

**Status of School Health Education in
North Carolina Middle and High Schools**

Findings of the 2002 School Health Education Teacher's Survey

Report Prepared

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March 2003

Highlights

- Two hundred fifty-one of 429 sampled teachers (58%) responded. This response rate was marginally higher than response rates for similar surveys over the past decade.
- Required Health Education courses
 - Eighty-two percent of respondents reported that a required health education course existed in grades 6 – 12.
 - Virtually all (95%) to respondents reported that the state's framework was required material.
- National Health Education Standards
 - All or virtually all programs attempted to increase student knowledge in the areas of tobacco use prevention, physical activity and fitness, HIV prevention, alcohol and other drug use prevention, nutrition and dietary behavior, and emotional and mental health.
 - Areas least likely to be covered were death and dying, dental and oral health and immunizations and vaccinations.
- Tobacco Prevention Topics
 - The overwhelming majority of respondents reported the inclusion of most listed tobacco prevention topics in required courses.
- HIV Prevention Topics
 - Virtually all (97%) respondents reported teaching that abstinence is the most effective method for avoiding HIV infections and that almost all (91%) taught about HIV transmission and the effects of HIV on the human body.
 - Topics least likely to be taught were condom efficacy (61%) and the correct method for using condoms (18%).
- Nutrition and Dietary Topics
 - There is almost universal inclusion of a broad range of nutrition and dietary topics in required health education classes taught by the respondents.
- Physical Activity Topics

- There is almost universal inclusion of a broad range of physical activity topics in required health education classes taught by the respondents.
- Tobacco Use Prevention and HIV Prevention
 - Tobacco prevention use information was commonly presented in grades six through nine while roughly one-third of respondents reported the presentation of this information in grades ten to twelve.
 - Tobacco prevention use education was incorporated in physical education classes at 70% of reporting schools.
 - Physical education was the class in which required HIV prevention was most likely to be incorporated.
- Collaboration
 - Physical education staff (85%) was most likely to be involved in health education activities.
 - Food service staff (24%) was least likely to be involved in health education activities.
- Staff Development
 - The most common topics (greater than 40%) on which the respondents reported receiving staff development included CPR, first aid, physical activity, accident and injury prevention and violence prevention.
 - Topics unlikely to be presented (less than 15%) included death and dying, dental health, personal hygiene, consumer and environmental health, sun safety and suicide prevention.
- Professional Preparation
 - Over half of the lead health educators responding to the survey identified their major emphasis of professional preparation as “health and physical education combined” and a quarter (26%) identified physical education as their major emphasis.
 - Just 4% stated that health education was the emphasis of their professional preparation.
 - Nearly one-half of all respondents (46%) reported that they had taught health education for 15 or more years.
 - Only four percent reported being in their first year of teaching.

SUMMARY REPORT
2002 SCHOOL HEALTH EDUCATION PROFILE
Lead Health Education Teachers (6-12)

INTRODUCTION

During the Spring of 2002 the Department of Health Education and Promotion, School of Health and Human Performance, East Carolina University under a contract from the North Carolina Department of Public Instruction, surveyed principals and health education teachers in randomly selected schools containing any grades 6-12 regarding the nature of health education programs in their schools. Two survey instruments were mailed to each principals and teacher and each selected school. The School Health Education Profile Surveys developed by the Division of Adolescent and School Health, Centers for Disease Control and Prevention (CDC) in collaboration with representatives of 75 states, local and territorial departments of education. These instruments were specifically designed to monitor the status of school health education, including education to prevent HIV infection, STD, and other important health problems, at the middle/junior high school and senior high school levels. A work group selected by the Healthful Living section of the NC Department of Public Instruction developed supplemental instruments for both principals and teachers. These questionnaires provided a more in-depth look at several of the areas addressed on the School Health Education Profile Surveys.

Sampling and Survey Procedures

All regular secondary public schools having at least one of the grades 6 through 12 were included in the sampling frame. Systematic equal probability sampling with a random start was used to select schools for the survey. Schools were sorted by estimated enrollment in the target grades within school grade level (middle schools, other) before sampling. This procedure resulted in the selection of 429 schools. The initial packets were mailed to the “principal” and “lead health educator” of each selected school and contained a letter explaining the survey procedure, the two survey instruments and an addressed return envelop with postage. Table 1 summarizes the mailing protocol used for the two surveys.

Table 1. Mailing protocol for school health profile surveys.

Action	Dates of action	
	Principal's Survey	Teacher's Survey
Letter from state superintendent sent to superintendents of all districts of containing participating schools	Late January	Late January
Initial mailing of survey instruments	Early March	Late March
Follow-up postcards to non-respondents	Late March	Early April
Follow-up letter from SDPI with incentives	Early May	Early May

Usable pairs of usable questionnaires were received from 310 out of 429 sampled principals (72%) and 251 out of 429 sampled teachers (58%). In 2000 forty-four percent of sampled principals and forty-three percent of sampled teachers returned surveys. Data from the School Health Education Profile instruments was processed by WESTAT in accordance with CDC contract protocol. Data from the locally generated supplemental instruments was processed at East Carolina University and then combined with the School Health Education Profile data set. The results provide an important description of school health education in a large number of schools.

This report presents data from the 251 teachers who responded to the survey. The frequency of tabled responses is often substantially lower than this number since a number of questions requested information exclusively from teachers working in schools in which health education was a requirement. In North Carolina this typically occurs in the middle school settings.

REQUIRED HEALTH EDUCATION COURSES

Health Education requirements

Questions one and two measure the extent to which health education courses are required for students in grades 6 through 12 and required materials to be used by teachers in these required courses. A study by Louis Harris and Associates found that health education requirements increase when students receive at least three consecutive years of quality health education (Louis Harris and Associates, 1998). The Institute of Medicine (IOM) has recommended that U.S. schools require a one-semester health education course at the secondary school level (IOM, 1997). School health education could be one of the most effective means to reduce and prevent some of the most serious health problems in the U.S., including cardiovascular disease, cancer, motor-vehicle crashes, homicide, and suicide (IOM, 1997).

QUESTION 1: Is a health education course required for students in any of grades 6 through 12 in this school?

Eighty-two percent of respondents reported that a required health education course existed in grades 6 – 12. Nationwide, 96.2% of schools at all levels require some health education for student. Nationwide, 86% of districts require elementary schools, 89.6% require middle/junior high schools, and 89.4% require senior high schools to teach health education (Kann et al, 2001). Nationwide, 68.8% of school districts are required to follow national, state-districts with requirements or recommendations to follow health education standards, 77.8% used the National Health Education Standards (Kann et al, 2001).

QUESTION 2: Are teachers in this school required to use each of the following materials in a required health education course for students in grades 6 through 12?

Table 2 contains the response data for this item. Virtually all (95%) of respondents reported that the state's framework was required material. Two-thirds reported using a required school curriculum, and a commercially developed textbook and teacher's guide.

Table 2. Required materials for health education.

	Number	Frequency	Percent
The National Health Education Standards	167	67	40
Your state's curriculum, set of guidelines, or Framework	189	180	95
Your district's curriculum, set of guidelines, or Framework	176	146	83
Your school's curriculum, set of guidelines, or Framework	170	113	66
Any materials from health organizations, such as the American Red Cross or the American Cancer Society	173	96	55
A commercially-developed student textbook	173	119	69
A commercially-developed teacher's guide	173	109	63

Compliance with National Health Education Standards

Questions three through six measure the extent to which school are complying with components of the National Health Education Standards which provide a frame work for decisions about which lessons, strategies, activities, and types of assessment to include in a health education curriculum (Joint Committee on Nation Health Education Standards, 1995). The aim of the national standards is to improve educational achievement for students and improve health in the United States. The desired outcome of the national Health Education Standards Project is for individuals to be health literate, which includes being a critical thinker and problem solver, a responsible and productive citizen, a self-directed learner, and an effective communicator. The national standards identify knowledge and skills that can be assessed and are organized around traditional health content areas and risk behaviors.

QUESTION 3: During this school year, have teachers in this school tried to increase student knowledge on each of the following topics in a required health education course in any of grades 6 through 12?

Table 3 summarizes responses to this item. All or virtually all programs attempted to increase student knowledge in the areas of tobacco use prevention, physical activity and fitness, HIV prevention, alcohol and other drug use prevention, nutrition and dietary behavior, and emotional and mental health. Areas least likely to be covered were death and dying, dental and oral health and immunizations and vaccinations.

Table 3. Topics for which required health education tried to increase student knowledge.

	Number	Frequency	Percent
Accident or injury prevention	188	174	93
Alcohol or other drug use prevention	189	188	99
Consumer health	185	144	78
CPR (cardiopulmonary resuscitation)	186	143	77
Death and dying	183	102	56
Dental and oral health	181	101	56
Emotional and mental health	186	177	95
Environmental health	183	126	69
First aid	187	160	86
Growth and development	188	155	82
HIV (human immunodeficiency virus) prevention	175	173	99
Human sexuality	186	153	82
Immunization and vaccinations	183	95	52
Nutrition and dietary behavior	181	180	99
Personal hygiene	184	143	78
Physical activity and fitness	185	185	100
Pregnancy prevention	187	151	81
STD (sexually transmitted disease) prevention	189	169	89
Suicide prevention	184	128	70
Sun safety or skin cancer prevention	184	125	68
Tobacco use prevention	186	186	100
Violence prevention	188	164	87

QUESTION 4: During this school year, have teachers in this school tried to improve each of the following student skill in a required health education course in any of grades 6 through 12?

Table 4 reveals that skill development was slightly less likely to occur in required health education classes than knowledge development. Even so approximately nine of ten respondents reported programs attempting to improve student skills in most of the listed areas.

Table 4. Topics for which required health education tried to increase student skill.

	Number	Frequency	Percent
Accessing valid health information, products, and services	186	161	87
Advocating for personal, family, and community health	185	148	80
Analysis of media messages	185	141	76
Communication	185	172	93
Decision making	187	184	98
Goal setting	187	176	94
Conflict resolution	188	179	95
Resisting peer pressure for unhealthy behaviors	187	180	96
Stress management	185	174	94

QUESTION 5: During this school year, have teachers in this school used each of the following teaching methods in a required health education course in any of grades 6 through 12?

Table 5 illustrates the frequency of utilization of various teaching methods in required health education classes. Group participation activities were most likely to be utilized. Eighty-nine percent of respondents reported using guest speakers and eighty percent employed the use of the internet. Two-thirds of respondents (64%) used peer educators in their classes.

Table 5. Teaching methods employed in required health education classes.

	Number	Frequency	Percent
Group discussions	187	185	99
Cooperative group activities	187	181	97
Role play, simulations, or practice	186	167	90
Language, performing, or visual arts	182	122	67
Pledges or contracts for behavior Change	180	106	59
Adult guest speakers	185	165	89
Peer educators	182	117	64
The Internet	183	146	80
Computer-assisted instruction	183	123	67

QUESTION 6: During this school year, have teachers in this school asked students to participate in each of the following activities as part of a required health education course in any of grades 6 through 12?

Table 6 shows student activities that were reported to be incorporated in required health education classes. Completing homework assignments with family members, analyzing health advertising and identifying potential injury hazards were reported by two-thirds or more respondents. Performing volunteer work in health-related settings was the activity least likely to be reported.

Table 6. Student activities in required health education classes.

	Number	Frequency	Percent
Perform volunteer work at a hospital, a local health department, or any other community organization that addresses health issues	183	24	13

Participate in or attend a school or community health fair	182	58	32
Gather information about health services that are available in the community	182	99	54
Visit a store to compare prices of health Products	179	44	25
Identify potential injury sites at school, home, or in the community	185	120	65
Identify and analyze advertising in the community designed to influence health behaviors or health risk behaviors	181	117	65
Advocate for a health-related issue	182	80	44
Complete homework assignments with family members	185	140	76

Over one-half of stated require elementary, middle/junior high, and senior high schools to each accident or injury prevention, alcohol and other drug use prevention, consumer health, emotional and mental health, environmental health, growth and development, HIV prevention, nutrition and dietary behavior, personal hygiene, physical activity and fitness, and violence prevention.

Nationwide 99.0% of schools used group discussions in at least one required health education course; 96.5% used cooperative group activities; 86.6% used visual, performing, or language arts; 84.8% used role play; 76.4% used quest speakers; 62.7% used peer teaching; 52.7% used the internet; 48.1% used pledges or contracts for behavior change; and 40.5% used computer-assisted instruction (Kann et al, 2001).

TOBACCO INTERVENTION TOPICS

This question measures which tobacco use prevention topics are taught in required health education course. These tobacco prevention topics meet the CDC Guidelines for School Health Programs to Prevent Tobacco Use and Addiction. Included in the guidelines is a recommendation that instruction focus on the short- and long-term negative physiologic and social consequences of tobacco use, social influences on tobacco use , peer norms regarding tobacco use, and refusal skills (CDC, 1994).

QUESTION 7: During this school year, did teachers in this school teach each of the following tobacco use prevention topics in a required health education course for students in any of grades 6 through 12?

Table seven indicates that the overwhelming majority of respondents reported the inclusion of most listed tobacco prevention topics in required courses.

Table 7. Tobacco prevention topics in required health education courses.

	Number	Frequency	Percent
Short- and long-term health consequences of cigarette smoking	182	181	99
Benefits of not smoking cigarettes	181	180	99
Risks of cigar or pipe smoking	182	164	90
Short- and long-term health consequences of using smokeless tobacco	180	176	98
Benefits of not using smokeless tobacco	181	175	97
Addictive effects of nicotine in tobacco products	182	177	97
How many young people use tobacco	181	172	95
The number of illnesses and deaths related to tobacco use	182	172	95
Influence of families on tobacco use	182	171	94
Influence of the media on tobacco use	182	175	96

Table 7. Tobacco prevention topics in required health education courses. (Con't)

Number	Frequency	Percent
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Social or cultural influences on tobacco use	180	167	93
How to find valid information or services related to tobacco use cessation	180	137	76

Nationwide, 85.9% of elementary schools, 86.4% of middle/junior high schools, and 90.1% of senior high schools teach tobacco use prevention topics (Kann et al, 2001).

HIV PREVENTION TOPICS

This question measures which HIV infection prevention topics are taught in required health education courses. Kirby et al (1994) reviewed 24 studies of school-based programs to reduce sexual risk behaviors and identified many of these topics as part of effective programs.

QUESTION 8: During this school year, did teachers in this school teach each of the following HIV prevention topics in a required health education course for students in any of grades 6 through 12?

Table 8 indicates that virtually all (97%) respondents reported teaching that abstinence is the most effective method for avoiding HIV infections and that almost all (91%) taught about HIV transmission and the effects of HIV on the human body. Topics least likely to be taught were condom efficacy (61%) and the correct method for using condoms (18%).

Nationwide, 50.1% of elementary schools, 75.9% of middle/junior high schools, and 85.6% of senior high schools taught HIV infection prevention in the past year (Kann et al, 2001).

Table 8. HIV prevention topics in required health education courses.

	Number	Frequency	Percent
Abstinence as the most effective method to avoid HIV infection	174	169	97
How HIV is transmitted	185	169	91
How HIV affects the human body	184	168	91
How to correctly use a condom	186	34	18
Condom efficacy, that is, how well condoms work and do not work	186	113	61
Influence of alcohol and other drugs on HIV-related risk behaviors	180	158	88
Social or cultural influences on HIV-related risk behaviors	185	148	80
The number of young people who get HIV	186	150	81
How to find valid information or services related to HIV or HIV testing	184	127	69
Compassion for persons living with HIV or AIDS	182	141	77

NUTRITION AND DIETARY TOPICS

This question measures which nutrition and dietary behavior topics are taught in required health education courses. Data from the 1999 YRBS revealed that nationwide, 16.0% of high school students were at risk of becoming overweight, while 9.9% of high school students were already overweight (Kann, et al, 2000). The primary goal of nutrition education should be helping your persons adopt healthy eating behaviors that will aid in reducing the risk for disease (CDC, 1996).

QUESTION 9: During this school year, did teachers in this school teach each of the following nutrition and dietary topics in a required health education course for students in any of grades 6 through 12?

Table 9 suggests that there is almost universal inclusion of a broad range of nutrition and dietary topics in required health education classes taught by the respondents.

Table 9. Nutrition and dietary topics in required health education courses.

	Number	Frequency	Percent
The benefits of healthy eating	182	178	98
The Food Guide Pyramid	184	176	96
The Dietary Guidelines for Americans	186	164	88
Using food labels	185	174	94
Aiming for a healthy weight	184	178	97
Choosing a variety of grains daily, especially whole grains	183	167	91
Choosing a variety of fruits and vegetables daily	184	171	93
Choosing a diet low in saturated fat and cholesterol and moderate in total fat	182	173	95
Moderating intake of sugars	183	170	93
Choosing and preparing foods with less salt	184	161	88
Eating more calcium-rich foods	183	155	85
Keeping food safe to eat	184	146	79
Preparing healthy meals and snacks	185	167	90
Risks of unhealthy weight control practices	184	176	96
Accepting body size differences	184	164	89
Eating disorders	182	176	97

Nationwide, 85.4% of elementary schools, 81.4% of middle/junior high schools, and 87.1% of senior high schools teach nutrition topics and dietary behaviors (Kann, et al, 2001).

PHYSICAL ACTIVITY TOPICS

This question measure which physical activity topics are taught in required health education course. The CDC's Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among

Young people recommend that health education curricula should provide information about physical activity concepts including the physical, social, and mental health benefits of physical activity; the components of health-related fitness; principles of exercise; injury prevention and first aid; precautions for preventing the spread of blood borne pathogens; nutrition, physical activity, and weight management; social influences on physical activity; and the development of safe and effective individualized physical activity programs (CDC, 1997).

QUESTION 10: During this school year, did teachers in this school teach each of the following physical activity topics in a required health education course for student in any grades 6 through 12?

Table 10. Physical activity topics in required health education courses.

	Number	Frequency	Percent
The physical, psychological, or social benefits of physical activity	186	182	98
Health-related fitness	185	181	98
Phases of a workout	185	174	94
How much physical activity is enough	186	159	85
Developing an individualized physical activity plan	184	143	78
Monitoring progress toward reaching goals in an individualized physical activity plan	184	131	71
Overcoming barriers to physical activity	184	142	77
Decreasing sedentary activities such as television watching	184	167	91
Opportunities for physical activity in the community	184	155	84
Preventing injury during physical activity	185	173	94
Weather-related safety	185	167	90
Dangers of using performance-enhancing drugs (steroids)	184	165	90

TOBACCO USE PREVENTION AND HIV PREVENTION

Questions eleven through thirteen measure the extent to which tobacco and HIV infection prevention lessons were being infused into the curriculum through various courses within the school. Health education can be offered to students in stand-alone classes, integrated with other subjects, or both. While integration of health information and skills into other subjects should not replace stand-alone health classes, such integration can reinforce and extend the health education curriculum in important ways (Marx et al, 1998).

QUESTION 11: During this school year, in which of the following grades was information on tobacco use prevention provided?

Table 11 reveals that tobacco prevention use information was commonly presented in grades six through nine while roughly one-third of respondents reported the presentation of this information in grades ten to twelve.

Table 11. Inclusion of tobacco use prevention by grade level.

	Number	Frequency	Percent
6	155	139	90
7	158	144	91
8	157	139	89
9	102	101	99
10	70	26	37
11	66	19	29
12	66	18	27

QUESTION 12: Are required tobacco use prevention units or lessons taught in each of the following courses in this school?

Response listed in the Table 12 indicated that required tobacco prevention use education was incorporated in physical education classes at 70% of reporting schools. Between a fourth and a third of reporting schools said such instruction was provided in a variety of other classes.

Table 12. Courses in which required tobacco use prevention education was taught.

	Number	Frequency	Percent
Science	217	48	22
Home economics or family and consumer education	215	56	26

Physical education	247	172	70
Family life education or life skills	220	77	35
Special education	211	48	23

QUESTION 13: Are required HIV prevention units or lessons taught in each of the following courses in this school?

Physical education was the class in which required HIV prevention was most likely to be incorporated.

Table 13. Courses in which required HIV prevention education was taught.

	Number	Frequency	Percent
Science	219	67	31
Home economics or family and consumer education	217	50	23
Physical education	244	148	61
Family life education or life skills	220	88	40
Special education	213	32	15

COLLABORATION

Questions fourteen and fifteen measure the extent to which health education staff work cooperatively with other components of the school health program (health services, mental health or social services, food service, and physical educations) and the community. An integrated school and community approach in an effective strategy to promote adolescent health and well being (Allensworth and Kolbe, 1987).

QUESTION 14: During this school year, have any health education staff worked with each of the following groups on health education activities?

As shown in table 14 physical education staff (85%) were most likely to be involved in health education activities. Food service staff (24%) were least likely to be involved.

Table 14. Involvement of school staff in health education activities.

	Number	Frequency	Percent
Physical education staff	246	208	85

School health services staff	242	169	70
School mental health or social services staff	244	154	63
Food service staff	233	55	24
Community members	242	141	58

Nationwide, 58.4% of schools reported that health education staff worked with organizations such as the American Heart Association, 41.8% of schools worked with local health departments, and 66.6% of schools worked with local hospital staff. In addition 22.6% of schools reported that health education staff worked with staff from colleges and universities and 21.2% of school worked with businesses. Additionally, 41.8% of school staff worked with health departments on activities, and 31.6% worked with mental health or social services agencies (Kann et al, 2001).

QUESTION 15: During this school year, had this school done each of the following activities?

Table 15 shows that most respondents (70%) reported providing families with information on the health education program

Table 15. Health education activities involving parents/family members.

	Number	Frequency	Percent
Provided families with information on the health education program	248	174	70
Met with a parents' organization such as the PTA or PTO to discuss the health education program	246	56	23
Invited family members to attend a health education class	246	108	44

STAFF DEVELOPMENT

Questions sixteen through nineteen measured the extent to which in-service training on health education topics and teaching methods is received and desired. Effective implementation of school health education is linked directly to adequate teacher training programs. School health education designed to decrease students' participation in risk behaviors requires that teachers have appropriate training to develop and implement school health education curricula (Allensworth, 1993). Professional development activities for health education teachers need to focus on teaching strategies that both actively engage student and facilitate their master of critical health information and skills (Lohrman and Wooley, 1997).

QUESTION 16: During the past two years, did you receive staff development (such as workshops, conferences, continuing education, or any other kind of in-service) on each of the following health education topics?

The most common topics (greater than 40%) on which the respondents reported receiving staff development included CPR, first aid, physical activity, accident and injury prevention and violence prevention. Topics unlikely to be presented (less than 15%) included death and dying, dental health, personal hygiene, consumer and environmental health, sun safety and suicide prevention.

Table 16. Topics of staff development received by respondents.

	Number	Frequency	Percent
Accident or injury prevention	241	103	43
Alcohol or other drug use prevention	238	83	35
Consumer health	237	28	12
CPR (cardiopulmonary resuscitation)	245	172	70
Death and dying	239	18	8
Dental and oral health	237	17	7
Emotional and mental health	237	67	28
Environmental health	238	29	12
First aid	242	154	64
Growth and development	240	53	22
HIV (human immunodeficiency virus) prevention	242	96	40
Human sexuality	238	80	34
Immunization and vaccinations	241	34	14
Nutrition and dietary behavior	240	68	28
Personal hygiene	238	22	9
Physical activity and fitness	242	122	50
Pregnancy prevention	238	76	32
STD (sexually transmitted disease) prevention	239	93	39
Suicide prevention	239	37	15
Sun safety or skin cancer prevention	238	29	12
Tobacco use prevention	241	75	31
Violence prevention	241	101	42

QUESTION 17: Would you like to receive staff development in each of these health education topics?

As shown in table 17 respondents reported an interest in receiving staff development in a broad range of topic areas.

Table 17. Topics of staff development desired by respondents.

	Number	Frequency	Percent
Accident or injury prevention	235	118	50
Alcohol or other drug use prevention	241	172	71
Consumer health	233	89	38
CPR (cardiopulmonary resuscitation)	237	153	65
Death and dying	235	123	52
Dental and oral health	234	84	36
Emotional and mental health	236	147	62
Environmental health	235	104	44
First aid	237	156	66
Growth and development	234	108	46
HIV (human immunodeficiency virus) prevention	236	149	63
Human sexuality	234	129	55
Immunization and vaccinations	234	87	37
Nutrition and dietary behavior	237	159	67
Personal hygiene	233	95	41
Physical activity and fitness	235	159	68
Pregnancy prevention	235	125	53
STD (sexually transmitted disease) prevention	237	144	61
Suicide prevention	239	161	67
Sun safety or skin cancer prevention	236	122	52
Tobacco use prevention	237	155	65
Violence prevention	241	189	78

QUESTION 18: During the past two years, did you receive staff development (such as workshops, conferences, continuing education, or any other kind of in-service) on each of the following teaching methods?

The responses shown in table 18 indicate that between one-third and one-half of respondents reported receiving staff development in at least one of methods listed. Most commonly reported was the use of group activities (56%) and the least commonly reported was encouraging family and community involvement (29%).

Table 18. Teaching methods and staff development.

	Number	Frequency	Percent
Teaching students with physical or cognitive disabilities	245	108	44
Teaching students of various cultural backgrounds	245	112	46
Teaching students with limited English proficiency	243	73	30
Using interactive teaching methods such as role plays or cooperative group activities	245	136	56
Encouraging family or community involvement	243	70	29
Teaching skills for behavior change	243	97	40

QUESTION 19: Would you like to receive staff development on each of these teaching methods?

Table 19 lists responses about the desirability of staff development in particular teaching methods. Each listed item received between fifty and seventy percent positive responses.

Table 19. Teaching methods training desired by respondents.

	Number	Frequency	Percent
Teaching students with physical or cognitive disabilities	237	165	70
Teaching students of various cultural backgrounds	239	149	62
Teaching students with limited English proficiency	240	153	64
Using interactive teaching methods such as role plays or cooperative group activities	231	135	58
Encouraging family or community involvement	239	144	60
Teaching skills for behavior change	238	178	75

PROFESSIONAL PREPARATION

Questions twenty and twenty-one measure the extent to which health education teachers are formally trained in health education as well as their teaching experience. Health education teachers need to be academically prepared and qualified specifically to teach health education (Lohrmann and Wooley, 1997; National Commission and the Role of the School and the Community in Improving Adolescent Health, 1990).

QUESTION 20: What was the major emphasis of your professional preparation?

Over half of the lead health educators responding to the survey identified their major emphasis of professional preparation as “health and physical education combined” and a quarter (26%) identified physical education as their major emphasis. Just 4% stated that health education was the emphasis of their professional preparation.

Table 20. Major emphasis of professional preparation.

	Number	Frequency	Percent
Health and physical education combined	233	130	56
Health education	233	10	4
Physical education	233	60	26
Other education degree	233	7	3
Kinesiology	233	0	0
Exercise science or exercise physiology	233	2	1
Home economics or family and consumer science	233	1	0
Science	233	3	1
Nursing	233	9	4
Counseling	233	4	2
Public health	233	1	0
Other	233	6	3

QUESTION 21: Including this school year, how many years have you been teaching health education?

Nearly one-half of all respondents (46%) reported that they had taught health education for 15 or more years. Only four percent reported being in their first year of teaching.

Table 21. Number of years teaching health education.

	Number	Frequency	Percent
1 year	243	10	4
2 to 5 years	243	46	19
6 to 9 years	243	30	12
10 to 14 years	243	45	19
15 years or more	243	112	46

TEACHER COMMENTS

A transcript of all comments recorded on the questionnaires by the responding lead health education teachers is contained in Appendix 1. Each comment is labeled as to the area of professional preparation and years of experience of the respondent. All references to particular schools or school districts have been removed. These comments are organized according the following themes:

1. Possibilities for integration of health education
2. Lack of support for health education and no required recommendation.
3. Time Constraints limiting health education
4. Health Education is not a priority to the school system
5. Curriculum issues in health education

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Appendix 1

Comments Provided by Lead Health Education Teachers.

Comments Provided by North Carolina Teachers

Theme: Possibilities for integration of health education

Major emphasis on professional preparation: *Physical education*

Years teaching health education: *10 to 14 years*

I would like to see the program changed to a one 9-week course in 7th grades. The curriculum would be concentrated but all inclusive of the major topics of fitness, hygiene, nutrition, and drug abuse prevention, diseases and prevention, family life, safety and first aid. More emphasis should be on physical education and providing opportunities on a daily basis for cardiovascular activity for all students. We have an epidemic of obesity and cost for an epidemic of obesity and cost for medically related conditions will soon be overwhelming.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *15 years or more*

Exceptional children are mainstreamed in our health and PE classes and are moderately successful in the health classroom. Role play and cooperative activities are utilized often in the classroom. Brainstorming and presentation of the finished information is often presented by each group with some teacher guidance. Library research utilizing media resources including computer technology and Internet access with parental permission are used to research health related topics. I believe if health education is going to be effective in high school, it must become a 2-semester course. Health and PE cannot be taught effectively in one semester.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *2 to 5 years*

We have a unique rotation system at our school. The students have health for two weeks and PE for four weeks. The students rotate, teachers as well.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *15 years or more*

On questions 16-19, some staff members have attended or had some form of training in different areas. We all probably could benefit from workshop on all areas except those that are apart of our family life unit.

Major emphasis on professional preparation: *Nursing*

Years teaching health education: *2 to 5 years*

Staff development needs to be offered annually in the health field. Many things change from day to day. I take every workshop offered that I can so I can stay up to date.

Theme: There is a lack of support for health education and no required recommendation.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *15 years or more*

The health program is nonexistent! IT is terrible. I taught in another county and health was taught half and half! This county is terrible.

Major emphasis on professional preparation: *Nursing*

Years teaching health education: *6 to 9 years*

I teach primarily health occupation sources, not health education exclusively.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *10 to 14 years*

Some of the courses mentioned are not offered at this school so I had to say no.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *6 to 9 years*

I am very disappointed in the lack of instructional support that is provided by East Carolina University. (e.g. guest speakers, workshops offered, instructional materials, updates, lesson plan ideas). To date, I have not received any correspondence from anyone at the university regarding support for our health education program in the last five years. I'm sure the university receives funding to support local programs and I would like to see evidence that the funding is being used properly.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *2 to 5 years*

At this particular school, not all health teachers follow the curriculum or teach the topics in this survey. However, I do. The health education courses are considered to be a "joke" at this school when I came here. This makes teaching health and life skills that much harder. Some teachers in this department are lucky to get through 5 chapters in 9 weeks. That is ridiculous! This is the same teacher who has the worst teaching evaluations in the school (possibly the county), but the principal does not oversee what he does. The principal knows that the curriculum is not met by everyone in the department, but he does not worry with it. However, the principal does checkup on me every once in awhile. The question is though, what about the 4 other people in the department? (Who all happen to be males). I am also the only teacher that goes to health conferences, in which I am also a member of the organization-NCAHPERD &AAHPERD) and I have to beg for money to attend from my principal. What is wrong with this picture?

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *15 years or more*

It is ridiculous having to pull kids from PE classes to teach health. Health is the most influential and important subject for a middle schooler. Pulling kids from PE classes like All school in XXXXX schools mean this: Kids get 45 total days of PE (Most are overweight or out of shape) & 45 days of Health. WE meet A&B days. Health should be mandatory everyday in middle school. WE don't need health in High school. Because they have already made their decisions! WE also need PE everyday. But it is all about testing that matters.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *15 years or more*

With testing scores being so emphasized. Health and Physical education is being put on the back burner.

Major emphasis on professional preparation: *Physical education*

Years teaching health education: *6 to 9 years*

We teach health one day per week in the gym. No classroom available.

Major emphasis on professional preparation: *Counseling*

Years teaching health education: *N/A*

We do not have a health education teacher at XXXX School. We teach grades 6-12 and have 7 teachers who mainly teach only core courses. I do not teach health education.

Major emphasis on professional preparation: *Public health*

Years teaching health education: *2 to 5 years*

For questions 3&4 we have talked about most of these topics but they are not required courses.

Major emphasis on professional preparation: *Health and physical education*

Years teaching health education: *15 years or more*

Health Ed. is sporadic at best in my district. Some schools don't teach it at all due to lack of staff & facilities. We lost the health supervisors position so there is no advocate. The human growth curriculum, which I believe is vitally important, is taught as a pull out during the 9 week health block. That reduces the amount of contact we have with the students to cover other topics.

Major emphasis on professional preparation: *Health and physical education*

Years teaching health education: *15 years and more*

This is the second time this school year I have completed this survey!

- Question 3 on the green survey, for me, can be answered differently. It's one week every 30 days because I get a new group of students every 30 days. That still equals 3 or several weeks per semester.
- Details for green survey questions 11 and 14
P.E. taught for 12 weeks
Health taught for 6 weeks

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *15 years or more*

Health education is included in the science curriculum, at the middle school (in my school district) thus, limiting (extremely) any mention of health topics/issues. Adding CPR/First Aid certification of students to my (high school) curriculum has created an almost impossible task for me to teach or mention everything, that I feel is important. I've personally approached the middle school about having a health class-perhaps even combining with PE class-without success.

Major emphasis on professional preparation: *Physical education*

Years teaching health education: *6 to 9 years*

I am a PE teacher that teaches health, we do not have a "health only" teacher at our school.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *10 to 14 years*

Our school board will not let us teach sex education. The parents in XXXX City want to do this.

Major emphasis on professional preparation: *Health & physical education combined*

Years teaching health education: *2 to 5 years*

I wish there were more health staff development offered in my area. I am unaware of any health or physical education staff development programs-does not seem there are many thru out most the year or updates or renewal offered specifically to health educators. Most of our health educators-don't care as much for teachers, health as much as they do for physical education jobs-seems it is a have to job not taken serious. Most educators are physical educators and coaches. I personally enjoy teaching health. I volunteered to teach health full-time.

Theme: Time Constraints limiting health education

Major emphasis on professional preparation: *Physical education*

Years teaching health education: *10 to 14 years*

Vague- many people in our department

Very few days to teach combo health/physical education

Major emphasis on professional preparation: *Physical education*

Years teaching health education: *2 to 5 years*

Our schedules do not allow us to see all the students, equal amounts of time. This makes teaching the standard course of study difficult.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *6 to 9 years*

Even though the health curriculum is only taught for 4 weeks, during an 18-week semester, I do cover almost all of the topics mentioned in questions 2-10, that I was not allowed to answer. The kids get 4 weeks of health every year, which would total 12 weeks after their middle school experience. It is incorporated into this semester (18 weeks) PE & Health required class.

Major emphasis on professional preparation: *Health and Physical education*

Years teaching health education: *15 years or more*

There is not enough time to teach both health and physical education classes in one course. State should provide one course of health and one physical education. One can't teach health in 4-6 weeks a year. Must

have health teachers for health and physical education teachers for P.E. not both, because too much to teach in each field.

Major emphasis on professional preparation: *Health education*

Years teaching health education: *2 to 5 years*

I believe our school has a successful comprehensive health program, however we are faced with a few problems; The short amount of time students are with the health teachers, (As a result in depth projects are rare) and the second issue: lack of enthusiasm from fellow educators.

Major emphasis on professional preparation: *Health & physical education combined*

Years teaching health education: *2 to 5 years*

Our students had 3 weeks of health (everyday 50 minutes) out of a 9-week class.

Major emphasis on professional preparation: *Health & physical education combined*

Years teaching health education: *10 to 14 years*

I believe that some of the major detriments to our health curriculum involve the combination of health and physical education. This places far too many time constraints on both. It results in very little of either being taught. Another problem lies in the fact that the curriculum is so diverse-it cannot possibly be taught effectively. This too could be addressed if health and physical education were separate courses. Suggestion: 1 semester of health education & 1 semester of physical education> freshman year

Theme: Health Education is not a priority to the school system

Major emphasis on professional preparation: *Nursing*

Years teaching health education: *1 year*

I am a school nurse, but not health educator for this school. The only required health education class is one semester in the 9th grade. Other classes in HIV, have been at done yearly at the Health fair organized by myself. I plan to continue these classes yearly. I have found there needs to be more health education.

Major emphasis on professional preparation: *Physical education*

Years teaching health education: *10 to 14 years*

I teach sixth grade students only. All three-grade levels take physical education/health for one semester. Students take physical education for two weeks and health. For one week. In a semester students receive six weeks of health and twelve weeks of physical education.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *10 to 14 years*

Students are required to take physical education & health; however there are exceptions:

1. Band students take ½ of year of PE/Health & ½ year keyboarding.
2. Low students are pulled from PE/Health for tutoring anywhere from 1 nine weeks to 2.
3. Any student not having spring PE misses family life. Any 8th grader not having 1st semester misses CPR.

Note: Health is taught on a 1 week to 2 week PE ratio in 90 min. classes ever other day.

* We receive a lot of workshops at the county level.

Major emphasis on professional preparation: *Nursing*

Years teaching health education: *2 to 5 years*

This school is for EC students. We only cover topics and not to any length. Topics are basic and addressed as occurs in many cases. I am a school nurse and science/health teacher addresses many of these subjects. Hope that this helps. I can't speak for all teacher and do not know all of their workshops. I attended school health nurse workshop that touched on several subjects mentioned.

Major emphasis on professional preparation: *Physical education*

Years teaching health education: *10 to 14 years*

Health and Phy.Ed at my school has been reduced to one semester. I teach all the health. Students rotate to me out of P.E. for 22 or 23 days. Approximately 4 weeks is all I have to teach the class. I often have to

decide between touching on a lot of different topics or teach a few topics in more detail. My undergraduate degree is health and Phy. ED. However, my masters is Phy. ED.

Major emphasis on professional preparation: *Health and physical education*

Years teaching health education: *15 years or more*

The limitation of our sex education program is due to the adoption of an abstinence-only curriculum by our school board. Our middle school have only 15 days (80 min classes) of health education. Plus 15 days of sex education for each grade level.

Major emphasis on professional preparation: *Health and physical education*

Years teaching health education: *15 years or more*

Our school is on the clock schedule- (A/B day). WE see our students every other day for approx. 1½ hrs. Students are on a rotation between three instructors. Each instructor teachers a different activity, including health.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *N/A*

Health here is not taught as a course, but rather through short talks in physical education and through workshops in science class.

Theme: Curriculum issues in health education

Major emphasis on professional preparation: *Health and physical education*

Years teaching health education: *15 years or more*

Nutrition is not included in the state health curriculum for high school. I do feel that it is a needed area for high school students because of the obesity problem our nation is experiencing. Also, eating disorders are increasing and teens simply do not know enough about eating healthy. Teens are also somewhat confused about how to manage their food intake when participating in carious sports. Because this is a topic many of my students want to know about, I try to invite a nutritionist to my classes or I try to devote 1 day just to cover some of the main points or nutrition.

Major emphasis on professional preparation: *Other education degree*

Years teaching health education: *N/A*

Health is taught in science class. None of us are health education teachers, we all spend two to three weeks per semester (we are on the block schedule) with help. We all try to make sure we do drugs and drug prevention, accidents within our health class and the school nurse covers abstinence and sexually transmitted diseases. Our school system adopted in “Totally Awesome Health” which is a fantastic health textbook, but we do not use much of it. WE have trouble getting our science curriculum covered-to much to do with to short of a time. I consulted the science/health teachers in 7th & 8th grade to fill this out.

Major emphasis on professional preparation: *Physical education*

Years teaching health education: *6 to 9 years*

Our school system has created a unit on family life that we have to use. It is so basic. It doesn't reach the kids who need it. We have sexually active teens yet we can only say “abstinence until marriage.”

Major emphasis on professional preparation: *Other education degree*

Years teaching health education: *2 to 5 years*

Health is also covered in the science curriculum.

Theme: Miscellaneous (Statements that could not be classified)

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *15 years or more*

Great questions, but way too long and time consuming.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *10 to 14 years*

As of last year health is a “pull out” from the physical education class. This means that we deal mainly with family life education and tobacco and drug prevention. The rest of the topics are expected to be covered in science class.

Major emphasis on professional preparation: *Health and physical education combined*

Years teaching health education: *15 years or more*

Sorry, I didn't open this up until yesterday. I thought it was another sales pitch.

Major emphasis on professional preparation: *Physical education combined*

Years teaching health education: *15 years or more*

Please, please, please stop requiring health to be taught along w/PE. Students only get 1 semester of PE and they lose 6 weeks of class time due to health. Please get health teacher in the rotation so students will not lose P.E. activity time. Please.

Major emphasis on professional preparation: *Public Health*

Years teaching health education: *2 to 5 years*

Thank you for including my school in the survey. I know that schools were randomly chosen, but I appreciate being included. I would like to receive survey results also. Thanks again for your efforts.

Major emphasis on professional preparation: *Health education*

Years teaching health education: *15 years or more*

This is my 1st year of only teaching health. I have had speakers from Dare Program, Think smart, NC National Guard Counter Drug task force, abstinence, Postponing sexual involvement, and others come to my classes. Hopefully next year will be even better.

Major emphasis on professional preparation: *Nursing*

Years teaching health education: *1 year*

New teacher-started 2/1/2002

Major emphasis on professional preparation: *Health and physical education*

Years teaching health education: *2 to 5 years*

In XXXXX County in order to teach abstinence the student has to return the paper saying they want to take the class. Most classes we have 3 kids out of 65 combined that bring the paper back. We have integrated Health and other subjects into our PE classes. We will teach that abstinence/family health class but it has to change.

Major emphasis on professional preparation: *Health and physical education*

Years teaching health education: *15 years or more*

I have participated in this survey at least 2 years. I would like to receive feedback on survey results.

Major emphasis on professional preparation: *Physical education combined*

Years teaching health education: *2 to 5 years*

I have been at XXXXX middle less than a month. I asked the guidance counselors, various teachers, the school nurse, and the other physical educator these questions. I answered these questions according to their answers and my experiences.

Major emphasis on professional preparation: *Physical education combined*

Years teaching health education: *2 to 5 years*

Our health is taught as a health and physical education course primarily 9th grade students. We have been working with the local fire department. They come and allow the students to go through their agility course; they fill a room with smoke and use the camera to find people. Have also had the local alcohol law enforcement officer come in and talk with the class during a health class.

Major emphasis on professional preparation: *Health & physical education combined*

Years teaching health education: *15 years or more*

When referring to Human sexuality, pregnancy prevention and STD prevention (Now called STI's). We only teach "Abstinence" with regard to these topics! Wake county has restricted us to a "just say no" type of curriculum with a few "bells + whistles."

Major emphasis on professional preparation: *Health & physical education combined*

Years teaching health education: *15 years or more*

I have enjoyed my career thus far. Through the years many changes have taken place to improve the quality of education. Our children are extremely blessed to attend the XXPSS. Not only students have received benefits but the employees in the system have been given numerous opportunities to enhance their skills in education.

Major emphasis on professional preparation: *Health & physical education combined*

Years teaching health education: *2 to 5 years*

I found the use of "required" confusing in questions like #2. Health Ed. is required to use a textbook? No, not necessarily. We are required to teach the curriculum. Any staff development would be lovely.

Major emphasis on professional preparation: *Other education degree*

Years teaching health education: *10 to 14 years*

I would appreciate the opportunity to continuing staff development on a myriad of topics. My or any teachers' participation is dependant on schedules.