



“Am I qualified? How do I know?” A Qualitative Study of Sexuality Educators’ Training Experiences

Marla E. Eisenberg, Nikki Madsen, Jennifer A. Oliphant, Renee E. Sieving, and Michael Resnick

ABSTRACT

Background: National Health Education Standards in the U.S. focus on key concepts and skills around health issues, including sexuality. However, little is known about the extent to which classroom teachers are trained to deliver sexuality education. **Purpose:** The purpose is to explore pre-service training experiences and needs of sexuality educators in Minnesota. **Methods:** Seven focus groups were conducted with a diverse sample of 41 sexuality educators, and qualitative analysis was used to detect themes across groups. **Results:** Results indicate a wide variety of pre-service teaching experience, ranging from no instruction to extensive training. Teachers had numerous suggestions for ways their training could have better prepared them to teach sexuality education, such as ways of working with culturally diverse students. Teachers described many ways in which they were unprepared in their first year of teaching sexuality education. **Discussion:** Training programs to prepare sexuality educators are not adequately preparing teachers for their multifaceted role. Findings point to the need to train sexuality educators differently than teachers for other subjects. **Translation to Health Education Practice:** Findings indicate that pre-service training programs should greatly expand their offerings, tighten requirements and hone methodologies in sexuality education to meet the needs of today’s teachers and students.

Eisenberg ME, Madsen N, Oliphant JA, Sieving RE, Resnick M. “Am I qualified? How do I know?” A qualitative study of sexuality educators’ training experiences. *Am J Health Educ.* 2010;41(6):337-344. This paper was submitted to the Journal on April 1, 2010, revised and accepted for publication on July 15, 2010.

BACKGROUND

The formation of romantic relationships plays a significant role in healthy adolescent development, particularly in helping youth to understand their own identity and how they relate to others in the world.¹ Schools are the place where we prepare young people for adulthood—academically, physically and socially—and teachers are trusted to facilitate this growth and learning. Proper preparation for this task is essential. In addition, U.S. adolescents have among the highest rates of pregnancy and sexually transmitted infections (STIs) in the industrialized world.^{2,3} School-based sexuality education programs are an established part of a panoply of prevention strategies that

have the capacity to reduce high risk sexual practices among youth, thereby reducing unplanned pregnancy and STIs in this population.⁴ Maximizing their effectiveness is an important public health goal.

SCHOOL-BASED SEXUALITY EDUCATION

Over the past few decades, policy debates have focused on what constitutes appropriate content of school-based sexuality education. At present, policies vary considerably across the United States, with the majority of states requiring some form of sexuality education in public schools.⁵ Additionally, past research shows that almost all students will receive sexuality education before they

Marla E. Eisenberg is an assistant professor in the Department of Pediatrics, University of Minnesota, Minneapolis, MN 55414; E-mail: eisen012@umn.edu. Nikki Madsen is the associate director at Pro-Choice Resources, Minneapolis, MN 55401. Jennifer A. Oliphant is a research fellow and community outreach coordinator in the Department of Pediatrics, University of Minnesota, Minneapolis, MN 55414. Renee E. Sieving is an associate professor with the Center for Adolescent Nursing, School of Nursing, University of Minnesota, Minneapolis, MN 55455. Michael Resnick is a professor in the Department of Pediatrics, University of Minnesota, Minneapolis, MN 55414.



graduate.⁶ However, school control is localized, with determination of content varying by school district and even in many cases by teacher, and sexuality education is taught as part of several different subjects.⁶ There are no state-required trainings or certifications specific to sexuality education in public school classrooms. Health teachers are most often given the assignment of delivering sexuality education,⁶ and many states' licensing requirements for health teachers specify that prevention of HIV, sexually transmitted infections and pregnancy are a part of their training program.

National Health Education Standards describe the knowledge and skills students are expected to achieve by certain grade levels, and provide a framework for curriculum development, instruction and assessment in health education.⁷ However, these concepts are broad, and university-based teacher training programs are not held to teaching specific content or skills around sexuality. Little is known as to how current teacher training programs are preparing teachers to deliver sexual health content in the classroom. A handful of studies in the 1980s and 1990s investigated the extent to which pre-service classroom teachers were trained in sexuality education or HIV/AIDS prevention specifically. At that time, approximately one in three colleges offered compulsory and/or optional courses designed to train teachers to teach sex education for students majoring in education.^{8,9} Sixty-one percent of institutions surveyed required students in health education certification programs to take a sexuality education course; no colleges required students specializing in other subject areas (e.g., science, special education) to take a sexuality education course¹⁰ and only one-quarter of institutions reported offering a course on HIV/AIDS.¹¹ Consequently, many teachers come to teach sexuality education with minimal formal education in sexuality.^{6,12} Although these studies are older, many teachers trained in that era are teaching sexuality content today.

It is important to note that surveys of training programs do not necessarily capture the experiences of pre-service

teachers-in-training. Even where a program administrator reports that sexual health content is offered in a required class, such offerings may or may not be sufficient for participants to feel they have gained skills and content to prepare them for teaching this topic. Although more recent research has indicated that preparation for sexuality education may be emphasized in other parts of the world (e.g., New Zealand¹³), we are not aware of more recent research with U.S. teacher training programs or pre-service teachers regarding their training in sexual health.

Benefits of Training for Sex Education

Research suggests that training to teach particular content can improve knowledge, perceived importance, self-efficacy and comfort in teaching that content,^{12,14-18} and students have indicated a preference for sex educators who are knowledgeable, professional and comfortable handling "sensitive" issues.¹⁹⁻²⁰ Pre-service and practicing teachers in a variety of subject areas reported that the higher level of knowledge and skills they possessed regarding health education, the more prepared and competent they felt to teach it.¹⁷ This finding also held among classroom health teachers: higher levels of training and experience in health education were associated with feelings of competence, confidence and comfort in fulfilling their role.^{12,18,21} Sexuality education is perhaps the most sensitive topic within the domain of health education; Lindau and colleagues found that training in sexual health was a significant predictor of teaching comprehensive sexuality education and covering a greater number of sexual health topics.²²

Although abstinence education continues to be taught and federally funded in the U.S., the current administration has also dedicated funds to evidence-based comprehensive sexuality education programs.²³ Comprehensive sexuality education requires that teachers provide information on a wider variety of topics, including many that teachers are less likely to teach because of concerns over potential controversy.^{24,25} Focused training will be essential to implementing comprehensive programming effectively.

PURPOSE

Much of the research in this area was conducted: (1) a number of years ago, (2) outside the U.S., or (3) with training institutions rather than teachers themselves. The broad goal of this research was to identify experiences, supports and challenges that today's teachers face in teaching sexuality education. Our more specific goal was to explore pre-service training experiences and needs of sexuality education teachers in Minnesota. Specific research questions focus on the type and extent of pre-service training for sexuality education, additional pre-service training desired by teachers, and reactions and experiences as a new sexuality education teacher. Findings are expected to be informative for administrators, educators and policy makers involved in teacher preparation.

METHODS

Design, Recruitment and Sample

We conducted seven focus groups with sexuality education teachers from a diverse group of schools throughout Minnesota.^{26,27} Study participants included 41 sexuality education teachers for students in grades 4-12 in urban, suburban and rural areas of the state, including full-time classroom teachers ($N=31$) and community-based sexuality educators ($N=10$) who teach in various settings including schools. Two primary methods were used to recruit participants. First, the Minnesota Department of Education provided a contact list of all health teachers in the state ($N\sim 800$). Study staff sent a letter of invitation to these teachers at their school addresses; follow-up e-mail invitations were sent to teachers for whom e-mail addresses were available. Second, study information was made available to teachers via local reproductive health organizations, conference tables and reproductive health newsletters. This recruitment method allowed for inclusion of sexuality education teachers licensed in disciplines other than health. Interested teachers who learned about the study through either recruitment method contacted study staff directly and were assigned to a scheduled



focus group based on their preferred time and location.

A diverse sample of teachers was recruited, including participants from populations that are under-represented in health education in Minnesota (male, African American & Latino educators). Participants had a broad range of teaching experience, ranging from 1-30+ years. They included teachers with health education backgrounds and those from other disciplines (e.g., Family and Consumer Science (FACS) teachers; community-based sexuality educators); middle and high school teachers; teachers from large and small schools; and those teaching in traditional public schools, charter schools and alternative learning centers. The format, timing and length of their sexuality education programs also varied, from single sessions to semester-long courses.

Focus Group Interview Guide

The focus group interview guide was developed by the interdisciplinary study team (all authors) with expertise in adolescent health, epidemiology, nursing and education, in consultation with colleagues at the Minnesota Department of Education, and the Birds & Bees Project. Questions were designed to elicit information about the supports teachers receive and the challenges they face in teaching sexuality education, and were based on the Birds & Bees Project's experience working with teachers with sexuality education assignments for over 35 years. Questions were ordered with the intent of moving from less sensitive to more sensitive topics in order to build rapport during the focus group session.

An initial set of discussion questions was pilot tested with a focus group of community-based sexuality educators. At the conclusion of the pilot focus group, participants were asked to comment on question ordering, clarity, language, sensitivity and other aspects of the focus group script; this feedback was used to further revise the focus group guide. As is common in qualitative research, the interview guide underwent additional revision following initial study focus groups. The focus group team reviewed the script and protocols after conducting two

focus groups; additional minor revisions to question wording and ordering were made at that time.

The final focus group interview guide contained nine questions and related probes (described elsewhere). The present report focuses on teachers' responses to three sets of questions regarding training and initial teaching experiences:

- What kind of training did you have to prepare you to teach this subject matter? Did you receive any specific sex education training?
- What additional training or support would have been helpful to you in college or prior to teaching sexuality education?
- What was your reaction when you were first assigned to teach sex ed? What did you think it would be like to teach sex ed? How has your experience compared to what you first expected?

Additional characteristics of participants and their sexuality education programs were not systematically collected. Many volunteered this information in the course of discussion, and available information is used to describe participants throughout the results section.

Focus Group Data Collection

Data collection was conducted in January and February 2009. Focus groups were convened in various settings (e.g., conference rooms, public libraries). Two groups were specifically scheduled around statewide teacher conferences to accommodate participants from throughout the state who gathered for these events. Groups were planned to include between 4 and 10 participants,²⁶ and actually included between 2 (one group) and 12 participants (one group).

Two study staff conducted each focus group, including a facilitator and a notetaker who recorded participants' comments. Facilitators were trained in general focus group methods during their graduate school training and had extensive experience in this type of data collection. In addition, study staff and investigators met on two occasions for specific training on this project, including reviewing the focus group script and discussing protocols and responses

to particular issues that might arise. All focus groups were digitally recorded, and recordings were transcribed verbatim by an experienced transcriptionist. Focus group discussions ranged from 60 to 105 minutes. All participants received a \$25 gift card in appreciation for their time and insights. All study protocols were approved by the University of Minnesota's Institutional Review Board.

Analysis

The first run of data analysis was conducted by the study's principal investigator. When the first run was complete, an additional member of the research team reviewed all original documents, initial coding documents and the initial coding scheme, and suggested revisions throughout, which were used to revise the analysis. Both coders received training in qualitative data analysis as part of their graduate training programs.

Analysis began with a complete review of all digital recordings and transcripts. Minor transcription errors were corrected and certain jargon and abbreviations were clarified in consultation with the other focus group facilitator. All responses to each focus group question set were grouped in separate documents. Additional comments about challenges and supports not directly related to any focus group question were also grouped, and these comments were set aside (approximately 9% of total). Over 900 unique, substantive comments were coded, excluding interjections of agreement (e.g., "That's a good way to put it!") and clarifying questions or comments asked by participants (e.g., "So can you teach that?").

Within each document, all comments were organized by themes and sub-themes in an iterative process, using a standard word processing program.²⁹ Specifically, all quotes were inserted into a word processing table and assigned a general theme reflecting their main point, (e.g., "managing controversy") as a Level 1 heading. Tables were sorted by these headings to group all similarly-themed quotes together; within themes, quotes were then reviewed for sub-themes which further described each Level 1 heading (e.g., "con-



troversty with parents” and “controversy in the classroom” were Level 2 headings). The process was again used to group similar sub-themes within themes, and the process was repeated to characterize Level 3 groupings as needed to provide additional detail for some sub-themes. Quotes were moved among levels and among documents throughout this process to reflect emerging themes and sub-themes. Representative comments within each Level 2 or Level 3 category were highlighted to maintain the integrity of participants’ own words and provide specific examples of teachers’ views and experiences. Comments that did not fit within any theme were removed and previously “leftover” comments were reviewed and incorporated into the coding documents, as appropriate. A written coding scheme was developed to organize all codes, incorporating headings at all three levels and representative quotes.

As a final step in this process, two participating teachers independently reviewed the coding documents and scheme, and provided feedback to increase the validity of the analysis and findings. Their comments on the coding, organization and representative quotations were used to revise the analysis and create a final coding scheme.

RESULTS

Teachers’ views on training experiences are categorized in three sections around focus group interview questions. Each section begins with a participant quote about the topic in general, followed by specific themes and representative quotes from teachers. Themes included: (1) too little preparation for sex education, (2) some training for sex education, (3) comprehensive training, (4) desired additional teaching methods, (5) desired additional sex education content, (6) desired training regarding extracurricular responsibilities, (7) assignment to teach sex education, and (8) expectations and surprises. Information about a participant’s school location, age group(s) and/or primary content area taught were provided by participants during the focus group discussions and follow individual quotes, where available.

Pre-service Training Experiences

“Well, I think one of the tricky things about teaching sex ed, or teaching anything, is that you have to have content knowledge and you also have to know how to teach, and they are really two separate skills.”
(4th-12th grade sexuality educator)

Too little preparation. Participants came to teach sexuality education with a wide variety of training experiences. Although most participants were trained as health teachers, many had no formal training in sexuality education. Those that had some training received it only as part of an elective course or an elective project within a required content or methods course. For some, this lack of training was attributed to the culture and time of their education; for example, those who were educated at religious institutions.

Among teachers who had little pre-service training, many sought out supplemental training opportunities early in their careers, either in specific curricula or from an agency (e.g., Planned Parenthood, Red Cross), to prepare them to teach this subject matter, suggesting that teachers are looking to supplement the training, or lack of training, they received in college in order to meet their teaching position requirements. External trainings were noted to be particularly important by teachers from non-health disciplines (e.g., special education) and community-based sexuality educators whose backgrounds were in non-education fields (e.g., gender studies).

“I had none. Absolutely none. It was a very Catholic college and it was a very long time ago.” (Rural Alternative Learning Center health/FACS teacher)

“When we did mini-lessons I know there was a week we worked sex ed stuff. But that was kind of like us wanting to, so we shared lessons on that. But there was nothing mandated.” (Rural Teen-Aged Parents teacher)

Some sex education training. Teachers who received some form of training

described two general types of content delivery: training focused on sexual health knowledge (e.g. birth control failure rates, sexual health statistics) or teaching methods (e.g. how to facilitate discussion on a sensitive subject). These participants felt they had received some training, but not necessarily adequate training in both skills and pedagogy. While basic information on sexuality was worthwhile, teachers commented that it didn’t necessarily prepare them to teach. A few had methods courses which included sexuality education, and these were particularly useful, as it was widely recognized among participants that this subject matter required different teaching strategies than most other material they taught.

In addition to the courses themselves, several participants remarked that excellent instructors were crucial to their pre-service training for sexuality education. Delivering the content thoroughly and plainly set a good example that teachers were able to emulate in their own classrooms.

“I just felt that I wasn’t given tools to be able to use right in the classroom.”

“I had a course in undergrad which we had a panel [of speakers] ...and also our professors brought in curriculums for us to look at ...and then we would actually do the activities like the kids would.” (6-8th grade health/PE teacher)

“I feel really fortunate. My professor, she didn’t hold back anything.” (Suburban teacher)

Comprehensive pre-service training. In some instances, teachers happened to complete their student teaching during a host teacher’s sexuality education unit. While all who reported having this experience were uncomfortable at the outset, they came to believe it was invaluable training that would be useful for all health educators. Having this “first time” experience as a student rather than a new teacher had several advantages; specifically, it gave student teachers the opportunity to reflect on the experience and get support and feedback from their peers and instruc-



tors. The combination of student teaching sex education and required relevant coursework provided the most thorough preparation for their role as sexuality educators.

"I took a required sex ed class for college and I did student teaching through sex ed. I was nervous and it was probably my best week. ... you have the support back at college with your student teachers. You know, 'How do I say this? What do I do here?'" (Urban 10th grade health teacher)

Additional Desired Pre-service Training

Teaching methods. Teachers had numerous suggestions for ways their training could have better prepared them to teach sexuality education. Because there was general recognition that teaching excellent sex education required training in both content and pedagogy, the primary area in which teachers wanted more education was in the domain that was not emphasized during their training. More specifically, we found a divide between classroom teachers, who typically had strong training in teaching methods but far less in sexuality content, and community-based educators, who typically had extensive training in content but relatively little in pedagogy. More extensive methods training with a particular focus on sexuality would have been welcome by many teachers. For example, participants thought that more exposure to various sexuality education curricula would have been valuable, and acknowledged the importance of practicing teaching sexuality content to gain comfort and experience.

"I think what would be nice ... is to have exposure to different curriculums. ... before you actually get to a school and they look at you and say 'here's some money, buy some curriculum.' ... You know, statistically what's been most successful, instead of having someone coming in and trying to sell you their curriculum. You have time, it's kind of neutral ground to look at the curriculum."

"Don't you think everyone should have to teach a sex ed topic? It's not a big deal

to teach about disease or first aid. That's not the uncomfortable part for the kids or you. So it would've been nice to have to teach that unit or a lesson from that unit." (6-10th grade health teacher)

Sex education content. In addition to teaching methods, teachers had several training needs related to content. Participants repeatedly described the need for culturally-sensitive and culturally-specific sexuality education resources. Particularly in urban settings, many taught in classrooms that were very diverse, including Somali, Asian, Native American, African American, and Hispanic and white youth. Even teachers who felt they had strong sex education training typically did not have materials in other languages, or training that acknowledged the wide range of cultural values and social norms students brought into the classroom.

Formal training about community resources, including how to access and use them, was also highlighted by several participants. These resources were, for many, an excellent way to expand their own sexuality education offerings, which was beneficial for students, as well as a way to extend their own training by learning from community agencies. However, most had learned about these possibilities after beginning as a teacher, rather than in their formal training.

"We have a strong Asian community and their belief in marriage and children and labor is a lot different than my background." (Urban 10th grade health teacher)

"Having [a local clinic] come in and having them do an anatomy lesson. To see them actually perform it. Because then when they were cut I was able to just replicate what she did." (Urban 10th grade health teacher)

Extracurricular responsibilities. Teachers described many additional responsibilities associated with teaching sexuality education, for which they typically received no formal training at all, including managing controversy, the political and advocacy aspects of

sexuality education, and working within school and school district guidelines. These activities were generally acknowledged to be an important part of their job as sexuality educators, but none reported being trained to take on these tasks effectively. Many didn't anticipate the complexities of these roles at all, and shared that they had to "learn as you go."

"That's the thing about methods classes, is you do a lot of practice among other students that all want to do the same thing as you. ... You don't ever get practice in dealing with parents who don't agree with what you are teaching, or students that are challenging what you are teaching, or administrators that are." (Community-based sexuality educator)

"I would say also the politics of it is really valuable. An assignment of advocacy in front of the school board or colleagues or a parent group - you know, that's part of the job." (6-10th grade health teacher)

Sex Education Teaching Assignment and Expectations

Assignment to teach sex education. All health educators agreed that teaching sexuality education was a standard part of their job, and they were expected to teach it. Other teachers found that they were assigned to teach the sexuality unit—or volunteered for it—because they were the only ones within their school or district with a relevant background or training in a particular curriculum. Participants did not report that this was viewed as an undesirable teaching assignment that was given to the teacher with the least seniority. By and large, teachers enjoyed teaching sexuality education and felt it was an extremely important part of their program.

"I think if you are applying for a health job, you pretty much assume you are going to be teaching sex ed." (Urban 10th grade health teacher)

"This is the reason I went into teaching." (Suburban 6-8th grade health teacher)



Expectations and surprises. Most teachers reported that their initial experiences teaching sexuality education were as good as expected or better. Others, however, reported being nervous or embarrassed when they began. In many cases, uncomfortable feelings were attributable to characteristics of the students (for example, one participant reported that a younger relative was a student in her first class) or of the teachers themselves (for example, being close in age to the students they were teaching, or being pregnant).

Many teachers described being surprised in their first years of teaching, both by the students and the parents. Several teachers reported that their students appeared quite sophisticated and knowledgeable, but this was not, in fact, the case. Teachers uncovered surprising and important misunderstandings and gaps in knowledge, for example, a 9th grade boy asking if he had a uterus. Similarly, the range of maturity levels within a class of students initially surprised some teachers, as some were very physically developed and/or sexually experienced, while others were not. Teachers were also surprised by parents, in terms of both the support and the opposition they encountered. Of the two types of parent responses, opposition was more common and many teachers felt unprepared for it.

"I think a lot of it has to do with being so close in age with the kids. Especially when I was student teaching." (Health/PE teacher)

"The ones sitting in back that know everything, but then, 'the baby comes from where?'"

"I think sometimes parents are both more and less worried than I thought they would be. ... We either get parents that are, 'thank you, you're so amazing, we really appreciate you,' ... or parents are livid that you are even talking about it at all. ... So I think that is more than I expected. More extremes than I expected." (Community-based sexuality educator)

DISCUSSION

Several themes emerged across focus groups regarding training experiences and needs of Minnesota's sexuality education teachers. First, sexuality educators came to the task from a variety of backgrounds, with disparate levels of training in sexuality education. Second, teachers described many additional training experiences that would have been beneficial in preparing them to teach sexuality education, including content, methods and extracurricular roles. Finally, the many surprises of early teaching experience point to the need for more thorough and wide-ranging training in sexuality education.

Findings from the present study suggest that training programs to prepare sexuality educators are falling short. Even among those with the most common and relevant professional background, i.e., health education, many found their pre-service training was inadequate; while those coming to sexuality education from other disciplines such as special education or science typically had no training in this content, methodology, or both. This finding is consistent with previous research demonstrating insufficient training. For example, Rasberry and colleagues³⁰ found that almost half of their sample of abstinence education teachers in Texas had received no teacher training, and only 7% had formal training in health or sexuality education. Similarly, studies with special education teachers have highlighted how important these teachers perceive topics of health and sexuality are to their students, and how ill-equipped they believe themselves to be in teaching sexuality education or health education.^{31,32}

In addition to the content and methods of sexuality education, teachers highlighted many related activities that were not addressed in their training, suggesting that even where teacher preparation is considered to be strong; it still does not fully prepare pre-service teachers for the realities of their multifaceted roles. This finding is consistent with previous studies on preparation for health education more broadly. For example, Birch and colleagues queried

master teachers about important components of professional training for health educators, and found that they viewed skills for maintaining a positive classroom atmosphere and garnering support from community, administrators and parents as important as knowledge about content and instructional techniques.³³

These findings point to the need to train sexuality educators differently than teachers for other subjects. An apprenticeship or Urban Teacher Residencies model which incorporates education theory and classroom practice, pairing students with experienced mentors, grouping candidates in cohorts, and building partnerships with non-profits and schools³⁴ may be more appropriate. It would allow trainees the opportunity to learn on the job all of the extra skills required in this position. Practically, this approach may entail requiring a sex education student teaching or mentoring experience for all entering sexuality educators. Importantly, even if excellent teacher training were implemented now, many current sex education teachers received their training many years ago and continue to teach in this field. This indicates a significant need for ongoing in-service training to provide updated materials and information, and new teaching methods for experienced teachers, as well as the workplace supports that will allow them to take advantage of such opportunities.

Findings from this study also reflect deeply ambivalent views on sexuality and sex education that pervade U.S. culture and place teachers—and teacher training programs—in a bind between national policy favoring abstinence-only education and professional obligation to contribute to students' welfare.³⁵ While teachers in the field may recognize students' needs and interest in comprehensive sexuality education, too little training is an example of insufficient structural supports for this role. International comparisons accentuate important differences in these structural supports and cultural norms around sexuality. Findings in Canadian studies of pre-service and in-service health educators are similar to the present study, showing a lack of knowledge,



skills and comfort with regards to sexuality education.^{29,36} However other countries take a broad and comprehensive approach to sexuality (e.g. Sweden, the Netherlands, Australia) which is reflected in the way in which they prepare teachers to educate students on this subject. For example, a recent study of pre-service teachers in New Zealand reported extensive coverage of sexuality content in their training.¹³ The political and social climate regarding sexuality may explain these differences across regions. Working with media, community groups, health care providers, religious leaders and families, as well as educators, may be an important tactic for re-framing the national debate about sex education to focus on issues of health and human rights to information, rather than issues of morality.

Limitations and Strengths

Participants in the present study were volunteers and not necessarily representative of all sexuality education teachers in Minnesota. However, it is important to note that this kind of discovery-oriented qualitative research is intended to delve deeply into a relatively new content area with those who have extensive experience with the subject matter; findings are not necessarily intended to be generalizable. In addition, data regarding teachers' race, location, primary discipline, etc. were not systematically collected; rather, participants volunteered this information as they chose in order to enhance comfort with the group and the discussion process. Examining patterns of response within and across any teacher characteristics might contribute greater nuance to our understanding of sexuality education training needs, but is impossible given this limitation. Finally, while teachers from outside the Twin Cities metropolitan area were included in the sample, we were unable to hold focus groups in other areas of the state. Doing so might have resulted in greater participation among teachers in rural areas, whose voices may be under-represented in this study.

Strengths of the study include participation by a wide variety of sexuality educators, including classroom health and other

teachers, those in special programs (e.g., Alternative Learning Centers, teen parents' program), and those based at community organizations and clinics. This diversity of background and experience brought many perspectives into the dialogue, and permitted deeper reflection on training than may have been possible with a more homogenous sample. In addition, the focus group guide was developed with input from a variety of professionals, including experts in adolescent health research, community-based organizations engaged in sexuality education, and sexuality educators themselves. This approach yielded an instrument designed to capture many different aspects of sexuality education training and teaching experience.

TRANSLATION TO HEALTH EDUCATION PRACTICE

The viewpoints expressed in this study highlight important considerations in preparing teachers involved in sexuality education with young people. First, education programs—particularly health education programs—should require training in both sexuality content and appropriate teaching methods. Because sexuality education is a standard element of health education programming in most school systems, pre-service training in sexuality education is a fundamental element of health education programs. Training programs in other subject areas where sexuality education is often included, such as family and consumer science, physical education, science and special education should also make relevant coursework available to pre-service teachers. To address challenges in teaching sexuality education, sexuality education training should routinely address topics such as understanding and teaching to diverse learners; answering difficult questions; understanding divergent moral perspectives on sexuality education; and responding effectively and empathetically to community reactions to sexuality education content and process.³⁷ Education programs should also consider expanding practicum experiences that allow teachers hands-on practice with teaching

classroom sexuality education and feedback from mentors.

Quantitative research is a critical next step to describe the training experiences of a representative sample of sexuality education teachers. Future research in this area should focus on detailed training experiences, specific deficits in training programs and predictors of limited sexuality education training (e.g., characteristics of the program, community factors). Longitudinal research examining variations in teacher training (in both academic and non-academic settings) and subsequent variations in tenure as a sexuality educator, satisfaction in this role and effectiveness in enhancing students' knowledge, skills and sexual health outcomes could provide even stronger evidence for implementing robust sexuality education as part of pre-service teacher training.

ACKNOWLEDGEMENTS

This study was funded by the Birds & Bees Project. This research was also supported in part by Cooperative Agreement Number U48DP001939 from the Centers for Disease Control and Prevention. The findings and conclusions are those of the authors and do not necessarily represent the official position of the CDC.

REFERENCES

1. Furman W, Collins A. Adolescent romantic relationships and experiences. In: Rubin KH, Bukowski WM, Laursen, eds. *Handbook of peer interactions, relationships, and groups*. The Guilford Press. 2008.
2. Ventura SJ, Amba JC, Mosher WD, Henshaw SK. Estimated pregnancy rates by outcome for the United States:1990-2004. *National Vital Statistics Report*. 2008;56(15):1-25, 28.
3. Panchaud C, Singh S, Feivelson D, Darroch JE. Sexually transmitted diseases among adolescents in developed countries. *Fam Plan Perspect*. 2000;32:24-32 & 45.
4. Kirby D. *Emerging Answers 2007: Research findings on programs to reduce teen pregnancy and sexually transmitted diseases*. Washington, D.C.: National Campaign to Prevent Teen and Unplanned Pregnancy; 2007.
5. Guttmacher Institute. Sex and STD/



- HIV education, State policies in brief, October, 2009, Available at: http://www.guttmacher.org/statecenter/spibs/spib_SE.pdf. Accessed October 29, 2009.
6. The Henry J. Kaiser Family Foundation. *Sex education in America: a view from inside the nation's classrooms*. Available at: <http://www.kff.org/youth/hivstds/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=13531>. Accessed Nov 22, 2009.
7. The Joint Committee on National Health Education Standards. *National health education standards: achieving excellence* (2nd ed.). Atlanta: American Cancer Society; 2007.
8. Thompson DN, Doll L. Sex education: what we teach the teachers. American Educational Research Association Annual Meeting. New Orleans, LA; April 1984.
9. McKay A, Barrett M. Pre-service sexual health education training of elementary, secondary, and physical health education teachers in Canadian faculties of education. *Can J Hum Sex*. 1999;8(2):91-101.
10. Rodriguez M, Young R, Renfro S, Asencio M, Haffner DW. *Teaching our teachers to teach: A SIECUS study on training and preparation for HIV/AIDS prevention and sexuality education*. SIECUS Report. 1995/96;28(2).
11. Quinn SC, Thomas SB, Smith BJ. Are health educators being prepared to provide HIV/AIDS education? A survey of selected health educators' professional preparation programs. *J Sch Health*. 1990;60(3):92-95.
12. Jacobs WJ, Wylie WE. Who teaches health education in Texas secondary schools. *J Sch Health*. 1995;65(9):365-368.
13. Sinkinson M, Hughes D. Food pyramids, keeping clean and sex talks: pre-service teachers' experiences and perceptions of school health education. *Health Educ Res*. 2008;23(6):1074-1084.
14. Smith DW, McCormick LK, Steckler AB, McLeroy KR. Teachers' use of health curricula: implementation of Growing Healthy, Project SMART and the Teenage Health Teaching Modules. *J Sch Health*. 1993;63(8):349-354.
15. Myers-Clack SA, Christopher SE. Effectiveness of a health course at influencing preservice teachers' attitudes toward teaching health. *J Sch Health*. 2001;71(9):462-466.
16. Price JH, Dake JA, Kirchofer G, Telljohann SK. Elementary school teachers' techniques of responding to student questions regarding sexuality issues. *J Sch Health*. 2003;73(1):9-14.
17. Vamos S, Zhou M. Educator preparedness to teach health education in BC classrooms. *Am J Health Educ*. 2007;38(5):284-292.
18. Vamos S. Experiences of beginning health educators and changes in their high school students' health behaviors and attitudes. *Health Educ Behav*. 2007;34(2):376-389.
19. Eisenberg M, Wagenaar A, Neumark-Sztainer D. Viewpoints of Minnesota students on school based sexuality education *J Sch Health*. 1997;67:322-326.
20. Allen L. "It's not who they are, it's what they are like": reconceptualising the "best educator" debate in sexuality education. *Sex Education*. 2009;9(1):33-49.
21. Wight D, Buston K. Meeting the needs but not changing goals: evaluation of in-service teacher training for sex education. *Oxford Review of Education*. 2003;29(4):521-543.
22. Lindau ST, Tetteh AS, Kasza KM, Gilliam M. What schools teach our patients about sex: content, quality and influences on sex education. *Obstet Gynecol*. 2008;111(2):256-266.
23. The National Campaign to Prevent Teen and Unplanned Pregnancy. Federal funding for teen pregnancy prevention programs. Available at: <http://www.thenationalcampaign.org/federal/funding/default.aspx>. Accessed January 11, 2010.
24. Landry DJ, Singh S, Darroch JE. Sexuality education in fifth and sixth grades in U.S. public schools, 1999. *Fam Plan Perspect*. 2000;32(5):212-219.
25. Landry DJ, Darroch JE, Singh S, Higgins J. Factors associated with the content of sex education in U.S. public secondary schools. *Perspect Sex Reprod Health*. 2003;35(6):261-269.
26. Krueger RA. *Focus groups: a practical guide for applied research*. Sage Publications. Thousand Oaks, 1994.
27. Morse J, Field PA. *Qualitative research methods for health professionals*. Thousand Oaks: Sage Publications, Inc., 1995.
28. Vamos S, Zhou M. Using focus group research to assess health education needs of pre-service and in-service teachers. *Am J Health Educ*. 2009;40(4):196-206.
29. Hahn C. *Doing qualitative research using your computer: a practical guide*. Los Angeles, CA: Sage Publications; 2008.
30. Rasberry CN, Goodson P, Buhi ER, Pruitt BB, Wilson K, Suther S. Texas abstinence educators' self-efficacy to motivate youth sexual abstinence. *American Journal of Sexuality Education*. 2007;2(3), 59-78.
31. Ellery PJ, Rabak-Wagener J. Special educators who teach health education. *Remedial & Special Education*. 1997;18(2):105-112.
32. Howard-Barr EM, Rienzo BA, Pigg M, James D. Teacher beliefs, professional preparation, and practices regarding exceptional students and sexuality education. *J Sch Health*. 2005;75(3):99-104.
33. Birch DA, Duplaga C, Seabert DM, Wilbur KM. What do master teachers consider important in professional preparation for school health education. *J Sch Health*. 2001;71(2):56-60.
34. Berry B, Montgomery D, Curtis R, Hernandez M, Wurtzel J, Snyder J. *Creating and sustaining urban teacher residencies: a new way to recruit, prepare, and retain effective teachers in high-needs districts*. Washington, D.C.: The Aspen Institute; 2008.
35. Walters S, Hayes DM. Teaching about Sexuality: Balancing contradictory social messages with professional standards. *American Journal of Sexuality Education*. 2007; 2(2):27-49.
36. Cohen JN, Byers ES, Sears HA, Weaver AD. Sexual health education: Attitudes, knowledge and comfort of teachers in New Brunswick Schools. *Can J Hum Sex*. 2004;13, 1-15.
37. Hedgpeth E, Helmich J. *Teaching about sexuality and HIV: principles and methods for effective education*. New York, NY: University Press; 1996.