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An HIV education needs assessment of selected teacher members of the American School Health Association and the American Home Economics Association

Kerr, Dianne Lynne, Ph.D.
The Ohio State University, 1992
AN HIV EDUCATION NEEDS ASSESSMENT
OF SELECTED TEACHER MEMBERS OF THE
AMERICAN SCHOOL HEALTH ASSOCIATION
AND THE AMERICAN HOME ECONOMICS ASSOCIATION

DISSERTATION
Presented in Partial Fulfillment of the Requirements
for
the Degree Doctor of Philosophy in the Graduate School
of
The Ohio State University
By
Dianne Lynne Kerr, MEd

The Ohio State University
1992

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VITA


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**FIELDS OF STUDY**

Major Field: Health, Physical Education and Recreation
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CHAPTER I
INTRODUCTION

Introduction

Acquired immunodeficiency syndrome (AIDS) and the entire spectrum of human immunodeficiency virus (HIV) infection continue to act as a modern plague which has changed the face of the earth. Cases of HIV infection and HIV are continuing to increase in the United States and globally (Centers for Disease Control [CDC], 1991; Mann, 1988).

School-based HIV prevention efforts are believed to play an important role in reducing the spread of HIV infection among young people (CDC, 1988; Presidential Commission on the Human Immunodeficiency Virus Epidemic, 1988). Although few adolescents have AIDS at present, it is believed that many adolescents are infected with HIV and will go on to develop AIDS when they are in their twenties (Boyer & Kegeles, 1991; Haffner, 1987; Hein, 1989; Wass, Miller, & Thornton, 1990). Despite the low number of teens with AIDS, an April, 1992 congressional report shows AIDS cases among teens have risen 70% in the last two years. In
addition, people under age 25 account for one fourth of the 40,000 Americans who are newly infected each year ("The Growing AIDS Threat," 1992).

In order to reach young people with HIV infection prevention messages, the HIV instructional needs of school-based professionals must be identified and met. This study seeks to identify and describe the needs of secondary school home economics and health teachers in particular.

This chapter will explore the nature of the problem of HIV infection and AIDS as it applies to school-based instructional efforts. It will briefly highlight United States and world statistics, the need for school-based HIV prevention efforts and the needs of school-based professionals. A theoretical basis for the study will be presented as well as the study's purpose. The significance of the study will be discussed, a problem statement will be made, and subproblems, definitions, limitations, and basic assumptions presented.

United States and World Statistics

As of the end of February 1992, 213,641 cases of AIDS had been reported to the United States Centers for Disease Control [CDC]. Of these Persons Living with AIDS (PLWAs), 138,395 have died (CDC, 1992). It has been predicted that by 1993 there will be between 151,000 and 225,000 PLWAs in the United States (CDC, 1991).
The global estimates are equally grim. In 1988, Jonathan Mann, former Director of the World Health Organization [WHO], estimated that there were 5 to 10 million people infected with HIV worldwide. He stated that if between 10% and 30% of these HIV-infected people developed AIDS over the next 5 years (by 1993) between 500,000 and 3 million cases of AIDS will emerge by 1993. These cases would occur even if educational programs prevented the further spread of HIV infection (Mann, 1988). By the end of this decade (the 1990s) the World Health Organization [WHO] predicted 5-6 million cumulative AIDS cases worldwide. Comparatively, there were 1 million cases through the 1980’s (CDC, 1991).

The World Health Organization’s most recent statistics show the accuracy of the prior predictions. As of April 1, 1992 there have been 484,148 cases of AIDS reported to the WHO from 164 countries. However, the WHO estimates that due to underreporting, there are actually 2 million cases of AIDS and 10-12 million cases of HIV infection in the world at present (World Health Organization, 1992).

The fatal consequences of AIDS are becoming more apparent as well. By the end of 1993 it is projected that there will be over 350,000 AIDS-related deaths in the United States (National Commission on AIDS, 1991). Further, New York City officials project 20,000 children will be orphaned when their parents die of AIDS-related conditions in the
next few years. Health economists have tallied "years of potential life lost" before age 65 to describe the effects of AIDS on young people. In 1992 the years of potential life lost due to AIDS will grow between 1.5 and 2.1 million. By 1993 AIDS will clearly be the most devastating of all diseases in terms of lost human potential (National Commission on AIDS, 1991). Prevention programs targeted at youth provide an opportunity to reduce or even halt the spread of HIV infection and save this human potential.

**Need for School-Based Prevention Efforts**

School has been called the optimal setting for conducting HIV education and prevention programs, since schools have the potential to reach 95% of this nation’s young people (Haffner, 1987). As of the end of February 1992, CDC reported only 808 13-19 year-olds with AIDS (CDC, 1992). However, HIV, the virus which causes AIDS, may incubate in the body for 5 to 11 years before AIDS is diagnosed. This, combined with the fact that there were over 8,000 cases of AIDS among 20 to 24 year-olds as of the end of February 1992, has caused numerous researchers (Boyer & Kegeles, 1991; Fennell, 1990; Haffner, 1987; Hein, 1989; Wass, Miller, & Thornton, 1990) to conclude that many 20 to 24 year-olds were infected with HIV when they were adolescents. Therefore, the importance of prevention efforts in junior and senior high school becomes apparent. To improve upon current efforts, needs of school-based
professionals must be identified and met. At present, HIV education programs are being mandated and implemented in numerous states and school districts across the country. During the implementation process, many assumptions were made regarding the HIV education needs of school-based professionals.

Needs Assessments of School-Based Professionals

According to the U.S. General Accounting Office [GAO], 88% of school districts nationwide were providing in-service training to HIV education teachers in 1989 and 83% of teachers who instructed students about HIV had received HIV education training (Noble, 1990). It is not clear how many of these in-service programs were based on needs assessments.

A previous study by Kerr, Allensworth, and Gayle (1989) was the first conducted on a national level which investigated the self-reported HIV education and prevention needs of health and education professionals. Professionals included in the study were health educators; physical educators; school administrators; school board members; presidents of high school PTAs; school nurses; physicians; state directors of health, physical education, and recreation; state school nurse consultants; teachers of many disciplines; and school counselors. The study assessed the HIV education needs of selected members of 11 national health and education professional organizations in the areas
of 1) resources, 2) policies, 3) training, and 4) knowledge. In an individual analysis of results of members of the Association for the Advancement of Health Education [AAHE], health educators needs were disclosed (Kerr, Allensworth, Gayle, & Dalis, 1988/89). This study expands upon this work by further investigating the needs of secondary school health teachers. It also contributes to the literature regarding the resource and training needs and obstacles faced by secondary school home economics teachers implementing HIV instructional programs, a national population which has not been studied to date.

Theoretical Basis

Needs assessment strategies often are implemented as an initial step in planning health education programs or interventions (Gilmore, Campbell, & Becker, 1989). Many health education program planning models (Green, Kreuter, Deeds, & Partridge, 1980; Ross & Mico, 1980; Bates & Winder, 1984) utilize needs assessments. According to Gilmore et al., (1989) educational needs often are assessed through the use of surveys; mail surveying in particular is a frequently used strategy.

The present study was conducted to assess the HIV education instructional needs of selected secondary school home economics and health teachers who are members of the American Home Economics Association (AHEA) and the American School Health Association (ASHA) respectively. Home
economics and health educators were selected because these secondary school teachers often teach similar health-related topics such as family life and sexuality and it was believed that HIV education instruction would be included in these disciplines. In addition, the AHEA and ASHA are concerned about the HIV education needs of their members. This assessment of the needs of their members will assist the organizations to plan better programs to meet these needs.

The study was based on the premise that needs assessments are a vital step in the program planning process, and that mail survey procedures are a legitimate method to assess needs. The study employs descriptive research methodology to ascertain the needs of the aforementioned school-based professionals.

Purpose

The purpose of this study was to identify and describe the self-reported HIV education instructional needs and obstacles of secondary school health and home economics teachers who are members of the American School Health Association (ASHA) and the American Home Economics Association (AHEA) respectively.

Significance

Members of the AHEA and the ASHA were selected for this study because they are believed to play important roles in HIV education efforts. A recent study by the Alan Guttmacher Institute (1989) found the home economics teacher
frequently teaches family life and sexuality education as part of the home economics curriculum. Educational units on HIV are often integrated into this curriculum. In addition, home economists may provide community HIV education programs for youth and their parents (Koblinsky, Preston, and Vaughn, 1987). Therefore, the self-reported HIV education needs of home economics teachers should be investigated and addressed.

As those most likely to teach sex education and HIV education, health educators play an important role in prevention efforts. The CDC (1988) and the Presidential Commission on the HIV Epidemic (1988) stated that HIV education should be conducted within the context of a comprehensive school health program and within the health education curriculum. This integration of HIV education into health education programs apparently is occurring since in 1989 the GAO found 79% of school districts surveyed nationwide required HIV education in health classes (Noble, 1990). A study of ASHA members who are junior and senior high school health teachers will illuminate the needs of these professionals who are so vital to the HIV education effort.

Data gathered from the administration of this questionnaire will be reported to the leadership of the ASHA and the AHEA and will assist the ASHA in meeting the needs of one of its collaborating organizations as well as its own
members. Findings of the AHEA needs assessment will be submitted to the Journal of Home Economics for publication. The ultimate goal of this research is to improve the quality of HIV education efforts nationwide.

Statement of the Problem

The purpose of this investigation was to identify and describe HIV education instructional needs and obstacles reported by secondary school home economics and health education teachers.

Subproblems

1. Describe selected teaching demographics of selected home economics and health teachers.
2. Describe HIV resources that are used and needed as identified by selected home economics and health teachers.
3. Identify training to conduct HIV education which is possessed and needed as reported by selected home economics and health teachers.
4. Identify the amount of time per semester spent teaching about HIV and other health topics as reported by selected home economics and health teachers.
5. Identify comfort levels and update needs of selected home economics and health teachers who teach sensitive HIV-related topics.
6. Identify the extent to which selected home
economics and health teachers are permitted to teach various sensitive topics in their respective school.

7. Describe how selected home economics and health teachers rated perceived obstacles to HIV education.

8. Describe differences between selected home economics and health teachers in terms of the above seven subproblems.

Definition of Terms

**Acquired Immunodeficiency Syndrome (AIDS).** A viral disease which damages the body's immune system, making the infected person susceptible to a wide range of serious diseases. May also involve neurologic symptoms (Quackenbush & Sargent, 1990).

**Centers for Disease Control (CDC).** A federal agency based in Atlanta which studies and monitors the incidence and prevalence of disease in the United States, and also provides health and safety guidelines for the prevention of disease (Quackenbush & Sargent, 1990).

**Human Immunodeficiency Virus (HIV).** The accepted name for the AIDS virus in most common usage now (Quackenbush & Sargent, 1990).

**Person Living with AIDS (PLWA).** A term used to compassionately describe a person living with the disease AIDS. (Many prefer this term to others like "AIDS victim" or
"AIDS patient") (Quackenbush & Sargent, 1990).

Safer sex. Sexual activity which helps to protect one from infection with HIV (Quackenbush & Sargent, 1990). (For purposes of this study the term refers to using condoms.)

Sexually transmitted disease (STD). Any of a number of diseases which can be transmitted through various forms of sexual contact (Quackenbush & Sargent, 1990).

Limitations of the Study

1. Although current mailing labels of members of the associations involved in the study were solicited, some frame error occurred.

2. The AHEA does not delineate junior and senior high school teachers on their membership rosters. Thus, oversampling was done to obtain a suitable frame size.

3. No statistical or interview procedures were applied to compare nonrespondents to respondents thus increasing the chance of nonresponse error and limiting generalizability to the respondents themselves.

Basic Assumptions

1. Only members of the ASHA and the AHEA were included in this study.

2. This study dealt with secondary school (junior and senior high school) teachers only. Elementary and post-secondary school teachers responses were not analyzed.
3. Incomplete questionnaires were not analyzed.

4. Only questionnaires of classroom teachers who were currently teaching were analyzed.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

In this chapter, a review of related literature will be presented. This will include sections on school-based HIV education programs in the United States; survey research of HIV education on the national level encompassing topics covered, obstacles to HIV education, teacher training programs, grade levels in which HIV education is addressed, and resources used; HIV-related sexuality education survey results; and HIV education needs assessments of national organizations. In addition, the importance of teacher comfort when discussing sensitive HIV-related topics is discussed briefly. To illuminate student needs, a summary of secondary school students’ HIV knowledge, attitudes, beliefs, and behaviors is presented. The chapter concludes with a discussion of HIV education curricula, issues in HIV education, and future trends for HIV education.

School-Based HIV Education Programs in the United States

In October 1986, C. Everett Koop, the Surgeon General of the United States, called for schools to teach our
nation's youth about the risk of HIV infection at that time referred to as AIDS (Koop, 1986). In that same month, the Centers for Disease Control (CDC) launched its School Health Education to Prevent the Spread of AIDS initiative (Noble, 1990). Shortly thereafter, several national organizations took the lead in determining the status of HIV education in the United States. These organizations included the U.S. Conference of Mayors, National Association of State Boards of Education, and Council of Chief State School Officers.

**Survey Research of HIV Education on the National Level**

In December of 1986, the U.S. Conference of Mayors conducted a survey of 73 of the country's largest local school districts and 25 state school agencies. It was determined that 54% of the school districts included in the survey were beginning to provide some form of HIV education. The majority of the remaining districts were planning HIV education programs. Of the 25 state education agencies, 8 had curricula, recommendations, or teaching guides to assist local districts, and one provided AIDS in-service training for teachers (U.S. Conference of Mayors, 1987).

A June 1987 survey conducted by the National Association of State Boards of Education [NASBE] revealed that only 5 states had mandated HIV education. By December of 1987 this number had more than quadrupled to 23 state

In December 1988, the Council of Chief State School Officers [CCSSO] conducted its second survey of state HIV education programs. Each coordinator of HIV education in the State Department of Education was mailed a survey instrument. The survey covered five general areas, three of which have impact on this study; state assistance with curriculum, state training, and state surveys of local programs. Fifty states, the District of Columbia, and three extra-state jurisdictions returned the completed surveys (Council of Chief State School Officers [CCSSO], 1989).

According to CCSSO (1989), state surveys of local programs had been conducted by 30 states. The percent of districts found to provide HIV education ranged from 11% to 100% with a median of 80% in those states reporting on local programs. The percent of schools per state providing HIV education varied from 10% to 100%. Forty-seven states
were using at least part of the CDC student survey and 30 states were using the CDC program survey (CCSSO, 1989).

During the 1987/88 school year, Wass et al. (1990) surveyed a stratified random sample of 423 public schools from pre-kindergarten through 12th grade to determine the extent, structure, and characteristics of HIV education provided. In this sample, 205 schools reported having a program. The investigators determined a national estimate for HIV education in the public schools to be 46%. The largest proportions of programs were offered in the East and the smallest in the South. Almost half of the programs were taught by health educators.

In May 1990, Dr. Gary Noble testified before the Committee on Governmental Affairs on the progress of HIV education for school-aged youth. According to Noble, (1990) every State education agency in the U.S. has funding, staff, and a well-developed plan to help local school districts implement HIV education programs. In addition, each of the states also has a CDC staff member (Project Officer) to assist it with technical and programming issues and each has a working relationship with project directors from 21 CDC funded national organizations. Noble (1990) reports 90% of all states has developed curricula or curriculum guides for use by local school districts.
Topics Covered

In the area of state assistance with curriculum, the CCSSO survey inquired about specific "critical" HIV education topics which are covered in the state curriculum. The number of states including the topics follow in parentheses after the given topic: abstinence (43); sexually transmitted diseases (40); condom use (39); sharing needles (38); safer sex (35); intercourse with an infected partner (34); and unprotected anal intercourse (30). Compared to the results of a December 1987 CCSSO survey, these figures represent increased coverage of these critical topics (CCSSO, 1989).

A 1988 sexuality and AIDS survey by the Alan Guttmacher Institute included 203 of the largest school districts in the country. Findings revealed the vast majority of school district curricula discuss abstinence as the best alternative for preventing pregnancy and STDs (91%) as well as condoms as a means of preventing HIV infection (86%) and other STDs (80%). Both abstinence and condom use are likely to be addressed in grade 10. (Kenney, Guardado & Brown, 1989)

Content of sexuality and HIV education programs varies from one school and one state to the next. There is controversy regarding which topics should be taught at which grade levels. According to the 1989 Guttmacher survey, most teachers believe most topics should be covered
in lower grade levels than they actually are. The gap between what teachers think should be covered and what actually is covered is greatest for birth control sources. Although 97% of teachers say that students should be told where to go to obtain birth control, this topic is covered in only 48% of the schools where these teachers are employed. More pertinent to this study are the topics of safer sex practices and homosexuality. Although these topics are taught in 60% of the schools, they are the most often omitted topics. It was determined also that 45-59% of the instructors who cover correct condom use, homosexuality, safer sex practices, and abortion say they have difficulty teaching these topics (Forrest and Silverman, 1989).

Obstacles to HIV Education

Few studies have addressed obstacles teachers face in providing HIV education. In the Guttmacher survey (1989) insufficient information was the most common reason given for difficulty in teaching about the sexual transmission of HIV. In addition, 15-18% of the respondents cited insufficient information and student reactions as reasons for difficulty in teaching about homosexuality and safer sex practices. By far the most common problem teachers cite in teaching these sensitive topics is pressure or fear of such pressure from parents, community, or school administrators (Forrest and Silverman, 1989).
Teacher Training to Conduct HIV Education Programs

DiClemente (1989) emphasized the importance of developing a level of comfort among HIV educators through teacher in-service programs which include a personal assessment of values and attitudes towards sexuality in general and homosexuality in particular. DiClemente believes teachers who feel uncomfortable discussing sexuality and specific sexual behaviors which they may personally consider offensive, are not likely to be effective communicators and facilitators of frank, open discussions. According to former Surgeon General C. Everett Koop, these frank discussions are essential for effective HIV education (Koop, 1986). DiClemente believes that overcoming teachers' personal biases and inhibitions is crucial to fostering an atmosphere where adolescents are comfortable enough to discuss sensitive personal topics such as their sexual behavior. According to DiClemente, properly trained teachers can "become powerful change agents in influencing adolescents to avoid high risk practices" (DiClemente, 1989, p.76).

A 1988 CCSSO survey determined that all State Departments of Education were providing some teacher training. The following methods for providing training were reported: special sessions for local trainers (48); state-sponsored meetings and conferences (47); professional meetings (45); and in-service programs (41). Other methods
such as regional in-service programs and satellite television were listed as well (CCSSO, 1989).

The CCSSO questionnaire also contained questions pertaining to the number of teachers trained to conduct HIV education. Twenty-six states reported data on the total number of teachers trained for HIV education. Figures ranged from 25,000 in Texas, to 40 in Idaho (CCSSO, 1989).

Noble (1990) stated that all states were providing training to local school personnel and in the 1988-89 school year these state-conducted training programs reached 100,000 local school personnel. Noble also reported the results of a Government Accounting Office (GAO) survey conducted in 1989 which found that 88% of local districts provide in-service to HIV education teachers and 83% of teachers who instructed students about HIV had received specific HIV education training (Noble, 1990).

**Grade Levels at Which HIV Education is Addressed**

The GAO reported that of districts surveyed nationwide, 79% require HIV education in health classes, 63% introduce the topic before grade six and 74% provide instruction on the topic in seventh grade. School districts usually provide HIV prevention in health education classes through the tenth grade level. (Noble, 1990) However, by grades 11 and 12 the proportion of school districts providing HIV education drops dramatically (Kenney, Guardado, & Brown, 1989; Noble, 1990).
A survey of the largest school districts in the United States revealed the vast majority of school districts provided an emphasis on abstinence for grades 7 and 8 and from grades 9 and up stress condom use to prevent HIV infection along with the abstinence message (Kenney, et al., 1989).

Although former Surgeon General C. Everett Koop and organizations such as the American Academy of Pediatrics and the Coalition of National Health Education Organizations have urged developmentally appropriate HIV education beginning at kindergarten, investigators have determined substantially fewer schools provide HIV education at levels below high school (Wass et al., 1990). Ficklen (1988) found school superintendents disagree on the grade levels at which HIV education should occur and many superintendents report that school districts give incomplete coverage or avoid the topic of HIV/AIDS.

**HIV Education Resources Used by School Districts**

Wass et al. (1990) found 46% of respondents to their survey used published materials, 38% used materials constructed by school staff, and 30% used materials jointly constructed by school staff and medical professionals. Another 18% of the respondents reported using curriculum guides developed by the state and various audiovisuals.

More specifically, Kenney (1989) reported the top ten instructional materials recommended or approved by state
education agencies consisted of 5 films and 5 pamphlets.

The films followed by their rankings in the top ten were as follows: ODN Productions, "Sex, Drugs, and AIDS" (2); New Day Films "The AIDS Movie" (4); Channing L. Bete's "What Everyone Should Know About AIDS" (5); American Red Cross film, "A Letter From Brian" (7); and Churchill Films' "AIDS: What Everyone Needs to Know" (9) (Kenney, 1989).

Pamphlets included the following: American Red Cross', "AIDS, Sex, and You" (1), "AIDS: Beyond Fear" (3), and "AIDS: The Facts" (6); U.S. Department of Health and Human Services’, "The Surgeon General's Report on AIDS" (8); and the American College Health Association’s "AIDS: What Everyone Needs to Know"(10) (Kenney, 1989).

**HIV-Related Sexuality Education Survey Results**

A recent study by the Alan Guttmacher Institute (1989) found that all but four states and virtually every large school district in the United States supports the provision of HIV education. They also found the support for teaching about sexually transmitted diseases and abstinence to be nearly as widespread. Although they cite public support for sexuality education as increasing steadily in recent years (85% of the public now supports such education), funding for sexuality education is far surpassed by funding for HIV education at present. According to the Guttmacher Institute, this "crisis-oriented" approach has been both beneficial and harmful to sexuality education in the United
States. The primary benefit is that school policies have become more supportive of sexuality education programs. However, sexuality education has also suffered since states and school districts are focusing primarily on HIV/AIDS (Kenney, et al., 1989).

The Alan Guttmacher Institute (1989) estimates that in 1987-88, 50,000 public school teachers were providing sexuality education in grades 7-12. Six percent of those classified as sex education teachers taught only HIV education. It was found that physical educators (31%) health educators (26%), and home economics teachers (23%) were most likely to provide sexuality education. In addition, the Guttmacher Institute found 17% of sexuality educators come from the discipline of biology and only 3% were school nurses.

The high percentage of home economics teachers conducting sexuality education has definite implications for this study. Many of these teachers will be providing HIV education as well, although nothing has been done nationally prior to this study to assess the HIV-related instructional needs of home economics teachers.

Sex education is taught by a variety of professionals in a variety of courses. On average, sex education is taught in 1.8 different courses. Most often it is taught as part of the following instructional programs: health (81%); home economics (40%); biology/science (38%);
physical education (11%); or some other course (5%). Only 10% of the respondents to the Guttmacher study indicated that they provide sex education as a separate course. HIV education is usually offered as part of health classes or in the health education department (68%) although 37% of those responding to the Guttmacher survey said HIV information is taught separately from sex education some or all of the time (Forrest and Silverman, 1989).

HIV Education Needs Assessments of National Organizations

Kerr, et al., (1989) conducted survey research to assess the HIV education needs of members of several national health and education associations. In 1988, 6,384 needs assessment questionnaires were sent to members of 11 national professional associations. A forty-five percent return rate was achieved (N= 2,855). Included in the study were members of the following organizations: American Academy of Pediatrics; American Association of Counseling and Development; American Association of School Administrators; American School Health Association; Association for the Advancement of Health Education; National Association of School Nurses; National Association of State School Nurse Consultants; National Education Association; National Parent Teacher Association; National School Boards Association; and Society of State Directors of Health, Physical Education and Recreation. These organizations represent teachers, parents, counselors, and
physicians. Results were analyzed for all of the aforementioned associations combined as well as for each individual association.

For the combined 11 groups, in the area of HIV resources, respondents indicated greatest needs for books, pamphlets, journal articles; and films and videotapes. More than half of the respondents indicated that they needed information on how to promote school health education programs as well as how to coordinate school-based HIV education programs with community, health, religious, and youth agencies. Training needs identified by the respondents included updates on homosexuality and bisexuality (62%), sexually transmitted diseases (60%), risk behaviors for HIV transmission (58%), intravenous drug use (57%), death and dying (54%), safer sex practices (54%), and communicating about HIV with a sexual partner (51%). Eighty-seven percent of those surveyed believed school-based health education is effective in preventing the spread of HIV infection. Respondents also felt the primary responsibility for conducting HIV education rests with teachers (36%), parents (27%), and school nurses (26%) (Kerr, et al., 1989).

Results of the 1988 study for the membership of the Association for the Advancement of Health Education [AAHE] as an individual organization present information about health teachers pertinent to this study. Eighty-seven
percent of the AAHE sample indicated that they were teachers. Sixty percent of the respondents needed information on how to integrate school-based HIV education programs with community, health, religious and youth agencies. Sixty-three percent of the respondents stated that they had received specific instruction in order to provide information about HIV to students. But 57% expressed a need for in-service programs on HIV for their school district or state. Forty-nine percent claimed to know how to handle blood or other body fluids safely to prevent the spread of HIV (Kerr, et al., 1988/89).

The needs assessment of AAHE members indicated that they were most uncomfortable discussing death and dying and homosexuality and bisexuality. They expressed greatest comfort discussing the topics of intravenous drug use and sexual decision making. Over half of the AAHE respondents cited update needs for the following topics: death and dying (67%); homosexuality and bisexuality (66%); risk behaviors for HIV transmission (58%); intravenous drug use (57%); safer sex practices (53%); discussing HIV with a partner (52%); and sexually transmitted diseases (51%) (Kerr, et al., 1988/89).

When asked whether they believe school-based health education is effective in preventing the spread of HIV, 86% percent of the AAHE sample answered in the affirmative. They also indicated teachers as those who should have the
primary responsibility for conducting HIV education (62%) with parents (27%) and nurses (6%) second and third respectively (Kerr, et al., 1988/89).

Kerr (1988) reported HIV education needs of 232 American School Health Association members involved in the larger needs assessment of 11 national organizations. Sixty two percent needed information on planning HIV education programs while 70% needed information on integrating these programs with community, health, religious, and youth-serving agencies. Similar to the AAHE members, more than 50% of ASHA members needed updates on the following topics: homosexuality and bisexuality; death and dying; sexually transmitted diseases; intravenous drug use, and sexual behavior. Respondents indicated a lack of comfort in discussing homosexuality and bisexuality, death and dying, communicating with partners about AIDS, and sexual behaviors.

In the fall of 1988, health education professional preparation programs identified from the AAHE directory of institutions offering specialization in health education and the Association for Schools of Public Health listing of member schools were surveyed to ascertain the extent of preparation to teach HIV education health educators were receiving. Content areas, skills to be developed or enhanced, areas of deficiency in professional preparation programs, and areas in which national associations may be
of assistance in professional preparation of health educators were also addressed. The survey yielded a 60% response rate (Quinn, Thomas, & Smith, 1990).

Only 25 institutions (23.8%) offered a specific course on HIV/AIDS and only two (8%) targeted the course specifically to health education majors. According to Quinn et al. (1990), this finding may be a cause for concern as it does not reflect the priority being placed on health education by the Presidential Commission on the HIV Epidemic nor may it be sufficient to adequately prepare health educators. In addition, the survey disclosed that when course objectives were identified by respondents, there was insufficient emphasis on curriculum development and no emphasis on policy issues. Quinn et al. (1990) recommend HIV education be targeted to health educators and this education specifically address minority health issues, community organization, policy development, and values education related to human sexuality, substance abuse, and death education. Quinn et al. (1990) also found that affective exercises identified by the respondents did not focus on topics identified by Kerr (1988) and Kerr et al. (1988/89) as being pertinent to ASHA and AAHE members' comfort levels (i.e. homosexuality and bisexuality, sexual behavior, and sexual communication). Therefore, it was
concluded that health educators will be at a disadvantage in dealing with those who are at risk for HIV infection (Quinn, et al., 1990).

Sensitive Topics and Teacher Comfort Levels

Sensitive topics in HIV education are those which tend to produce controversy. Lohrmann (1988) feels some schools are still resistant to teach about AIDS because in the past the inclusion of sensitive topics received substantial criticism from parents and others in the community. In this study, the following could be considered sensitive topics: homosexuality and bisexuality, safer sex practices, sexual decision making, intravenous drug use, communicating with a sexual partner about sexuality and HIV-related issues, death and dying, sexual behavior, sexually transmitted diseases (STDs), and risk behavior for HIV transmission.

Acosta (1992) studied parents' perceptions of sensitive topics in the context of HIV education. It was found that most parents of eighth graders favored all topics on the questionnaire as appropriate for their children. However, 10% or more of parents found the following seven topics to be inappropriate for their eighth graders: 1) insertion of fingers or other objects in the rectum, penis or vagina (10%), 2) compulsory blood testing (11.1%), 3) oral sex (12.2%), 4) avoiding oral sex as a preventive measure (15.6%), 5) avoiding sexual activities
causing cuts or tears in the lining of the rectum, vagina or penis as a preventive measure (15.6%), 6) quarantine of AIDS-infected persons (17.8%), and 7) identification of AIDS carriers by some visible sign (18.9%). Acosta (1992) believes more parents are supportive of teaching sex-related HIV education topics than they were with sex education topics a few years ago. Acosta (1992) states, "If given the opportunity, parents are likely to promote a more realistic stance in dealing with sex-related and controversial topics relative to AIDS" (p. 49).

Numerous experts from various disciplines have indicated the need for sexuality and HIV educators to discuss sensitive topics in order to effectively educate their students about HIV (Haffner, 1987; Koblinsky et al., 1987; Diclemente, Boyer, & Mills, 1987). Former U.S. Surgeon General C. Everett Koop (1986) stated:

Many people—especially our youth—are not receiving information that is vital to their future health and well-being because of our reticence in dealing with the subjects of sex, sexual practices, and homosexuality. This silence must end. We can no longer afford to sidestep frank, open discussions about sexual practices—homosexual and heterosexual. (p. 3)
DiClemente (1989) emphasized the importance of developing a level of comfort among HIV educators through teacher in-service programs which include a personal assessment of values and attitudes towards sexuality in general and homosexuality in particular. DiClemente (1989) believes "teachers who feel uncomfortable discussing sexuality and specific sexual behaviors which they may personally consider offensive, are not likely to be effective communicators or facilitators of frank, open discussions" (p. 73). Further, DiClemente feels that overcoming teachers' personal biases and inhibitions is critical to developing an atmosphere where adolescents are comfortable enough to discuss sensitive personal topics such as their sexual practices. According to DiClemente (1989), properly trained teachers can "become powerful change agents in influencing adolescents to avoid high risk practices" (p. 76).

Underscoring the need to address the issue of homosexuality in the schools is the Report of the Secretary’s Task Force on Youth Suicide. This task force recently reported that gay teenagers are two to three times more likely to attempt suicide than non-gay youth (U.S. Department of Health and Human Services, 1989). The Secretary’s Task Force cites abuse/harassment of homosexual youth by peers and lack of adequate information about homosexuality as school risk factors in gay and lesbian
youth suicide. The Task Force recommends the following:
"public and private schools need to take responsibility for
providing all students at the junior and senior high school
level with positive information about homosexuality" and
"school staff need to receive training on how to work with
gay youth and handle conflicts involving gay youth" (p.
135). In addition, the Association for Supervision and
Curriculum Development [ASCD] "encourages schools to
provide staff training and materials to enable educators to
better work with this at-risk population" (ASCD, 1990).

The American School Health Association [ASHA] (1990)
unanimously approved a resolution on gay and lesbian youth
in schools which recommends that teachers and other "school
personnel should discourage any sexually-oriented
deprecating, harassing, and prejudicial statements
injurious to the students' self-esteem" and "curriculum
materials, teaching strategies, and school policies that do
not discriminate on the basis of sexual orientation should
be implemented in schools". In addition the ASHA
resolution states that the topic of sexual orientation
should be addressed in the comprehensive health curriculum
(ASHA, 1990).

Teaching needs and obstacles faced by home economics
and health teachers are inextricably intertwined to the
educational needs of their students. These professionals
are attempting not only to increase students' knowledge
about HIV, but to facilitate attitudinal and behavioral change as well. The following section of the literature review will focus on studies that have identified the HIV-related knowledge, attitudes, and behaviors of students.

Students' HIV Knowledge, Attitudes, and Behaviors

Numerous studies have been conducted to assess high school student's knowledge, attitudes, beliefs and behaviors regarding HIV. Most of these studies focused on students aged 16 years or older (Petosa & Wessinger, 1990). Far fewer studies have been conducted with students under 16 years of age or at the junior high school level or younger (Petosa & Wessinger, 1990; Wass et al., 1990). Petosa and Wessinger (1990) emphasize that HIV education needs to begin prior to sex and drug experimentation. In addition, interventions with younger students should consider their different developmental capabilities and social experiences. A summary of the common findings of studies of secondary school students' HIV knowledge, attitudes, and behaviors follows. Although not a complete literature review on this area, it will give the reader basic knowledge about what adolescents know, how they feel, and, most importantly, what they do with regard to HIV/AIDS.

Student HIV Knowledge

Several studies have shown that students are confused about casual transmission of HIV. The most recent and
extensive survey of high school students' HIV knowledge and behaviors was published by the CDC in June, 1990 and included data collected from 32 State and Territorial, and ten local education agencies that took part in these surveys. It was found that although students know HIV can be transmitted through unprotected sexual intercourse and intravenous drug use (needle sharing in particular), many did not know or acknowledge that blood donation, blood tests, mosquitoes, and public toilets do not increase risk of HIV infection (Centers for Disease Control, 1990b).

In 1985, Price et al. found student knowledge of HIV issues to be very low. The instrument Price and his colleagues administered revealed only 3 knowledge questions were answered correctly by 75% or more students. Even students with the highest level of knowledge answered only 47% of questions correctly. However, in 1985 when Price et al. administered their study many schools were not yet providing HIV education and less than 5 states had mandated HIV education (Fraser & Mitchell, 1988). In 1986, DiClemente, Zorn, and Temoshok found high school students in Family Life Education classes were confused about the way HIV is transmitted. Only 66% of the students knew that HIV is not spread by casual contact.

Many investigators have found that students have misconceptions regarding blood donation being a source of HIV transmission. (Strunin & Hingson, 1987; Helgerson &
Students are also confused about which body fluids transmit HIV. Strunin and Higson (1987) found 29% of adolescents were unaware that semen and vaginal fluids transmit HIV. A study of 1,326 San Francisco teens by DiClemente, Zorn and Temoshok (1986) found that only 41% of students knew that kissing was not a mode of HIV transmission.

DiClemente, Boyer & Morales (1988) found Black and Latino adolescents twice as likely as white adolescents to have misconceptions about the casual transmission of HIV. These misconceptions were associated with greater levels of perceived risk about contracting HIV.

**HIV-Related Attitudes of Adolescents**


In addition, Brown et al., (1990) found 9% of tenth graders endorsed homophobic attitudes while no fifth graders did. The authors suggest that these teens are intolerant of those they perceive as "causing AIDS". Fennell (1990) suggests negative attitudes toward
homosexuality may affect the outcome of HIV education programs because many students still perceive AIDS as a "gay disease", thus a disease that will not personally affect them. This may contribute further to adolescent attitudes of invulnerability.

**HIV-Related Behaviors of Adolescents**

Hein (1989) reported more teenage than adult cases of HIV infection are acquired through heterosexual transmission. Thus the risk to female adolescents is higher than the risk to adult women. In addition, adolescents with AIDS are more likely to be Black or Hispanic than are adults. Transmission patterns appear to be different for these minorities. Black adolescents are more likely than Whites or Hispanics to have contracted HIV through homosexual activity while Hispanic adolescents are more likely to have contracted HIV through intravenous drug use than Whites or Blacks.

Heterosexual intercourse among adolescents is common. In 1986 it was estimated that 11.6 million youth aged 13 to 19 had had sexual intercourse (Alan Guttmacher Institute, 1986). The average age for females to have first intercourse is 16.2 years; for males 15.7 years (Zelnick & Kantner, 1980).

Additional data confirms the fact that many adolescents have unprotected sex. Four of ten adolescent females become pregnant before the age of 20 and nearly
half of those infected with sexually transmitted diseases are under age 25 (Yarber, 1987). In addition, Strunin and Hingson (1987) report only 15% of a random sample of Massachusetts teens reported they had changed their sexual behavior due to concern about contracting HIV. In addition, according to Rotheram-Borus and Koopman (1991), no educational program has strongly demonstrated behavior change among youth. One exception is found in preliminary results of a study of runaway and gay adolescents (Rotheram-Borus, Koopman, Haignere, & Ehrhardt, 1989) which utilized cognitive and behavioral psychology to change behavior.

Further complicating prevention efforts is the fact that a majority of teens are not using condoms. Strunin and Hingson (1987) found only 10% of the random sample of Massachusetts teens they queried reported using condoms. Kegeles et al. (1988) found San Francisco teens report more condom use (27% of females and 41% of males reported using condoms the previous month). One year later the same investigators found 23% of females and 49% of males reported condom use in the previous month but only 2.1% of females and 8.2% of males reported using condoms during each act of sexual intercourse (Kegeles et al., 1988).

Intravenous drug abuse, particularly needle-sharing, is another risk behavior for HIV transmission. Estimates of injected drug use by adolescents vary. Data reported to
the CDC by state, territorial, and local education agencies in 1989 revealed that 2% to 5% of students (median 3%) reported ever injecting cocaine, heroin, or other illegal drugs and 0.2% to 3% (median 0.9%) reported needle-sharing to inject drugs. (CDC, 1990) Strunin and Hingson (1987) found 13% of a random sample of Massachusetts teens reported drug use other than alcohol and marijuana, 1% injected drugs.

Although not a direct route of infection, some investigators consider alcohol and marijuana to contribute to HIV infection. They operate as "gateways" to intravenous drugs (Kandel & Logan, 1984; Yamaguchi & Kandel, 1984) and lower inhibitions among adolescents which can lead to unsafe sexual behavior (Fullilove, Fullilove, Haynes, & Gross, 1989).

The HIV-related knowledge, attitudes, and behaviors of adolescents present evidence as to why they are among the fastest growing groups with AIDS in the United States (Citizens Commission on AIDS for New York City and Northern New Jersey, 1991). Several investigators have expressed that, to be effective, those planning interventions with adolescents must consider their developmental characteristics when selecting HIV prevention strategies (Haffner, 1987; Rotheram-Borus & Koopman, 1991; Hein, 1989; Cates, 1991). The following section on HIV education curricula will describe what is being taught in American
schools and which messages and strategies are being utilized.

HIV Education Curricula

The CDC has recommended that HIV education may be most appropriate and effective if it is conducted as part of a comprehensive school health education program. However, they also state that provision of this education should take place as rapidly as possible, even if it initially taught as a separate subject (CDC, 1988). The Presidential Commission on the HIV Epidemic (1988) refers to a comprehensive school health education curriculum for all grades K through 12 as the "long-term response which will have a far greater pay-off when fully implemented" (p. 88). Consequently, some widely used comprehensive health curricula have incorporated HIV information in the past few years. These include such well-known comprehensive school health curricula as the Teenage Health Teaching Modules (EDC, 1989) and the Michigan Model (Michigan Department of Education, 1988). In addition, a variety of prepared curricula have been developed as stand-alone units on HIV (Meeks & Heit, 1988; Quackenbush & Sargent, 1990; Yarber, 1987). Sroka and Calabrese (1987) developed a stand alone curriculum which addresses HIV within the context of sexually transmitted diseases (STDs).

There is debate as to what should be taught in HIV education programs at various grade levels. The CDC has
suggested content to be addressed in HIV education programs at early elementary school, late elementary/middle school, and junior high/senior high school (CDC, 1988). The latter applies to this study. Content foci for junior/senior high school students suggested by the CDC includes explanation of HIV; transmission modes; abstinence from sex and intravenous drug use; description of those who are at increased risk of HIV infection; infection among health care workers; risky practices for HIV infection; preventive practices for HIV, pregnancy, and STDs; safer sex practices such as using latex condoms and spermicides, mutually monogamous sexual relations and abstinence; blood-related issues; testing issues; and how an infected individual can protect others from becoming infected. The CDC suggests to contact the National AIDS Hotline and the STD National Hotline for additional information (CDC, 1988).

HIV education program content varies from community to community throughout the United States. The National PTA (1991) states, "Many, but not all, states and school districts now require teaching HIV/AIDS prevention. However, the quality and quantity of that education varies greatly from one school to another and even from one class to another" (p. 9).

DiClemente (1989) calls for standardized HIV prevention programs to "ensure uniformity of information across communities" (p. 75). He argues that as the
situation now stands adolescents attending different schools in the same community may receive totally different HIV education and another adolescent residing nearby may not receive any HIV education at all. According to DiClemente, "...HIV prevention programs must reach all adolescents; whether they reside in high-density AIDS epicenters like San Francisco and New York City or in communities which are currently considered low-risk areas" (p. 76-77). Other researchers have found that HIV education is less prevalent in smaller schools (Wass, et al., 1990) and in rural schools (Helge & Paulk, 1991). A recent survey determined over half of the HIV education programs offered in rural schools take place in one day or less with most of the schools covering the topic in health classes. Only a third of survey respondents said they have tools for evaluating their HIV education programs and about 90 percent allow parents to excuse their children from instruction (Helge & Paulk, 1991).

Issues in HIV Education

Issues in HIV education include opposition and support for HIV education itself and disputes about what prevention messages should be given to students (abstinence education versus safer sex education).

Opposition and Support for HIV Education

Phyllis Schlafly’s Coalition for Teen Health regards HIV education as "a violation of the First Amendment rights
of children whose religion teaches that nonmarital acts are morally wrong" (Schlafly, 1987). The United Families Foundation believes "sexuality education should simply teach that sex can lead to AIDS. AIDS leads to death" (Bartleson, 1987).

It has been suggested that teachers may overestimate the lack of community support for sexuality and HIV education (Yarber and Pavese, 1984). A 1988 Harris Poll of the American public indicated 85% approve of sexuality education in the schools (Harris & Associates, 1988). Public opinion regarding HIV education in the United States is nearly as strong with 83% in favor of HIV education in the schools in 1986 (Yankelovich, Clancy, and Shulman, 1986) and 91% in favor in 1987 (National Broadcasting Corporation, 1987).

A 1987 NBC poll found 91% of the American public supportive of HIV education in the schools. A more recent study of parents of eighth grade students was the first to assess parental perceptions regarding the appropriateness of certain HIV education topics for their children. (Acosta, 1992) Acosta found the highest percentage of parental disagreement to be 15.6% for two topics: oral sex; and sexual activities causing cuts or tears in the lining of the rectum, vagina, or penis. Only 7.8% of parents disagreed with the schools teaching about condom use. In general, most parents approved of topics related to
scientific and biological aspects of HIV education but were also in agreement with both abstinence and safer sex education as part of their child's HIV instruction.

**HIV Education Messages**

One of the major issues of concern to those responsible for HIV education is what HIV prevention messages should be given to students. According to the Citizens Commission on AIDS for New York City and Northern New Jersey (1991), "The most controversial aspect of AIDS education in the schools is not whether it should be taught, or by whom, but what the message should be." (p.156) Rotheram-Borus and Koopman (1991) suggest that there are at least five different messages: 1) abstinence, 2) monogamy, 3) screening partners, 4) HIV antibody testing, and 5) explicit instruction in safer practices for having sex or using drugs. Hein (1991) maintains there are four messages and these have not kept pace with the epidemic: 1) be abstinent, 2) limit sexual partners, 3) "know" your partner, and 4) be monogamous. Hein (1991) believes none of these messages are useful concepts for teenagers. Other authors propose there are only two general models for STD and HIV prevention. One encourages morality and abstinence, the other encourages behavior modification such as using condoms and not sharing needles. (Scharer, Challberg, & Rearick, 1990).
The first and most widely used strategy, abstinence from sexual intercourse and all drug use, is the safest both in terms of infection prevention and controversy. Most parents and other adults in the community advocate the abstinence approach (Welbourne-Moglia & Edwards, 1986).

A recent study investigated the effects of three abstinence sex education programs on student attitudes toward sexual activity (Olsen, Weed, Ritz, & Jensen, 1991). The programs were: Teen-Aid, Sex Respect, and Values and Choices. The investigators found all three programs increased abstinence values for seventh and tenth grade students with the exception of the Teen-Aid program for the seventh graders. The Sex Respect program produced the most attitude change. According to the researchers, this may be because the language used in the program is congruent with the students' language and the visual aids are better than the other programs (Olsen et al., 1991). Engs (1991) believes the Sex Respect and Teen-AID programs "discourage students' options for choice made on objective materials and hinder teachers from discussing unbiased factual information" (p. 157).

Bennett (1988) is a proponent of abstinence programs. He believes sex education should: 1) teach sexual restraint, 2) teach that sex involves complicated feelings and emotions, 3) promote the family, 4) include parental help in teaching sex in the classroom and at home, and
5) use teachers who provide good role models. Others, while supporting abstinence promotion as one vital message, realize that many teens fail to "Just Say No". Substance abuse prevention literature indicates that this approach is difficult for adolescents because they generally do not have the social skills to resist peer pressure (Botvin & Eng, 1982; Wallack & Corbett, 1987). Further complicating matters is the finding that adolescents generally approve of their peers having sex (AAHE, 1988).

Thus, even though the federal government and most schools use the abstinence message, its efficacy has been questioned, especially for youth that have already engaged in sexual activity. It has been suggested that abstinence promotion may be more effective for younger adolescents who are not yet sexually active (Rotheram-Borus & Koopman, 1991).

Condom promotion and instruction regarding their use as well as needle cleaning is at the other end of the HIV prevention continuum. Condom distribution in schools is a very current issue. This controversial measure has recently been adopted in New York City Schools. Condoms are available on request to 261,000 New York City High School students in the school system's 17 clinics as well as from any teacher or staff member who has volunteered for the program. Student's confidentiality will be protected and parental consent is not required (Lewis, 1991). Condom
distribution has been practiced in Canada since 1989 through the use of condom vending machines in secondary school restrooms (Jamieson, Beals, Lalonde & Associates, 1989).

In some states in the United States the distribution of contraceptives in schools is illegal. For example, in the State of Michigan, it is illegal to distribute "a family planning drug or devise in a public school" (p. 15) (Michigan Department of Education, 1991). In addition, HIV education and safer sex instruction in particular may violate community standards. In 1988 the CDC stated, "the exact grades at which students receive this essential information should be determined locally, in accord with community and parental values, and thus may vary from community to community" (p. 5). When considering community values, one should recognize that some groups are adamantly opposed to HIV education while others consider it a necessity to save the lives of students.

Future Trends in HIV Education

While it is difficult to anticipate what future trends in HIV education will be, a review of the current literature and expert opinions may shed some light on future programming efforts. Some theories about future efforts include changing the HIV prevention messages provided to students, an increased role for peer educators, and the provision of a standardized HIV education program.
New HIV Prevention Messages

Some authors believe that most of the current HIV prevention messages are not working and that new strategies and messages should be used in the second decade of the HIV epidemic (Hein, 1991; Hacker, 1990). These authors advocate promoting "outercourse" or pleasuring activities such as touching, massage, and masturbation which do not involve sexual penetration. These activities are risk-free (Hein, 1991) and enable adolescents to enjoy aspects of their sexuality other than intercourse (Hacker, 1990). Hein adds the following additional strategies:

1) researchers should work to develop a viricide or barrier method that is female controlled, 2) expand HIV education efforts in schools, youth-serving agencies, and health facilities to make condoms widely and easily available, 3) change the words and images we use. (Teens should know there are people who are living with HIV, not just dying from AIDS. In addition, include same-sex activities and gay sexuality in discussions and speak of youth in high risk situations, not high-risk youths.), 4) attend to the barriers that exclude teens from health services, and 5) help teens channel their talents to become part of the compassionate response to the HIV epidemic by becoming volunteers, peer educators, etc.
Increased Use of Peer Education Efforts

Brown, DiClemente, and Reynolds (1991) state, "The importance of the peer group in adolescence cannot be overestimated. Peers are the transitional objects of adolescents as they search for their identity and transition to adulthood. The norms of the peer group provide a structure for decision making" (p. 56). Strunin (1991) cites reliance on peer networks as a characteristic of adolescence. Boyer and Kegeles (1991) maintain that effective programs use strategies which combine cognitive and behavioral skills training and are age appropriate and sensitive to cultural values, religious beliefs, sex roles and customs within adolescent groups. Similarly, Petosa and Wessinger (1990) believe prevention programs must go beyond health motivations and address a complex set of needs and social forces that shape adolescent behavior. Adolescents feel a great pressure to conform (Haffner, 1987). Peer education programs are an attempt to address the important adolescent social force of peer influence.

Peer education programs have recently gained support as a means of combatting the spread of HIV infection. According to DiClemente et al.,(1991) there is a plethora of anecdotal evidence to suggest that adolescents' intentions toward HIV risk behaviors will be influenced by perceptions of peer expectations. Boyer and Kegeles (1991) have developed an AIDS Risk Reduction Model (ARRM) which
contends an adolescent will be influenced by what they believe their peer group considers to be risky sexual practices. The peer group opinion influences whether the adolescent labels the behavior as risky. For example, if an adolescent peer group believes unprotected intercourse is not risky, then the adolescent will not be likely to consider it risky. Thus, some HIV experts (Cates, 1991; Fraser & Mitchell, 1988; Haffner, 1987) have suggested a need to learn more about how to influence or change peer values and norms. Haffner states, "Teenagers may be more motivated to change behavior if educators concentrate on changing the norms of the peer group rather than trying to change individual teens' actions in a way contrary to the peer group's norms" (p. 13).

Fraser and Mitchell (1988) highlight peer-mediated programs as one of a number of positive approaches to changing adolescent behavior. They cite the success of such programs as Students Against Drunk Driving (SADD) in changing group norms of adolescents. SADD has helped teens change their views such that it is no longer acceptable to drink and drive. With regard to the HIV epidemic, Fraser and Mitchell feel that a program similar to SADD could change group norms about abstinence and/or safer sex practices. Fraser and Mitchell (1988) believe also that upper-elementary school students are most influenced by
their peers, thus norm and attitude-changing programs must begin at an early age.

Haffner (1987) lists a variety of roles for teen involvement in HIV education programs which include: 1) serving as role models for other teens, 2) educating each other, 3) acting as peer counselors, 4) designing materials, 5) serving on advisory boards, 6) conducting needs assessments, 7) organizing student HIV prevention groups, and 8) designing and conducting other innovative projects.

Successful peer education programs have been initiated by a variety of organizations including the San Francisco Unified School District, the Center for Population Options, the Medical Foundation of Boston, and the Rhode Island Department of Education (Kerr, Allensworth, & Gayle, 1991).

Recent successful programs have been led by teenagers. One such program focused on helping teens resist peer pressures to initiate sexual activity (Howard & McCabe, 1990). The Rhode Island Department of Education Peer Education Program included 15 peer educators. These peer educators contacted 4,000 youth in street outreach activities such as distributing literature and condoms to people at beaches, concerts, etc. (Kerr, et al., 1991). Peer programs have the potential to provide a wide variety of activities such as staffing "rap rooms" where students drop in to discuss HIV-related concerns and AIDS telephone
hotlines offering referral and counseling as well as teen theater productions and the other activities mentioned above.

Numerous HIV education experts (Fraser & Mitchell, 1988; Hein, 1991; Kerr, et al., 1991; Rotheram-Borus & Koopman, 1991) recommend teen involvement in HIV education initiatives. This involvement may include the design and implementation of prevention programs themselves. In addition, Rotheram-Borus and Koopman (1991) cite the need for data regarding effective programs employing these strategies. Research on a variety of HIV prevention education programs is apparently lacking (CDC, 1991). The Centers for Disease Control states, "Research is urgently needed to determine the effectiveness of specific HIV prevention education programs in preventing risk behaviors, and to help us understand why programs may or may not be effective" (p. 15). Certainly, peer education programs are an aspect of HIV education whose effectiveness needs to be determined. Future research will undoubtedly help HIV educators to determine the effectiveness of peer-mediated interventions. For the present these peer-mediated programs continue to be theoretically sound as a basis for educating adolescents about HIV issues.

**Development of a Standardized HIV Education Program**

DiClemente (1989) recommends development of a standardized school-based HIV prevention program. This
type of program will help to ensure equality of HIV instruction across geographical areas of the nation. DiClemente stresses that adolescents in low incidence areas should be exposed to a program which will be beneficial to them if they migrate to other areas of the country. They should not be at a disadvantage as compared to their peers if they move to a new geographical location. Although he recommends standardization of a curricular program, DiClemente does not rule out modifying this curriculum based upon local input. Helge and Paulk (1991) point out that 90 percent of rural schools they surveyed allow parents to excuse their children from HIV education programs. Parental excusal is often a result of concern about children being exposed to sensitive subject matter. However, excusing adolescents from HIV education may put them at risk for HIV infection. Yarber (1988) suggests defending students' rights to health information. He feels students have a right to know how to protect themselves from HIV infection. Thus, schools have the authority and obligation to provide students with HIV education. However, Yarber recognizes also that some schools "may require parental permission due to the local political climate" (p. 51). In addition, Yarber feels that community participation in program development will lead to strong endorsement of the program. Finally, the Report of the National Commission on AIDS (1991) stresses an increasing
need to supplement individual behavioral change strategies with a concept of community-wide prevention. Thus, it is important that future HIV prevention programs be developed with community input.

Although the Centers for Disease Control developed "Guidelines for Effective School Health Education to Prevent the Spread of AIDS" in 1988, and recommended HIV education be conducted within a comprehensive health education program, they have not designed any sort of standardized curriculum. Their guidelines contained only major concepts for different school levels (e.g. early elementary, late elementary, junior/senior high school) (CDC, 1988). The CDC guidelines were lacking in specific concepts for each grade level. It is highly doubtful the CDC will develop a standardized HIV curriculum in the future since our national program on AIDS was based on the principle "that the specific scope and content of HIV education should be locally determined and should be consistent with parental and community values" (p. 679) (Moore, et al., 1991). Thus, the task of developing a standardized HIV curriculum may be left to individual authors or those that develop other prepared health curricula if it is indeed to come to fruition.
CHAPTER III
METHODOLOGY

Research Design

This is a descriptive research study utilizing survey research instruments that were mailed to participants. The study will identify and describe HIV education instructional needs reported by secondary school home economics and health education teachers. It will address also the following subproblems: 1) describe selected teaching demographics of selected home economics and health teachers, 2) describe HIV resources that are used and needed as identified by selected home economics and health teachers, 3) identify training to conduct HIV education which is possessed and needed as reported by selected home economics and health teachers, 4) identify the amount of time per semester spent teaching about HIV and other health topics as reported by selected home economics and health teachers, 5) identify comfort levels and update needs of selected home economics and health teachers who teach sensitive HIV-related topics, 6) identify the extent to which health and home economics teachers are permitted to teach various sensitive topics in their respective school,
7) describe how selected home economics and health teachers rated perceived obstacles to HIV/AIDS education, and
8) describe differences between selected home economics and health teachers in terms of the above seven subproblems.

Survey Instrument Development

An AIDS Education Needs Assessment Questionnaire was developed in December 1987 from which many of the questions on this 1990 Needs Assessment Questionnaire were derived. Members of the ASHA AIDS Education Advisory Committee (AEAC) met on December 17, 1987. These advisory committee members were representing twelve national health and education associations and were appointed by the presidents of the respective organizations. The eleven AEAC members, their titles and respective organizational representation included the following: Jonathan Howe, President, National School Boards Association; Effie Jones, Associate Executive Director, American Association of School Administrators; Lynne Gustafson, President, National Association of School Nurses; Jerry Newton, School Health Committee, American Academy of Pediatrics; Laura Abraham, AIDS Project Manager, National PTA; Constance Cordovilla, AIDS Education Coordinator, American Federation of Teachers; James Williams, Executive Director, NEA Health Information Network; Julie Conatser, Executive Director, Oklahoma Academy for State Goals, American Association of Counseling and Development; Gus Dalis, President, Association for the

These committee members were selected by their organization presidents at the request of ASHA Executive Director Dana Davis based upon their experience both with the organization and with HIV/AIDS issues. The eleven AEAC members were asked to individually list the HIV education needs of their respective organizational memberships as they perceived them. A nominal group process was used to elicit the AEAC member’s responses. The principal investigator listed these needs on newsprint taped on the wall around the room. There were many needs duplicated by several members. After the meeting, it was found that these needs fell within four basic categories: 1) knowledge, 2) resources, 3) training, and 4) policy. Therefore, these four categories were included on the 1988 needs assessment instrument.

The knowledge section included questions which were adapted from the AIDS questionnaire section of the National Health Interview Survey. At CDC’s recommendation, questions most frequently answered incorrectly by others
answering the questionnaire were included. Questions on transmission modes, prevention, and HIV antibody testing were selected.

The resource section of the questionnaire included six types of resources: instructional units, lesson plans, films/videotapes, books, pamphlets, and journal articles. Respondents were asked whether they needed lists identifying these resources.

The training section included twenty-two questions. Three questions asked subjects if they needed HIV in-service programs, have had specific instruction to provide HIV education, and knew how to safely handle blood and other body fluids to prevent the spread of HIV. Ten HIV-related topics were listed and subjects were asked how they would feel teaching or discussing these topics in a professional setting. Responses were recorded using a five-point Likert scale ranging from very comfortable to very uncomfortable. Respondents were also asked if they needed to update knowledge or skills to teach these same ten topics and were given response selections of "yes" or "no". The first draft of the needs assessment questionnaire contained 90 questions derived from the nominal group process and developed by the investigator (former ASHA HIV Education Project Director) and two project consultants. These 90 questions were based upon lists of members' needs the advisory committee developed
during the nominal group process. The needs were recorded on newsprint during the initial meeting. Following the meeting the investigator and consultants met at the ASHA National Office and summarized these perceived member needs into questions for the needs assessment instrument. The consultants (Diane Allensworth and Jacob Gayle) were full time health education faculty members in the Department of Adult, Counseling, Health, and Vocational Education (ACHVE) at Kent State University at the time.

These 90 questions subsequently were sent back to the AEAC as well as three members of the ASHA AIDS Task Force (Lorraine Jones, RN; Jeffrey Black, MD; Wanda Jubb, EdD) for additional review and editing. The other members of the ASHA AIDS Task Force (Diane Allensworth, PhD and Jacob Gayle, PhD) were involved with developing the original questions and, therefore, were not involved in the review procedure. The reviewers were asked to delete those questions which they felt were not generic enough to be asked of members of 11 diverse national education and health organizations and those which they felt were not essential to assess the needs of these memberships. The final draft of the questionnaire contained 55 items which were formatted so as to be answered on a computer scanner sheet. This was done for ease of data input since entering this information by hand would involve an excessive amount of time and costs which were prohibitive. This
questionnaire was sent to Laura Kann, PhD, School Health Education Evaluation Specialist for the Division of Adolescent and School Health, CDC, for review and editing. Dr. Kann was asked to delete questions which she felt were inappropriate and to give suggestions for rewording of questions that she felt may be unclear. Dr. Kann gave additional recommendations for formatting and wording of the items, (e.g. putting the opinion questions last and clarifying instructional units for grades K-5 on the resource section) but did not delete any additional questions. Thus, the second review of the instrument included the revisions of 15 individuals and the final draft contained 55 questions.

The 1988 instrument subsequently was used to conduct the ASHA AIDS Education Needs Assessment of Health and Education Professionals (Kerr, Allensworth, & Gayle, 1989) described in Chapter II of this document. This needs assessment questionnaire was mailed to 6,394 health and education professionals who were members of the 11 national organizations mentioned previously. Of these, 2,855 were returned representing a 45 percent response rate.

The Statistical Package for the Social Sciences was used for data analysis. Descriptive, univariate statistical analyses were used including calculation of frequency distributions which reflected the number and
proportion of survey participants who responded in a particular fashion.

Development of the Current Instrument

Parts of the 1988 instrument described above were revised and updated for the purposes of this study. These revisions included some of the questions on resource and training needs and comfort levels when teaching ten HIV-related topics. The comfort levels and update needs when teaching these topics were asked as individual questions on the original needs assessment instrument. The revised instrument included these questions in chart format so that respondents could merely check off their answers on the chart next to the topical area. An additional question added as another chart column was "Are you permitted to teach this topic in your school?". Participants were given a "yes" or "no" alternative. Changes to the section on resources included inquiring about what types of resources they were currently using rather than just about those they needed. The revised questionnaire contained revisions in the training section as well. Questions were added which asked how many formal instruction programs they had taken or attended and what type of instruction it was (e.g. under-graduate courses, graduate courses, in-service programs provided by the school, local workshops, or state and national workshops or conferences.) No knowledge or policy questions were included on the revised instrument.
This was done to update the instrument because the vast majority of persons now have basic knowledge about HIV and most school systems now have HIV/AIDS policies in place. In addition, this instrument was devised to be more specific to instructional needs and these sections on policy and knowledge were no longer as pertinent as they were for the original 1988 needs assessment.

Only HIV educational resources, training, and new sections on obstacles to HIV education and demographics were included. This instrument was revised by the principal investigator with input from her advisor and dissertation committee.

Content validity of the instrument was established by the ASHA AIDS Advisory Committee during an advisory committee meeting on October 17, 1989. Test-retest reliability was conducted on the instrument through administration to a pilot group of members very similar to those included in the study.

**Pilot Study to Determine Instrument Reliability**

A pilot study of 100 randomly selected members of the AHEA sample and 54 immediate past health educator members of the ASHA who work in school districts was conducted to determine test-retest reliability of the questionnaire used for the study. These members were selected for the pilot study because they were most like the sample to be used. In the first cover letter, subjects were asked to complete
the instrument and return it in a prepaid envelope and were informed that they would be mailed another instrument in two weeks. A second copy of the instrument was mailed two weeks after the postmark date of the first instrument. Of the 154 subjects, 38 completed and returned both instruments. They were sent a thank you letter with a complimentary copy of Straight Talk Magazine, a magazine for teens about HIV infection, as a reward for their efforts.

The questionnaire's test-retest reliability over two weeks, including all questions for which Pearson's correlation coefficient could be computed, ranged from -.04 to 1.0 with a mean reliability score of .62. The mean reliability score indicated moderate reliability according to Davis (1971). (Appendix A contains a sample of the final questionnaire which includes test-retest reliability coefficients next to each item).

Content Validity

Content validity of the questionnaire was determined by a panel of experts. This panel consisted of twelve members of the ASHA AIDS Advisory Committee and CDC Project Officer David Poehler. The advisory committee members were appointed by presidents of the national organization whose interests they represented. Members of the ASHA AIDS Advisory Committee were selected by their organization's presidents based on their knowledge of the organization's
membership as well as their knowledge of HIV issues.
Names, titles and addresses of advisory committee members
serving as expert review panelists for the purpose of
determining content validity of the 1990 needs assessment
questionnaire is included in Appendix B. Many of these
individuals assisted in the development of the 1988
instrument. Some new panel members were added due to new
presidential appointments by their respective
organizations. The new panel determined content validity
of the current questionnaire which had been revised by the
principal investigator based upon input from her adviser
and dissertation committee. Panel members who assisted in
the 1988 instrument development were given oral directions
during the process for determining content validity. These
oral directions described which questions on the 1990
instrument were new so that panelists may pay particular
attention to the appropriateness of the new questions.

Procedures for Determining Content Validity

The panel of experts was asked to listen to oral
directions and to read written directions. The oral and
written direction sheets can be found in Appendix B. After
reading the directions, the panel rated each question on
the questionnaire on a Likert scale of 1 to 5 where 1 was
poor and 5 excellent. Questions receiving a mean score
below 3 (average) were eliminated from the instrument
because they were considered by a majority of panel members
to be below average. Only one question which inquired about whether respondents were able to personally select HIV resource materials was eliminated as a result of this rating procedure. Review panelists believed that this question was not pertinent to the study’s objectives.

Review panel members were asked also to review the wording of questions and to make clarifications and additional suggestions directly on the questionnaire. Similar comments received from more than one of the 13 review panelists were incorporated into the final draft of the questionnaire. For example, the original questionnaire asked respondents to write in the name and author of resources they used. More than one panelist felt this would be too difficult and wanted this completion section omitted. (See Appendix B for mean rating scores typed to the left of each item of the questionnaire.)

Questionnaire Formatting and Printing Procedures

Total design method (TDM) procedures suggested by Dillman (1978) were used in constructing the questionnaire. These procedures are purported to increase response rates. Format and printing procedures included the following: 1) printing the questionnaire as a booklet the dimensions of which were 6 1/8" x 8 1/2" and saddle-back stapling the final draft, 2) including no questions on the front or back pages, 3) reducing the type so that questionnaire pages are
printed in a photographically reduced form, and 4) a quality reproduction of the booklet on white paper.

Dillman's (1978) recommendations for cover design and question ordering also were followed. The cover of the questionnaire booklet included the name and logos of each organization to be assessed and the title "An HIV/AIDS Education Needs Assessment of Health and Home Economics Educators". The first page after the cover page began with topical questions of interest to the subjects. The first question, "Do you presently teach about HIV/AIDS in your classroom?" meets Dillman's requirement of being easy, conveying a sense of neutrality, and applying to everyone.

Questions were grouped according to similar content (e.g. questions about resources needed and used were grouped together as were questions regarding obstacles to HIV education, training possessed and needed, and demographics.) The order of questions took advantage of cognitive ties subjects were likely to make among groups of questions and, when possible, similar types of questions were grouped together. For example, questions requiring yes or no answers were grouped together except in instances where this type of grouping would break a logical sequence of cognitive ties for the reader.

Demographic questions were placed at the end of the booklet on the next to the last page as per Dillman's (1978) recommendation. For some respondents this was the
last page of the questionnaire since only secondary school teachers were asked to complete the last page. This last page contained questions most likely to be objectionable to the subjects such as comfort levels, update needs, and permission to teach sensitive topics. This page was designed in chart format with multiple columns for ease in answering as well as conserving space. Additional procedures recommended by Dillman (1978) and used for this study included: 1) using lower case letters for questions, upper case for answers, 2) identifying answer categories with numbers to the left of the possible selections, 3) establishing a vertical flow to the response categories, 4) providing directions for how to answer questions and distinguishing the directions from the questions by putting them in parentheses and using lower case letters. The back cover of the questionnaire booklet contained a statement of thanks and gave directions to participants wishing to receive a summary of results.

**Subject Selection**

In November 1988, a letter was sent by ASHA Executive Director Dana Davis to the President of the American Home Economics Association (AHEA) to ask the organization to join the ASHA in its HIV prevention efforts and to appoint a representative to the ASHA AIDS Advisory Committee. Gladys Gary Vaughn was appointed as the AHEA representative. After appointment, Dr. Vaughn was
contacted as was the AHEA membership and data services department in order to procure labels for the sample to be used for this study. A random sample of members of the Elementary, Secondary, and Adult Education Section of AHEA was solicited at the time since these members would most likely be teachers. However, this sample was not obtained due to AHEA’s inability to generate random samples of members on their computer system. Initially, the principal investigator was told that this random sampling could be done but was later told that the AHEA programmer could not program for a random sample. In February 1990, a new order was placed with the AHEA data processing services department. The order blank contained a request for a cross tabulation of members of the Elementary, Secondary, and Adult Education Section and the Home Economics Teacher Education Section and that this cross section be removed from the education section for the final list. Although AHEA personnel assured the principal investigator that this would be done, the resulting list and labels consisted only of the cross tabulation rather than a list of those left in the education section after this cross tabulation was removed. The principal investigator was able to procure a list of AHEA members from the United States and U.S. territories and to remove those on the cross tabulated list from this list by hand. Thus, those members of the education section who also were members of the home
economics teacher education section were eliminated from the sample. The final sample consisted of members of the AHEA from the United States and its territories but excluding those who were also in the teacher education section since these were most likely university teachers who were not the target population for the study. This sample (N=1441) was used for the study with the realization that this was an oversample. Only responses from secondary school home economics teachers who lived in the United States were included in the data analysis.

The ASHA has only 108 secondary school health educator members that identify themselves as such on the membership blank. All of these secondary school health educator members were included in the study. Therefore, the total sample of health and home economics teachers was 1549.

Mailing Procedure

Dillman's (1978) TDM procedures were used to prepare and assemble the mail package. Four sets of mailing labels and one printout listing of the sample, stationery for cover letters, and the Interim Executive Director's signature was obtained from the AHEA. The same materials were prepared for the ASHA by the principal investigator at the ASHA National Office. Questionnaires were stamped with a highly visible identification number in the upper right hand corner of the cover page with a numbering machine and the same number was stamped next to the recipient's name on
the mailing list. Questionnaires were meter mailed first class from the ASHA National Office on Monday May 14, 1990. The initial mailing included a cover letter on organization stationery describing the importance of HIV education efforts and their participation in this survey with the Executive Director’s signature copied onto it, the questionnaire booklet, and prepaid (metered) return envelope. Exactly one week after the first mailing (May 21, 1990), a follow-up post card was mailed (See Appendix C for sample cover letters and follow-up post card). On June 5, 1990 a second questionnaire and new cover letter was mailed to those who had not yet responded. Due to financial limitations, a third complete mailing by certified mail at seven weeks, normally a part of the TDM procedure, was not conducted. Questionnaires to be included in the study were accepted until July 17, 1990.

Data Analysis/Statistics Used

Data from the questionnaires were entered and verified by staff of the Bureau of Research and Training at Kent State University (KSU) using the Statistical Package for the Social Sciences (SPSS). Data for each organization were analyzed individually and comparisons were made between the health teachers and home economics teachers.

Pearson’s correlation coefficient measures the magnitude and direction of a relationship (Hopkins, Glass & Hopkins, 1987). This statistic was used to determine the
relationship between the first and second administration of the questionnaire (test-retest reliability). A questionnaire with the reliability coefficients typed next to each question may be found in Appendix A.

Since survey research often describes a population at a given time, descriptive statistics are the preferred analysis technique. Descriptive statistics which report frequencies and measures of central tendency were used to answer subproblems one through seven. Group comparisons between home economics educators and health educators were analyzed by use of chi-square for nominal data such as demographics and resources and training needed and possessed. The chi-square test of association statistic is used to determine whether observed proportions differ from expected proportions. In this study expected proportions cannot be hypothesized prior to research on the basis of logic or theory. Therefore, the best estimate of the parameter must be estimated from the sample data. The value of chi-square increases as the observed proportions differ among the groups being compared (Hopkins, et al., 1987).

Group comparisons for continuous data were analyzed through the use of t-tests. The t-tests were used to determine differences in comfort level and perceived obstacles to HIV education between groups and to determine differences in the amount of time the two groups spent
teaching ten health topical areas.

Questionnaire return rates and results of all statistical applications are found in Chapter IV. Results by research question are reported for each individual organization and comparisons are made between organizations for each research question as well.
CHAPTER IV
RESULTS

Return Rates

Of the 1549 questionnaires that were mailed, 1163 were returned. This constitutes a 75% return rate. Of this total return of 1163, only those completing the questionnaire and who teach junior and senior high school were analyzed. The total number of questionnaires that met these criteria was 865. Thus, 298 questionnaires were not included in the analysis. Of these 298, 92 indicated that they were not currently teaching, 55 left significant portions of the questionnaire blank, 54 did not teach junior or senior high school, 34 had retired, 25 were program administrators, 14 felt they were not qualified to complete the questionnaire due to being teachers of unrelated disciplines (e.g. English, economics, child development, food services, food and nutrition, sewing, etc.), 9 were special education teachers, 6 were substitute teachers, 6 were from other countries (2 Canada, 2 Puerto Rico, and 2 Germany) and 2 indicated they did not have time to complete the questionnaire and returned it unanswered. One additional questionnaire was removed from the sample because
the subject removed the coding number from the instrument and it was impossible to determine from his/her responses whether he/she was home economics teacher or a health teacher.

Findings Relative to Research Questions

Statement of the Problem: The purpose of this study was to identify HIV education instructional needs and obstacles reported by secondary school home economics and health education teachers.

Subproblems

1. Describe selected teaching demographics of selected home economics and health teachers.

2. Describe HIV resources that are used and needed as identified by selected home economics and health teachers.

3. Identify training to conduct HIV education which is possessed and needed as reported by selected home economics and health teachers.

4. Identify the amount of time per semester spent teaching about HIV and other health topics as reported by selected home economics and health teachers.

5. Identify comfort levels and update needs of selected home economics and health teachers who teaching sensitive HIV-related topics.

6. Identify the extent to which selected home
economics and health teachers are permitted to teach various sensitive topics in their respective school.

7. Describe how selected home economics and health teachers rated perceived obstacles to HIV/AIDS education.

8. Describe differences between home economics and health teachers in terms of the above seven subproblems.

Home Economics Teacher Results

The following sections describe the results of the secondary school home economics teacher respondents on the first seven research questions above.

Description of Teaching Demographics

Teaching demographics including grade levels taught, years of teaching experience, area in which school is located, and type of school setting were ascertained for the home economics teachers.

The home economics respondents (N=789) reported that they taught home economics (95%) and health education (13%). The majority of the sample taught grades 9-12 (79%) and/or grades 6-8 (38%). In addition, 3% of the sample reported teaching grades K-5 and 3.2% reported teaching adult education. Others reported teaching at junior or community colleges (1%) or at colleges or universities (1%). Percentages equal over 100 because some teachers taught at
more than one school setting or at both junior and senior
high school. Those who reported teaching in grades K-5,
adult education, community colleges, or colleges or
universities did so in addition to their junior or senior
high school teaching. Respondents had to teach in secondary
schools (grades 6-12) to be included in this study.

The home economics teachers had a wealth of teaching
experience with 26% teaching over 20 Years, 25% teaching
16-20 years, 23% teaching 11-15 years, 15% teaching 6-10
years and 10% teaching 0-5 years (see Figure 1).

Most reported teaching in a suburb (42%) with 30%
teaching in rural settings and 28% in urban settings. The
respondents also overwhelmingly worked in public school
settings (93%). An additional 4% and 2% reported working at
vocational or private schools respectively. Over half of
the home economics teachers (57%) reported that they teach
about AIDS.
Figure 1. Teaching Experience of Home Economics Teachers
Resources Used and Needed

The resource use reported by home economics educators may be found in Figure 2. Resources used included pamphlets, videotapes, locally developed curriculum/curriculum guide, state curriculum/curriculum guide, student textbooks/booklets purchased from a publisher, and curriculum guides purchased from a vendor/ outside source but not from a textbook publisher. In the "other (please specify)" question, 7% of respondents added guest speakers, 5% added magazine/newspaper articles, and 2% added the American Red Cross as resources used.

Resources needed by home economics teachers are found in Figure 3. The home economics teachers reported needing information to plan school health education programs to prevent the spread of HIV infection and AIDS (54%) while 22% did not need such information and 25% said that this did not apply to their position. Over half of the respondents reported needing films or videos (66%), developmental guidelines which describe the kind of HIV/AIDS information that should be taught at the various grade levels (65%), lesson or unit plans (61%), pamphlets (56%), and criteria for evaluating an HIV/AIDS curriculum (50%). Less than half of the respondents reported needing information that will help them to develop a coalition to prevent the spread of HIV infection (39%) while 33% did not need such information.
Figure 2: Resources Used by Home Economics Teachers

Vendor Curriculum  Textbooks  State Curriculum  Local Curriculum  Videos  Pamphlets

Percentage

0  10  20  30  40  50
Figure 3. Resources Needed by Home Economics Teachers
and 28% felt this did not apply to their position. Other resources that less than half of the respondents needed were scientific or educational articles (48%) and books (29%). Resources needed that were added by respondents in the "other (please specify)" category were guest speakers (3%) and updated information (2%).

Training Possessed and Needed

A little over half of the home economics teacher respondents had formal instruction to help them to provide students with information about HIV/AIDS (54%). Of those who had such instruction, most had in-service programs provided by the school system and local workshops or conferences. A smaller percentage had state or national workshops or conferences, graduate courses, or undergraduate courses (see Figure 4). Most had taken or attended 1 to 3 of these programs. As shown in Figure 5, about one fourth had taken 4-6 such programs and only 4% attended more than 7 of these programs. Over half (52%) reported knowing CDC guidelines to safely handle blood or other body fluid spills to prevent the spread of HIV/AIDS despite the fact that only 32% reported their school district provided them with such training. Approximately sixty percent of the respondents felt that HIV/AIDS in-service programs were needed in their school.
Figure 4. Type of HIV Training Possessed by Home Economics Teachers
Figure 5. Number of HIV Trainings Reported by Home Economics Teachers
Time Spent Teaching About HIV and Other Health Topics

Over half (55%) of the home economic teachers reported implementing 1 to 3 hours of HIV/AIDS instruction per semester with 29% teaching 4 to 6 hours, 8% teaching 7 to 9 hours, 4% teaching 10 to 12 hours, and 4% reporting over 12 hours of teaching about HIV/AIDS.

Inquiry about the number of hours spent teaching the ten health topical areas per semester (community health, consumer health, environmental health, family life, growth and development, nutritional health, personal health, prevention and control of diseases and disorders, safety and accident prevention, substance use and abuse) generated responses that are difficult to interpret as subjects were asked to write a number of hours next to each topical area. Some respondents were obviously confused with regard to the number of instructional hours available in a semester (e.g. they indicated teaching some topics for 99 hours per semester.) These results are found in Table 1 but should be interpreted with caution due to instrumentation and response problems.
Table 1

Descriptive Data for Semester Hours Home Economics Teachers Spend Teaching Ten Health Topical Areas

<table>
<thead>
<tr>
<th>Topic</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Health</td>
<td>523</td>
<td>2.1</td>
<td>0</td>
<td>6.8</td>
<td>99</td>
</tr>
<tr>
<td>Consumer Health</td>
<td>567</td>
<td>3.6</td>
<td>2.0</td>
<td>8.2</td>
<td>99</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>545</td>
<td>2.4</td>
<td>1.0</td>
<td>5.6</td>
<td>75</td>
</tr>
<tr>
<td>Family Life</td>
<td>679</td>
<td>24.5</td>
<td>10.0</td>
<td>29.8</td>
<td>99</td>
</tr>
<tr>
<td>Growth and Development</td>
<td>654</td>
<td>21.0</td>
<td>10.0</td>
<td>25.8</td>
<td>99</td>
</tr>
<tr>
<td>Nutritional Health</td>
<td>727</td>
<td>19.8</td>
<td>10.0</td>
<td>23.0</td>
<td>99</td>
</tr>
<tr>
<td>Personal Health</td>
<td>629</td>
<td>8.5</td>
<td>5.0</td>
<td>13.3</td>
<td>99</td>
</tr>
<tr>
<td>Disease Prevention</td>
<td>633</td>
<td>5.3</td>
<td>3.0</td>
<td>7.8</td>
<td>99</td>
</tr>
<tr>
<td>Safety/Accident Prev.</td>
<td>692</td>
<td>6.5</td>
<td>4.0</td>
<td>10.8</td>
<td>99</td>
</tr>
<tr>
<td>Substance Use/Abuse</td>
<td>621</td>
<td>6.8</td>
<td>4.0</td>
<td>11.3</td>
<td>99</td>
</tr>
</tbody>
</table>
Comfort Levels and Update Needs

Home economics teachers generally reported high levels of comfort when teaching nearly all sensitive HIV-related topics with few exceptions. Most discomfort was expressed regarding teaching about homosexuality and bisexuality. Approximately 30% of the respondents reported that they would feel somewhat or very uncomfortable teaching this topic to their students, another 16% felt "neutral". In addition, 18% reported that they would feel uncomfortable teaching about intravenous drug use, and 13% reported discomfort in teaching about safer sex practices.

Approximately 85% of the home economics teachers reported they felt somewhat comfortable or very comfortable teaching the topics sexual abstinence and sexual decision making. Another 84% felt somewhat or very comfortable teaching about sexually transmitted diseases. Other topics in which a significant percentage of respondents reported being somewhat or very comfortable teaching included: sexual behavior (81%), safer sex (78%), death and dying (78%), risk behavior for HIV/AIDS transmission (78%), intravenous drug use (62%), and homosexuality and bisexuality (54%). Table 2 shows comfort levels reported for all sensitive topics.
Table 2

**Comfort Levels of Home Economics Teachers When Teaching Sensitive Topics (N = 789)**

<table>
<thead>
<tr>
<th>Topic</th>
<th>VC (%)</th>
<th>SC (%)</th>
<th>N (%)</th>
<th>SU (%)</th>
<th>VU (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinence</td>
<td>62.6</td>
<td>22.0</td>
<td>9.7</td>
<td>3.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Communicating about sex/AIDS</td>
<td>52.3</td>
<td>28.3</td>
<td>10.0</td>
<td>7.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Sexual decision making</td>
<td>59.6</td>
<td>25.8</td>
<td>7.9</td>
<td>6.0</td>
<td>.6</td>
</tr>
<tr>
<td>Sexual behavior</td>
<td>46.4</td>
<td>34.2</td>
<td>9.1</td>
<td>9.4</td>
<td>.9</td>
</tr>
<tr>
<td>Death and dying</td>
<td>39.5</td>
<td>38.6</td>
<td>11.4</td>
<td>9.2</td>
<td>1.4</td>
</tr>
<tr>
<td>IV drug use</td>
<td>31.9</td>
<td>29.6</td>
<td>20.1</td>
<td>15.8</td>
<td>2.6</td>
</tr>
<tr>
<td>STDs</td>
<td>51.1</td>
<td>33.3</td>
<td>7.8</td>
<td>6.9</td>
<td>.9</td>
</tr>
<tr>
<td>Risk behaviors</td>
<td>47.2</td>
<td>30.5</td>
<td>12.8</td>
<td>8.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Safer sex</td>
<td>48.3</td>
<td>30.0</td>
<td>8.4</td>
<td>10.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Homosexuality &amp; bisexuality</td>
<td>22.4</td>
<td>31.1</td>
<td>16.3</td>
<td>23.1</td>
<td>7.0</td>
</tr>
</tbody>
</table>

VC=very comfortable, SC=somewhat comfortable, N=neutral, SU=somewhat uncomfortable, VU=very uncomfortable
Over half of the home economics teachers reported needing to update their knowledge of the following topics: intravenous drug use, homosexuality and bisexuality, sexually transmitted diseases, death and dying, risk behavior for HIV transmission, and communicating with a sexual partner about sexuality and AIDS-related issues. Less than half needed updates on safer sex, sexual behavior, sexual decision making, and abstinence. Home economics teachers' update needs for all sensitive topics may be found in Figure 6.

**Permission to Teach Sensitive Topics**

Home Economics teachers report being permitted to teach all of the following topics in their school: death and dying, STDs, intravenous drug use, sexual abstinence, sexual decision making, risk behavior for HIV transmission, sexual behavior, communicating with a sexual partner about sexuality and AIDS-related issues, safer sex, and homosexuality and bisexuality (see Figure 7). However, the topics of safer sex and homosexuality and bisexuality were not permitted most often to be taught by the home economics teachers. More than one fourth (26%) of the teachers reported not being permitted to teach safer sex practices (e.g. using condoms), in their school. Over one third (34%) of the responding teachers reported not being permitted to teach about homosexuality and bisexuality in their school. Another 10% wrote in question marks, "don't know", or left
Figure 6. Update Needs Cited by Over Half of Home Economics Teachers
Figure 7. Percentage of Home Economics Teachers Permitted to Teach Sensitive HIV-Related Topics
this item blank indicating that they were unsure as to whether they were permitted to teach about homosexuality and bisexuality in their school.

**Rating of Perceived Obstacles to HIV Education**

As shown in Table 3, most of the stated obstacles to HIV education were perceived by home economics teachers as only moderate. Those rated as a great or very great obstacle by a substantial percentage of teachers included the following: overcrowded curriculum; not enough time to adequately address this topic (43%), student attitudes (e.g. they "know it all" or believe "it will never happen to me") (43%), lack of materials stressing abstinence (42%), lack of materials stressing values and the family (38%), restrictions on what topics can be taught (e.g. condom use, homosexuality, safer sex) (32%), misinformation about HIV/AIDS is still perpetuated by a variety of sources (e.g. parents, peers, media) (32%), and lack of specific training to teach this topic (28%).

Over half of the respondents found the following to be no obstacle or a small obstacle: lack of support by school administrators (73%), (over half of the home economics teachers (53%) felt that lack of support by school administrators was not an obstacle at all) and negative pressure from parents and community groups (61%).
### Table 3

**Home Economics Teachers’ Perceptions of Obstacles to HIV Education N=789**

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Perception of Obstacle (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Pressure from parents/community</td>
<td>30.9</td>
</tr>
<tr>
<td>Lack of up-to-date, age-appropriate materials</td>
<td>21.3</td>
</tr>
<tr>
<td>Lack of administrative support</td>
<td>53.2</td>
</tr>
<tr>
<td>Topic restrictions</td>
<td>25.1</td>
</tr>
<tr>
<td>Student attitudes</td>
<td>8.5</td>
</tr>
<tr>
<td>Lack of specific training</td>
<td>21.2</td>
</tr>
<tr>
<td>Overcrowded curriculum</td>
<td>13.5</td>
</tr>
<tr>
<td>Misinformation perpetuated</td>
<td>8.0</td>
</tr>
<tr>
<td>Lack of materials stressing values and family</td>
<td>19.2</td>
</tr>
<tr>
<td>Lack of materials stressing abstinence</td>
<td>16.0</td>
</tr>
</tbody>
</table>

N=no, S=small, M=moderate, G=great, VG=very great
Other obstacles mentioned by the home economics teachers included in the "other (please specify)" category included that this information was taught only by the health or physical education teacher (2%). An additional 3% wrote somewhere on the questionnaire that HIV education was done only by health teachers although they did not cite this as an obstacle. Other written comments regarding obstacles included financial (1%) and not being permitted to teach this topic (1%).

Health Teacher Results

The following sections describe the results of the secondary school health teacher respondents on the first seven research questions.

Description of Teaching Demographics

Teaching demographics including grade levels taught, years of teaching experience, area in which school is located, and type of school setting were ascertained for the health teachers.

The health teacher respondents (N=76) reported that they taught health education (94.7%), physical education (14.5%), and home economics (2.6%). In addition, 17.1% reported teaching other topics. The majority of the respondents taught grades 6-8 (60.5%) and grades 9-12 (56.6%). Others reported teaching grades K-5 (17.1%), college (9.2%), junior or community college (3.9%), and adult education (3.9%). As shown in Figure 8, these health
Figure 8. Teaching Experience of Health Teachers
teachers had a wealth of teaching experience with over one fourth of the respondents teaching over 20 years.

Most reported teaching in suburban areas (59.2%) with 22.4% and 15.8% teaching in rural and urban areas respectively. The respondents reported working almost exclusively in public schools (92.1%) with only 5.3% reporting working in private schools. Ninety-two percent of those responding reported that they teach about AIDS.

Resources Used and Needed

The resource use reported by health teachers included videotapes, pamphlets, state curriculum/curriculum guide, locally developed curriculum/curriculum guide, curriculum guides purchased from a vendor/outside source but not from a publisher, and student textbooks/booklets purchased from a publisher (see Figure 9). Comments in the "other (please specify)" section included guest speakers (10%), and magazine and newspaper articles (8%). Also mentioned but not numerically significant were American Red Cross materials, health department materials, and respondents' own materials.

The health teachers reported fewer resource needs than the home economics teachers. Over half of the respondents reported a need for films or videos (61.8%), and developmental guidelines which describe the kind of HIV/AIDS information that should be taught at the various grade levels (58.7%). Less than half reported needing other
Figure 9. Resources Used by Health Teachers
resources such as articles (48.7%), criteria for evaluating an AIDS curriculum (48%), information to plan school health education programs to prevent the spread of HIV infection (46.1%), pamphlets (40.8%), information that will help to develop coalitions to prevent the spread of HIV infection (39.5%), lesson or unit plans (38.2%), and books (22.4%) (see Figure 10). In the "other (please specify)" category health educators added updated information (7%), guest speakers (4%) and posters (1%).

Training Possessed and Needed

Over 92% of the health teachers reported formal instruction to help them provide students with information about HIV/AIDS. Of those who had such instruction, most had it in the form of workshops or conferences which were local (67%) or at the state or national levels (55%). As shown in Figure 11, next in frequency were in-service programs conducted by the school, graduate courses, or college/university courses. Most had taken 1 to 3 of these programs (46%) with 39% taking 4 to 6 programs and approximately 16% taking more than 7 formal instructional programs on HIV/AIDS (see Figure 12).
Figure 10. Resources Needed by Health Teachers
Figure 11. Type of HIV Training Possessed by Health Teachers

- Undergraduate Courses
- Graduate Courses
- School In-service
- State/Natl. Conf.
- Local Workshop

Percentage
Figure 12. Number of HIV Trainings Reported by Health Teachers
Three fourths of the respondents reported knowing CDC guidelines to safely handle blood or other body fluid spills to prevent the spread of HIV/AIDS but only 37% reported their school district provided them with training regarding how to handle body fluid spills. Over half (57%) of the respondents felt HIV/AIDS in-service programs were needed in their school.

**Time Spent Teaching About HIV and Other Health Topics**

Most health teachers reported teaching about HIV for 1 to 3 hours (41%) per semester with 37% teaching 4 to 6 hours, 13% teaching 7 to 9 hours, 4% teaching 10-12 hours and 4% teaching about HIV over 12 hours.

As in the home economics teacher analysis, due to respondent confusion about the number of hours in a semester, hours spent teaching about the ten health topical areas must be interpreted with caution. Table 4 shows the number of hours health teachers reported teaching the ten health topical areas.
Table 4

Descriptive Data for Semester Hours Health Teachers Spend Teaching Ten Health Topical Areas

<table>
<thead>
<tr>
<th>Topic</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Health</td>
<td>55</td>
<td>2.0</td>
<td>1.0</td>
<td>3.0</td>
<td>15</td>
</tr>
<tr>
<td>Consumer Health</td>
<td>62</td>
<td>2.8</td>
<td>2.0</td>
<td>3.1</td>
<td>15</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>59</td>
<td>4.4</td>
<td>2.0</td>
<td>13.4</td>
<td>99</td>
</tr>
<tr>
<td>Family Life</td>
<td>67</td>
<td>15.3</td>
<td>10.0</td>
<td>17.7</td>
<td>99</td>
</tr>
<tr>
<td>Growth and Development</td>
<td>65</td>
<td>8.5</td>
<td>5.0</td>
<td>9.3</td>
<td>51</td>
</tr>
<tr>
<td>Nutritional Health</td>
<td>66</td>
<td>7.6</td>
<td>5.0</td>
<td>11.0</td>
<td>88</td>
</tr>
<tr>
<td>Personal Health</td>
<td>65</td>
<td>10.2</td>
<td>5.0</td>
<td>17.3</td>
<td>99</td>
</tr>
<tr>
<td>Disease Prevention</td>
<td>64</td>
<td>12.0</td>
<td>9.5</td>
<td>17.2</td>
<td>99</td>
</tr>
<tr>
<td>Safety/Accident Prev.</td>
<td>63</td>
<td>6.2</td>
<td>3.0</td>
<td>11.9</td>
<td>88</td>
</tr>
<tr>
<td>Substance Use/Abuse</td>
<td>71</td>
<td>17.2</td>
<td>13.0</td>
<td>19.0</td>
<td>99</td>
</tr>
</tbody>
</table>
Comfort Levels and Update Needs

Most health teachers were very comfortable teaching various sensitive HIV-related topics. Table 5 shows the percentages of health educators reporting various comfort levels for the given topics. Over half felt very comfortable teaching all of the given topics with the exception of death and dying (50%), and homosexuality and bisexuality (47%). Approximately 8% of the health teachers reported being somewhat or very uncomfortable teaching about death and dying. Almost 11% reported some level of discomfort teaching about homosexuality and bisexuality. Health teachers reported few topical areas in which they felt they needed knowledge updates. Over two thirds of the respondents did not need updates on abstinence (81%), risk behavior for HIV/AIDS transmission (80%), safer sex (74%), and communicating about sex and AIDS (70%).

More than a third of the respondents expressed a need for updates on sexually transmitted diseases, intravenous drug use, homosexuality and bisexuality, and death and dying (see Figure 13).

Permission to Teach Sensitive Topics

As shown in Figure 14, over 85% of health teachers reported that they were permitted to teach all of the sensitive topics previously discussed (abstinence, communicating with a sexual partner about sex and AIDS, sexual decision making, sexual behavior, death and dying,
Table 5

**Comfort Levels of Health Teachers When Teaching Sensitive Topics (N = 76)**

<table>
<thead>
<tr>
<th>Topic</th>
<th>VC</th>
<th>SC</th>
<th>N</th>
<th>SU</th>
<th>VU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinence</td>
<td>86.8</td>
<td>6.6</td>
<td>2.6</td>
<td>2.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Communicating about sex/AIDS</td>
<td>68.0</td>
<td>22.7</td>
<td>2.7</td>
<td>5.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Sexual decision making</td>
<td>73.7</td>
<td>18.4</td>
<td>3.9</td>
<td>2.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Sexual behavior</td>
<td>67.1</td>
<td>22.4</td>
<td>6.6</td>
<td>2.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Death and dying</td>
<td>50.0</td>
<td>34.2</td>
<td>7.9</td>
<td>6.6</td>
<td>1.3</td>
</tr>
<tr>
<td>IV drug use</td>
<td>76.3</td>
<td>18.4</td>
<td>2.6</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>STDs</td>
<td>82.9</td>
<td>10.5</td>
<td>2.6</td>
<td>2.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Risk behaviors</td>
<td>86.8</td>
<td>10.5</td>
<td>1.3</td>
<td>0.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Safer sex</td>
<td>73.3</td>
<td>14.7</td>
<td>6.7</td>
<td>2.7</td>
<td>2.7</td>
</tr>
<tr>
<td>Homosexuality &amp; bisexuality</td>
<td>47.4</td>
<td>35.5</td>
<td>6.6</td>
<td>7.9</td>
<td>2.6</td>
</tr>
</tbody>
</table>

VC=very comfortable, SC=somewhat comfortable, N=neutral, SU=somewhat uncomfortable, VU=very uncomfortable
Figure 13. Update Needs Cited by Over a Third of Health Teachers
Figure 14. Percentage of Health Teachers Permitted to Teach Sensitive HIV-Related Topics
intravenous drug use, STDs, risk behaviors for HIV/AIDS transmission, safer sex, and homosexuality and bisexuality). However, 18% of the sample reported they were not allowed to teach safer sex (e.g. use of condoms), and 25% were not permitted to teach about homosexuality and bisexuality. An additional 7% wrote question marks, "don’t know" or left this item blank perhaps indicating that they were unaware as to whether they were permitted to teach about homosexuality and bisexuality.

**Rating of Perceived Obstacles to HIV Education**

A large percentage of health educators (68%) found lack of support by school administrators to be no obstacle to their HIV education instructional efforts. Another 68% found lack of specific training to teach this topic to be no obstacle.

Obstacles perceived as great or very great by 20% of more of the health teachers included the following: overcrowded curriculum (29%), student attitudes (e.g. they "know it all" or believe "it will never happen to me") (24%), lack of materials stressing abstinence (24%), and lack of materials stressing values and the family (20%). Health teachers’ ratings of each of the given obstacles may be found in Table 6. Health teachers specified a lack of an effective approach by the media (1%), a vocal minority that opposes sexuality education (1%), and homophobia (1%) as "other" obstacles.
Table 6

**Health Teachers' Perceptions of Obstacles**
to HIV Education  N=76

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Perception of Obstacle (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Pressure from parents/community</td>
<td>43.4</td>
</tr>
<tr>
<td>Lack of up-to-date, age-appropriate materials</td>
<td>43.4</td>
</tr>
<tr>
<td>Lack of administrative support</td>
<td>68.4</td>
</tr>
<tr>
<td>Topic restrictions</td>
<td>38.7</td>
</tr>
<tr>
<td>Student attitudes</td>
<td>14.5</td>
</tr>
<tr>
<td>Lack of specific training</td>
<td>68.4</td>
</tr>
<tr>
<td>Overcrowded curriculum</td>
<td>14.5</td>
</tr>
<tr>
<td>Misinformation</td>
<td>11.8</td>
</tr>
<tr>
<td>Lack of materials stressing values and family</td>
<td>27.6</td>
</tr>
<tr>
<td>Lack of materials stressing abstinence</td>
<td>28.9</td>
</tr>
</tbody>
</table>

N=no, S=small, M=moderate, G=great, VG=very great
The final section of this chapter will deal with research question number eight which compared the home economics and health teachers on the previous seven research questions.

**Comparisons of Health and Home Economics Teachers**

Several comparisons (Chi-square and t-test) between the health and home economics teachers were of interest. Because the home economics teachers outnumbered the health teachers by about 9 to 1 (678:76) in the whole sample, the home economics sample was randomly sampled down in size commensurate with the health sample to afford clear comparisons. Those who taught both grade levels 6-8 and 9-12 were not included in the comparisons. All reported differences were statistically significant.

**Teaching Demographics**

In significant comparisons of teaching demographics, home economics teachers were more likely than health teachers to teach grades 9 through 12 and less likely to teach grades 6 through 8 (see Table 7). They were also more likely to teach in urban settings and less likely to teach in suburban settings than the health educators (see Table 8). There was no difference between the groups in years of teaching experience. There were so few subjects in either group teaching in private and vocational settings that no meaningful comparison regarding school type was possible.
Table 7

Comparisons of Grade Levels Taught by Home Economics and Health Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Grade Levels Taught</th>
<th>Row Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6-8</td>
<td>9-12</td>
</tr>
<tr>
<td>Home Economics</td>
<td>19 (36.5%)</td>
<td>44 (59.5%)</td>
</tr>
<tr>
<td>Health</td>
<td>33 (63.5%)</td>
<td>30 (40.5%)</td>
</tr>
<tr>
<td>Column Totals</td>
<td>52 (41.3%)</td>
<td>74 (58.7%)</td>
</tr>
</tbody>
</table>

\[ X^2(1, N=126) = 6.4, \quad .99 X^2_1 = 6.63, \quad p \approx .01 \]

Table 8

Comparison of Teaching Settings of Home Economics and Health Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Setting</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Suburban</td>
</tr>
<tr>
<td>Home Economics</td>
<td>19 (52.8%)</td>
<td>29 (39.2%)</td>
</tr>
<tr>
<td>Health</td>
<td>17 (47.2%)</td>
<td>45 (60.8%)</td>
</tr>
<tr>
<td>Column Totals</td>
<td>36 (24.7%)</td>
<td>74 (50.7%)</td>
</tr>
</tbody>
</table>

\[ X^2(2, N=146) = 7.5, \quad .95 X^2_2 = 5.99, \quad p < .05 \]
Resources Used and Needed

Regarding comparisons of resources currently in use by those educators who presently teach about HIV/AIDS, the home economics teachers were significantly less likely to use state curricula ($X^2(1, N=138) = 21.2, p < .01$) and videos ($X^2(1, N=138) = 14.5, p < .01$) than the health teachers. There was no difference between groups in the tendency to use curricula either produced locally or purchased from vendors or textbook publishers or to use pamphlets. The only area of information/resource need for which the two groups differed significantly ($X^2(1, N=150) = 6.1, p < .05$) was the home economics teachers' expressed greater need for information for planning educational programs to prevent the spread of HIV/AIDS. No difference between groups was found in the need for information regarding forming coalitions, the need for lesson/unit plans, films/videos, books, pamphlets or articles, the need for curriculum evaluation criteria, the need for developmentally-sensitive instructional guidelines, or the need for in-service programs.

Training Possessed and Needed

In comparisons of training, significantly fewer home economics than health teachers reported having formal instruction for providing HIV/AIDS information ($X^2(1, N=151) = 36.8, p < .01$). Regarding sources of training for those who had been trained, the home economics teachers were
proportionately lacking in national workshopconference training \(X^2(1, N=140) = 4.1, p < .05\) there was no difference in college, graduate level, in-service, or local workshop training. The home economics teachers tended to have had 1-3 instructional programs as compared to 4 or more for the health teachers (see Table 9). In addition, fewer home economics teachers than health teachers reported knowing the CDC guidelines for safely handling blood/body fluid spills, but there was no difference in the groups’ reporting having been trained by one’s school district in the handling of such spills.
Table 9
Comparisons of Number of Hours of HIV Training for Health and Home Economics Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Hours</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-3</td>
<td>4-6</td>
</tr>
<tr>
<td>Home Economics</td>
<td>48</td>
<td>18</td>
</tr>
<tr>
<td>(69.6)</td>
<td>(26.1)</td>
<td>(4.3)</td>
</tr>
<tr>
<td>Health</td>
<td>32</td>
<td>27</td>
</tr>
<tr>
<td>(45.7)</td>
<td>(38.6)</td>
<td>(15.7)</td>
</tr>
<tr>
<td>Column Totals</td>
<td>80</td>
<td>45</td>
</tr>
<tr>
<td>(57.6)</td>
<td>(32.4)</td>
<td>(10.1)</td>
</tr>
</tbody>
</table>

\[X^2 (2, N=139) = 9.56, .99X^2 = 9.21, p < .01\]
Time Spent Teaching About HIV and Other Health Topics

In the area of teaching practices, significantly fewer ($X^2(1, N=151) = 23.3, p < .01$) home economics than health teachers reported that they teach about HIV/AIDS; of those respondents who did teach about HIV/AIDS, there was no difference between the two groups in the number of hours spent teaching the subject. Table 10 shows t-test results for comparisons of the number of hours the home economics teachers and health teachers report teaching the ten health topical areas. Differences in the number of hours spent teaching various health topics indicated that the home economics group taught significantly more growth/development and nutritional health, while teaching less prevention and control of diseases/disorders and substance use/abuse. Table 10 also shows no significant differences reported by health and home economic teachers for the number of hours spent teaching community health, consumer health, environmental health, family life, personal health, or safety/accident prevention. These results regarding health topic instructional time should be interpreted with caution, however, due to respondents answering in non-standard ways.
Table 10
Comparisons of Number of Semester Hours of Health Topics Taught by Health and Home Economics Teachers

<table>
<thead>
<tr>
<th>Topic</th>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>2-tail Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Health</td>
<td>Home Ec.</td>
<td>54</td>
<td>1.15</td>
<td>1.69</td>
<td>-1.86</td>
<td>85.10</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>55</td>
<td>2.02</td>
<td>3.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Health</td>
<td>Home Ec.</td>
<td>54</td>
<td>3.83</td>
<td>11.02</td>
<td>0.66</td>
<td>60.43</td>
<td>0.510</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>62</td>
<td>2.80</td>
<td>3.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Health</td>
<td>Home Ec.</td>
<td>52</td>
<td>1.15</td>
<td>1.78</td>
<td>-1.84</td>
<td>60.32</td>
<td>0.070</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>59</td>
<td>4.39</td>
<td>13.36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Life</td>
<td>Home Ec.</td>
<td>62</td>
<td>20.65</td>
<td>25.33</td>
<td>1.37</td>
<td>108.03</td>
<td>0.173</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>67</td>
<td>15.33</td>
<td>17.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>Home Ec.</td>
<td>64</td>
<td>21.63</td>
<td>24.68</td>
<td>3.99</td>
<td>80.35</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>65</td>
<td>8.48</td>
<td>9.32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutritional</td>
<td>Home Ec.</td>
<td>69</td>
<td>21.06</td>
<td>27.14</td>
<td>3.79</td>
<td>90.76</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>66</td>
<td>7.65</td>
<td>11.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Health</td>
<td>Home Ec.</td>
<td>62</td>
<td>6.32</td>
<td>11.99</td>
<td>-1.48</td>
<td>114.19</td>
<td>0.141</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>65</td>
<td>10.23</td>
<td>17.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevention/Control of Diseases and Disorders</td>
<td>Home Ec.</td>
<td>63</td>
<td>3.84</td>
<td>3.85</td>
<td>-3.71</td>
<td>69.39</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>64</td>
<td>12.02</td>
<td>17.18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety and Accident Prevention</td>
<td>Home Ec.</td>
<td>66</td>
<td>6.32</td>
<td>9.19</td>
<td>0.08</td>
<td>116.51</td>
<td>0.933</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>63</td>
<td>6.16</td>
<td>11.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance Use and Abuse</td>
<td>Home Ec.</td>
<td>59</td>
<td>6.05</td>
<td>13.02</td>
<td>-3.95</td>
<td>123.67</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>71</td>
<td>17.21</td>
<td>19.04</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Separate variance used due to heterogeneity of variance in all comparisons
Comfort Levels and Update Needs

When asked about their levels of comfort in teaching these topics, the subjects of homosexuality/bisexuality revealed the most meaningful difference, home economics teachers feeling only neutral and health teachers feeling comfortable. The home economics teachers expressed being comfortable but to a lesser degree than the health teachers when teaching abstinence, sexual behavior, death/dying, intravenous drug use, STDs, risk behavior for HIV/AIDS, and safer sex practices. There was no difference between home economics and health teachers regarding comfort levels when teaching about communication with partners about sex and AIDS or sexual decision making (see Table 11).

When questioned about the need to update one’s knowledge of various topics, the home economics teachers were more likely to express the need for updating in the following areas: sexual abstinence, communicating with a partner about sex and AIDS, sexual behavior, death/dying, intravenous drug use, STDs, risk behavior for HIV/AIDS, safer sex practices, and homosexuality and bisexuality. There was no difference in the expressed need to update knowledge about sexual decision making.
Table 11

Comparisons of Comfort Levels of Health and Home Economics Teachers When Teaching HIV-Related Topics

<table>
<thead>
<tr>
<th>Topic</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>2-tail probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinence</td>
<td>Home Ec.</td>
<td>76</td>
<td>4.31</td>
<td>0.95</td>
<td>-3.12</td>
<td>142</td>
<td>0.002 *</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>76</td>
<td>4.75</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicating About Sex/AIDS</td>
<td>Home Ec.</td>
<td>76</td>
<td>4.27</td>
<td>0.81</td>
<td>-1.66</td>
<td>149</td>
<td>0.098</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>75</td>
<td>4.51</td>
<td>0.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Decision Making</td>
<td>Home Ec.</td>
<td>76</td>
<td>4.41</td>
<td>0.75</td>
<td>-1.57</td>
<td>150</td>
<td>0.119</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>76</td>
<td>4.61</td>
<td>0.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Behavior</td>
<td>Home Ec.</td>
<td>76</td>
<td>4.24</td>
<td>0.76</td>
<td>-2.12</td>
<td>150</td>
<td>0.036</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>76</td>
<td>4.51</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death &amp; Dying</td>
<td>Home Ec.</td>
<td>76</td>
<td>3.75</td>
<td>1.11</td>
<td>-2.91</td>
<td>150</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>76</td>
<td>4.25</td>
<td>0.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV Drug Use</td>
<td>Home Ec.</td>
<td>75</td>
<td>3.71</td>
<td>1.08</td>
<td>-5.42</td>
<td>128</td>
<td>0.000 *</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>76</td>
<td>4.67</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STD's</td>
<td>Home Ec.</td>
<td>75</td>
<td>4.41</td>
<td>0.79</td>
<td>-2.35</td>
<td>149</td>
<td>0.020</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>76</td>
<td>4.71</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Behaviors for HIV</td>
<td>Home Ec.</td>
<td>75</td>
<td>4.20</td>
<td>0.94</td>
<td>-4.82</td>
<td>123</td>
<td>0.000 *</td>
</tr>
<tr>
<td>Transmission</td>
<td>Health</td>
<td>76</td>
<td>4.81</td>
<td>0.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safer Sex</td>
<td>Home Ec.</td>
<td>76</td>
<td>4.14</td>
<td>0.976</td>
<td>-2.50</td>
<td>149</td>
<td>0.014</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>75</td>
<td>4.53</td>
<td>0.935</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homosexuality</td>
<td>Home Ec.</td>
<td>76</td>
<td>3.41</td>
<td>1.20</td>
<td>-4.19</td>
<td>150</td>
<td>0.000</td>
</tr>
<tr>
<td>Bisexuality</td>
<td>Health</td>
<td>76</td>
<td>4.17</td>
<td>1.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Separate variance estimate used in these cases
Permission to Teach Sensitive Topics

When the educators were asked whether they were permitted to teach various topics in their schools, some significant differences between the two groups emerged. The home economics teachers reported being less likely than the health group to be permitted to teach sexual abstinence, communication with partners about sex and AIDS, sexual decision making, intravenous drug use, sexually transmitted diseases, risk behavior for HIV/AIDS, and safer sex practices. There was no difference reported in permission to teach sexual behavior, death/dying, and homosexuality/bisexuality (see Table 12).
Table 12

Comparisons of Home Economics and Health Teachers’ Permission to Teach HIV-Related Topics

<table>
<thead>
<tr>
<th>Topic</th>
<th>Group</th>
<th>Perm.</th>
<th>Not Perm.</th>
<th>X²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinence</td>
<td>HEc.</td>
<td>44</td>
<td>22</td>
<td>10.8</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Hlth.</td>
<td>96</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comm. Sex/AIDS</td>
<td>HEc.</td>
<td>68</td>
<td>32</td>
<td>8.3</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Hlth.</td>
<td>88</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex Dec. Making</td>
<td>HEc.</td>
<td>81</td>
<td>19</td>
<td>4.1</td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td>Hlth.</td>
<td>92</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex Behavior</td>
<td>HEc.</td>
<td>76</td>
<td>24</td>
<td>3.4</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>Hlth.</td>
<td>88</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death &amp; Dying</td>
<td>HEc.</td>
<td>86</td>
<td>14</td>
<td>.3</td>
<td>.61</td>
</tr>
<tr>
<td></td>
<td>Hlth.</td>
<td>89</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV Drug Use</td>
<td>HEc.</td>
<td>83</td>
<td>17</td>
<td>7.0</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Hlth.</td>
<td>96</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STDs</td>
<td>HEc.</td>
<td>84</td>
<td>16</td>
<td>7.9</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Hlth.</td>
<td>97</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Behaviors for</td>
<td>HEc.</td>
<td>77</td>
<td>23</td>
<td>13.8</td>
<td>.00</td>
</tr>
<tr>
<td>HIV Transmission</td>
<td>Hlth.</td>
<td>97</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safer Sex</td>
<td>HEc.</td>
<td>64</td>
<td>36</td>
<td>6.4</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Hlth</td>
<td>82</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homosexuality/</td>
<td>HEc.</td>
<td>42</td>
<td>38*</td>
<td>4.6</td>
<td>.10</td>
</tr>
<tr>
<td>Bisexuality</td>
<td>Hlth.</td>
<td>68</td>
<td>25*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Total does not equal 100% because remainder of respondents indicated on the questionnaire they did not know if they were permitted to teach about homosexuality/bisexuality.
Rating of Perceived Obstacles to HIV Education

When asked to rate the degree of obstruction posed by various obstacles to HIV education, the home economics group tended to find greater opposition. As shown in Table 13, the most substantial difference was lack of training for teaching about HIV/AIDS, the home economics teachers finding this a moderate obstacle, the health teachers finding it no obstacle. The differences were not substantial for the obstacles of parent/community pressure, lack of up-to-date materials, lack of support by administrators, restrictions on topics to be taught, student attitudes, inadequate time, misinformation, lack of materials stressing values and the family or lack of materials stressing abstinence.
Table 13

Comparisons of Home Economics and Health Teachers’ Perceived Obstacles to HIV Education

<table>
<thead>
<tr>
<th>Topic</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>2-tail probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure from parents/community groups</td>
<td>Home Ec.</td>
<td>73</td>
<td>1.23</td>
<td>1.20</td>
<td>1.98</td>
<td>136</td>
<td>0.050</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>76</td>
<td>0.88</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of up-to-date age-appropriate materials</td>
<td>Home Ec.</td>
<td>75</td>
<td>1.61</td>
<td>1.28</td>
<td>4.58</td>
<td>149</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>76</td>
<td>0.95</td>
<td>1.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of administrative support</td>
<td>Home Ec.</td>
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* Separate variance estimate used in these cases
CHAPTER V
DISCUSSION AND RECOMMENDATIONS

Introduction

Although this data was collected in the summer of 1990, no national initiatives have investigated or addressed the HIV education needs of home economics teachers since that time. Nor is there reason to believe or research to support that health teachers' needs have changed significantly during this period.

This chapter includes discussion and recommendations based upon the findings of this research. Discussion will include possible explanations for the significant differences between health and home economics teachers and how responses to this questionnaire compare with previous research. Recommendations will be made to attempt to meet the needs of these two groups of educators as well as for future research in this area. Finally, implications for health educators will be discussed and conclusions drawn.

Resources Used and Needed

The most widely used HIV/AIDS resource of home economics teachers was pamphlets, while health teachers' number one resource was videotapes. The home economics
teachers were significantly less likely to use videos and state curricula than the health teachers. This may be due to the home economics teachers being unaware of the availability of these resources since efforts at the state level have focused on health educators. Similarly, many videotape vendors send information about these tapes to the attention of health educators in schools. Home economics teachers probably do not purchase HIV/AIDS videotapes because they have other priorities for funding.

Many school systems do not encourage anyone but health educators to teach about HIV/AIDS. This is probably due to the Centers for Disease Control emphasis on HIV education within comprehensive school health education, an emphasis which has led to increases in funding for health education programs. This emphasis may deter school-based professionals other than health educators from obtaining needed resources due to a lack of information regarding the availability of such resources or a lack of funds for purchase. The home economics teachers expressed a real need for information for planning education programs to prevent the spread of HIV/AIDS.

Training Possessed and Needed

It is apparent from the results of this section of the instrument that home economics teachers, although possessing some formal instruction to help them teach about HIV/AIDS, need more. Well over half of the home economics teachers
reported teaching about HIV and expressed a need for information to plan school health education to prevent the spread of HIV infection. Only 38% of these teachers reported having in-service programs in their school district and 60% felt they were needed. In addition, most of the home economics sample were not being provided enough training opportunities regarding HIV/AIDS in the form of conferences at the state and national levels. In contrast, health teachers appear to be well trained at the local, state, and national levels to conduct HIV education programs.

While the Centers for Disease Control has advocated health educators as those who should conduct HIV education, some believe the epidemic demands a more far-reaching response. Allensworth and Symons (1989) and Kerr, Allensworth, & Gayle (1991) contend a multidisciplinary approach using multiple strategies is imperative. They advocate the involvement of school nurses, psychologists, physicians, and counselors along with teachers of all disciplines, peers, parents, and community members in strategies to prevent the spread of HIV infection. The Alan Guttmacher Institute (1989) determined that teachers of physical education, home economics, and biology, as well as health education are the primary sexuality educators in schools. At a minimum, teachers of these disciplines should be involved in HIV prevention efforts.
Time Spent Teaching About HIV and Other Health Topics

For those health and home economics teachers who teach about HIV, there was no significant difference in the amount of time they devoted to the subject. Since health educators are delegated the responsibility for HIV education in most secondary schools, it would be logical to assume that they would be teaching more hours than the home economics teachers. However, in the "obstacles to HIV education" section of the questionnaire, both groups of teachers indicated an overcrowded curriculum as their greatest obstacle. Thus, perhaps neither health or home economics teachers perceive that they have sufficient time to devote to HIV education.

With respect to other health topics, some findings were as one would expect. Home economics teachers indicated teaching growth/development and nutritional health more than health teachers, while health teachers taught more prevention and control of diseases and disorders and substance use and abuse than home economics teachers. HIV education can occur as part of any of these units.

It is surprising that there were no differences reported in the amount of time spent teaching other health topical areas such as community, consumer, environmental, and personal health; family life; and safety and accident prevention. One would assume that health teachers would teach significantly more hours of these topics than home
economics teachers. However, many health teachers have limited time to teach an already overcrowded curriculum.

**Comfort Levels and Update Needs**

For nearly every given topic, home economics teachers reported feeling less comfortable than health teachers when teaching the topic to their students. The biggest difference between the groups was in teaching homosexuality/bisexuality. Home economics teachers reported feeling neutral while most health teachers felt comfortable. Speculation about the reasons for this include an assumption that health teachers may have had better professional preparation to teach sexuality issues than home economics teachers. While many home economics teachers are prepared to teach growth and development, it is unclear whether this preparation includes instruction about sexual orientations. Health teachers, through coursework in human sexuality, would be more likely to be exposed to the topic of sexual orientation than home economics teachers.

Some home economics teachers also expressed discomfort about teaching intravenous drug use and safer sex practices. These are topics most health teachers felt comfortable teaching. Both groups felt most comfortable teaching about abstinence which, according to Kenney (1989), is the topic most often stressed in state HIV/AIDS curricula and curriculum guides in the United States.
Home economics teachers reported significantly more update needs than health educators. The only topic where no significant differences between health and home economics teachers existed were a need for updates on sexual decision making. As in previous needs assessments of health educators, needs to update on the topics death and dying and homosexuality and bisexuality were greatest (Kerr, Allensworth, Gayle, & Dalis, 1988; Kerr, 1988).

The first ranking update need of home economics teachers was intravenous drug use followed by homosexuality and bisexuality, sexually transmitted diseases, death and dying, and risk behaviors for HIV transmission. As was previously stated, professional preparation and in-service programs for home economics teachers are not likely to address these topics. However, this study indicated over half (57%) of home economics teachers teach about HIV/AIDS. If this is indeed the case nationally, perhaps these topics should be addressed in home economics teacher in-service and professional preparation programs.

**Permission to Teach Sensitive Topics**

Home economics teachers were less likely than health teachers to be permitted to teach nearly all of the given topics (sexual abstinence, communication with partners about sex and AIDS, sexual decision making, intravenous drug use, sexually transmitted diseases, risk behavior for HIV/AIDS, and safer sex practices). It may well be that home
economics teachers are not as likely to be permitted to teach these topics because, consistent with government expectations, school districts are requiring HIV-related topics to fall under the auspices of the health teacher. It is interesting to note that no difference was observed between health and home economics teachers in permission to teach the very controversial topics of sexual behavior, death/dying, and homosexuality/bisexuality. However, homosexuality/bisexuality and safer sex were the topics most teachers indicated they were not permitted to teach. Seventeen percent of health teachers indicated that they were not permitted to teach safer sex. This is consistent with studies of secondary teachers (grades 7-12) conducted by the Guttmacher Institute. Their research revealed the topics of homosexuality and safer sex were covered less frequently than other HIV-related topics. This may be due to the fact that many communities do not feel these topics should be taught due to their controversial nature. Thus, any attempts to include them in the curriculum have been defeated. Further, the CDC does not mandate states or local education agencies to teach specific HIV-related topics but rather suggests that they develop materials and programs that are consistent with local community standards (CDC, 1988). This leads many school districts to bypass important sensitive topics in order to avoid community controversy.
Obstacles to HIV Education

Obstacles perceived as being problematic in prior studies of sexuality and HIV educators regarding teaching sensitive issues were not supported by this research. For example, this study provided no support for the contention that pressure from parents, community, or school administrators was a significant obstacle when teaching sensitive topics as was found in the Guttmacher Institute study (Forrest & Silverman, 1989).

Health and home economics teachers perceived the same items to be great or very great obstacles to HIV education. Although percentages were higher for the home economics teachers, the obstacles were perceived in the same order for both groups of educators: 1) overcrowded curriculum; not enough time to teach the topic, 2) student attitudes (e.g. they "know it all" or believe "it will never happen to me"), 3) lack of materials stressing abstinence, and 4) lack of materials stressing values and the family.

The last two obstacles were somewhat surprising since most school systems stress abstinence as the primary method to prevent HIV infection (Kenney, 1989). However, although this emphasis on abstinence is prevalent, it is perceived by respondents in this study that few materials stressing abstinence are available. This is consistent with the research of Smalley (1991) who has found that abstinence curricula and supplemental instructional programs are
lacking in quantity as well as quality. As a result, teachers often develop their own materials (Smalley, 1991).

It may be that many school districts and textbook publishers are grappling with how to present "safer sex" practices to students and have focused their concerns on these types of materials rather than those stressing abstinence.

In addition, according to some researchers, many educators on the secondary level have found the "just say no" approach to sexual abstinence and drug education to be highly ineffective with adolescents (Botvin, 1984; Alter & Scales, 1979). Further, according to Yarber (1988), this approach is not appropriate for HIV education "since equating sex with drug abuse may teach adolescents to be unduly afraid of sex" (p. 50). Perhaps educators need more detailed and creative teaching materials and/or strategies to present abstinence information to students at this time when sexual activity of secondary school students is so prevalent and so much encouraged by the mass media. Yarber (1988) contends that most educators are not comfortable teaching abstinence until marriage because it is unrealistic given the sexual climate of our society. Smalley (1991) reports that abstinence "is not an easy topic to discuss in a classroom filled with 30 fifteen-year-olds" (p. 129). Also, conflict between peer and adult role models and an intense peer influence may compound this issue (Allensworth
This is why many HIV educators and sexuality experts feel peer educators are well suited to provide information on abstinence and safer sex to secondary school students (DiClemente et al., 1991; Fraser & Mitchell, 1988; Haffner, 1987; Howard & McCabe, 1990).

The lack of materials stressing values and the family obstacle is consistent with a current national trend to strengthen and reemphasize the family and family values. Values and values clarification, in particular, is a controversial topic in health education (Greenberg, 1991). Some feel that it is impossible to present value-laden information in a non-biased manner; thus it should not be permitted to be taught. Yarber (1988) advocates teachers stress responsible sexuality based on factors such as maturity, personal and family values, and one's religion. He believes that HIV educators should be able to lead group discussions and values clarification exercises. In addition, internationally recognized sexuality expert Sol Gordon (1985), states "A sex education without values is valueless" and recommends that we promote a moral sex education with "universal values" (p. 46). This would include making responsible decisions based on a universal value of not hurting or exploiting others. Values such as "sex is never a true test of love", and "using another human being to satisfy selfish desires is wrong" (p. 47) would also be taught in a moral sex education program (Gordon,
Regardless of the approach used, a clear need is identified in this study for materials that stress values and the family.

The involvement of parents in HIV education efforts has been stressed by many national organizations involved with such efforts. Organizations such as the National PTA, National Education Association, National School Boards Association, and virtually all 21 national organizations with Centers for Disease Control Cooperative Agreements to prevent the spread of HIV infection have advocated parental involvement in HIV education efforts. This parental involvement theme was echoed by The Presidential Commission on the HIV Epidemic (1988) when they advised state and local health departments and school boards collaborate to conduct regularly scheduled HIV/AIDS conferences for parents free of charge. In addition, the CDC made available free of charge parent HIV/AIDS materials to facilitate parents increasing their own knowledge and talking to their children about the epidemic.

Recommendations

The following recommendations have been proposed based upon a review of the literature and in response to the findings of this study:

1) HIV in-service programs in schools should involve all school-based professionals, not just those teaching the topic.
2) Schools are not currently providing adequate training for school-based professionals regarding "universal precautions" for handling blood and body fluid spills. Schools should provide, as part of the HIV in-service program, infection control training for handling blood and other potentially infectious body fluid spills.

3) Lists of available HIV/AIDS videos and State HIV/AIDS curricula or curriculum guides should be made available to home economics teachers and others who teach about HIV/AIDS in the school.

4) State and national organizations for home economics teachers should include programs or presentations on HIV/AIDS issues at state and national conferences to increase the exposure of home economics teachers to these topics.

5) Home economics teachers in particular should be afforded more training in order to teach about HIV/AIDS. This training should include updates on topics such as intravenous drug use, homosexuality and bisexuality, sexually transmitted diseases, death and dying, risk behavior for HIV transmission, and communicating with a sexual partner about sex and AIDS-related issues. Although some of these topics seem controversial for those secondary school teachers in the lower grades (6-8), research supports the fact that students at this age are experimenting with sex and drugs and many will have
to face the HIV-related death of family and/or friends in the future. Professional preparation programs for home economics teachers should recognize that approximately half of these educators will teach about HIV and should provide them with adequate training to do so.

6) Secondary school administrators and school boards should be encouraged to permit instruction on the topics of safer sex and homosexuality and bisexuality in the schools. Leaving these topics out of the curriculum may actually threaten the lives of students due to the increased rate of suicide among gay youth and the need of adolescents for skills to prevent HIV infection. National organizations such as the Association for Supervision and Curriculum Development, American Association of School Administrators, National Association of State Boards of Education, and National School Boards Association should take leadership roles in educating and sensitizing their members about these topics.

7) Health educators have been shown repeatedly to be less comfortable teaching the topics of death and dying and homosexuality and bisexuality than other HIV-related topics. Health education professional preparation programs, in-service programs, and professional conferences should address these topics and provide updates and exercises to develop participant comfort when
teaching these topics.

8) High quality materials stressing abstinence, values, and the family should be developed for HIV education programs. These materials should not be religiously-biased but rather should include "universal values" such as those Gordon (1985) espouses.

Suggestions for Future Research

Future research in this area should include periodic reassessments of needs of school-based professionals teaching about HIV/AIDS. It is important to recognize that the results of this study of members of professional associations are not necessarily generalizable to secondary health and home economics teachers who are not members of professional associations. Thus, it may be appropriate to conduct future research on those who are not members of professional associations. In addition, more in-depth study of a smaller number of HIV educators through interview or observational techniques would shed light on what teaching methods and strategies are used. Additional research should be conducted to determine content included in teacher in-service programs and what type of in-service interventions can increase the comfort levels of educators when teaching sensitive HIV-related topics. More research on obstacles faced by HIV educators should be conducted which allows for open-ended responses on how best to address these obstacles.
Survey research of school administrators and school board members which discloses their knowledge, attitudes, and beliefs regarding topics such as homosexuality and bisexuality and safer sex instruction in the schools may reveal why some of these professionals are not permitting instruction on these topics. Parent education programs on these topics may contribute to more parental support for their inclusion in the curriculum.

Finally, other school-based professionals such as biology teachers, physical education teachers, and school nurses should be studied to determine their level of involvement in HIV education programs on the secondary school level.

**Implications for Health Educators**

This study has many implications for health educators. Implications will be discussed per the following research question order: resources used and needed, training possessed and needed, time spent teaching about HIV and other health topics, comfort levels and update needs, permission to teach sensitive topics, and obstacles to HIV education.

**Resources Used and Needed**

Health teachers are using videotapes more than any other resource to teach about HIV. It is important that showing a video not be the extent of the HIV education instructional effort. Over half of the health teachers in this study had
access to pamphlets, a state curriculum/curriculum guide, and locally developed curriculum guides. Thus, resources for teaching about HIV were abundant for the health educators. This study implies health teachers should share their resources with others in the school who are devoting time to HIV instruction. For example, the home economics teachers spent the same amount of time teaching about HIV as the health teachers and over half were in need of such resources as videos, developmental guidelines, lesson or unit plans, pamphlets, and criteria for evaluating an HIV/AIDS curriculum. This implies a need for resource sharing.

**Training Possessed and Needed**

Although 92% of health teachers had formal instruction to help them to provide students with information about HIV/AIDS, 57% felt HIV/AIDS in-service programs were needed in their schools. Most of the health teacher training came from local, state, or national workshops. Only 37% reported that their school trained them to safely handle blood or other body fluid spills to prevent the spread of HIV infection. This implies that more effort is needed within the school to provide in-service programs which address infection control as well as instructional issues.

**Time Spent Teaching About HIV and Other Health Topics**

Although health teachers were significantly more likely to teach about HIV than home economics teachers, of those
who did teach the subject there was no significant
difference in the number of hours spent on HIV/AIDS
instruction. Most spent 1-3 hours teaching about the topic.
If possible health teachers should spend more time
addressing this topic since they have been designated as the
ones to have major responsibility for HIV education efforts
in the schools (CDC, 1988).

No differences were reported between health and home
economics teachers in the amount of time spent teaching
about community health, consumer health, environmental
health, family life, personal health, or safety/accident
prevention. This implies that health educators need to
spend more time on these particular topics.

Comfort Levels and Update Needs

Most health teachers reported they were comfortable
teaching the sensitive HIV-related topics. However, they
expressed most discomfort teaching death and dying and
homosexuality and bisexuality. Those providing workshops
and in-service training for health teachers should include
strategies which assist health teachers in developing
comfort about discussing these issues with students. Over a
third of the health teachers expressed a need for updates on
these two topics as well as the topics of IV drugs and STDs.
In-service programs for health educators should particularly
address these four topics.
Permission to Teach Sensitive Topics

Most health teachers were permitted to teach sensitive HIV-related topics. However, 17% reported they were not permitted to teach safer sex and 25% reported they were not permitted to teach about homosexuality and bisexuality. If this is indeed the case, health educators may wish to present evidence to school administrators as to why these topics are vital in the secondary school HIV/AIDS curriculum. Evidence presented earlier implies that the life of some students may depend upon teaching these topics.

Rating of Perceived Obstacles to HIV Education

The obstacle of an overcrowded curriculum has special relevance for those health educators attempting to teach a comprehensive health curriculum which incorporates HIV education. Health educators are often relegated little time to teach health at the secondary school level; often, only one semester of health is offered during the high school years. During this time it is often expected that ten health topical areas be covered. This study implies that some of these topical areas are not being taught at all. Indeed, it may be virtually impossible to teach ten health topical areas in the one semester many health teachers are allotted. Health educators must continue to lobby for more instructional time in order to meet students' needs.

The other major obstacle of student attitudes, especially attitudes of invulnerability, is one with which
health teachers are familiar. The invulnerability of teens is an obstacle that health educators deal with on a daily basis. In the realm of HIV education, it is important that students recognize HIV infection as a perceived threat in order to take action to prevent such infection. Health educators may assist students in perceiving risk by inviting into the classroom Persons Living with AIDS (PLWAs) that were infected with HIV during their teen years.

Conclusion

Health educators have been given a major responsibility to teach secondary school students about HIV/AIDS infection prevention. It is apparent from this study that health educators possess many resources and much training in order to provide HIV/AIDS instruction. However, they appear to be in need of additional time to address this topic more thoroughly.

Additionally, in this study over half of home economics teachers were teaching about HIV/AIDS in their classrooms. Further, some home economics teachers appear frustrated about not being permitted to teach about HIV saying that they are "not allowed" to teach this topic since health and physical education teachers have been given the primary responsibility for doing so. However, a far greater number of home economics teachers report that they, like the health teachers, do not have enough time to adequately address this topic.
Thus, health educators may wish to assist teachers of other disciplines with their HIV instructional needs. For example, since health educators have more access to resources such as videotapes and state curricula, health teachers may wish to become HIV/AIDS resource persons in their respective schools. It is clear from this study that a more coordinated approach is needed if multiple disciplines seek to address HIV/AIDS. Since both health and home economics teachers report insufficient time to adequately address the topic, a planned, coordinated multidisciplinary approach may be mutually beneficial. This would also help to avoid an overlap of HIV-related topics addressed by teachers of various disciplines.

A need for high quality materials which address abstinence, values, and the family is evident. Health educators may seek to develop such materials. Government funding has been made available to pilot test abstinence promotion materials (Eng, 1991).

It is also important that health education teachers be permitted to teach about safer sex practices in the nation’s secondary schools. The 18% of health educators not permitted to do so in this study is somewhat alarming given the teen pregnancy and STD statistics and the fact that AIDS cases among teens have increased 70% in the last two years ("The Growing AIDS Threat", 1992).

Although health teachers have fewer resource, training,
and update needs than home economics teachers, this study revealed health teachers continue to need updates particularly on the topics of death and dying and homosexuality and bisexuality. As evidenced by United States and world HIV/AIDS statistics discussed in Chapter I, and the absence of a vaccine or cure, HIV-related death tolls will continue to rise. Thus, death and dying issues will need to be addressed in the school setting. Many students will have family and friends afflicted with HIV and AIDS and school personnel will need to assist them in coping with morbidity and mortality.

Health and home economics teachers need updates and increased comfort when discussing topics like homosexuality and bisexuality. Self-identified male homosexual adolescents are at particular risk for HIV infection and suicide. Health educators need to be informed about and address sexual orientation issues in school HIV education programs. These issues should be covered in professional preparation and in-service programs as well. In addition, home economics teachers need updated information on injected drug use, STDs, and risk behaviors for HIV transmission. Health teachers may wish to assist by providing them with such information.

Innovative approaches to HIV education must continue to be developed which address students’ needs and developmental characteristics. The second greatest obstacle to HIV
education found in this study was student attitudes (they "know it all" or believe "it will never happen to me"). Thus, health education interventions should be designed which help teens learn the facts about HIV and perceive their personal risk of HIV infection. As stated earlier, peer education programs are promising in this respect. Programs which provide teens with viable alternatives to sexual intercourse have also been suggested (Hein, 1991; Hacker, 1990).

Health educators directing national HIV education initiatives at the Centers for Disease Control’s Division of Adolescent and School Health (DASH) may wish to be more inclusive of home economics teachers when planning programs to prevent the spread of HIV infection among school-age youth. Results of this study indicate home economics teachers are teaching about HIV/AIDS and have need for HIV resources and training.

In sum, teachers need to continue providing quality HIV/AIDS education and to seek new methods to effectively deliver HIV infection prevention messages. To do this the instructional needs and obstacles identified in this study should be addressed. The very lives of our youth may depend upon it.
LIST OF REFERENCES


APPENDIX A

FINAL DRAFT OF QUESTIONNAIRE
WITH TEST-RETEST RELIABILITY COEFFICIENTS

Directions: Please answer the following directly on this questionnaire. Please circle only one number per question unless requested to do otherwise.

1. Do you presently teach about HIV/AIDS in your classroom? (Circle number of your answer)
   1 NO (If you circle this, go to question 3)
   2 YES

2. How many hours per semester would you estimate that you spend teaching about HIV/AIDS? (Circle number)
   1 1 TO 3 HOURS
   2 4 TO 6 HOURS
   3 7 TO 9 HOURS
   4 10 TO 12 HOURS
   5 OVER 12 HOURS

3. From the following list of topics, please indicate the number of hours per semester you teach each health topic. (If none, write "0")

   COMMUNITY HEALTH
   CONSUMER HEALTH
   ENVIRONMENTAL HEALTH
   FAMILY LIFE
   GROWTH AND DEVELOPMENT
   NUTRITIONAL HEALTH
   PERSONAL HEALTH
   PREVENTION AND CONTROL OF DISEASES AND DISORDERS
   SAFETY AND ACCIDENT PREVENTION
   SUBSTANCE USE AND ABUSE

4. Do you need informational resources to help you plan school health education programs to prevent the spread of HIV infection and AIDS? (Circle number)
   1 NO
   2 YES
   3 DOES NOT APPLY TO MY POSITION
5. Do you need information that will help you to develop coalitions (alliances of persons in the school and community) whose goal is to prevent the spread of HIV infection/AIDS? (Circle number)

1  NO
2  YES
3  DOES NOT APPLY TO MY POSITION

6. Which, if any, of the resources below do you need to help you teach about HIV/AIDS? (Circle the number of all those you need)

1  LESSON OR UNIT PLANS
2  FILMS OR VIDEOTAPES
3  BOOKS
4  PAMPHLETS
5  ARTICLES (SCIENTIFIC AND/OR EDUCATIONAL)
6  OTHER (PLEASE SPECIFY) ______________

7. Do you need criteria for evaluating an HIV/AIDS curriculum? (Circle number)

1  NO
2  YES

8. Do you need developmental guidelines which describe the kind of HIV/AIDS information that should be taught at the various grade levels? (Circle number)

1  NO
2  YES

9. Following is a list of resource materials commonly used for HIV/AIDS instructional programs. (Circle the number to the left of all those you are currently using)

1  LOCALLY DEVELOPED CURRICULUM/CURRICULUM GUIDE
2  STATE CURRICULUM/CURRICULUM GUIDE
3  CURRICULUM GUIDES PURCHASED FROM A VENDOR/OUTSIDE SOURCE BUT NOT FROM A TEXTBOOK PUBLISHER
4  STUDENT TEXTBOOKS/BOOKLETS PURCHASED FROM A PUBLISHER
5  VIDEOTAPES
6  PAMPHLETS
7  OTHER (PLEASE SPECIFY) ______________
10. Do you feel you need HIV/AIDS education in-service programs in your school?

1. NO
2. YES

11. Have you had formal instruction to help you to provide students with information about HIV/AIDS? (If your answer is "NO" go to question 14.)

1. NO (If you circle this, go to question 14)
2. YES

12. What type of formal instruction have you had to help you provide students with information about HIV/AIDS? (Circle number of all that apply)

1. UNDERGRADUATE COLLEGE/UNIVERSITY COURSES
2. GRADUATE COLLEGE/UNIVERSITY COURSES
3. IN-SERVICE PROGRAMS PROVIDED BY THE SCHOOL SYSTEM
4. LOCAL WORKSHOPS OR CONFERENCES
5. STATE OR NATIONAL WORKSHOPS OR CONFERENCES
6. OTHER (PLEASE SPECIFY) _______________________________________________________________________

13. How many formal instructional programs for HIV/AIDS education have you taken or attended? (Circle number)

1. 1 TO 3
2. 4 TO 6
3. 7 OR MORE

14. Do you know Centers for Disease Control (CDC) guidelines for how to safely handle blood or other body fluid spills to prevent the spread of HIV/AIDS?

1. NO
2. YES

15. Has your school district provided you with training on the use of CDC guidelines to handle blood or other body fluid spills to prevent the spread of HIV/AIDS?

1. NO
2. YES
16. Based upon your experience, use the scale on the left to rate each of the potential obstacles to HIV education. (Circle the number that indicates how you rate the potential obstacle)

**Scale**
0 = no obstacle  
1 = small obstacle  
2 = moderate obstacle  
3 = great obstacle  
4 = very great obstacle

<table>
<thead>
<tr>
<th>Potential Obstacle</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. NEGATIVE PRESSURE FROM PARENTS AND COMMUNITY GROUPS</td>
<td>1</td>
<td>.64</td>
</tr>
<tr>
<td>b. LACK OF UP-TO-DATE, AGE APPROPRIATE TEACHING MATERIALS</td>
<td>2</td>
<td>.60</td>
</tr>
<tr>
<td>c. LACK OF SUPPORT BY SCHOOL ADMINISTRATORS</td>
<td>2</td>
<td>.72</td>
</tr>
<tr>
<td>d. RESTRICTIONS ON WHAT TOPICS CAN BE TAUGHT (e.g. condom use, homosexuality, safer sex)</td>
<td>2</td>
<td>.84</td>
</tr>
<tr>
<td>e. STUDENT ATTITUDES (e.g. they &quot;know it all&quot; or believe &quot;it will never happen to me&quot;)</td>
<td>2</td>
<td>.34</td>
</tr>
<tr>
<td>f. LACK OF SPECIFIC TRAINING TO TEACH THIS TOPIC</td>
<td>2</td>
<td>.59</td>
</tr>
<tr>
<td>g. OVERCROWDED CURRICULUM; NOT ENOUGH TIME TO ADEQUATELY ADDRESS THIS TOPIC</td>
<td>2</td>
<td>.71</td>
</tr>
<tr>
<td>h. MISINFORMATION ABOUT HIV/AIDS IS STILL PERPETUATED BY A VARIETY OF SOURCES (e.g. peers, parents, media)</td>
<td>2</td>
<td>.41</td>
</tr>
<tr>
<td>i. LACK OF MATERIALS STRESSING VALUES AND THE FAMILY</td>
<td>2</td>
<td>.61</td>
</tr>
<tr>
<td>j. LACK OF MATERIALS STRESSING ABSTINENCE</td>
<td>2</td>
<td>.75</td>
</tr>
</tbody>
</table>
k. Please list in the space provided below any additional obstacles to HIV education that you feel are important.

17. What subject(s) do you teach? (Circle number of all that apply)

- 1 HEALTH EDUCATION
- 2 HOME ECONOMICS
- 3 PHYSICAL EDUCATION
- 4 OTHER (PLEASE SPECIFY)____________________

18. What grade level(s) do you teach? (Circle all that apply)

- 1 GRADES K TO 5
- 2 GRADES 6 TO 8
- 3 GRADES 9 TO 12
- 4 COMMUNITY/JUNIOR COLLEGE
- 5 COLLEGE/UNIVERSITY
- 6 ADULT EDUCATION

19. How many years have you been teaching? (Circle number)

1 0 TO 5 YEARS
2 6 TO 10 YEARS
3 11 TO 15 YEARS
4 16 TO 20 YEARS
5 OVER 20 YEARS

20. Which of the following best describes the area in which your school is located? (Circle number)

1 RURAL
2 SUBURBAN
3 URBAN
4 OTHER (PLEASE SPECIFY)____________________

21. In what type of school do you teach? (Circle number)

1 PUBLIC
2 PAROCHIAL/PRIVATE
3 VOCATIONAL
4 OTHER (PLEASE SPECIFY)____________________

IF YOU TEACH GRADES 6 THROUGH 12
PLEASE COMPLETE THE CHART ON THE FOLLOWING PAGE
Directions: Please fill out this chart horizontally (row by row). For each topic on the left answer the three questions in the columns on the right. (Circle the number of your answer in each row for the given topic.)

<table>
<thead>
<tr>
<th>Questions</th>
<th>How would you feel teaching this topic to your students?</th>
<th>Do you feel you need to update your knowledge of this topic?</th>
<th>Are you permitted to teach this topic in your school?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sexual Abstinence</strong></td>
<td>1 VERY COMFORTABLE .70</td>
<td>1 NO .72</td>
<td>1 NO .04</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td>1 NO .73</td>
<td>1 NO .44</td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communicating with a sexual partner about sexuality and AIDS related issues</strong></td>
<td>1 VERY COMFORTABLE .53</td>
<td>1 NO .73</td>
<td>1 NO .44</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sexual decision making</strong></td>
<td>1 VERY COMFORTABLE .72</td>
<td>1 NO .73</td>
<td>1 NO .08</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sexual behavior</strong></td>
<td>1 VERY COMFORTABLE .72</td>
<td>1 NO .70</td>
<td>1 NO .51</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Death &amp; Dying</strong></td>
<td>1 VERY COMFORTABLE .70</td>
<td>1 NO .84</td>
<td>1 NO .69</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intravenous drug use</strong></td>
<td>1 VERY COMFORTABLE .58</td>
<td>1 NO .58</td>
<td>1 NO Can't compute</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sexually Transmitted diseases</strong></td>
<td>1 VERY COMFORTABLE .76</td>
<td>1 NO .65</td>
<td>1 NO .55</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Risk behavior for HIV/AIDS transmission</strong></td>
<td>1 VERY COMFORTABLE .39</td>
<td>1 NO .81</td>
<td>1 NO .55</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Safer sex practices (e.g. using condoms)</strong></td>
<td>1 VERY COMFORTABLE .84</td>
<td>1 NO .67</td>
<td>1 NO .53</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Homosexuality &amp; Bisexuality</strong></td>
<td>1 VERY COMFORTABLE .39</td>
<td>1 NO .61</td>
<td>1 NO .90</td>
</tr>
<tr>
<td></td>
<td>2 SOMEWHAT COMFORTABLE</td>
<td>2 YES</td>
<td>2 YES</td>
</tr>
<tr>
<td></td>
<td>3 NEUTRAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 SOMEWHAT UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 VERY UNCOMFORTABLE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Your contribution to this effort is very greatly appreciated. If you would like a summary of results, please print your name and address on the back of the return envelope (NOT on this questionnaire). We will see that you get it.
APPENDIX B
MATERIALS RELEVANT TO CONTENT VALIDITY

Panel of Experts to Determine Content Validity of Instrument

Laura Abraham, MS
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Chicago, IL  60611

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Consultant for Health Education
Los Angeles County Office of Education
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Hebron, CT  06248
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National Association of School Psychologists  
Department of Psychology  
Poe Hall, NC State University  
Box 7801  
Raleigh, NC 27695-7801

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Associate Executive Director  
American Association of School Administrators  
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Arlington, VA 22209

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Indiana State School Nurse Consultant  
National Association of State School Nurse Consultants  
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Indianapolis, IN 46214

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American Academy of Pediatrics  
University of California Medical Center/ San Diego  
Department of Pediatrics H-6  
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San Diego, CA 92013

David Poehler, PhD  
Project Officer  
ASHA/CDC AIDS Cooperative Agreement  
Division of Adolescent and School Health  
Centers for Disease Control  
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Lori Rogovin  
Government Relations Specialist  
American Association of Counseling and Development  
901 Capitol Street  
Washington, DC 20003

Gladys Gary Vaughn, PhD  
Administrator  
Research and Public Affairs Unit  
American Home Economics Association  
1555 King Street  
Alexandria, VA 22314
ORAL INSTRUCTIONS FOR CONTENT VALIDITY ACTIVITY

Please look at the needs assessment for AHEA and ASHA members and the accompanying instruction sheet in your packet.

A blue line is drawn to the left of each question upon which you should rate that question on a scale of 1 - 5 using the scale on the pink sheet.

There are some new questions on this instrument. Demographic questions 1 - 9 are new additions to the instrument as are questions 19, 20, 23, 24, and 27. All other questions were on the first needs assessment.

Please read the pink instruction sheet for further instructions. There should be no discussion during this activity.
Dear Advisory Committee Member:

Attached please find the 1989 ASHA AIDS Education Needs Assessment Questionnaire to be administered to selected members of the American School Health Association and the American Home Economics Association. We need you to serve as an expert review panel member to determine content validity of this instrument. Please do this as an individual. Do not discuss your work with others in the group.

Secondary school health educators from ASHA’s membership will be sent the questionnaire and AHEA’s education section members will be assessed but only those who teach grades 6-12 will be included in the results of the needs assessment.

The purpose of the study is to identify the self-reported HIV education needs of health and home economics educators in the areas of resources and training and to ascertain perceived obstacles to AIDS education by these professionals.

Keeping this purpose in mind, please review this instrument and do the following:

1) Ascertain whether each question is valid— ask yourself "how well does it measure what needs to be measured or ask the questions which should be asked in order to meet the purposes of the proposed study?" To do this, rate each question using the following scale: 5=excellent, 4=very good, 3=average, 2=below average, 1=poor.

2) In your expert opinion, are any questions incomplete in scope? If you feel another selection needs to be added to a question, please add it directly on the attached questionnaire.

3) Please check the wording of each question. If you feel any of the questions are confusing, please change them to be more clear. Again, make these changes directly on the attached instrument.

4) If you have any other suggestions or changes, please write them directly on the instrument.

5) Finally, please put your name in the upper right hand corner of the questionnaire and give it to Ms. Kerr when you have completed the task.
1989 ASHA AIDS Education Needs Assessment Questionnaire
for the American Home Economics Association
and the American School Health Association

Directions: Please answer the following directly on this
questionnaire. Please make only one check mark
per question unless requested to do otherwise.

Rating Part I - Demographics

4.1 1. What subject do you teach? (Please check all that
apply)
   Health ____
   Home Economics ____
   Physical Education ____
   Other ____

4.1 2. What grade level do you teach?
   Elementary grades (K-5) ____
   Middle grades (6-8) ____
   High school (9-12) ____
   College/University ____
   Adult education ____

4.1 3. How many years have you been teaching?
   0 - 5 ____
   6 - 10 ____
   11 - 15 ____
   16 - 20 ____
   over 20 ____

4.0 4. Do you presently teach about AIDS in your classroom?
   yes ____
   no ____

3.7 5. Do you presently teach about health issues in your
   classroom?
   yes ____
   no ____

3.9 6. How many hours per semester would you estimate that
   you spend teaching about AIDS?
   0 - 2 ____
   3 - 5 ____
   6 - 8 ____
   9 - 12 ____
   over 12 ____
4.0 7. How many hours per semester would you estimate that you spend teaching about health-related topics?
   0 - 5 ____
   6 - 10 ____
   11 - 15 ____
   over 15 ____

4.1 8. Which of the following best describes the area in which your school is located?
   rural ____
   suburban ____
   urban ____

4.1 9. In what type of school do you teach?
   public ____
   private ____
   religious/parochial ____
   vocational ____
   other ____

Part II - Resources

3.8 10. Do you need resources to help you plan school health education programs to prevent the spread of HIV infection?
   yes ____
   no ____
   does not apply to my position ____

3.3 11. Do you need information that will help you to develop AIDS coalitions which involve the school and community?
   yes ____
   no ____
   does not apply to my position ____

Do you need AIDS resource lists identifying the following?

4.1 12. Lesson or unit plans for grades 6 - 12
   yes ____
   no ____

4.0 13. Films or videotapes
   yes ____
   no ____

4.0 14. Books
   yes ____
   no ____
4.1 15. Pamphlets yes ____ no ____

4.0 16. Journal articles (scientific and/or educational) yes ____ no ____

3.8 17. Do you need criteria for evaluating an AIDS curriculum? yes ____ no ____

4.2 18. Do you need guidelines which describe the kind of AIDS information that should be taught at the various grade levels? yes ____ no ____

3.9 19. Following is a list or resource materials commonly used for HIV education programs. Please place a check mark to the left of those you are using. To the right of the resource type, write in the name and author of the one(s) you use most.

<table>
<thead>
<tr>
<th>Resource Type</th>
<th>Name/author of resource (Please write in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Locally developed curriculum</td>
<td></td>
</tr>
<tr>
<td>☐ Curriculum guides purchased from a vendor</td>
<td></td>
</tr>
<tr>
<td>☐ Student textbooks/booklets purchased from a publisher</td>
<td></td>
</tr>
<tr>
<td>☐ Videotapes</td>
<td></td>
</tr>
<tr>
<td>☐ Pamphlets</td>
<td></td>
</tr>
</tbody>
</table>

2.8 20. Were you able to personally select any of the materials listed above? ☐ Yes ☐ No (If you answered "yes" please circle those you selected).
Part III - Training

3.5 21. Do you need AIDS education inservice programs in your school?  
   yes ____  
   no ____

3.8 22. Have you had formal instruction to help you to provide students with information about AIDS?  
   yes ____  
   no ____

4.0 23. What type of formal instruction have you had to help you to provide students with information about AIDS?  
   (Check all that apply)  
   Undergraduate college/university courses ____  
   Graduate college/university courses ____  
   In-service programs ____  
   Workshops ____  
   Conferences ____  
   Other ____

3.7 24. How many formal instructional programs for HIV/AIDS education have you taken or attended?  
   0 ____  
   1 - 3 ____  
   4 - 6 ____  
   7 or more ____

4.1 25. Do you know how to safely handle blood or other body fluid spills to prevent the spread of HIV/AIDS?  
   yes ____  
   no ____

3.9 26. Has your school district provided you with training to handle blood or other body fluid spills to prevent the spread of HIV/AIDS?  
   yes ____  
   no ____  
   does not apply to my position ____
Part IV - Obstacles to HIV Education

4.2 27. Please rank order the following obstacles to HIV education on a scale of 1 to 8. One is the greatest obstacle, 8 is the least. Use each number (1, 2, 3, 4, 5, 6, 7, and 8) only once.

<table>
<thead>
<tr>
<th>RANK</th>
<th>OBSTACLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>____</td>
<td>Pressure from parents and community groups</td>
</tr>
<tr>
<td>____</td>
<td>Lack of up-to-date, accurate teaching materials</td>
</tr>
<tr>
<td>____</td>
<td>Lack of support by school administrators</td>
</tr>
<tr>
<td>____</td>
<td>Curriculum restrictions on what topics can be taught (e.g. condom use, homosexuality, safer sex)</td>
</tr>
<tr>
<td>____</td>
<td>Student attitudes (e.g. they &quot;know it all&quot; or believe &quot;it will never happen to me&quot;)</td>
</tr>
<tr>
<td>____</td>
<td>Curriculum is already overcrowded; not enough time to address this topic adequately</td>
</tr>
<tr>
<td>____</td>
<td>Misinformation about AIDS is still perpetuated by a variety of sources (e.g. peers, parents, the media)</td>
</tr>
</tbody>
</table>

Please list in the space provided below any additional obstacles to HIV education that you feel are important.

________________________________________________________________________
________________________________________________________________________

If you teach grades 6 - 12, please fill out the chart on the following page. If you do not teach grades 6 - 12 you need not fill out the chart. Please return the questionnaire in the enclosed prepaid envelope. Thank you for your time in completing this instrument!
Please fill out the following chart only if you teach grades 6-12.

Place one check mark in each box for the given topic.

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>How would you feel teaching this topic to your students?</th>
<th>Do you need to update your knowledge to teach this topic?</th>
<th>Do you have an opportunity to teach this topic in your classroom?</th>
<th>Are you permitted to teach this topic in your school?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinence</td>
<td>Very Comfortable</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Somewhat Conf.</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Somewhat Unconf.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Very Unconf.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Communicating with a sexual partner</td>
<td>Very Comfortable</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Somewhat Conf.</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Somewhat Unconf.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Very Unconf.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sexual decision making</td>
<td>Very Comfortable</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Somewhat Conf.</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Somewhat Unconf.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Very Unconf.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sexual behavior</td>
<td>Very Comfortable</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Somewhat Conf.</td>
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<tr>
<td></td>
<td>Very Unconf.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Death &amp; dying</td>
<td>Very Comfortable</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td></td>
<td>Somewhat Conf.</td>
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<td>No</td>
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<td></td>
<td>Very Unconf.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Intravenous drug use</td>
<td>Very Comfortable</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
<td>No</td>
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<td>Sexually transmitted diseases</td>
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<td>Risk behaviors for AIDS transmission</td>
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<td>Safer sex practices (e.g. using condoms)</td>
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<td>Yes</td>
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<td>Yes</td>
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<td>Homosexuality &amp; Bisexuality</td>
<td>Very Comfortable</td>
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Rating Score: 4.1 4.3 4.1 4.3
May 9, 1990

Dear ASHA member:

Nearly everyone in America is alarmed about AIDS and is concerned about how to prevent this deadly disease. In order to better understand and meet our members' AIDS/HIV education needs, our association is conducting a needs assessment. This is the second such needs assessment of ASHA members in a period of two years.

You have been selected as one of a small number of Association members to answer questions on AIDS-related issues. In order for the results to be truly representative of the thinking of selected members of the ASHA, it is important that each questionnaire be completed and returned. You should be aware, however, that your participation in this study is completely voluntary.

You may be assured of complete confidentiality. Although an identification number is located in the upper right hand corner of the questionnaire, this will be used for mailing purposes only. This is so that we may check your name off of the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

The results of this needs assessment will be used to improve HIV/AIDS education efforts nationwide. You may receive a summary of the results by writing "copy of results requested" on the back of the return envelope and printing your name and address below it. Please do not put this information on the questionnaire itself.

We hope that you will choose to take part in this most important project which is being conducted under the direction of Philip Heit, Ed.D. of The Ohio State University. It will take only 10-15 minutes to complete and return the questionnaire. A prepaid envelope is enclosed for your convenience. Dianne Kerr, HIV Education Project Director of the ASHA, will be glad to answer any questions that you may have at (216) 678-1601. Thank you for your time and assistance with this national effort to prevent the spread of HIV/AIDS.

Sincerely,

Dana A. Davis
Executive Director
May 14, 1990

Dear AHEA member:

Nearly everyone in America is concerned about AIDS and is interested in learning more about how to prevent this deadly disease. Our Association has entered into a collaborative agreement with the American School Health Association to assist their educational efforts to prevent the spread of HIV/AIDS. This study will help us to better understand and meet the HIV/AIDS education needs of our members.

You have been selected as one of a small number of our members to answer questions on AIDS related issues. In order that the results will truly represent the thinking of the members of AHEA, it is important that each questionnaire be completed and returned. It is equally important that you understand, however, that your participation in this study is completely voluntary.

You may be assured of complete confidentiality. Although an identification number is located in the upper right hand corner of the questionnaire, this will be used for mailing purposes only. Your name will never be placed on the questionnaire.

The results of this needs assessment will be used to improve HIV/AIDS education efforts nationwide. You may receive a summary of results by writing "copy of results requested" on the back of the return envelope and printing your name and address below it. Please do not put this information on the questionnaire itself.

We hope that you will choose to take part in this most important project which is being conducted under the direction of Philip Heit, Ph.D. of The Ohio State University. It will take about 10-15 minutes to complete and return the questionnaire. A prepaid envelope is enclosed for your convenience. Dianne Kerr at the American School Health Association will be glad to answer any questions that you may have at (216) 678-1601.

Thank you for your time and assistance with this national effort to prevent the spread of HIV/AIDS.

Sincerely,

[Signature]

Karl G. Weddle, Ph.D.
Interim Executive Director
Last week a needs assessment questionnaire on AIDS education was sent to you.

If you have already completed and returned it to us please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small, but representative sample of your professional association membership, it is extremely important that yours also be included in the study if the results are to accurately represent the AIDS education needs of your association's members.

If by some chance you did not receive the questionnaire, or it got misplaced, please call me right now, collect at (216) 678-1601 and I will get another one in the mail to you today.

Sincerely,

Dianne Kerr
AIDS Project Director
American School Health Association
June 4, 1990

Dear ASHA member:

About three weeks ago, Dana Davis, Executive Director of the American School Health Association, wrote to you soliciting your response to an HIV/AIDS education needs assessment questionnaire. As of today, we have not yet received your completed questionnaire.

We are conducting this study to determine the HIV/AIDS education needs of health and home economics educators, their comfort levels in addressing AIDS-related issues and their perceived obstacles to such education. The results of this study will be used to improve HIV/AIDS education nationwide.

As the director of this project, I am writing to you because of the significance each questionnaire has to this study. In order for the results to be truly representative of the needs of selected educators in the American School Health Association, it is essential that each person in the sample return their questionnaire.

In the event your questionnaire has been misplaced, a replacement is enclosed.

Your cooperation is greatly appreciated.

Cordially,

Dianne L. Kerr
Project Director

P.S. A number of people have called and written to inform us that they have retired or are not currently teaching. If this is the case for you, please simply write this on the front cover of the questionnaire and return it in the enclosed postpaid envelope. This will help us to get as high a return rate as possible. Thank you!
June 4, 1990

Dear AHEA member:

About three weeks ago, Karl Weddle, Interim Executive Director of the American Home Economics Association, wrote to you soliciting your response to an HIV/AIDS education needs assessment questionnaire. As of today, we have not yet received your completed questionnaire.

We are conducting this study to determine the HIV/AIDS education needs of home economics and health educators, their comfort levels in addressing AIDS-related issues and their perceived obstacles to such education. The results of this study will be used to improve HIV/AIDS education nationwide.

As the director of this project, I am writing to you because of the significance each questionnaire has to this study. In order for the results to be truly representative of the needs of selected educators in the American Home Economics Association, it is essential that each person in the sample return their questionnaire.

In the event your questionnaire has been misplaced, a replacement is enclosed.

Your cooperation is greatly appreciated.

Cordially,

Dianne L. Kerr
Project Director

P.S. A number of people have called and written to inform us that they have retired or are not currently teaching. If this is the case for you, please simply write this on the front cover of the questionnaire and return it in the enclosed postpaid envelope. This will help us to get as high a return rate as possible. Thank you!