

Sexuality education in Florida: Content, context, and controversy.

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Abstract:

As with many states, Florida has official directives that are intended to influence what type of sexuality education, if any, takes place in public school classrooms. However, little is known about contextual factors that facilitate or challenge the ability of teachers to implement effective sexuality education initiatives. Levels of sexually transmitted infections (STIs) and unintended pregnancies continue to rise in Florida; indeed, the state ranks second in annual incident HIV infections. The need exists to examine the capacity of Florida's schools to develop educational responses to these issues. Methodology: Community-based participatory research (CBPR), scientific review, and a statewide mail-based survey were used to collect quantitative and qualitative data from 479 public school personnel throughout Florida. Results: Even though the vast majority of teachers (87%) acknowledged that some form of “sex education” took place in their schools, it was not accessible to all students, was most often afforded little time, occurred late in the students' academic career, had little to no uniformity in terms of what was being taught and who was teaching it, had no standards in terms of training or quality assurance, and may not adequately address the realistic needs of students. Conclusions and Recommendations: Teachers in Florida reported numerous barriers to providing comprehensive sexuality education. State organizations and advocacy groups located within Florida may consider initiating campaigns to promote comprehensive sexuality education in Florida's public schools.

Keywords: sexuality education | Florida | abstinence education | community-based participatory research | public health

Article:

INTRODUCTION

Sexuality education involves the process of acquiring knowledge and forming beliefs, values, and attitudes about intimacy, relationships, and identity. This education is a lifelong process and is instrumental in helping people to establish healthy behaviors throughout life. Sexuality is a

core personality component that has many aspects, including physical, emotional, social, and spiritual (Office of the Surgeon General, 2001).

As a public health issue, adolescent sexual behavior and risk prevention are important due to their highest age-specific risk for sexually transmitted infections (STIs), such as HIV/AIDS, and also their highest age-specific proportion of unintended pregnancies in the United States (Santelli et al., 2006; Schuster, Bell, & Kanouse, 1996). Young women under the age of 20 give birth to over 400,000 babies each year and approximately half of all youth (ages 15 to 24 years) that are sexually active will become infected with an STI by the age of 25, although this group represents only 25% of sexually active individuals within the general population (Kaiser Family Foundation, 2006). Additionally, new HIV infections have increased by 10% from 2000 to 2003 within this age group (Bleakley, Hennessy, & Fishbein, 2006).

Overview of Types of Sexuality Education

In terms of school-based sexuality education in the United States, three main types of programs exist (Sexuality Information and Education Council of the United States [SIECUS], 2004). These include comprehensive, abstinence-based, and abstinence-only-until-marriage programs.

Comprehensive sexuality education is ideally intended to start early, in kindergarten, and to continue throughout the young person's academic career, until twelfth grade. It includes factual and medically accurate information on a broad array of topics and provides opportunities for skill building. The key concepts of comprehensive sexuality education include: human development, relationships, personal skills, sexual behavior, sexual health, and society and culture (SIECUS, 2004). In addition to these key concepts there are specific topics, sub-concepts, and age-appropriate developmental messages that have been compiled by the National Guidelines Task Force (SIECUS, 2004). Under the comprehensive approach, the goals of sexuality education fall into four areas: information; attitudes, values, and insights; relationships and interpersonal skills; and responsibility (SIECUS, 2004). Comprehensive curricula aim to provide evidence-based information on a wide array of specific sexual health issues including HIV/STI prevention and contraception, as well as abstinence from sexual activity.

Abstinence-based (also called abstinence-plus or abstinence-centered) programs emphasize the benefits of abstinence and delaying sexual debut. These programs may include information on disease-prevention methods, shared sexual behavior, and contraception (Bleakley, Hennessy, & Fishbein, 2006; SIECUS, 2004; Kaiser Family Foundation, 2002). Furthermore, these programs may or may not provide information on proper condom use. However, in most programs, abstinence from sexual activity is stressed as the “best” way to avoid negative sexual health outcomes. Oftentimes, abstinence-based is referred to under the umbrella of comprehensive education (since comprehensive education includes information regarding abstinence), depending on the amount of time allocated to teaching sexuality within a given program.

Abstinence-only-until-marriage programs emphasize abstinence from all sexual behaviors outside of marriage. These programs do not include any information on disease-prevention methods or contraception and typically present marriage as the only morally acceptable context for all sexual activity (Kaiser Family Foundation, 2002). The eight points (also known as “Abstinence A-H”) federally funded abstinence-only education programs must adhere to include: (1) have as its exclusive purpose, teaching the social, psychological, and health gains to be realized from abstaining from sexual activities; (2) teach abstinence from sexual activity outside marriage as the expected standard for all school-age children; (3) teach that abstinence from sexual activities is the only certain way to avoid out-of-wedlock pregnancy, STIs and other associated health problems; (4) teach that a mutually faithful monogamous relationship in the context of marriage is the expected standard of human sexual activity; (5) teach that sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects; (6) teach that bearing children out of wedlock is likely to have harmful consequences for the child, the child's parents, and society; (7) teach young people how to reject sexual advances and how alcohol and drug use increase vulnerability to sexual advances; and (8) teach the importance of attaining self-sufficiency before engaging in sexual activity (Santelli et al., 2006; SIECUS, 2004, Kaiser Family Foundation, 2002).

Overview of Policies Regarding Sexuality Education in the United States and Florida

National Policies

The federal government in the United States began supporting programs that promote abstinence in 1981 by way of the Adolescent Family Life Act (AFLA) (Bleakley, Hennessy, & Fishbein, 2006; Santelli et al., 2006; Kaiser Family Foundation, 2002). In 1996, there were major expansions in federal support for abstinence and for programs that teach only abstinence while restricting other information. The expansions include Section 510 of the Social Security Act, which was a part of welfare reform in 1996. In 2000, Community-Based Abstinence Education (CBAE) projects were funded through a maternal child health block grant for Special Projects of Regional and National Significance (SPRANS) (Bleakley, Hennessy, & Fishbein, 2006; Santelli, et al., 2006; Kaiser Family Foundation, 2002).

Both the SPRANS and 510 programs prohibit the dissemination of information related to contraceptive services, gender identity and sexual orientation, and other human sexuality aspects (Santelli et al., 2006). Programs that are funded under AFLA since 1997 have been required to comply with the section 510 requirements, which provide an eight-point definition of abstinence-only education. Programs that receive funding under SPRANS are required to teach all eight components outlined in the federal definition, are required to reach 12–18-year-olds, and they cannot provide information about contraception or safer-sex practices except in limited situations, even with non-federal funds.

Recent reviews of abstinence-only programs have concluded that strong evidence in support of the efficacy of these programs in delaying sexual activity or reducing pregnancies does not exist (Bleakley, Hennessy, & Fishbein, 2006; Hauser, 2004; Kirby, 2002, 2006). Conversely, systematic reviews (Albert, 2004; Eng & Butler, 1997; Kirby, 2001, 2002, 2006) suggest that comprehensive sexuality education may “delay initiation of sexual intercourse, reduce frequency of sex, reduce frequency of unprotected sex, and reduce the number of sexual partners” (Bleakley, Hennessy, & Fishbein, p. 1152).

Despite this evidence, and although comprehensive sexuality education is strongly supported by the general public and by health professionals and advocates, federal funding for abstinence-only education continues to increase (Lindberg, Santelli, & Singh, 2006; Santelli et al., 2006; Kirby, 2006). A recent nationally representative polling of school superintendents and their representatives found that, overall, 23% of school districts in the United States require that abstinence-only-until-marriage be taught in classrooms, with prohibitions on any discussion of other alternatives (or mentioning only the shortcomings of other alternatives) (Kirby, 2006). Abstinence-only federal funding in the United States increased from \$60 million in FY 1998 to \$168 million in FY 2005 (Santelli et al., 2006). In terms of current federal funding for abstinence-until-marriage on a state level, Vermont, receives the least and California has never applied for it (SIECUS, 2005). Florida consistently ranks among the top five states that receive the most funding for abstinence-until-marriage education (SIECUS, 2006).

Overview of Sexuality Education and Related Policies in Florida

Rules and regulations regarding sexuality education vary widely across individual states and may change often. In addition, these regulations are often broad, leaving specific curriculum content up to local schools and districts (Kaiser Family Foundation, 2002). In FY 2006, Florida received \$10,700,147 in federal funding for abstinence-only-until-marriage programs (SIECUS, 2006). Florida also received \$2,521,581 in federal Title V funding. The Title V grant requires states to match three state-raised dollars or the equivalent in services for every four federal dollars received. Local groups can provide the match in full or in part. In Florida, sub-grantees match the federal funding in lieu of the state; however, some sub-grantees receive money from both state and federal funds. There are currently twelve SPRANS-CBAE grantees in Florida, and four AFLA grantees (SIECUS, 2006). The SPRANS-CBAE grantees include faith-based organizations, health departments, and other community-based organizations.

The state of Florida currently maintains an official “stress abstinence” policy in regards to sexuality education and instruction on HIV/AIDS. According to Florida Statute 1003.46:

Throughout instruction in acquired immune deficiency syndrome, sexually transmitted infections, or health education, when such instruction and course material contains instruction in human sexuality, a school shall:

a Teach abstinence from sexual activity outside of marriage as the expected standard for all school-age students while teaching the benefits of monogamous heterosexual marriage.

b Emphasize that abstinence from sexual activity is a certain way to avoid out-of-wedlock pregnancy, sexually transmitted infections, including acquired immune deficiency syndrome, and other associated health problems.

c Teach that each student has the power to control personal behavior and encourage students to base actions on reasoning, self-esteem, and respect for others.

d Provide instruction and material that is appropriate for the grade and age of the student.
(Florida Statutes, 2006)

In addition to stressing abstinence, the state of Florida mandates that high school students receive one-half credit in “Life Management Skills” (LMS) in order to graduate (although, at the time of publication, this requirement is currently under review and revision by the state legislature). This credit is received in either ninth or tenth grade (SIECUS, 2006). The LMS course must include information on the prevention of STIs and HIV/AIDS, the consequences of teen pregnancy, and the benefits of sexual abstinence. School boards have the option to allow additional instruction on HIV/AIDS. Such instruction can include information on the “means used to control” the spread of HIV/AIDS. Although sexuality education is technically required in LMS courses in Florida, there is an “opt-out” policy in which parents or guardians may choose to remove their children from all or part of the instruction.

Hauser's (2004) review of state-funded evaluations of five years of abstinence-only-until-marriage education for ten states, including Florida, found that the Florida Abstinence-Only Program had a total allocation of public funds of \$5.7 million, and included the effort of 22 sub-grantees in the state. The curricula included: Education Now Babies Later (ENABL), Sex Can Wait, Why Am I Tempted (WAIT) Training, Vessels of Honor, and Smart Moves, among others. The result of the evaluation of the behavioral survey showed little change from pre- to posttest except that participants reported increases in several sexual behaviors. This included an increase in the total number reporting that they had sex. For the attitudinal survey, there were slight changes in the desired direction, but the amount of change was minimal (Hauser, 2004). A recent ranking of state efforts toward addressing contraception (Guttmacher Institute, 2006a, 2006b) cited Florida's sex education policy as the worst in the nation in terms of type and quality of policy. Quality referred to the ability of the policy to enhance or hinder the use of and access to contraceptive services and supplies.

Florida has specific instructions that influence a school's sexuality education curricula. While sexuality education and HIV/AIDS education are mandated in Florida, little is known at the state level about who is actually teaching sexuality education. In addition, what topics teachers choose to include in their classes may vary significantly from official curricula and little is known about the factors that impact the ability of schools and teachers to develop, implement, and evaluate

their sexuality education initiatives. Much of the previous research on sexuality education in public schools focuses on the content of the available school sexuality education curricula but not on what is actually being taught (Klein, Goodson, Serrins, Edmundson, & Evans, 1994; Lindberg, Santelli, & Singh, 2006). To truly assess the characteristics and capacity of a school in this area, it is essential to explore both the curricula and the actual content of sexuality education courses and the perceptions of the teachers with regard to certain sexuality-related topics.

As with many states, levels of STIs and unintended pregnancies continue to rise in Florida. Indeed, the state ranks second in the nation, after New York, in the number of annual incident HIV infections (Florida Department of Health, 2003). In addition, Florida ranks sixth of all states for the highest teenage pregnancy rate (Gutmacher Institute, 2006a, 2006b). The need exists to examine the capacity of Florida's schools to develop educational responses to these significant public health issues.

Study Purpose and Aims

The purpose of our study was to assess the characteristics of Florida public schools' sexuality-related curricula and to identify the factors that facilitate and challenge the ability to provide comprehensive sexuality education. Specifically, the aims of this descriptive article are to explore data related to:

1. determining whether or not sexuality education is offered in various public schools and, if so, where is it taking place;
2. elucidating the classroom characteristics of teachers who are currently teaching sexuality education;
3. ascertaining whether or not teachers are using formal curricula and/or whether or not the curriculum is supplemented by outside organizations and materials;
4. examining the sexuality education course content being used in public schools; and
5. determining whether or not training is available for sexuality education teachers.

METHODS

This project was based on the model of a successful statewide assessment of sexuality education in Indiana carried out by researchers at Indiana University, who also served as co-investigators on the Florida study, in partnership with an influential community-based coalition (Get Real Indiana!). The study was conducted in five phases over the course of the 2006 calendar year.

Phase 1: Community Mobilization

This study benefited from the use of a community-based participatory research framework (Israel, Schulz, Parker, & Becker, 1998). Given the sensitivity of the issues that were discussed and uncovered, it was imperative to work with community members who could provide insight into local, social, and cultural norms to help guide and shape the research process. These

individuals were identified through local health departments and community-based organizations that deal with sexuality-related issues on an ongoing basis.

In February and March 2006, meetings were convened for two separate Community Advisory Committees in North (Gainesville) and South (Ft. Lauderdale) Florida. Each Community Advisory Committee was composed of approximately ten members who volunteered to assist the investigators throughout the course of the study. Members of each committee included a diverse array of teachers, nurses and nurse practitioners, public and school health personnel, and members of various community-based organizations related to sexual health. Committee members helped to refine research questions, identify appropriate methods for data collection, design the data collection materials, and implement the study.

Phase 2: Scientific Review

In addition to the Community Advisory Committees, a Scientific Advisory Committee was charged with the task of reviewing the preliminary research protocols and providing feedback about the scientific validity and reliability of the research questions, study design, utility and accessibility of the questions and survey format, and completeness of content. The committee was composed of six academics from the University of Florida, Columbia University, and the University of North Florida, who had extensive research experience in sexuality education projects throughout the United States. The study team in collaboration with the Community and Scientific Advisory Committees determined questions on the final version of the survey instrument. The University of Florida's Institutional Review Board (IRB) approved the final version of the survey instrument.

Phase 3: Identification of Study Participants

In order to identify potential participants for the survey, information was first gathered from Community Advisory Committee members with regard to which teachers were charged with the task of providing sexuality education in their individual regions. Committee members in both North and South Florida identified middle and high school teachers with the primary teaching codes of science, health, physical education, or family and consumer sciences. Subsequently, two research assistants attempted to systematically contact (via telephone) the Offices of the Superintendent in each of Florida's 75 school districts. Each district officer or representative was asked:

1. In your school district, which teachers have primary responsibility for teaching sex education?
2. In which courses does sex education in your school district typically get taught?

Based on the information provided by superintendents' offices, the most commonly reported individuals responsible for teaching sexuality education in Florida's public schools included middle-school health, middle-school science, middle-school physical education, high-school

health, high-school physical education, and high-school family and consumer sciences teachers. In addition, sexuality education was most often reported to take place in the LMS course (usually taught by family and consumer sciences teachers).

Phase 4: Construction of the Sampling Frame

An electronic database was acquired through the Florida Department of Education (Department of Education Information Services) that contained the names and addresses of 8,000 teachers (or all middle-school health, middle-school science, middle-school physical education, high-school health, high-school physical education, and high-school family and consumer sciences in the state). From this database, and the information given by the community groups and superintendents' offices, a stratified random sub-sample of 2,000 teachers (based on teaching code and geographic location) was selected to participate in the study. All individuals were over the age of 18.

Phase 5: Survey of Sexuality Educators

Data collection was accomplished through the use of non-probability mail-based survey methodology. The study team partnered with the Florida Survey Research Center, a service team of specialized survey researchers within the Department of Political Science at the University of Florida, who handled all logistical aspects related to the conduct of the survey. Upon receiving final University of Florida IRB approval, study packets were mailed from the Florida Survey Research Center to the potential study participants. The research packet included a letter explaining the study (which incorporated the IRB informed consent form), a paper survey, and a postage-paid return envelope. Packets sent to teachers in Palm Beach, Broward, and Dade Counties included survey instruments printed in both English and Spanish, due to the high number of Spanish-speaking individuals in these districts. Additionally, Spanish-language surveys were made available to all participants throughout the state via a return postcard. Last, a reminder postcard was sent two weeks after the initial survey was mailed.

Completion of the questionnaire was estimated to take approximately 25 minutes. Participants had the option to skip any question. All data were collected anonymously via the returned survey and subsequently hand-entered into a database by a staff member at the Florida Survey Research Center. Data from the surveys were only considered in aggregate form; it was not possible to identify any individual participant. Incentives were not used in this study.

RESULTS

CONCLUSIONS AND RECOMMENDATIONS

Of the 2,000 packets mailed, 85 were returned by the post office for incorrect or incomplete addresses. A total of 479 completed surveys that were returned to the Florida Survey Research Center were processed and “cleaned” (checked for incomplete responses, omitted information,

proper skip patterns, etc.), data reduced into an ASCII database, and analyzed using the SAS statistical analysis package. Thus, our overall response rate was approximately 25%.

Demographics of Survey Respondents

Of all those who returned surveys, approximately 86% were female, while about 14% were male. More than two-fifths (43%) of the respondents were between the ages of 51 and 60, while more than one-fourth (28%) were between the ages of 41 and 50. Just over 14% of the respondents were between the ages of 31 and 40, and another 10.7% were between the ages of 20 and 30.

Approximately 5% of the respondents were Spanish, Hispanic, or Latino. Of these respondents, the largest proportion were of Cuban descent. More than four-fifths (84%) of the respondents were White, and approximately 10% were Black or African American. Smaller percentages of respondents were American Indian or Alaska Native (0.2%), Asian (0.5%), or Native Hawaiian or Pacific Islander (0.2%). In addition, about 6% of the respondents listed their race as "Other."

More than half (52%) of the respondents held certifications in "Family and Consumer Sciences." Just below one quarter of the respondents held certifications in either "Physical Education" (23%) or "Science" (24%) and about one-fifth (20%) were certified in "Health." More than three-quarters of the respondents were certified to teach high school (79%) and nearly as many (73%) were certified to teach middle school. About one-fifth (21%) of the respondents were certified to teach elementary school.

Three-fifths of the respondents reported that they hold a Bachelor's degree and more than two-fifths (44%) reported that they hold a Master's degree. About 1% of the respondents had a Doctoral degree. More than one-third (34%) of the respondents said that the main subject they taught was "Family and Consumer Sciences." Just over one-fourth (26%) of the respondents reported that the main subject they taught was "Physical Education." Approximately one-fifth (21%) of the respondents said they primarily taught "Science," and about 11% said "Health."

Aim 1: Is Sexuality Education Offered and, If So, Where Is It Taking Place?

The first section of the survey contained five questions about sex education courses in the respondent's school and school district. The following definition of "sex education" was presented at the beginning of the survey:

A variety of types and forms of sexuality education exist across the country, even though they may be called by some other title. In this study, sexuality education (sex education) can be defined as any instruction about human sexual development, the process of reproduction, or sexual behavior and interpersonal relationships. It may include a variety of topics such as discussions of puberty, male and female reproductive systems, pregnancy and childbirth, abstinence, contraception and birth control, sexually transmitted infections (STIs), HIV/AIDS, relationships, and sexual decision making.

Broadly, 87% of the total sample of respondents reported that some form of “sex education” was offered in their schools during the 2005–2006 school year. Only about 13% of the respondents said that sex education was not offered in their schools. Sex education courses were most likely to be taught in the ninth (51%) and tenth (52%) grades. In addition, over 45% of the respondents who work in schools that offer sex-education courses reported that these courses were offered in the eleventh (47%) and twelfth (46%) grades. Approximately 30% of respondents noted that sex education courses were offered for the seventh (29%) and eighth (29%) grades in their schools. Just over one fifth (22%) of these respondents noted that sex-education courses were offered to sixth graders in their schools.

Sex-education courses were most likely to be taught by a “Health teacher” (57%) or “Family and consumer sciences teacher” (42%). In addition, approximately 35% of the respondents who work in schools that offer sex education courses noted that a “Science teacher” teaches sex-education courses. Smaller percentages of respondents indicated that a “Physical education teacher” (16%), “School nurse” (11%), or “School counselor” (3%) teaches sex education. About 11% of these respondents indicated that “Other” types of school personnel teach sex-education courses at their schools.

Sex education was “a requirement for all students” in only 16% of the respondents' schools. Consistent with loopholes in the state's mandate, the majority of teachers reported that parents/caregivers were able to control whether or not their children received information regarding sexuality. In just over one-quarter (26%) of the respondents' schools, parents/caregivers had to “give passive consent/permission for students to participate” in sex education, and in approximately 30% of these schools, parents/caregivers had to give “active consent/permission for students to participate” in sex education. About 10% of the respondents indicated a different consent situation at their schools.

Aim 2: What are the Classroom Characteristics of Current Sexuality Educators?

Approximately three-fifths (58%) of the respondents reported that they, themselves, taught sex education during the 2005–2006 school year. Only these survey respondents answered all other questions in this section. Nearly 30% of the teachers who reported teaching sex education during the 2005–2006 school year had been teaching sex education for over 15 years. In addition, more than one-quarter of these respondents had been teaching sex education for either two or five years (26%) or six to 10 years (26%).

More than one-half of the respondents taught eighth grade (59%), ninth grade (54%), eleventh grade (58%), or twelfth grade (55%). Approximately one-fifth of these respondents taught seventh grade (21%) or tenth grade (20%). Just 8% of these respondents taught sex education to students in sixth grade.

More than four-fifths (85%) of the respondents reported that their students received 20 hours or less of classroom contact hours in sex education during the year. Another 6% reported that their

students had 21 to 40 contact hours in sex education during the 2005–2006 school year, and a similar percentage (5%) had more than 80 classroom contact hours in sex education.

Approximately three-quarters (74%) of the respondents reported that they spent less than 25% of their classroom time teaching sex education. About 15% of these respondents said that 25–49% of their classroom time was devoted to teaching sex education. Another 5% of these respondents reported they spent 50–99% of their classroom time teaching sex education, and just 2% said that they spent all of their classroom time teaching sex education.

The vast majority (94%) of the respondents reported that they taught sex education as part of another course. Only 3% of the respondents said that they taught sex education as a separate course during the 2005–2006 school year. In addition, 4% of these respondents reported that they taught sex education as specific lessons independent of any course.

More than one-half (52%) of the respondents who reported teaching sex education as part of another course during the 2005–2006 school year said that sex education was combined with a class in “Family and Consumer Sciences.” Approximately 30% of these respondents said that sex education was combined with a “Health” class. Twenty-seven percent of these respondents noted that sex education was combined with a “Science” class, and 5% said it was combined with a “Physical Education” course. In addition, 8% of those who reported teaching sex education as part of another course provided “Other” courses with which sex education was combined (and most of these responses indicated LMS as the course that sexuality education was combined with).

Aim 3: What, If Any, Formal Sexuality Education Curricula and Other Materials are Being Used?

More than two-thirds (68%) of the respondents who taught sex education during the 2005–2006 school year reported using an official curriculum to do so. About 32% of these respondents said that they did not use an official curriculum to teach sex education. Those respondents who reported that they did use an official curriculum to teach sex education were next asked, “What curriculum did you use?” The results appear in Table 1 (please note that respondents were asked to mark all applicable responses, so the results in Table 1 do not total 100%). More than one-half (55%) of the instructors who taught sex education using a curriculum reported using a “Locally developed curriculum.” More than two-fifths (41%) of these respondents listed “Other” curricula that they used. These other responses are presented in Table 2, both by category/grouping and specific comment.

TABLE 1 Teachers' Reported Curricula Used to Teach Sexuality Education

Curriculum	%
Be Proud! Be Responsible!	1

Get Real About AIDS	5
Great to Wait (Florida Abstinence Education Program)	15
Planned Parenthood curriculum	4
Postponing Sexual Involvement	7
Locally developed curriculum	55
Sex Respect	6
SIECUS Guidelines	2
Other	41

TABLE 2 Teachers' Reported Curricula Used to Teach Sexuality Education (“Other” Response)

Response	Frequency
State Guidelines. Curriculum. or Texts for Course	25
County/School Board Curriculum	10
Child Development Curriculum/Text	5
Broward County Approved Curriculum	3
Glencoe Health Text Supplement	3
Sunshine State Standards	3
WAIT (from A Women's Place)	3
Be the One	2
Game Plan	2
Mark Wilcox	2
Miami-Dade County	2
Act Smart	1
As designed by Health Education Department of School Board	1
Baby Think it Over	1

Classroom texts	1
County curriculum from 1990 (I update as much as possible)	1
Curriculum Accompanying Text	1
DCF Training	1
Developing Child, Married and Family Life	1
DOE Life Management classes	1
ENABL (Healthy Start Coalition)	1
Family Dynamics	1
Family Service Center Agency Representative	1
Florida Benchmarks	1
Frameworks for Parenting	1
Health Department Curriculum	1
Health Teacher MDCPS (middle school)	1
Health & Wellness	1
Healthy Babies, Healthy Mothers	1
Internet Information	1
Life Management Skills	1
LMS Plans	1
One for Escambia County	1
Parenting: Rewards and Responsibility	1
Part of Health Education book	1
Pinellas County Family Life Education Curriculum	1
School board approved	1
Science Curriculum textbook	1
Sexuality and Responsibility	1

State Course Requirements	1
State Curriculum Guidelines for the specific class	1
State of Florida Curriculum	1
St. Johns County “Great to Wait”	1
Teen Aid	1
Teen Health	1
Textbook, County and teacher designed	1
Textbook Health-“Making Life Choices”	1
“The Developing Child”-Adopted text	1
UF Team Packs	1

In terms of teaching materials, more than one-half of the respondents reported using “Commercial materials” (52%) or ‘Materials developed by [the] district’ (55%). Approximately 46% of these respondents used materials they developed on their own, and about one-third used “Library materials” (32%) or “Donated or free materials” (37%). Just fewer than 10% of those who taught sex education used “Materials developed by [the] school.” In addition, 28% of these respondents note “Other” materials they used to teach sex education. Approximately three-fourths of these respondents noted that they had “Diagrams or photos of human reproductive anatomy” (79%) or “Videos/films on sexuality-related topics” (76%). About two-thirds of the respondents reported having “Diagrams or photos of sexually transmitted infections” (65%) or “Statistics on sexual health issues” (64%) as resources. More than one-half of these respondents said they had “Written materials on sexuality” (51%) or “Pamphlets on sexuality-related topics” (53%). About two-fifths of these educators reported having “Books on sexuality-related topics” (41%) or “Internet materials on sexual health-related topics” (39%).

Aim 4: What is the Course Content of Sexuality Education?

Abstinence

Overall, respondents adhered strictly to the federal guidelines of abstinence-only education (i.e., “Abstinence A-H”). Nearly all of the respondents who taught sex education during the 2005–2006 school year reported that they taught “that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, STIs, and other associated health problems” (97%); “the social, psychological, and health gains to be realized by abstaining from sexual activity” (95%); and, “how to reject sexual advances and how alcohol and drug use increases

vulnerability to sexual advances” (92%). More than 80% of these respondents said they taught “the importance of attaining self-sufficiency before engaging in sexual activity” (85%) and “abstinence from sexual activity outside marriage as the expected standard for all school age children” (82%). Results for all abstinence-related questions may be found in Table 3.

TABLE 3 Teachers' Reported Inclusion of “Abstinence A-H” Topics (from Section 510 of Title V of the Social Security Act)

In My Classroom, I Teach...	Yes (%)	No (%)
The social, psychological, and health gains to be realized by abstaining from sexual activity.	95	5
Abstinence from sexual activity outside marriage as the expected standard for all school age children.	83	18
That abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, STIs, and other associated health problems.	97	3
That a mutually faithful monogamous relationship in context of marriage is the expected standard of human sexual activity.	70	30
That sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects.	68	32
That bearing children out-of-wedlock is likely to have harmful consequences for the child, the child's parents, and society.	72	28
Young people how to reject sexual advances and how alcohol and drug use increases vulnerability to sexual advances.	92	8
The importance of attaining self-sufficiency before engaging in sexual activity.	85	15

Human Development

Respondents reported that the most widely covered topics within the category of human development were “Reproduction” (97%), “Puberty” (91%), and “Sexual anatomy and physiology” (89%). The topic least likely to be covered in this category was “Sexual orientation”—less than one-third (29%) of the respondents covered this topic.

Personal Skills

Respondents reported that the most widely covered topics within the category of personal skills were “Decision making” (97%), “Communication skills” (93%), and “Values” (93%). The topic

least likely to be covered in this category was “Negotiation”—less than three-fifths (59%) of the respondents covered this topic.

Relationship Topics

All of the topics presented in the relationship category were covered by more than three-quarters of the respondents. Respondents reported that the most widely covered topics within the category of relationships were “Families” (91%), “Friendship” (89%), and “Love” (89%). The topic least likely to be covered in this category was “Raising children”—about three-quarters (79%) of the respondents covered this topic.

Sexual Behavior

Only two of the topics in the category of sexual behaviors were covered by more than one-half of the respondents. Respondents reported that the most widely covered topics within the category of sexual behavior were “Abstinence” (98%) and “Human sexual response” (56%). The topics least likely to be covered in this category were “Masturbation” (27%), “Shared sexual behavior” (21%), “Sexual dysfunction” (17%), and “Sexual fantasy” (10%).

Sexual Health

Respondents reported that the most widely covered topics within the category of sexual health were “HIV/AIDS” (99%), “Sexually transmitted diseases” (97%), and “Reproductive health” (88%). The topic least likely to be covered in this category was “Abortion”—about two-fifths (42%) of the respondents covered this topic.

Aim 5: Are Training and Assistance Available to Sexuality Educators?

The final subset included a series of five questions about training in sex education and the kinds of assistance respondents might be interested in receiving. The first question in this section asked the respondents whether they have ever received any formal training to teach sexual education. Slightly more than one-half (54%) of the respondents reported that they had received formal training to teach sex education, while 46% had not. Table 4 shows the response rates for teachers' reported training in various sexuality education topics.

TABLE 4 Teachers' Reported Sexuality Education Training (Among Teachers Who Reported Receiving Training)

	Within the last year (%)	Within the last two (%) years	More than two years (%)ago	Never received training in topic (%)
Human development	8	11	76	5
Personal skills	8	12	72	8
Relationships	7	9	74	11
Sexual behavior	9	13	67	12
Sexual health	12	14	68	7

Most of the respondents who had received formal training in sex education received that training “More than two years ago.” Approximately three-quarters of these respondents received training in “Human development” (76%), “Personal skills” (72%), or “Relationships” (74%) more than two years ago. Respondents were more likely to have received recent training in “Sexual health.” A total of about one-fourth of these respondents said that they had received formal training in sexual health “Within the last year” (12%) or “Within the last 2 years” (14%). Approximately one-eighth (12%) of these educators “Never received training” in “Sexual behavior.”

Approximately three-fifths (61%) of the survey respondents said they would be interested in receiving more training in sex education. Just over one-fourth (26%) of the respondents reported that they would not be interested in receiving more training in sex education, and nearly 14% said they “Don't know” if they'd be interested in training.

The final question asked respondents: “What kinds of assistance, if any, would help you discuss each of the following topics?” and presented a list of topic categories covered in a sex-education course. Nearly one-half (48%) of the respondents would find “Accurate Information” helpful in discussing “Sexual health” in the classroom. Almost two-thirds (65%) of these educators would find “Teaching materials” helpful in discussing “Relationships” in the classroom and one-half (50%) of the respondents thought assistance in the form of “Teaching strategies” would be useful in discussing this topic. The respondents were mostly likely to say that assistance was not needed in discussing “Human development” (21%).

DISCUSSION

The majority of Floridian teachers who responded to the survey were female, over the age of 40, White, certified in “Family and Consumer Sciences,” and held Bachelor's or Master's degrees. According to these individuals, sexuality education was offered in most schools during the 2005–2006 school year and was most often taught in the ninth or tenth grade by either a “Health” or “Family and Consumer Sciences” teacher. A fair number of current sexuality educators had been teaching for over 15 years. The majority had been teaching sexuality education between two and ten years, and most taught eighth through twelfth grades. Discussions the of major issues reported by teachers regarding sexuality education in Florida's public schools, as well as study limitations, are reported individually in the following sub-sections.

Limited Access to Sexuality Education

Overall, sexuality education was a requirement for all students in only a small percentage of schools. Most often the situation was that parental consent, either active or passive, was required. This is of concern in that a limited number of students may actually have had access to information based on the decisions of their parents and guardians. Although the vast majority of parents in previous studies have expressed support for school-based sexuality education, and relatively few students may actually be “opted out” by their parents, any students who are barred access to sexuality-education classes may realistically be deprived of one of the few opportunities in which to gain this information. The Office of the Surgeon General (2001) states that it is the responsibility of a community to ensure that all of its members have access to medically accurate and culturally appropriate sexuality education.

Late Onset of Sexuality Education

Relatively few teachers reported teaching sexuality education in middle school (sixth to eighth grades). The Office of the Surgeon General (2001, p. 15) recommends that schools should “(p)rovide access to education about sexual health and responsible sexual behavior that is thorough and wide-ranging, begins early, and continues throughout the lifespan.” Additionally, SIECUS (2004) advises that age-appropriate sexuality-education messages should begin to be delivered as early as kindergarten and continue through middle childhood (ages 5–8, early elementary school), preadolescence (ages 9–12, later elementary school), early adolescence (ages 12–15, middle school/junior high school), and adolescence (ages 15–18, high school). According to the teachers in our sample, students in Florida are being exposed to school-based sexuality education relatively late which may be detrimentally impacting their sexual health.

Limited Time Devoted to Sexuality Education

Most educators reported that students received less than 20 hours of classroom contact time during the 2005–2006 school year; these educators spent less than 25% of classroom time on sexuality education; and sexuality education was most often taught as part of another course. Ideally, according to SIECUS (2004, p. 79), comprehensive sexuality education programs would cover all 39 topics included in their formal guidelines. However, in reality, constraints on time and resources are serious issues for school teachers and, although teachers reported high rates of covering many sexuality-related topics, all issues may simply not be covered in depth or breadth. Educators with this dilemma may choose the topics they cover based on the amount of time and resources available and/or the needs of the students. This may be best facilitated by systematically communicating with students and asking which concepts, topics, and developmental messages are most important to them.

No Standardization or Regulation of Curricula

In terms of curricula and materials used, most sexuality educators reported use of an official curriculum; however, it remains fairly unclear as to what an “official curriculum” is. For example, more than half of educators used a “locally developed curriculum.” In reality, this could be anything; indeed, in qualitative comments on our surveys, teachers reported using everything from formal state or local guidelines to “Internet information” and “County curriculum from 1990 which I update as much as possible” (Table 2). In short, there appears to be absolutely no uniformity in terms of underlying value systems or philosophical foundations for sexuality education in Florida. For better or for worse, the law leaves the determination of curriculum content, including curricula for sexuality education, up to individual school systems (Office of the Surgeon General, 2001). However, individual states and local systems may or may not set minimum standards. SIECUS (2004, p. 84) advocates that, at a bare minimum, all curricula should be reviewed closely in order to ensure that key concepts and topics are covered,

the information is medically accurate, culturally and developmentally appropriate, and that the materials are not based on fear or shame. The organization also provides curriculum evaluation tools in their guidelines to assist policy makers and educators with this daunting task. In Florida, thus far, such a “minimum standards” evaluation has not yet taken place and is desperately needed.

Lack of Teacher Training

Slightly more than half of teachers have been formally trained in teaching sexuality education, and almost all of those more than two years ago. These figures are similar to other abysmally low estimates of training in other studies (Price, Kirchofer, Telljohann, & Dake, 2003). According to the SIECUS Guidelines (2004, p. 19) “(s)exuality education should be taught by specially trained teachers who... must receive training in human sexuality, including the philosophy and methodology of sexuality education.” The Office of the Surgeon General (2001) also recommends that all professionals who deal with sexual issues be provided with adequate training and that they should be encouraged to use the training.

The lack of training among teachers in Florida is concerning because, for many youth, they will be the first and only point of contact for accurate information regarding sexual health. In addition, untrained teachers may be uncomfortable or simply unable to answer questions students have regarding sexual health (Price et al., 2003). Encouragingly, most teachers in our sample reported that they are interested in receiving more training. Comprehensive training efforts for teachers throughout the state would ultimately benefit both teachers and students. In terms of assistance, teachers in our sample reported that accurate information for discussing sexual health and teaching materials and teaching strategies for discussing relationships would be most helpful. It will be up to the state and local systems to determine whether or not such training and assistance will be provided to teachers who are reportedly in great need.

Inconsistent and Unclear Classroom Content

Although there is ample evidence that the majority of Americans favor some form of sexuality education in public schools (Smith, 2000), as well as proof of the success of comprehensive school-based sexuality–education programs (Kirby, 2001, 1999), the issue of the actual content of sexuality education programs remains highly controversial for many, including teachers. This was reflected in our sample. It was not surprising to us that abstinence was covered more often than any other topic among teachers in our sample, particularly given the “stress abstinence” policy within the state and the amount of federal funding which Florida receives for abstinence-only education. The vast majority of our survey respondents adhered strictly to the federal requirements for abstinence-only education (i.e., “Abstinence A-H”). Abstinence is inarguably a fundamental component of any comprehensive sexuality education program. Overall, Kirby (1999, 2001) found that educational programs that emphasized abstinence, but also included

information on condoms and other forms of protection, have proven to be significantly more effective in delaying sexual debut and risky behaviors than abstinence-only programs alone.

It is noteworthy that a substantial number of teachers reported providing some form of information on a wide array of topics other than abstinence. Of great concern, however, is that the content (and quality) of the information being taught remains completely unclear. Further qualitative inquiry in this area of research is urgently needed. Although teachers report providing information on many topics, such as “contraception,” it may actually be confusing to students if presented simultaneously with stringent “Abstinence A-H” content. Such approaches may actually result in doing more harm than good when students are presented with conflicting messages. Given the volatile climate in many school districts, teachers may also choose to stick with topics that are “safer,” or less controversial, out of necessity. For example, within the domain of human development, “reproduction,” “puberty,” and “sexual anatomy and physiology” were most often covered while “sexual orientation” was covered least. Sexual orientation, in particular, is a salient issue in adolescence and the stigma and discrimination that youth may experience as a result of their actual or perceived sexual behaviors, orientation, or identity may have a significant and negative impact on their overall health and wellbeing (Office of the Surgeon General, 2001). Additionally, Santelli and colleagues (2006) recommend that programs should make a concerted effort to focus on the special needs of at-risk groups in the classroom and community (such as youth who may be gay, lesbian, bisexual, transgender, and/or questioning their sexualities).

As another example, within the domain of sexual health, “HIV/AIDS,” “STIs,” and “reproductive health” were most likely covered, while “abortion” was barely covered at all. Abortion is likely one of the most contentious topics in sexual health, particularly in relation to young adults. However, providing accurate and comprehensive information on abortion is extremely important due to the fact that a higher proportion of adolescent pregnancies conclude in abortion (29%) than do pregnancies for women over age 20 years (21%) (Office of the Surgeon General, 2001). The SIECUS Guidelines (2004) recommend that, at the very least, age-appropriate messages should be delivered to youth which cover the full range of realistic options for women who become pregnant (birth, adoption, and abortion), as well as referrals for where students can acquire more information.

Study Limitations

As with all research, the findings from this assessment must be interpreted considering their limitations. Mail-based random sampling techniques have proven to be problematic in previous studies on sexuality education and sexual behaviors, mainly due to low response rates (Delbanco, Lundy, Hoff, Parker, & Smith, 1997; Dodge, Sandfort, Yarber, & de Wit, 2005; Weinberg, Lottes, & Shaver, 2000). Our response rate of approximately 25% is typical for mail-based surveys but still relatively low. Many factors may affect the response rate to a survey and, in our case, there were three factors that almost certainly reduced the rate of response. First, potential

respondents are less likely to complete a survey if they feel that the topic is sensitive. It is very likely that many of the teachers who were sent survey packets were reluctant to share that information given the volatile context surrounding sexuality education in Florida. Second, the length of the survey may have affected response rates as it contained numerous detailed, multi-part questions. Many teachers were likely reluctant to spend the time answering all of the questions. Finally, the survey was distributed just as teachers were completing the school year (May 2006). Most teachers were busy completing their grading, and it is likely that completing the survey was not their first priority or they had left their schools before completing the survey.

Last, using a cross-sectional method, it is possible that a survey may not have fully assessed complex and dynamic factors that are reflective of school-based sexuality-education programs. For example, the limited operationalization of concepts such as topics covered in the classroom on a brief one-time questionnaire did not allow us to assess the content and quality of such instruction even if previously a particular topic (for example, gender roles) was reportedly covered. Future research endeavors in Florida would greatly benefit from a more in-depth investigation of the individual sections of our survey than we were able to employ in our samples through ongoing and additive research.

CONCLUSIONS AND RECOMMENDATIONS

In a recent policy statement, the American Public Health Association (2006) recommended that evidence-based sexuality education programs be available to all students in order to ensure the promotion of responsible sexual health among youth in the United States. These recommendations include requiring local school districts to plan and implement comprehensive sexuality education as an integral part of comprehensive K–12 health education (American Public Health Association, 2006 pp. 23–24). Specifically, the information taught should be scientifically and medically accurate, based on evidence, and should be consistent with community standards but implemented in a “non-judgmental” manner that remains value-aware and does not impose religious beliefs on students. In addition, the content should be “age, developmentally, linguistically, and culturally appropriate” and should be taught only by teachers who have been specially trained in the content. Last, schools should be required to make this information available to all students unless a parent makes a specific request to withhold this opportunity from the student (i.e., “opt-out”). According to the teachers who responded to our survey, the policymakers, legislators, and others involved in decisionmaking surrounding sexuality education in Florida have failed on all counts of these recommendations.

Overall, participants reported numerous barriers to providing comprehensive sexuality education in Floridian schools. Even though the vast majority of teachers (87%) acknowledged that sexuality education, in some form, took place in their schools, it was most often afforded little time, occurred late in the students' academic career, had little to no uniformity in terms of what was taught and who was teaching it, had no standards in terms of training or quality assurance, was not accessible to all students, and may not adequately address the realistic needs of students.

In order to remedy the current situation, state organizations and advocacy groups located within the state may consider initiating campaigns to promote comprehensive sexuality education in Florida's public schools. Such initiatives may be comprised of public health experts, governmental officials, school personnel, parents, students, and other stakeholders and should determine the direction of how to best implement more comprehensive strategies within the state of Florida, given its unique social and cultural context.

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REFERENCES

1. Albert, B. 2004. American opinion on teen pregnancy and related issues 2003, Washington, D.C.: National Campaign to Prevent Teen Pregnancy.
2. American Public Health Association-Association News. 2006. 2005–10 Sexuality education as part of a comprehensive health education program in K–2 schools Retrieved October 13, 2006, from <http://www.apha.org/legislative/policy/2005/2005–10.pdf>
3. Bleakley, A., Hennessy, M. and Fishbein, M. 2006. Public opinion on sex education in U.S. schools. *Archives of Pediatrics and Adolescent Medicine*, 160: 1151–1156.
4. Delbanco, S., Lundy, J., Hoff, T., Parker, M. and Smith, M. 1997. Public knowledge and perceptions about unplanned pregnancy and contraception in three countries. *Family Planning Perspectives.*, 29: 70–75.
5. Dodge, B., Sandfort, T. G. M., Yarber, W. L. and de Wit, J. B. F. 2005. Sexual health among male college students in the United States and the Netherlands. *American Journal of Health Behavior.*, 29: 172–182.
6. Eng, T. R. and Butler, W. T. 1997. *The hidden epidemic: Confronting sexually transmitted diseases*, Washington, D.C.: National Academy Press.
7. Florida Department of Health. 2003. Florida HIV/AIDS annual report. Retrieved November 19, 2005, from http://www.doh.state.fl.us/disease_ctrl/aids/trends/epiprof/AnnualRpt2003.pdf

8. Florida Statutes. 2006. Health education; instruction in acquired immune deficiency syndrome. Retrieved May 25, 2007, from <http://www.leg.state.fl.us/statutes/index>
9. Guttmacher Institute. 2006a. Contraception counts: Florida Retrieved March 16, 2006, from http://www.guttmacher.org/pubs/state_data/states/florida.pdf
10. Guttmacher Institute. 2006b. State policies in brief as of May 1, 2006: Sex and STD/HIV education Retrieved May 11, 2006, from http://www.guttmacher.org/statecenter/spibs/spib_SE.pdf
11. Hauser, D. 2004. Five years of abstinence-only-until-marriage education: Assessing the impact. Advocates for Youth Retrieved May 11, 2006, from <http://www.advocatesforyouth.org/PUBLICATIONS/stateevaluations.pdf>
12. Israel, B. A., Schulz, A. J., Parker, E. A. and Becker, A. B. 1998. Review of community-based research: Assessing partnership approaches to improve health. Annual Review of Public Health., 19: 173–202.
13. Kaiser Family Foundation. 2002. Issue update: Sex education in the U.S.: Policy and politics Publication # 3224. Retrieved October 13, 2006, from <http://www.kff.org>
14. Kaiser Family Foundation. 2006. Sexual health statistics for teenagers and young adults in the United States Retrieved October 13, 2006, from <http://www.kff.org/womenshealth/3040.cfm>
15. Kirby, D. 1999. Reducing adolescent pregnancy: Approaches that work. Contemporary Pediatrics., 16: 83–94.
16. Kirby, D. 2001. Emerging answers: Research findings on programs to reduce teen pregnancy (Summary), Washington, D.C.: National Campaign to Prevent Teen Pregnancy.
17. Kirby, D. 2002. Do abstinence-only programs delay the initiation of sex among young people and reduce teen pregnancy?, Washington, D.C.: National Campaign to Prevent Teen Pregnancy.
18. Klein, N. A., Goodson, P., Serrins, D. S., Edmunson, E. and Evans, A. 1994. Evaluation of sex education curricula: Measuring up to the SIECUS guidelines. Journal of School Health., 64: 328–333.
19. Lindbergh, L. D., Santelli, J. S. and Singh, S. 2006. Changes in formal sex education: 1995–2002. Perspectives on Sexual & Reproductive Health., 38: 182–189.
20. Office of the Surgeon General. 2001. The surgeon general's call to action to promote sexual health and responsible sexual behavior, Rockville, MD: Author.

21. Price, J. H., Kirchofer, G., Telljohann, S. and Dake, J. A. 2003. Elementary school teachers' techniques of responding to student questions regarding sexuality issues. *Journal of School Health.*, 73: 9–14.
22. Santelli, J., Ott, M. A., Lyon, M., Rogers, J., Summers, D. and Schleifer, R. 2006. Abstinence and abstinence-only education: A review of U.S. policies and programs. *Journal of Adolescent Health*, 38: 72–81.
23. Schuster, M. A., Bell, R. M. and Kanouse, D. E. 1996. The sexual practices of adolescent virgins: Genital sexual activities of high school students who have never had vaginal intercourse. *American Journal of Public Health.*, 86: 1570–1576.
24. Sexuality Information and Education Council of the United States (SIECUS). 2004. *Guidelines for Comprehensive Sexuality Education Kindergarten through 12th Grade*. National Guidelines Task Force. , 3rd Edition, Washington, D.C.: SIECUS.
25. Sexuality Information and Education Council of the United States (SIECUS). 2005. SIECUS public policy office state funding charts. Retrieved May 25, 2007, from <http://www.siecus.org/policy/states/>
26. Sexuality Information and Education Council of the United States (SIECUS). 2006. SIECUS public policy office state profile: Florida Retrieved June 1, 2007, from <http://www.siecus.org/policy/states>
27. Smith, T. 2000. Data from the general social survey, Chicago, IL: National Opinion Research Center, University of Chicago.
28. Weinberg, M. S., Lottes, I. and Shaver, F. 2000. Sociocultural correlates of permissive sexual attitudes: A test of Reiss's hypothesis about Sweden and the United States. *The Journal of Sex Research.*, 37: 44–52.