America has a sex problem.
The US has the highest rate of teenage childbearing among developed countries, three times as high as our Canadian neighbor and ten times higher than Switzerland (The National Campaign 2010a). Over 40 percent of all children in the US are born to unmarried mothers (CDC 2010a). Whether or not this fact is itself morally problematic, it is also true that the poverty rate in households with single mothers is five times higher than in households with married couples (U.S. Census Bureau 2010: Table 4). Sexually transmitted diseases (STDs) are common among youth and young adults: even though those between the ages of 15-24 comprise only a quarter of the sexually active population, they account for about one half of all new STD infections (CDC 2010b: 63).

Given these problems, what should public schools teach our children about sex?
Public opinion on this seems to be clear and consistent. Sex education should be taught. Youth should refrain from sexual intercourse until they are out of high school, until they are in a committed relationship, or until they are married. Youth should be given factually accurate information about condoms and other contraceptives and their role in reducing the risks of pregnancy and STDs (see for example Kaiser Family Foundation 2003; Rector, Pardue and Shannan 2004; Bleakley, Hennessy and Fishbein 2006; Eisenberg et al. 2007; Ito et al. 2006).

Given the apparent consensus about sex education, it might seem that the American public would be united behind what is commonly called ‘comprehensive sex education’ (CSE). But this is hardly the case. Indeed, there are fierce divisions among activists regarding what should be taught about sex to American youth. These disagreements pervade every aspect of the discussion; even the ‘facts’
presented above receive almost entirely different interpretations by the main political actors.

On the one hand, the advocates of CSE include most of the mainstream medical or public organizations as well as a wide variety of interest groups.3 On the other, CSE is fiercely opposed by individuals and organizations supporting ‘abstinence only’ (AO) education. These groups include Focus on the Family, Eagle Forum, Concerned Women for America, the Christian Coalition of America, the Traditional Values Coalition, and the National Abstinence Clearinghouse, among many others. Most, but not all, of these groups are motivated by strongly held Christian beliefs.

This chapter examines the struggles over sexuality education in American public schools, and especially the role of religion in these contests. The conflicts over the actual curricula often occur school district by school district or within individual states (see for example Elliott 2010). The disputes over federal support for sex education focus on the national institutions: the Congress, the presidency, the courts, and the bureaucracy. The contests over curricula and resources are not the focus of this paper, however. Here, I am more interested in understanding the struggle over beliefs, values, and ideas. In doing so, I first consider the ‘worldview problem’ that so clearly distinguishes between supporters of AO and CSE. Next, I examine the invisible and (sometimes) visible hand of religion in the sex ed controversies. I subsequently discuss the ‘battle over science’ which is fought over public opinion, programmatic effectiveness, and governmental support.

The Worldview Problem

As elsewhere in the ‘culture wars’ the activists for AO and CSE have “opposed moral systems: they define incompatible moral worlds” (Lakoff 2002: 222). Although superficially they seem to support the same goals – delaying sex until an appropriate time and circumstance, protecting youth from unwanted pregnancies and STDs – each side has its own moral priorities and rejects those of its opponents (Table 1). For AO, the ‘appropriate time and circumstance’ for sex is only within a monogamous, marital [by its definition, heterosexual] relationship. CSE’s proponents believe that a responsible and loving relationship is possible even for teenagers. For AO, the only certain way to avoid STDs and unwanted pregnancies is total abstinence until marriage, not only from intercourse, but from other ‘risky’ sexual behaviors including mutual masturbation; for CSE, the only practical way to avoid pregnancy and STDs is through the responsible use of contraceptives, especially condoms.

[Table 1 here]

The advocates of AO see procreation as sex’s central purpose, along with the intimate bonding of married, heterosexual couples. The goal of sexual education is purity for AO’s advocates, who consider any form of sexual engagement outside of marriage as immoral. To suggest otherwise is not merely misguided policy, it is moral error. As one advocate of AO put it in critiquing recently proposed legislation in Illinois for CSE: “Sexual subversives [NB: in this context, advocates of the bill] see no inherent value or meaning in reserving sexual activity for marriage and want to
promote their desacralized, diminished view of sex to the next generation” (Higgins 2011). Higgins went on to say: “The [proposed] Personal Responsibility Education Act is yet another attempt by legislator-ideologues to use public money to normalize sexual immorality and perversion by inculcating children and teens with subjectivist, relativist assumptions about sexuality” (Higgins 2011).

For CSE, procreation is a legitimate purpose, but pleasure trumps this, as sex is a human right, for both heterosexuals and homosexuals, independent of procreation. CSE’s proponents do not make moral judgments about non-marital sex, other than it should avoid risk and be non-exploitative: the principle goal of sexual education is to teach youth how to protect themselves from STDs and unwanted pregnancies by using condoms or engaging in less-risky activities.

For advocates of AO, the message of sexuality education should be clear: the only 100 percent effective way to avoid harm is to abstain entirely from sex. They believe this message is not only right but also effective: youth should abstain from sex and, given appropriate moral instruction, they can do so. CSE’s supporters find this entirely wishful thinking: as substantial proportions of teenagers do, in fact, have sex they should be given instruction that acknowledges this and accordingly seeks to have youth reduce the risks they face. Moreover, CSE advocates argue that AO denies the legitimacy of homosexuals ever having sex, because AO’s religious believers reject the concept of same sex marriage, the sole morally-condoned venue for sexual expression.

That the supporters of AO and CSE have different moral priorities, and that the moral purposes of sex trump the ostensible goals of sex ed, might be illustrated through a thought experiment. Assume that a drug was developed that would fully protect individuals from all physical and psychological harms associated with sex, and that a single dose of this drug would provide complete protection for as long as the individual wished, without any side effects.

Would AO supporters endorse this drug? Never. Even though the drug would fulfill one of the expressed goals of AO – as with abstinence, it would be 100 percent effective in eliminating negative sexual side effects – it does not promote the actual goal of AO: sexual purity until marriage. CSE advocates, in contrast, would almost certainly, and wholeheartedly, approve and recommend such a medicine.

Another thought experiment would illustrate that the purpose of sex similarly dominates the goals of CSE. Suppose that convincing empirical evidence existed that AO education is dramatically superior at reducing the negative side effects of sexual activity because youth can be taught and can practice abstinence. Would CSE’s proponents then reject CSE in favor of AO? Unlikely. Supporters of CSE would still emphasize condom use and other risk-reduction techniques because youth should be free to choose whether or not to engage in sexual activity.

The debates about sexuality education that divide the supporters of AO and CSE most often concern questions about effectiveness but, in some ways, that is beside the point: the real debate involves not what is effective, but what is right.

The Invisible Hand of Religion
Although this chapter examines the role of religion in advocating AO education, in many websites that advocate AO religion is virtually absent. To understand why, a brief history of federal support for AO education is essential.

The Congress first entered the field of youth sexuality when it enacted two laws in 1978 to address the rising trend in teen pregnancy and its consequences (Donovan 1984: 222). These laws did not involve sex education per se but they did authorize programmatic funding for family planning services and support targeted at youth. Although the programs did not fund abortion, they required grantees to provide abortion counseling and referral.

Senators Jeremiah Denton (R-AL) and Orrin Hatch (R-UT) adamantly opposed these programs on the grounds that they encouraged promiscuity and abortion and so undermined the family. To counteract the programs created in 1978, Denton and Hatch introduced the Adolescent Family Life Act (AFLA). AFLA’s primary goal was “to promote chastity and self-discipline” through family-centered programs.

Through AFLA, the federal government first began funding what was then called “chastity” education. AFLA “require[d] grant recipients to involve religions organizations in their programs, and it encourage[d] religious groups to become direct grantees” (Donovan 1984: 222). AFLA funds could not be used to provide non-pregnant youth family planning services or any information about abortion, unless both the youth and her parents requested this information.

AFLA funded various demonstration projects, and its early grants “went almost exclusively to far-right and religious groups” (Saul 1998: 10). Not surprisingly, the federal government was sued in 1982 by the American Civil Liberties Union (ACLU) on behalf of a group of clergy and other taxpayers. The Federal District Court for the District of Columbia ruled in favor of the ACLU, declaring that the law violated the Establishment Clause of the Constitution because it funded religious organizations.

The Supreme Court overturned this ruling in 1988 on a 5-4 vote, finding that “the statute is not unconstitutional on its face, and that a determination of whether any of the grants...violate the Establishment Clause requires further proceedings in the District Court” (Bowen v. Kendrick 1988: 593). As Chief Justice Rehnquist noted “[I]t is undisputed that a number of grantees or sub-grantees were organizations with institutional ties to religious denominations” and “there is no dispute that the record contains evidence of specific incidents of impermissible behavior by AFLA grantees” (Bowen v. Kendrick 1988: 621). Still, Rehnquist concluded,

On an issue as sensitive and important as teenage sexuality, it is not surprising that the Government’s secular concerns would either coincide or conflict with those of religious institutions. But the possibility or even the likelihood that some of the religious institutions who receive AFLA funding will agree with the message that Congress intended to deliver to adolescents through the AFLA is insufficient to warrant a finding that the statute on its face has the primary effect of advancing religion (Bowen v. Kendrick 1988: 613).
The central message of this ruling, regarding the potential entanglement of the government with religion through sex education programs, was that federal government can support abstinence-based programs so long as their purpose aligns with secular goals and is not explicitly religious in content. For advocates of AO education to receive federal support, the meaning was clear: speak only about secular purposes, and do not mention religion.

The Court’s ruling was subject to sharp dissent by Justice Harry Blackmun, with the critiques reflecting a more general criticism of religiously-based AO programs: “asking religious organizations to teach and counsel youngsters on matters of deep religious significance, yet expect[ing] them to refrain from making reference to religion is both foolhardy and unconstitutional” as “[t]he AFLA, without a doubt, endorses religion” (Kendrick v. Bowen 1988: 636, 652; see also Marasse 1989).

What can make religious support of AO challenging to study is that the ‘government’s secular concerns’ about reducing teenage pregnancies and STDs may indeed coincide with AO education. So, in many cases, it is not possible to say with certainty whether a person or organization’s advocacy of AO is based on secular goals, religious principles, or some combination of both.

It is safe to assume that certain individuals advocating AO are primarily motivated by their religious convictions. Senator Denton, for instance, is a devout Christian. Prior to joining the Senate, Denton served as a consultant to Pat Robertson and the Christian Broadcast Network (Conservapedia n.d.). After leaving the Senate, Denton created a foundation which has as one of its two major efforts the “One Nation Under God” program, whose goal is to “abolish…the false premise that there is a constitutionally erected ‘wall of separation between church and state’…to re-establish God’s Ten Commandments as the basis of our own law [and] to return the freedom to pray in schools” (Admiral Jeremiah Denton Foundation n.d.).

Senator Hatch, in contrast, has not made his religion as central publicly to his work, even though he has held leadership positions in the Mormon church and has authored the book Higher Laws: Understanding the Doctrines of Christ (Hatch 1995). Still, he was the lead sponsor of the “Religious Land Use and Institutionalized Persons Act,” which protected the rights of all religions to build churches on private property, and unlike many conservative Christians he defended the freedom of those who wanted to build the so-called “Ground Zero” mosque in downtown Manhattan (CBS News 2010).

The (Sometimes) Visible Hand of Religion

Numerous organizations supporting AO education are indeed avowedly Christian, however. Among the most prominent of these are the Family Research Council and Focus on the Family, although there are numerous other national or state organizations that share similar concerns, even if they do not focus specifically on sexuality education.6

The Family Research Council’s goal is to “advance faith, family and freedom in public policy and public opinion...[t]hrough our outreach to pastors, we equip churches to transform the culture” (Family Research Council n.d.). In stating its position on
sexuality education, the FRC states that

FRC believes the context for the full expression of human sexuality is within the bonds of marriage between one man and one woman....In accordance with this position, the best sexuality education embraces sexual abstinence outside of marriage. The abstinence-until-marriage approach promotes optimal physical and psycho-social outcomes for youth and young adults. FRC maintains that contraceptive-based or comprehensive sex education is destructive, providing mixed risk messaging and an overly narrow focus on physical health alone. FRC does not consider homosexuality, bi-sexuality, and transgenderism as acceptable alternative lifestyles or sexual "preferences"; they are unhealthy and destructive to individual persons, families, and society. Compassion compels us to support the healing of those who wish to change their destructive behavior (Family Research Council n.d.a.)

The FRC does not call for explicitly faith-based instruction, however. Instead, it relies on a primarily secular framework:

Risk avoidance or abstinence messaging serves as the best primary prevention approach for those who both have and have not been sexually active outside of marriage. This public health approach promotes the optimal reproductive health, sexual health, and psycho-social and societal outcomes...Based upon sound behavioral theory, abstinence-focused education provides the skills necessary to avoid sexual activity, build character, and develop healthy relationships. Well-developed abstinence-until-marriage curricula should be accurate, age-appropriate, and promote a positive view of sexuality in the appropriate context of marriage (Family Research Council n.d.a.)

Focus on the Family “is a global Christian ministry dedicated to helping families thrive”. In what is quite literally its "mission statement" Focus on the Family states that “Sexuality is a glorious gift from God to be offered back to Him either in marriage for procreation, union and mutual delight or in celibacy for undivided devotion to Christ” (Focus on the Family n.d.). The organization’s position on sexuality education is clear: “Focus on the Family supports abstinence-until-marriage education in the public schools because it is God’s expected standard as communicated in Scripture” (Focus on the Family n.d.a.).

As with the FRC, when Focus actually describes the core elements of AO education, religious concerns are virtually absent. In listing the eight principle concepts of AO, only one is even tangentially related to religion, and it is down the list at number seven, recommending the generic principle that “Religious beliefs and heritage surrounding sexuality should be honored.” Its first principle is purely secular and empirical: “Sexual abstinence until marriage eliminates health risks” (Focus on the Family 2008).

Many other groups supporting AO education are not openly or visibly religious, although it appears that they do have deep religious roots. The Medical Institute for
Sexual Health, for example, bills itself as “the leading organization in the United States studying the science involved with the sexual behavior of adolescents and young adults and the impact that behavior has on the spread of sexually transmitted infections as well as the emotional and physical implications” (Medical Institute n.d.). Nothing on its website hints at a religious purpose, although key members of the Institute are so motivated.

The Institute was founded by Joe S. McIlhaney, Jr. (Medical Institute n.d.). McIlhaney, an obstetrician/gynecologist, is the co-author of 1001 Health-Care Questions Women Ask, published by BakerBooks, which “has a vision for building up the body of Christ through books that are relevant, intelligent, and engaging” (Bakerbooks n.d.). The Library Journal’s review of 1000 Questions states that “as a Christian physician, McIlhaney does have a strong, pervasive moral and religious point of view...[the book] includes numerous biblical references. Recommended only for libraries where patrons have an orientation similar to that of the author” (Amazon.com n.d.)

The Institute’s Chairman of the Board is J. Thomas Fitch, a pediatrician who co-authored the book Questions Kids Ask About Sex. Questions was published by Revell Books, as with Bakerbooks a division of the Baker Publishing Group. Revell is a press founded to fulfill the ‘need for practical books that would help bring the Christian faith to everyday life” (Revell Books, n.d.) and the book first appears in a Google search at the Christian Family Bookstores website. Other board members are also committed Christians.

A yet more clearly secular organization promoting AO education is The Institute for Research and Evaluation. The IRE is “a nonprofit research organization that has gained national recognition for its work evaluating sex education programs, particularly abstinence education interventions” (indeed, on its home page, the IRE mentions its efforts regarding abstinence only) (Institute for Research and Evaluation n.d.).7 The IRE was founded by Stan E. Weed, a Ph.D. psychologist focusing on social problems and preventative programs for adolescents. Among his numerous publications, Weed wrote “Transmission of Values” for the Encyclopedia of Mormonism (Weed 1992). In this article, Weed states that “The Lord has commanded parents, first and foremost, to teach their children the gospel.” Although he does not mention sexuality in that article, Weed does write that “Prevention is the preferred mode of addressing potential problems among the youth of the Church, and the best preventative efforts are those that do indeed inculcate values” (Weed 1992: 1507).

The religious values of McIlhaney, Fitch, Weed and others working in the publicly secular institutions supporting AO undoubtedly influence their work, as they seek simultaneously to improve public health and promote their religious moral values. It is also safe to say that AO advocates believe that CSE’s supporters are also motivated by their moral concerns. As Weed testified to Congress, some “critics oppose abstinence education because it goes against their core value system. They believe that our society ought to be more free and open about sex, overcome our inhibitions, and simply enjoy the pleasures of physical intimacy regardless of age or
marital status. For this group, effectiveness of abstinence education is not the most important issue” (Weed 2008: 1).

**The Battle Over Science and Scientific Expertise**

The *Bowen v. Kendrick* ruling determined that sexuality education programs could not explicitly promote religious messages but, so long as they sought secular goals, the messages could “coincide” with religious beliefs. What this meant, in practice, is that AO advocates needed to show that AO programs were effective at changing behaviors to reduce teenage pregnancies and STDs or that they were generally preferred by the public as consistent with its values. As a result, much of the political competition over sexuality education has involved a war of statistics, with each side claiming that the empirical evidence showed that its favored program was more effective – or more popular -- than the other.

This war had two main fronts. Perhaps the most visible front concerned the data themselves: What did they show regarding public preferences and programmatic effectiveness? An equally important front, however, concerned those who produced and assessed the data: Who were they? What made them qualified? What standards did they use? Were they biased in favor of CSE? (see for example Higgins 2011).

Before examining both fronts, it is worth reviewing what is generally known about how individuals interpret data. The most important consideration here involves ‘confirmation/disconfirmation bias’ (Lord, Ross and Lepper 1979). Lord et al. argued that

> People who hold strong opinions on complex social issues are likely to examine relevant empirical evidence in a biased manner. They are apt to accept ‘confirming’ evidence at face value while subjecting ‘discontinuing’ evidence to critical evaluation, and as a result to draw undue support for their initial positions from mixed or random empirical findings (Lord, Ross and Lepper 1979: 2098).

These insights have led to a vast body of research, and a couple of further implications should be noted. First, when a person’s prior beliefs are motivated by emotional conviction, disconfirmation bias is magnified (Edwards and Smith 1996). Second, “even when initially based on weak data, social theories can survive the total discrediting of that initial evidential base” (Anderson, Lepper and Ross 1980: 1037). Third, when individuals are free to seek information about the topic at hand, they tend to select sources that confirm their biases and to avoid sources that do not (Taber and Lodge 2006). Finally, confirmation bias leads to political views that are increasingly polarized (Taber, Cann and Kucsova 2009).

These findings about confirmation/disconfirmation bias have special relevance for sexuality education debates. To the extent that sexuality education advocates have emotional convictions – a plausible assumption for most – they are likely to conclude that their empirical assumptions are correct even in the face of contradictory evidence: indeed, it might be virtually impossible for them to accept that their beliefs are empirically wrong. AO advocates are likely to seek evidence in support of AO popularity and effectiveness and accept it as convincing, while at the
same time they are likely to reject all empirical support for CSE. Moreover, new research on the popularity and effectiveness of sexuality programs is unlikely to resolve the debates; if anything, the research will exacerbate them.

One obvious problem for AO advocates is that most ‘mainstream’ medical and public health organizations support CSE. The AO community views these mainstream organizations with deep skepticism, if not outright hostility. This skepticism derives from a couple of sources. At the outset, disconfirmation bias suggests that AO supporters will tend to disregard any evidence the mainstream organizations provide that contradict the tenets of AO.

Moreover, those in the AO community are likely to believe that the mainstream organizations embrace a distinctly different set of values – that their support for CSE stems not from evidence, but from the conviction that AO is ‘wrong’ and that CSE is ‘right’. And because the mainstream organizations are unreceptive to AO (often, in fairly aggressive ways), hostility breeds hostility. As one prominent medical professional argued, “abstinence as a sole option for adolescents is scientifically and ethically problematic...[AO] programs threaten fundamental human rights to health, information, and life” (Santelli et al. 2006a: 72).

The response from AO’s defenders was swift and blunt: “The authors of this review article attack abstinence education programs as immoral, unethical, unscientific, ineffective, and contrary to human rights and public health principles. When measured against usual standards of scientific evidence, their arguments, are at best, weak and, at worst, fallacious.” The “authors parade about in the finery of ethics and human rights...[which] is the height of sophistry” (Hendricks et al. 2006: 2).

AO advocates thus do not accept the views of the mainstream medical community as definitive. As a press release posted on the Abstinence Clearinghouse put it,

A new statement by the American Medical Association discriminates against abstinence education programs while giving the failed programs of contraception educators permission to invade the minds of innocent youth carte blanche...The AMA has long given support and endorsement to contraception education programs, despite the fact that no condom-based education program has ever been shown to reduce the rates of teen pregnancy or STDs.

So, why does the AMA continue to endorse the failed programs of contraception educators?...Who knows? The recent attacks on abstinence education are designed to deflect attention from the failures of contraception programs and their unwillingness to have their content known and their results honestly examined. “They’re scared,” said [Leslee J.] Unruh [President of the Abstinence Clearinghouse] “Fear is motivating all of these attacks. They know that their programs don’t work and that parents no longer want them in the schools. It’s classic strategy, ‘when you look bad, make others look elsewhere’” (Abstinence Clearinghouse 2004).
Although AO supporters reject the views of the medical societies, they embrace the views of individual medical practitioners who oppose CSE and support AO. For example, the same press release Abstinence Clearinghouse used to challenge the AMA favorably quoted three other physicians supporting AO. Dr. Eric Keroack, an OB/GYN in Boston, MA rebuffed the AMA: "If one were to compare the ‘scientific’ results found during the first 10 years of teaching contraception education to the findings of the first 5 years of teaching abstinence, the trends would be shocking! In fact, the only meager successes contraception education can claim have been the result of their minor inclusion of the discussion of abstinence" (Abstinence Clearinghouse 2004). Dr. Sharon Quick warned about the risks of condom failure, and Dr. Nancy Eugenio praised the abstinence-based HIV prevention program in Uganda.

The statements of medical professionals in opposition to CSE did not come from neutral experts. Keroack is a bête noir of CSE supporters. He opposes contraception and abortion on religious grounds, and controversially has argued that "premarital sex suppresses the hormone oxytocin, thereby impairing one’s ability to forge a successful long term relationship" (Schiff 2007). Before being appointed as Deputy Assistant Secretary for Population Affairs at the Department of Health and Human Services for President Bush in 2006, Keroack served as medical director of A Woman’s Concern, a Christian nonprofit organization opposed to abortion (Jose 2006). Keroack also serves on the medical advisory board for the Abstinence Clearinghouse. Quick is a member of the Christian Medical and Dental Associations (Rettig, Fancher and Parker 2004). Although she was a pediatric anesthesiologist, she devoted substantial effort to investigating “reference errors in the medical literature,” especially the “literature on the subject of parenting by those with same-sex sexual attraction and/or behavior” (Varnum et al. v. Brien 2007: 2, 3). Quick served as an expert witness in a same-sex marriage lawsuit in Iowa, where her deposition sought to discredit the research showing that children raised in households with homosexual parent were not disadvantaged relative to those raised in heterosexual households (Varnum et al. v. Brien 2007).

Public Opinion

What does the public actually want from sexuality education? Unfortunately, the ‘public’ may not actually know. As White puts it, “On most issues, there is no such thing as a stable ‘public opinion.’ People do have general attitudes, beliefs that they can use to evaluate a choice. But often voters hold different attitudes that would lead to different evaluations of the same choice. How they answer a question depends on which considerations have been raised in their minds most recently” (White 2010).

Although it may appear, and it does seem plausible, that the public supports ‘abstinence’ as well as ‘factually accurate’ ‘comprehensive education’ each of these terms is subject to various interpretations, with each interpretation reflecting differing emphases.
Take the term abstinence: what, precisely, does it mean? Dictionary definitions are irrelevant for the sexuality education debate, as what matters is the conceptions of the activists and the broader public. For AO supporters, the concept is both clear and obvious: abstinence means no sexual interaction between individuals until monogamous marriage. For advocates of CSE, abstinence would seem to mean “no sexual intercourse”. A wide range of activities would thus be considered abstinent by CSE but a violation of abstinence by AO. It is not at all clear what the general public means by abstinence, however, so public opinion polls showing overwhelming support for abstinence are open to diverse interpretations, with each side promoting the interpretation that favors its interests.

Neither party to the controversy is willing merely to accept the results of public opinion polls, however: both sides have used polls to try and demonstrate that the public is on its side. To see how differently polls can be used to bolster the views of the competing perspectives, let us compare the results of two surveys, one sponsored by the Coalition for Adolescent Sexual Health (administered by Zogby, henceforth the “Zogby poll”) and one conducted by the Annenberg National Health Communication Survey (Bleakley, Hennessy and Fishbein 2006, the “Annenberg poll”).

The Coalition is a partnership of ‘pro-family’ groups including Focus on the Family, Eagle Forum, Concerned Women for America, the Christian Coalition of America, the Traditional Values Coalition, and the National Abstinence Clearinghouse (Education Reporter 2003). The Zogby poll itself was developed by Focus on the Family. As with any poll developed by an advocacy organization, Focus crafted the questions in such a way as to elicit responses that favor the group’s interests, although Zogby defended the poll as well-constructed (Education Reporter 2003), and the poll itself was a nationally representative sample of over 1200 parents with children under age 18 (Zogby International 2003).

The Coalition released the Zogby poll in 2003. In summarizing its results, the Heritage Foundation reported that:

A nationally representative Zogby International poll shows that American parents overwhelmingly, and in some cases almost unanimously, support the themes and messages of abstinence education programs. By contrast, parents overwhelmingly reject the messages in safe sex or "comprehensive sex-ed" curricula. Since the themes of these sex-ed courses contradict and undermine the basic values parents want taught, these courses should be deemed unacceptable, even if combined with other materials (Rector, Pardue, Shannon 2004: 1).

The actual results are less definitive than Heritage proclaims, however, and although the Coalition would certainly prefer otherwise, those very same poll results might also be interpreted in the following way:
When should sexual activity begin? Wait until marriage: 47 percent; before marriage: 53 percent.

Should young people be taught only about abstinence, or about abstinence and contraception? Abstinence only: 22 percent; abstinence and contraception: 75 percent; contraception only: 2 percent.

Is abstinence more important than contraception? Yes: 44 percent; no: 56 percent.

Does the Zogby poll show that “parents overwhelmingly reject the messages in safe sex or ‘comprehensive sex-ed’ curricula” or does it show that ‘a majority of parents think that teaching about abstinence is not more important than teaching about contraception because they believe that sexual activity should begin before marriage’? To supporters of AO, the answer is self evident the former. According to Leslee Unruh, President of the Abstinence Clearinghouse, a member of the Coalition, “This report proves once and for all what parents really think. They do not want strangers and teachers telling their children how to have sex. Parents want their children taught about responsibility, decision making, healthy choices and how to build a long lasting marriage relationship” (Abstinence Clearinghouse 2003).

The remainder of the poll results focused on the ‘values’ of parents regarding what should be taught in sex education. What is especially interesting about these results is that only two statements are purely about values; that is, what parents believe is best for their children. The remaining topics involve empirical statements – or empirical possibilities (e.g., “may undermine”) – and parents are asked whether these statements should be taught. For example, almost 80 percent of respondents agreed with the statement “Having many sexual partners at an early age may undermine an individual’s ability to develop love, intimacy, and commitment.”

Finding that 8 out of 10 agree with this statement is entirely different from finding out whether the statement is actually true and, if so, to what extent. After all, nearly 70 percent of Americans believe that “angels and demons are active in the world” (Pew Forum on Religion & Public Life 2008, 12) but holding this belief does not necessarily make it true.

The Annenberg poll was also a nationally representative, randomized, “repeated cross-sectional” survey (Bleakley, Hennessy, and Fishbein 2006: 1152). The survey was conducted at the request of Bleakley, Hennessy and Fishbein. Its results give a very picture of public beliefs than the Zogby poll as interpreted by AO defenders (Table 3 and 4). These results show a very strong preference for CSE beliefs and programs over AO beliefs and programs and, unlike the Zogby poll, it is difficult to interpret the results in ways that show support for AO programs. Note, however, that the Annenberg poll, at least as reported in Table 4, also emphasizes what respondents believe about facts.

[Table 3 and 4 here]

An initial google search produced no evidence of AO supporters explicitly rejecting the results of the Annenberg poll, but their likely critiques are easy to imagine. First, Annenberg polled adults, not parents. It is certainly plausible that parents have
views more sympathetic to AO than the public at large. Two separate studies, however, have also found substantial support for CSE among parents (Ito et al. 2006 and Eisenberg et al. 2008). Second – and here AO supporters are on more solid ground – although parents may favor CSE programs in the abstract, they often oppose the specific topics covered in actual CSE programs (Rector, Pardue and Shannon 2004; see also National Abstinence Education Association 2007a).17 “When you ask parents in a vague euphemistic way about comprehensive sex education, they will respond one way,” said Peter Brandt, director of issue response at Focus on the Family, one of the groups that sponsored the Zogby poll. "As we get more specific in terms of what children are actually taught, though, parents are more opposed” (Schemo 2003). To which Tamara Kreinen, the President of the Sexuality Information and Education Council of the United States (SIECUS) replied: “Obviously, they [the writers of the Zogby poll] polled for what they thought was most shocking” (Schemo 2003).18

Programmatic Effectiveness

Advocates of AO are quick to claim (indeed, overstate) that AO works and to assert that CSE does not, and vice versa. There is a substantial literature on the effectiveness of sex education programs (see for example Underhill, Montgomery and Operario 2007a; Young and Penhallow 2006; Trenholm et al. 2007; National Abstinence Education Association 2007b). Most of the studies would seem to be to be by ‘neutral’ (i.e., academic) researchers but, as we have seen, advocates on each side of the debate appear often to believe the research and researchers that support their preconceptions are the unbiased ones, while evidence and authors supporting the other’s position are dubious (see for example the review of Santelli et al 2006a by Hendricks et al. 2006). Unruh, in challenging the impartiality of research journals publishing studies questioning the effectiveness of AO programs, puts it: "We have not had real, conservative, peer-reviewed journals. We’re now hopefully going to see them" (Sternberg 2002).

The literature on the effectiveness of sex education programs often involves fairly technical issues concerning research design, implementation, and evaluation. A few examples can nonetheless illustrate the nature of the debate and disagreement.

Concerned Women for America, for example, states that “A study in the American Journal of Health Behavior indicates that students in abstinence programs are 50 percent less likely to engage in sex. In contrast, the longstanding comprehensive sex education program that prevails in most public schools was studied by the U.S. Department of Health and Human Services last year and found to have no impact on teens’ behavior” (Concerned Women for America 2008).

Although CWA provide no citations, the relevant AO study was conducted by Weed et al., a supporter of AO (2008). This study was based on an AO program (“Reasons of the Heart”) offered in a suburban county in northern Virginia, with three middle-schools (and about 350 ‘pre-test virgins’ in the 7th grade) involved in the study. The results showed that 9.4 percent of the ‘pre-test virgins’ reported sexual intercourse in the year after the AO program, a statistically-significant difference from the 16.4
percent of the control-group virgins who reported sexual intercourse within one year, yielding a 46 percent lower rate of sexual initiation in the AO group compared to the control group (Weed, et al. 2008: 65).

These results do indicate that the Reasons of the Heart program appears at least to delay sexual intercourse among seventh grade girls who were not already sexually active. The authors, but not Concerned Women, appropriately note the limitations to the study, e.g., that it was a single program in a single county, that only a one-year period was monitored and, especially, “the self-reported nature of the data should be kept in mind when considering the findings” (Weed, et al. 2008: 71). The final caveat is an important one, as it is reasonable to believe that youth instructed on the merits of abstinence may be less inclined to acknowledge that they did not heed the message. Moreover: it is one thing for 12 year old girls to delay sexual initiation through their 13th year, but that is a far cry from remaining abstinent until marriage, given that the average age for first marriages for women in the United States is 26 years.

It is unreasonable to expect any policy advocacy group to offer the same kind of caveats about research that we would anticipate from scholars. Yet Concerned Women vastly overstates the meaning of the study to support its position, primarily by making global, long-term inferences instead of specific, limited ones.

And what of the Health and Human Services study that Concerned Women cite finding that “the longstanding comprehensive sex education program that prevails in most public schools...[had] no impact on teens’ behavior”? That study was requested by two fierce opponents of CSE, Republican Senators Tom Coburn (R-OK) and Rick Santorum (R-PA) (Lee 2007). The Administration for Children and Families (ACF) within HHS contracted the review to the Sagamore Institute for Policy Research, and further requested that the Medical Institute for Sexual Health be the sole organization providing formal comments on the report. The Sagamore Institute has strong religious roots: one of its units is the Center on Faith in Communities which “inspires, educates, equips and resources faith-based organizations in their efforts to transform communities” (Sagamore Institute n.d.). The Medical Institute for Sexual Health is a non-profit advocating that “adolescents and adults remain abstinent ‘until committing to a life-long mutually monogamous relationship such as marriage’” (Lee 2007).19

In its report, the ACF reviewed nine recognized CSE programs (Administration for Children and Families 2007). It found that these curricula “show[ed] some small positive impacts on b) reducing sex without condoms and to a lesser extent a) delaying sexual debut” (ACF 2007: 8).

The ACF report received scathing reviews from supporters of CSE: “The report was poorly conducted and would never pass peer review by an established journal” (Guttmacher Institute 2007). Nonetheless, Guttmacher emphasized that the report’s literature review acknowledges that “seven of the eight comprehensive sex education curricula that were evaluated showed positive impacts on delaying sexual debut, increasing condom use among those who were sexually active, or both” (Guttmacher
Institute 2007). It further emphasized that “comprehensive sex education has been shown in numerous studies by well-respected researchers to delay sex, increase contraceptive use and reduce the number of sexual partners” (Guttmacher 2007). The research it cites in support of this claim comes from a review by the National Campaign to Prevent Teen Pregnancy, a pro-CSE organization (Kirby 2001).

To be sure, the Guttmacher critique also uses deceptive language to describe the results of the review, as only two of the programs reviewed by ACF indicated a delay in sexual debut, and the delays were quite modest. Both sides play the overstatement game.

Both AO and CSE proponents also compete vigorously over the ‘facts’ that are to be included in sex education curriculum. These contests focus primarily on the riskiness of condoms, the psychological impacts of non-marital sex, and sexual orientation. In short, AO advocates believe that the facts are that pre-marital sex is inherently damaging psychologically and that homosexuality is an immoral choice, while CSE supporters believe that sexual activity among youth can have both good and bad psychological consequences and that sexual orientation is generally immutable.

Regarding condoms, in the eyes of CSE’s supporters they are highly effective at preventing HIV, other STDs, and pregnancies (see for example Alford 2005; American Academy of Pediatrics 2001). In contrast, AO advocates maintain that condoms have alarmingly high failure rates (see for example Benn and Derby n.d.).

In its study, the National Institutes of Health found that

Estimates of condom breakage from these [prospective] studies range from 0.4 – 2.3 percent. Slippage rates...ranged from 0.6 percent to 1.3 percent. Slippage rates include both slippage during intercourse and slippage during withdrawal. The combined method failure (slippage plus breakage) is estimated at 1.6 percent – 3.6 percent” (National Institute of Allergy and Infectious Diseases, 2001, 9; see also Lin and Santelli 2008).

In contrast, Teen-Aid, an AO advocacy organization, reports that condoms break or slip between 0.6 and 25 percent of the time (Benn and Derby n.d.). An earlier version of Teen-Aid curriculum reported failure rates of up to 44.5 percent (Roach and Benn 1998, cited by Lin and Santelli 2008, 58). For Teen-Aid, the implication is clear: “If condoms and condom usage are not reliable, wouldn’t relying on them be like playing the insane ‘game’ of Russian roulette?...Condoms do not prevent pregnancy, STDs or AIDS; they only delay them. Theoretically, the longer one relies on them, they will fail and the ‘game’ is over. (Roach & Benn 1998, 215; quoted by Lin and Santelli 2008, 60).

SIECUS, a pro-CSE group, in posing the question “Do condoms frequently break or slip off?” bluntly answers: “No. It is not common...” (SIECUS n.d.). Although SIECUS does report studies with failure or slippage rates varying from 0.6 percent to as high as 12 percent, they clearly emphasize the studies showing problems at the lower end of the range. One crucial distinction that SIECUS mentions, but that Teen-Aid
ignores, is that there is a big difference between condoms ‘slipping’ and ‘slipping off’. Rates for the former are higher, but the consequences much less dire.

Ironically, AO supporters seem to believe that youth cannot be taught to use condoms properly and reliably, but that they can be taught not to have sex. CSE advocates appear to hold the opposite position.

Finally, proponents and opponents of AO disagree on the extent to which the federal government supports AO education financially. On the extreme, the Heritage Foundation issued the report “Government Spends $12 on Safe Sex and Contraceptives for Every $1 Spent on Abstinence” (Pardue, Rector and Martin 2004). This report goes on to say that “If funding for teens alone is examined, government still spent $4.50 on promoting teen contraceptive use for every one dollar spent on teen abstinence.” A similar, although more overtly judgmental, assessment is offered by Concerned Women for America (CWA): “Even though they work, in 2002 abstinence programs received only $102 million in federal funding compared to at least $427 million allocated to comprehensive sex education and contraception programs that do not work” (Concerned Women for America 2008).

As Stone reminds us, “There are many possible measures of any phenomenon and the choice among them depends on the purposes of measuring...Counting always involves deliberate decisions about counting as” (Stone 2002: 164). Advocates of AO programs – as other activists – seek to report numbers that define the situation most favorably to their interests.

There are two main features in the AO reports that overstate, at least by implication, spending on CSE and understate spending on AO. The sleight of hand is most obvious in the Heritage report’s title through the unobtrusive inclusion of the simple word and. Heritage apparently counts every dollar spent on CSE as well as other programs that involve family planning and contraceptives. The CWA statement does the same, but it also contains the apparently innocuous phrase “federal funding”. The key distortion here is that most federal funding for AO programs comes through the “Section 510” provision of the 1996 welfare reform act, and this provision requires that the states match every $4 in federal spending with $3 in state spending (Santelli et al. 2006a: 75).20 As a result, total spending on Section 510 programs is 75 percent higher than federal spending. CSE advocates, in contrast, target their counting efforts on federal programs devoted entirely to AO (e.g., Dallard 2002).

Conclusions

Sex has consequences, and these consequences are of great importance to us as individuals as well as to our society as a whole. Because sex is of such profound importance, individuals and groups have strong moral views about it and how it should be taught to the nation’s youth. These views dominate the struggle over sexuality education. Although supporters of abstinence only education and comprehensive sexuality education might at times appear to be seeking the same goals – sex that can be celebrated, and that causes no harm – they come from radically different moral perspectives. The advocates of AO education are typically
motivated by their religious concerns. But because religion cannot be explicitly used in the classroom, AO advocates seek to secular means to promote their causes. Still, if it were possible, there is little doubt that AO proponents would bring religion into the curriculum.
ENDNOTES

1 The respective birthrates are 41.5 per 1000 women aged 15-19 in the U.S., 14.1 per 1000 in Canada, and 4.3 per 1000 in Switzerland. The gap persists even though the teen birthrate in the US has declined over the past 20 years (The National Campaign 2010b).

2 The relative poverty rates 28.7 percent and 5.5 percent.

3 Medical and public health groups supporting CSE include the American Academy of Pediatrics, American College of Obstetricians and Gynecologists, American Medical Association, American Public Health Association, Institute of Medicine, and Society for Adolescent Medicine, American Psychological Association (see for example, Institute of Medicine 2000; Klein et al. 2005; Society for Adolescent Medicine 2006; American Academy of Pediatrics 2001). CSE is also supported by groups such as Sexuality Information and Education Council of the United States (SIECUS), Advocates for Youth, Planned Parenthood, Parents and Friends of Lesbians and Gays (PFLAG ), the Human Rights Campaign, and the National Abortion & Reproductive Rights Action League (NARAL).

4 The bill, tucked into the Omnibus Budget Reconciliation Act of 1981, was approved without hearings or floor votes (Saul 1998: 5).

5 Of the eight church-affiliated groups that were direct AFLA grantees, six were Catholic organizations, one was aligned with the conservative Lutheran Church-Missouri Synod, and one (BYU) was sponsored by the Mormon church (Donovan 1984: 222).

6 Other national religious (Christian) organizations include the Alliance Defense Fund, American Family Association, Concerned Women for America, Eagle Forum, and the Liberty Council.

7 The IRE’s clients appear usually, but not exclusively, faith-based programs (Institute for Research and Evaluation n.d.a.)

8 Google scholar indicates that this article has been cited 1606 times as of March 26, 2011.

9 The reverse, of course, is true for CSE proponents.

10 Santelli was also one of the authors of “Abstinence-Only Education Policies and Programs: A Position Paper of the Society for Adolescent Medicine” (Santelli et al. 2006b).

11 The press release also quoted Dr. Nancy Eugenio, but a google search using her name and ‘abstinence’ produced no hits other than the release.

12 Even for AO supporters, the border conditions are not entirely defined. Would sexually arousing kissing violate abstinence?

13 Under this definition, individuals could engage in oral or anal sex while remaining ‘abstinent’. It seems doubtful, however, that most supporters would consider these activities ‘not having sex’.

14 I have been able to obtain the poll itself, as all reported web links to it appear to be no longer valid.

15 The specific survey on sexuality education used data collected on approximately 1000 adults from this polling sample between July 2005 and January 2006.

16 Bleakley is a Ph.D. research scientist at the Annenberg Public Policy Center at the University of Pennsylvania, where she has written extensively on adolescent sexual behavior. I was unable to discover any mention of her religious beliefs, although she has written about the impact of religious beliefs on adolescent sexual behavior.16 Michael Hennessy is a Ph.D. statistician at Annenberg who had earlier worked at the CDC. His ties to the CDC would certainly made Hennessy’s research suspect in the eyes of the AO community, as in the year before the Zogby poll the CDC had come under heavy fire for recommending programs that “subvert the idea of abstinence” (Vlahos 2003). Fishbein is a communications professor, and he has also served as the President of the Society for Consumer
Psychology and the Interamerican Psychological Society (Annenberg Public Policy Center n.d.). I was unable to locate any references linking Fishbein to religious beliefs.

17 This is not a trivial matter. The American public also shows overwhelming support for cutting federal spending in the abstract, but very little support for actually cutting any specific programs. In terms of practical politics, the specific usually carries more weight than the abstract.

18 The Zogby polled included specific topics selected from a wide range of CSE curricula developed by SIECUS. SIECUS argues that these curricula provided local schools suggestions about possible topics and approaches, but that the curricula should be tailored to local preferences.

19 I was unable to confirm this statement on the Medical Institute’s website. According to one journalist, “Unlike some conservative groups, the Medical Institute strives for medical respectability, focusing on public-health arguments in favor of virginity rather than moral virtues” (Shaffer 2006).

20 In FY 2005, the federal government spent $168 million on AO education, with $105 million coming through Section 510 programs (Santelli et al. 2006a: 75).
REFERENCES

Abstinence Clearinghouse. 2003. “Parents Overwhelming Oppose Comprehensive Sex Education, Support Abstinence Education.” Website available at http://www.physiciansforlife.org/content/view/246/64/ (Accessed March 27, 2011). [NB: This press release was posted on the Physicians for Life website, although the release notes that it was “Provided by the Abstinence Clearinghouse. I was unable to locate it at the Clearinghouse.]


McIlhaney, Joe S., Jr. and Susan Nethery. *1001 Health-Care Questions Women Ask.*


[NB: The story's title is in error, as the CDC did not fund these CSE programs, but listed them in its “Programs that Work” initiative.]


Table 1: The Competing Moral Priorities of Abstinence Only and Comprehensive Sexuality Education

<table>
<thead>
<tr>
<th></th>
<th>Abstinence Only</th>
<th>Comprehensive Sexuality Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Purpose of Sex</td>
<td>Procreation</td>
<td>Pleasure</td>
</tr>
<tr>
<td>The Goal of Sexuality</td>
<td>Purity</td>
<td>Protection</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author
<table>
<thead>
<tr>
<th>When should sexual activity begin?</th>
<th>Wait until marriage (47%)</th>
<th>Wait until near marriage (32%)</th>
<th>Wait until you have, at least, finished HS (12%)</th>
<th>Protected sex in HS is ok (7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What should young people be taught?</strong></td>
<td>Abstinence and no contraception (22%)</td>
<td>Abstinence plus basic information on contraception (52%)</td>
<td>Abstinence plus encouragement to use contraception (23%)</td>
<td>Contraception only (2%)</td>
</tr>
<tr>
<td>What’s more important, abstinence or contraception?</td>
<td>Abstinence is more important (44%)</td>
<td>Abstinence and contraception should have equal emphasis (41%)</td>
<td>Contraception is more important (8%)</td>
<td>Government should teach neither (7%)</td>
</tr>
</tbody>
</table>

Source: Rector, Pardue, Shannon (2004): 8, 19, 20
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>No Opinion</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinence-only education is an effective way to prevent unplanned pregnancy and STDs.</td>
<td>29.8%</td>
<td>24.7%</td>
<td>6.4%</td>
<td>22.9%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Sex education material about abstinence and other methods of preventing pregnancy is an effective way to prevent unplanned pregnancy and STDs.</td>
<td>6.3%</td>
<td>8.7%</td>
<td>4.6%</td>
<td>43.6%</td>
<td>36.9%</td>
</tr>
<tr>
<td>Teaching teens how to properly use a condom encourages them to have sex.</td>
<td>23.8%</td>
<td>33.1%</td>
<td>6.0%</td>
<td>23.5%</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

Source: Bleakley, Hennessy and Fishbein (2006): 1153
<table>
<thead>
<tr>
<th></th>
<th>Strongly Oppose</th>
<th>Somewhat Oppose</th>
<th>No Opinion</th>
<th>Somewhat Support</th>
<th>Strongly Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support or oppose AO?</strong></td>
<td>18.8%</td>
<td>31.9%</td>
<td>13.1%</td>
<td>20.9%</td>
<td>15.3%</td>
</tr>
<tr>
<td><strong>Support or oppose teaching other methods of preventing pregnancy</strong></td>
<td>3.3%</td>
<td>6.5%</td>
<td>8.1%</td>
<td>43.6%</td>
<td>38.5%</td>
</tr>
<tr>
<td><strong>and STDs in addition to teaching about abstinence.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Support or oppose instructions about how to use condoms properly</strong></td>
<td>7.7%</td>
<td>13.2%</td>
<td>10.8%</td>
<td>41.3%</td>
<td>27.0%</td>
</tr>
</tbody>
</table>

Source: Bleakley, Hennessy and Fishbein (2006): 1154