Comprehensive Sexuality Education? Going WAAAAAY Beyond Abstinence and Condoms. *American Journal of Sexuality Education* 4(1), 10-15, doi:10.1080/15546120902870315

*Higher Order Thinking: Bloom's Taxonomy – Learning Center*. (n.d.). UNC Learning Center. Retrieved December 15, 2023, from <https://learningcenter.unc.edu/tips-and-tools/higher-order-thinking/>

Iyer, P., & Aggleton, P. (2013). 'Sex education should be taught, fine... but we make sure they control themselves': Teachers' beliefs and attitudes towards young people's sexual and reproductive health in a Ugandan secondary school. *Sex Education*, 13(1), 40-53.

Jaramillo, N., Buhi, E. R., Elder, J. P., & Corliss, H. L. (2017). Associations between sex education and contraceptive use among heterosexually active, adolescent males in the United States. *Journal of Adolescent Health*, 60(5), 534-540.

Kohler, P. K., Manhart, L. E., & Lafferty, W. E. (2008). Abstinence-only and comprehensive sex education and the initiation of sexual activity and teen pregnancy. *Journal of adolescent Health*, 42(4), 344-351.

Malone, P., & Rodriguez, M. (2011). Comprehensive sex education vs. abstinence-only-until-marriage programs. *Human Rights*, 38(2), 5-22.

*Massachusetts*. (n.d.). Sex Education Collaborative. Retrieved January 6, 2024, from <https://sexeducationcollaborative.org/states/massachusetts>

Medelyan, A. (n.d.). *Coding Qualitative Data: How To Code Qualitative Research (2023)*.

Thematic. Retrieved December 15, 2023, from <https://getthematic.com/insights/coding-qualitative-data/>

Schwarz, A. (2007). Comprehensive sex education: why america's youth deserve the truth about sex. *Hamline Journal of Public Law & Policy* 29(1), 115-160.

Sell, K., Oliver, K., & Meiksin, R. (2021). Comprehensive Sex Education Addressing Gender and Power: A Systematic Review to Investigate Implementation and Mechanisms of Impact. *Sexuality Research and Social Policy*, 1-17.

Sondag, K. A., Johnson, A. G., & Parrish, M. E. (2022). School sex education: Teachers' and young adults' perceptions of relevance for LGBT students. *Journal of LGBT Youth*, 19(3), 247-267.

Totenberg, N., & McCammon, S. (2022, June 24). *Supreme Court overturns Roe v. Wade, ending right to abortion upheld for decades*. NPR. Retrieved December 15, 2023, from <https://www.npr.org/2022/06/24/1102305878/supreme-court-abortion-roe-v-wade-decision-overturn>.

**Appendix A**

Hello (Participants Name),

My name is Lauren Bessette, and I am a senior at Trinity College in Hartford CT. I am an Educational Studies major who is working on a senior research project on comprehensive sex education and teachers believed impacts of teaching comprehensive sex education. I am an alumnus of Andover Public Schools, and I am contacting you, as a health educator, to see if you would be willing to take part in my research. Participating in my study would require an hour of your time, taking part in an interview over zoom, with your consent. I am extremely interested in learning more about the perceived impacts of comprehensive sex education and would be honored to have you participate in my study. Please let me know if you have any questions. I hope to hear from you soon.

Sincerely,  
Lauren Bessette



## Appendix B

### Guided Interviews Questions:

1. How long have you been a health educator? Have you been in your current school district for all those years?
2. What grade do you teach? Have you always taught this grade?
3. How would you define sex-education?
  - a. Do you believe that your classroom follows your definition of sex-education?
4. On average, are your students responsive to your sex-education curriculum?
5. *According to the World Health Organization Comprehensive Sex-Education “gives young people accurate, age-appropriate information about sexuality and their sexual and reproductive health, which is critical for their health and survival. While CSE programmes will be different everywhere, the United Nations’ technical guidance – which was developed together by UNESCO, UNFPA, UNICEF, UN Women, UNAIDS and WHO – recommends that these programmes should be based on an established curriculum; scientifically accurate; tailored for different ages; and comprehensive, meaning they cover a range of topics on sexuality and sexual and reproductive health, throughout childhood and adolescence. Topics covered by CSE, which can also be called life skills, family life education and a variety of other names, include, but are not limited to, families and relationships; respect, consent, and bodily autonomy; anatomy, puberty, and menstruation; contraception and pregnancy; and sexually transmitted infections, including HIV” (Comprehensive Sexuality Education, 2023). Would you classify your classroom to be a space where you provide comprehensive sex-education for your students?*
6. Could you give me examples of when you have used comprehensive sex-education framework as a part of your curriculum.
7. Now that I have given you a definition for comprehensive sex-education, I am going to read a scenario you could see in one of your classes. When I am done reading, I would love for you to respond with how you may react to this situation: *One of your students comes up to you after a class where you have been discussing sexuality and sexual intercourse. The student, a presenting male, comes up and asks you about his own sexuality, his confusion towards it, and potential physical relationships that he is still not comfortable with although he is curious. Your curriculum focuses more on heterosexual individuals and relationships.* How do you respond to this student?

8. When you teach (comprehensive) sex-education in your class, is it inclusive of all gender identities and sexualities, or is it more focused on teaching students about cis and heterosexual individuals and relationships?
9. How do you perceive the impact that comprehensive sex-education has or could have on your students?
  - a. Would you categorize it as a positive impact, negative impact, or neutral impact?
10. How do you think you can improve your sex-education curriculum to make it more impactful for all students? For example, what would you change in relation to the outline of what comprehensive sex-education is defines as?
11. Is there anything else you would like to share regarding your teaching methods, curriculum, and the way you interact with students regarding comprehensive sex-education?

## Appendix C

### Oral consent script:

The purpose of this research study is to understand teacher's believed impacts of comprehensive sex-education being taught to students. You will be asked to describe your experience as a health educator what you believe are the impacts of comprehensive sex-education. This will require about one hour of your time.

The benefits of this study are to help us understand the potential impacts (either positive, negative, or neutral) of comprehensive sex-education through the lens of health educators. The potential risks are only minimal risk, meaning that the probability of harm or discomfort is not greater than ordinarily encountered in daily life.

Your participation in this project is completely voluntary, and you are free to stop or withdraw at any time, without any penalty.

I would like your permission to record your interview. Are you comfortable with me recording our session? Whether you agree to being recorded or not, I will NOT use your name or any identifying details when typing up the transcript or sharing our results.

[If yes, then start the recording, and ask:]

Would you please say aloud that you've agreed to be recorded for this anonymous interview?

To contact me you can reach me through:

Cell: (978)-886-3135

Email: [lauren.bessette@trincoll.edu](mailto:lauren.bessette@trincoll.edu)

## Appendix D

Codes Round #1	Definition/Description
Understanding Sex-Education (Q: 1-4)	
Students	Discusses students
Teachers	Discusses teachers
School	Discusses school
Understanding Pedagogy and Curriculum	Teacher can explain their classroom pedagogy/curriculum
Misunderstanding Pedagogy and Curriculum	Teacher cannot explain their classroom pedagogy/curriculum
Understanding Comprehensive Sex-Education (Q: 5-8)	
Students	Discusses students
Teachers	Discusses teachers
School	Discusses school
Beliefs	Teacher shares beliefs on Comprehensive Sex-Education
Attitude	Teacher shares attitudes of Comprehensive Sex-Education
Values	Teacher shares values of their teaching process
Understanding Pedagogy and Curriculum	Teacher can explain their classroom pedagogy/curriculum
Misunderstanding Pedagogy and Curriculum	Teacher cannot explain their classroom pedagogy/curriculum
Comprehensive Sex-Education Perceived Impacts (Q: 9-11)	
Students	Discusses students
Teachers	Discusses teachers
School	Discusses school
Positive Impact	Perceived positive impacts of CSE
Negative Impact	Perceived negative impacts of CSE
Neutral Impact	Perceived neutral impacts of CSE

## Appendix E

Codes Round #2	Definition/Description
Positive Impact	From first round of coding teachers believe CSE has a positive impact on students
Substantial Understanding of CSE (SU)	teacher shows substantial knowledge of comprehensive sex education and topics within
Adequate Understanding of CSE (AU)	teacher shows adequate knowledge of comprehensive sex education and topics within but could still improve
Unsatisfactory Understanding of CSE (UU)	teacher shows an unsatisfactory understanding of comprehensive sex education and topics within and needs great improvement
Positive/Neutral Impact	From first round of coding teachers believe CSE has a positive/neutral impact on students
Substantial Understanding of CSE (SU)	teacher shows substantial knowledge of comprehensive sex education and topics within
Adequate Understanding of CSE (AU)	teacher shows adequate knowledge of comprehensive sex education and topics within but could still improve
Unsatisfactory Understanding of CSE (UU)	teacher shows an unsatisfactory understanding of comprehensive sex education and topics within and needs great improvement

## Appendix F

Coding Round #2	Definition/Description
Substantial Understanding of CSE	From second round of coding teachers show a substantial understanding of CSE
Critical Thinking (CT)	a teacher can critically analyze and think about their curriculum: what it offers to students and what it does not offer to students; is there an aspect of CSE that is missing and should be added?
Applied Thinking (AT)	teacher can apply their knowledge of understanding CSE to their curriculum but do not take the next step to analyze what it offers and what it does not
Understanding Thinking (UT)	teachers can understand CSE and how it is used in their curriculum but cannot apply or critically think what their curriculum offers to the students and what it is missing
Adequate Understanding of CSE	From second round of coding teachers show an adequate understanding of CSE
Critical Thinking (CT)	a teacher can critically analyze and think about their curriculum: what it offers to students and what it does not offer to students; is there an aspect of CSE that is missing and should be added?
Applied Thinking (AT)	teacher can apply their knowledge of understanding CSE to their curriculum but do not take the next step to analyze what it offers and what it does not
Understanding Thinking (UT)	teachers can understand CSE and how it is used in their curriculum but cannot apply or critically think what their curriculum offers to the students and what it is missing
Unsatisfactory Understanding of CSE	From second round of coding teachers show an unsatisfactory understanding of CSE
Critical Thinking (CT)	a teacher can critically analyze and think about their curriculum: what it offers to students and what it does not offer to students; is there an aspect of CSE that is missing and should be added?
Applied Thinking (AT)	teacher can apply their knowledge of understanding CSE to their curriculum but do not take the next step to analyze what it offers and what it does not
Understanding Thinking (UT)	teachers can understand CSE and how it is used in their curriculum but cannot apply or critically think what their curriculum offers to the students and what it is missing

(Higher Order Thinking: Bloom's Taxonomy – Learning Center, n.d.)