# New Brunswick Students' Ideas

# About Sexual Health Education

**Report prepared for the New Brunswick Department of Education**

**by**

**E. Sandra Byers, Heather A. Sears, Susan D. Voyer,**

**Jennifer L. Thurlow, Jacqueline N. Cohen, & Angela D. Weaver**

**Department of Psychology**

**University of New Brunswick**

**November 2001**

For more information about this project, contact the first author at

Department of Psychology, University of New Brunswick

Bag Service # 45444, Fredericton, N.B., E3B 6E4

Telephone: (506) 458-7697; Fax: (506) 447-3063; e-mail: *byers@unb.ca*

# TABLE OF CONTENTS

## ACKNOWLEDGMENTS

The authors would like to acknowledge the individuals who assisted with the development and completion of this project. First, we would like to thank Margaret Layden-Oreto and Mark Holland of the New Brunswick Department of Education who were especially helpful in developing and refining the survey and methodology. We also would like to express our appreciation to the Directors of Education of the participating school districts, the principals of participating schools and the parents for their help in facilitating our access to New Brunswick students.

Second, we would like to thank the students who participated in this survey. Their willingness to share their opinions has given us a clearer picture of students' preferences for the content and timing of sexual health education. This information will be very useful in revising the sexual health education curriculum.

Third, we would like to express special appreciation to Alexander McKay of the Sex Information and Education Council of Canada for making available the surveys he used for his research in Ontario schools as well as for his willingness to share his expertise.

We would also like to thank Tricia Beattie, Steven Jefferson, Chris Lee, Sheila MacNeil, Anne Moore, Laura Nichols, Heather Sheppard, and Adrienne Wang for their help with data collection and Krista Byers-Heinlein and Hilary Randall for their help with data entry and coding.

Finally, we would like to acknowledge the financial support of the New Brunswick Department of Education.

# EXECUTIVE SUMMARY

## Introduction

The New Brunswick health curriculum for elementary and middle schools, which includes sexual health education, is currently being revised. In order to design an effective program to enhance sexual health and prevent sexual problems, it is important to consider the perspective of students and to consider how the current curriculum is meeting and is not meeting their needs. High school students can provide information about the nature and content of the sexual health education that they received as well as aspects of sexual health education that they did not receive but feel that they needed. Middle school students can provide the perspective of youth experiencing their first sexual health education classes and fill an important gap in the research literature since most studies have been completed with high school students.

## Survey Objectives

1. To assess students' views on the provision of sexual health education in school, successful teaching methods, which sexual health topics should be covered in the curriculum, and at which grade level these topics should be introduced.

2. To inform revisions to the sexual health education curriculum by increasing the ability of educators to balance the needs of students and teachers with the desires of New Brunswick parents in order to promote students' sexual health.

## Method

Surveys were completed by 745 middle school students (grades 6 to 8) and 1663 high school students (grades 9 to 12) across New Brunswick.

## Results

Students in high schools and middle schools overwhelmingly supported having sexual health education in school. They also indicated that sexual health education should cover a wide range of topics. In addition, students

suggested that some sexual health topics should be introduced in the elementary school grades, and the majority of students felt that almost all topics should be introduced by grades 6-8. Students also told us that they would like both factual information about sexual health topics as well as practical skills for dealing with specific issues.

In general, many students were not satisfied with the quality of the sexual health education that they have received in school. In addition, many high school students and more than half of the middle school students felt that the sexual health topics of most interest to them were not covered in school. It also seems that, for at least some youth, the information they are receiving at school is lagging behind their experiences. This situation is troublesome given that about one-third of students also thought that their parents or guardians did a fair or poor job providing them with sexual health education.

About one-half of the high school students and three-quarters of the middle school students indicated that their instructors were comfortable with the topics discussed and that they answered students' questions well. Nevertheless, students felt that their teachers were not as comfortable as they could have been, that teachers rarely encouraged them to ask questions about sexual health issues, and that more interactive teaching methods would be helpful. In addition, although most students have been taught sexual health in co-ed classes, only about one-half of youth reported that they prefer to be taught together.

## Recommendations

**Recommendation 1:** Sexual health education should be provided in all New Brunswick schools.

**Recommendation 2:** The sexual health education curriculum needs to be revised to better meet the needs of high school and middle school students.

**Recommendation 3:** The New Brunswick sexual health education curriculum should cover a wide range of sexual health topics.

**Recommendation 4:** Sexual health education should begin in grades K-5. However, some topics should be taught in later grades.

**Recommendation 5:** New Brunswick teachers should be made aware of the results of these studies.

**Recommendation 6:** New Brunswick teachers should be supported and provided with in-service training to increase their comfort level and ability to use creative teaching techniques. They also need to be provided with the resources required to provide effective sexual health education (i.e., resources that support the use of interactive techniques).

**Recommendation 7:** The Department of Education should investigate whether it would be best to teach some sexual health topics in single-sex classes instead of or in addition to teaching them in co-ed classes.

**Recommendation 8:** The curriculum should be timed to be both age and experience appropriate.

**Recommendation 9:** In revising the sexual health education curriculum, the results of these two student surveys should be interpreted in conjunction with the results of the surveys of New Brunswick teachers' and parents' opinions about sexual health education.

# INTRODUCTION

Recent epidemiological research suggests that many Canadian youth are at risk for a variety of sexuality-related problems. Indicators of high risk include an early age of first intercourse, low rates of condom and contraceptive use, high rates of sexually transmitted infections and unwanted pregnancies, having multiple partners, and having unprotected sex while under the influence of alcohol or other drugs (Health Canada, 1999, 2000; King, Beazley, Warren, Hankins, Robertson, & Radford, 1988). However, research indicates that well-planned and effectively delivered sexuality education and school-parent cooperation can help young people make informed and responsible decisions about their sexual health (Baldwin, Whitely, & Baldwin, 1990; Barrett, 1990; Connell, Turner, & Mason, 1985; Mackie & Oickle, 1996; Munro, Doherty-Poirier, Mayan, & Salmon, 1994). Accordingly, all provinces and territories in Canada mandate that schools provide health and sexuality education (Barrett, 1994; McCall, Beazley, Doherty-Poirier, Lovato, MacKinnon, Otis, & Shannon, 1999).

The Canadian Guidelines for Sexual Health Education (Health Canada, 1994) define sexual health education as "… a broadly based, community supported enterprise in which the individual's personal, family, religious, and social values are engaged in understanding and making decisions about sexual behaviour and implementing those decisions" (p. 4). The Guidelines identify two main goals of sexual health education. The first goal is sexual health enhancement, including promoting a positive self-image and maintaining one's physical/reproductive health. The second goal is prevention of sexual health problems, such as unintended pregnancy, sexual exploitation, abuse, and sexually transmitted infections including AIDS.

In order to design an effective program to enhance sexual health and prevent sexual problems, it is important to consider the adolescent perspective. Campbell and Campbell (1990) drew a distinction between an adult-focused and an adolescent-focused perspective on teenage sexuality. For example, adults place a greater emphasis on the long-term consequences of actions, such as pregnancy, whereas for teenagers the long-term consequences may be too remote and abstract to effectively guide current behaviour. These authors suggested that, although most sexual health programs are based on adult perspectives, these programs may be more successful in achieving intended objectives if the perspective of youth is also considered. In

particular, it is important to evaluate whether the curriculum addresses students' actual and perceived needs. This, in turn, will make it more likely that sexual health programs will achieve the goals identified by parents and educators. However, it cannot be assumed that the results of surveys done elsewhere accurately represent the climate of sexual health education attitudes in New Brunswick. Therefore, it is important to assess New Brunswick students' perceptions of the overall quality of the sexual health education they have received and their perceived sexual health education needs. This information can then be used to revise the sexual health curriculum.

McKay and Holowaty (1997) reported that asking students their opinions is an important component when designing effective educational programs. They surveyed 406 Ontario adolescents in grades 7 to 12 and found that most (89%) believed that sexual health education is an important part of the curriculum. However, less than two-thirds (61%) believed that their schools had done a good job of providing such information. This suggests that sexual health education curricula could be more effective. Langille, Graham, Marshall, Blake, Chitty, and Doncaster-Scott (2000) interviewed 28 female teenagers from Amherst, Nova Scotia. From these in-depth interviews, they identified three barriers to effective use of sexual health education in schools: curriculum, teachers, and students.

*Curriculum*

The first barrier to effective sexual health education is the course material. Langille et al. (2000) reported that students described sexual health education as boring and repetitive, and felt that the courses lacked personal relevancy by focusing on anatomy rather than sexual decision-making. Further, they felt that the information was offered at the wrong times relative to students' sexual experience, such that for students who were sexually active, the material was too basic and did not meet their needs. Similarly, other researchers have found that students want more detailed sexual health information on specific topics (e.g., preventing and treating STDs, methods of birth control), explicit instructions on skills, and information presented in earlier grades (Eisenberg & Wagenaar, 1997; McKay & Holowaty, 1997). In keeping with the students' perspective, Kirby (1992) concluded from an in-depth review of the sexual health education literature that knowledge is not enough to achieve desired health outcomes from sexual health education. Skill development is also important (Haffner, 1996; Melchert & Burnett,

1990). Further, Kirby stated that, to be effective, sexual health education must be timed to be both age and experience appropriate in that younger adolescents are taught the information and skills to delay first sexual intercourse while older adolescents are taught more about contraception. Thus, the present research assessed students' opinions of the current sexual health education curriculum as well as the grade level they perceive appropriate for introducing specific sexual health topics.

*Teachers*

Teachers are another important component of sexual health education. They bring their attitudes, comfort level, and teaching techniques to the classroom. Langille et al. (2000) reported that students identified problems with sexual health education when they perceived teachers as judgmental or uncomfortable, when teachers used personal situations from their own life experiences, or when teachers lacked credibility because they are from a different generation with different values. In keeping with these results, Hamilton and Levenson-Gingiss (1993) found that teachers who were more comfortable presenting information and leading discussion, and who felt better prepared were more influential and received more positive ratings of classroom performance. According to Eisenberg and Wagenaar (1997), students also identified an open and honest climate as important. They indicated that they preferred non-lecture teaching methods, such as discussion, guest speakers, and experiential learning activities, to a lecture approach. Locker (1990) found that teaching techniques and activities that involve student participation enhance the effectiveness of sexual health classes. Thus, it is important to assess students' opinions of their sexual health teachers and teaching methods to determine the effectiveness of the teaching component of sexual health education.

*Students*

Students' attitudes and behaviour also may affect the quality of sexual health education. Some students perceive that sexual health education is not taken seriously by other students, which impacts the effectiveness of the class (Langille et al., 2000). For example, girls are embarrassed to ask questions in front of boys who make inappropriate jokes or act disrespectfully. This leads to the issue of gender dynamics in the classroom. For example, Cohen, Byers, Sears, and Weaver (2001) found that New Brunswick female teachers preferred teaching single-sex classes whereas male teachers were equally

comfortable with either a single-sex or mixed-sex class. McKay and Holowaty (1997) reported that 60% of girls and 35% of boys felt that single-sex classes would be appropriate for some sexual health topics and would make them feel more comfortable. Further, these authors reported that girls rated almost all sexual health topics of higher importance than boys. Therefore, it is important to assess if there are gender differences in students' perspectives and if there is a preference for single-sex or co-ed classes.

Sexual health education classes are an important source of information for students (McKay & Holowaty, 1997). However, sexual health classes are not the only way that students obtain their sexual health information: Parents and school are students' two preferred sources of sexual health information (McKay & Holowaty, 1997). Many students want their parents involved, but they are uncomfortable asking them directly about sexual health topics and they want tips for talking with parents to be presented at school (Eisenberg & Wagenaar, 1997). In addition, many parents underestimate the extent to which their children want factual information about sexuality (King & Lorusso, 1997). Weaver, Byers, Sears, Cohen, and Randall (2001) reported that very few New Brunswick parents felt that they had done an excellent job providing sexual health education in the home, and they had rarely encouraged their children to ask questions about sexuality. Thus, since adolescents and their parents view sexuality discussions differently, it is important to examine the adolescent's perspective of sexual health education in the home.

## SURVEY OBJECTIVES

The New Brunswick health curriculum for elementary and middle school students, which includes sexual health education, is currently being revised. The present surveys of high school and middle school students are two of four studies that have been conducted to inform these revisions. In the first two studies, teachers' and parents' attitudes toward sexual health education were evaluated (Cohen et al., 2000; Weaver et al., 2001). The first study in this report surveyed high school students (grades 9 to 12) because they should have received sexual health education in school. Further, most of these students will have been involved in one or more romantic relationships that included some level of sexual activity (King et al., 1988). Thus, high school students were expected to provide information about the nature and content of the sexual health education that they received as well as aspects of sexual health education that they did not receive but feel that they needed. The second study in this report surveyed middle school students (grades 6 to 8) to provide the perspective of youth experiencing their first sexual health education classes. Further, little is known about middle school students' attitudes and views of sexual health education as most studies have been completed with students in grades 9 to 12.

The results of the present studies will inform the Department of Education about what students want to learn as part of school-based sexual health education. This will increase the Department's ability to design a program that is more effective in promoting students' sexual health. Also, the knowledge that most students are supportive of the sexual health education curriculum would likely increase the comfort of teachers providing that education. Students would also benefit from knowing that their opinions are valued and reflected in curriculum decisions.

To date, no large-scale surveys have been undertaken to assess the opinions of New Brunswick students about sexual health education in the schools. Therefore, one of the objectives of these surveys was to assess students' general opinions about, and personal experiences with, the provision of sexual health education. Students' opinions about the content and timing of sexual health education were examined. Also, the surveys looked at students' opinions about the sexual health education that they have received at home.

Specifically, students were asked to indicate:

- their views about the provision of sexual health education in school
- the importance of specific sexual health topics and how well they were covered in school
- the grade level at which they feel that each of these topics should be introduced
- their opinions regarding how sexual health education is taught in school
- their opinions regarding sexual health education in their homes

# STUDY 1: SURVEY OF HIGH SCHOOL STUDENTS

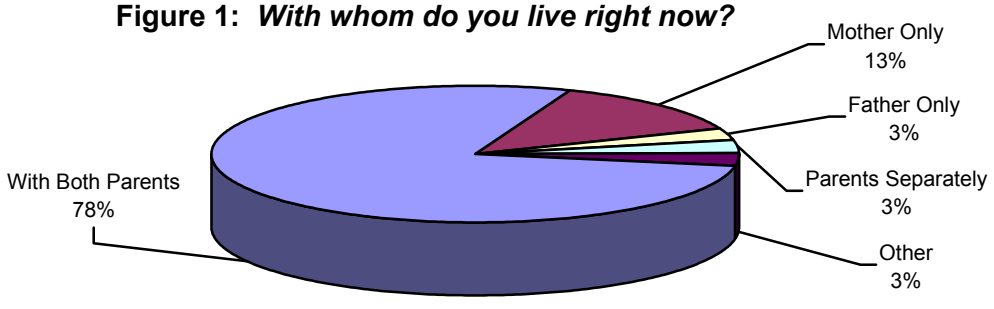
## METHOD

### Participants

Approximately one half of New Brunswick students attend school in an urban school district; therefore, one half of the sample was recruited from two of the three primarily urban school districts. The other half of the sample targeted schools in rural school districts, which were sampled geographically from around the province. Six high schools and two combined schools (grades 6-12) were selected and participated. Each of the combined schools selected for this study participated in our previous surveys of teachers' and parents' attitudes regarding the sexual health curriculum. However, the high schools did not participate in these earlier studies.

In total, 1666 surveys were completed by high school students. Only 15 students declined to complete the surveys. Two surveys were excluded because only the first page was completed, and one survey was removed because it was completed improperly. Of the high school students who completed the survey, about half (54%) were girls. Each grade was equally represented and the gender of the participants was equally represented in each grade. About three-quarters of the respondents (78%) lived with both parents (see Figure 1).

**Figure 1:** ***With whom do you live right now?***



## Procedure

Following ethics approval from the University of New Brunswick, the New Brunswick Department of Education sent a letter describing the project to the directors of the selected school districts and notified them which schools had been selected to participate. The researchers then contacted the principals of the selected schools by telephone in order to obtain their consent to participate in the survey, to explain the procedure, and to verify the number of students in the school.

Members of the research team visited each school to administer the survey to groups of youth. Students completed the survey in their classrooms. Before the surveys were distributed, students were informed about the nature and purpose of the study and were asked to read and sign a consent form if they wished to participate (see Appendix). Students were informed that they could omit any questions they were uncomfortable answering and that they could withdraw from the study at any time. The survey was completed in one class period.

## Survey

The survey was divided into seven parts (see Appendix for the items). Part A elicited students' general opinions about sexual health education in school, such as whether sexual health education should be provided in school, whether the school and parents should share responsibility for the provision of sexual health education, at what grade level sexual health education should begin, and their perception of the quality of the sexual health education that they have received in school. Part B asked students to indicate how important each of 10 topics is to the sexual health curriculum. In Part C, students were asked to indicate how well each of these topics was covered. Part D asked for opinions about how sexual health education is taught in school. Part E asked the grade level at which schools should begin covering 27 specific sexual health topics. Part F asked about sexual health education in the home and personal dating experiences. Finally, Part G requested demographic information, such as gender and grade.

## Data Analysis

Frequencies and means were used to describe students' responses to individual questions. Analyses of variance and correlations were used to

assess the relationships between specific variables. However, due to the large sample size, only significant results that accounted for more than 4% of the variance in the criterion are described in this report. In general, there were no differences in attitudes based on family structure (i.e., two-parent or single-parent family), parents' level of education, or students' grade placement.

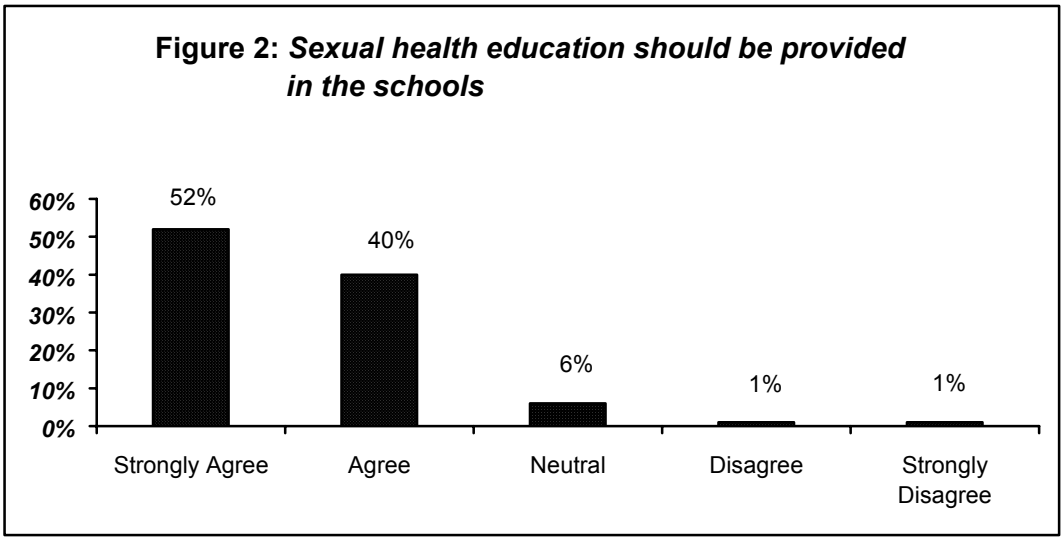
# RESULTS

## High School Students' Opinions about Sexual Health Education

High school students were asked for their opinions about general aspects of sexual health education in school. This included whether sexual health education should be provided in school, whether parents and schools should share responsibility for sexual health education, at what grade sexual health education should begin, and how they would rate the quality of the sexual health education they have received in school. There were no significant differences based on the gender of respondents.

The results indicated that there is overwhelming support among New Brunswick high school students for the provision of sexual health education in school. Ninety-two percent of students either agreed (40%) or strongly agreed (52%) that sexual health education should be provided in school (see Figure 2).

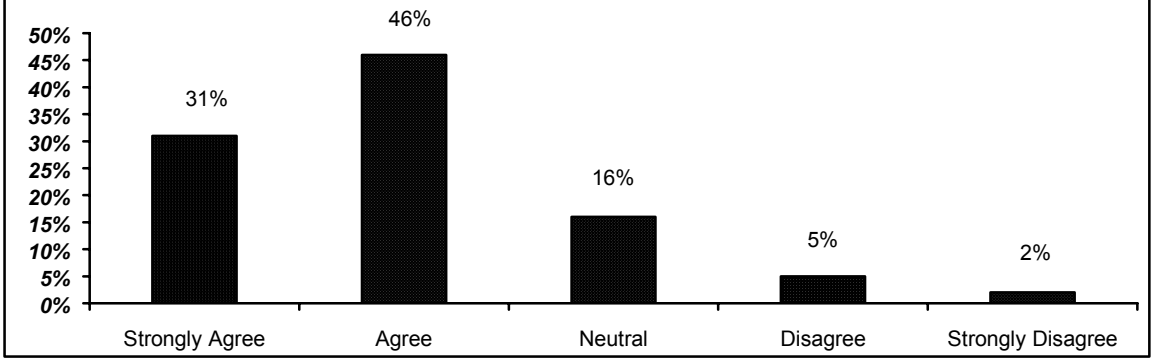
**Figure 2:** ***Sexual health education should be provided in the schools***




Many students indicated that both schools and parents should be involved in providing sexual health education to youth (see Figure 3): 77% of students agreed (46%) or strongly agreed (31%) that schools and parents should share responsibility for providing sexual health education to students. Thus, consistent with previous studies, the majority of youth prefer to learn about sexual health from both schools and parents. A substantial minority (15%) was in favour of sexual health education in school, but not in favour of this

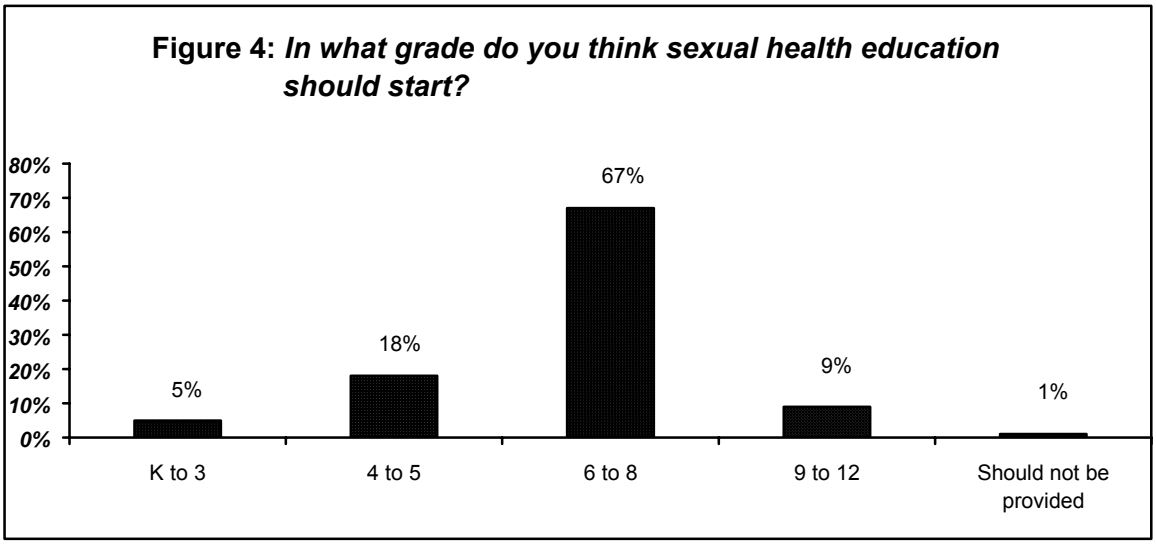
responsibility being shared between schools and parents, suggesting that some students prefer to learn about sexuality in school.

**Figure 3:** ***The school and parents should share responsibility for providing children with sexual health education***




About one quarter of high school students (23%) felt that sexual health education should begin in grades K – 3 (5%) or grades 4 – 5 (18%). However, about two-thirds (67%) felt that sexual health education should begin in grades 6 to 8. Only 9% of students thought that sexual health education should start in grades 9-12, and only 1% felt that sexual health education should not be provided in school (see Figure 4).

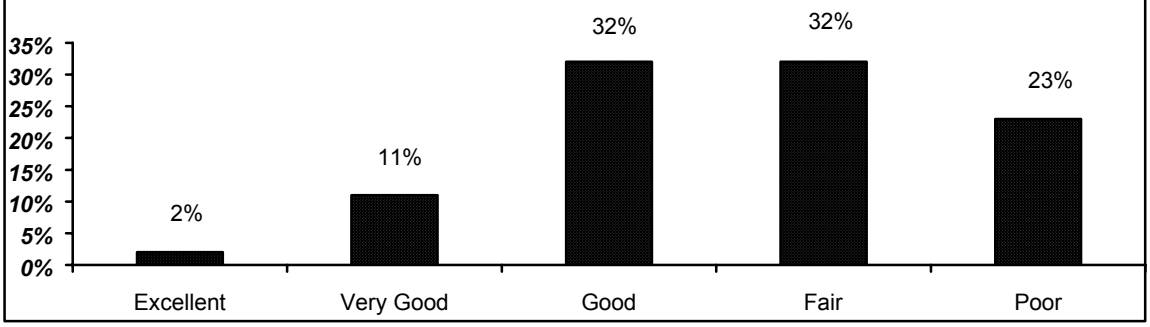
**Figure 4:** ***In what grade do you think sexual health education should start?***




Only 7% of students surveyed indicated that they had not received any sexual health education in school. Those who had received sexual health

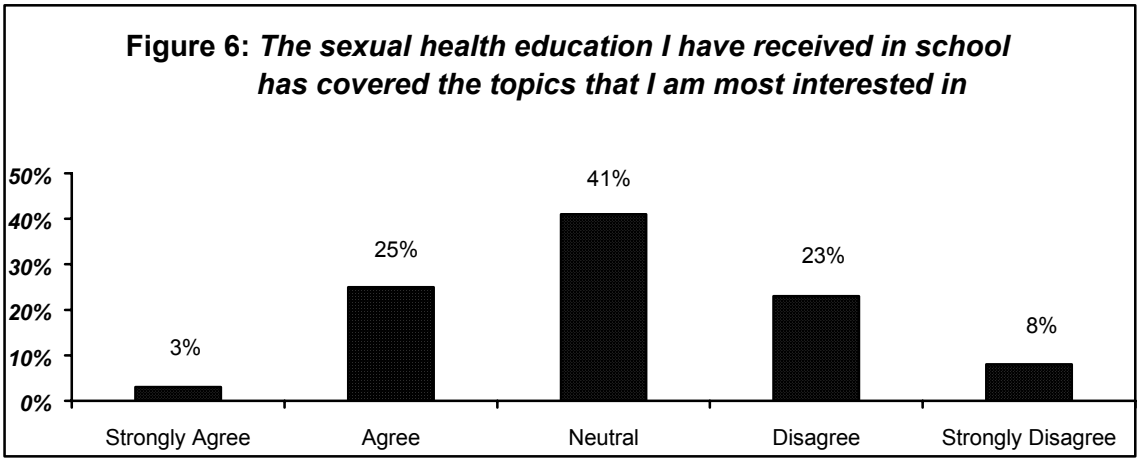
education were asked to rate the quality of that education. Only 2% of students rated the quality as excellent and 11% as very good; 32% rated the quality as good, 32% rated it as fair, and 23% rated it as poor (see Figure 5). Thus, the majority of students were dissatisfied with the quality of the sexual health education that they had received at school.

**Figure 5:** ***Overall, how would you rate the quality of the sexual health education that you have received in school***




Finally, students were asked whether the sexual health education they had received in school had covered the topics that they were most interested in. Of those students who had received sexual health education, only about one-quarter (28%) agreed or strongly agreed with this statement. On the other hand, 31% either disagreed or strongly disagreed (see Figure 6); the remainder were neutral. Thus, most students did not feel that the school covered the topics in which they were most interested.

**Figure 6:** ***The sexual health education I have received in school has covered the topics that I am most interested in***



## Importance of Topics for the Sexual Health Curriculum

High school students were asked to indicate how important it is for each of 10 sexual health topics to be covered in the sexual health curriculum. Their ratings were made on a scale from 1 (not at all important) to 5 (extremely important). Students rated all of the topics listed as important to the sexual health curriculum (see Table 1). Specifically, students thought that it was extremely important that the curriculum include information on sexually transmitted diseases and birth control methods. They rated the topics of sexual assault, personal safety, reproduction, sexual decision-making, and puberty as very important. Although they placed less importance on sexual pleasure and enjoyment, abstinence, and correct names for the genitals than on other topics, students still rated these topics as important to cover.

Overall, it appears that high school students feel that it is important to include a broad range of topics in the sexual health education curriculum. While both boys and girls rated all topics as important, girls rated abstinence ($F$ (1, 1574) = 88.1, $p < .05$) and sexual assault and coercion ($F$ (1, 1574) = 72.7, $p < .05$) as more important than boys did. In contrast, boys rated sexual pleasure and enjoyment as more important than girls did ($F$ (1, 1574) = 213.0, $p < .05$). Boys and girls did not differ in their ratings of the remaining seven topics.

*Table 1: Importance high school students assigned to possible topics in the sexual health curriculum.*

| Rating | Topic | Mean | Standard Deviation | Median |
|---|---|---|---|---|
| ***Extremely Important*** | Sexually transmitted diseases | 4.52 | .81 | 5 |
| | Birth control methods | 4.36 | .89 | 5 |
| ***Very Important*** | Sexual coercion/assault | 4.06 | .99 | 4 |
| | Personal safety | 4.02 | 1.01 | 4 |
| | Reproduction | 3.81 | .97 | 4 |
| | Sexual decision-making | 3.75 | 1.09 | 4 |
| | Puberty | 3.72 | .97 | 4 |
| ***Important*** | Sexual pleasure/enjoyment | 3.24 | 1.34 | 3 |
| | Abstinence | 3.07 | 1.24 | 3 |
| | Correct names for genitals | 2.98 | 1.10 | 3 |

## Topics Covered in Sexual Health Education

High school students were asked to indicate how well each of 10 sexual health topics was covered in the sexual health education that they had received. Their ratings were made on a scale from 1 (not covered at all) to 5 (covered very well). If they had not received any sexual health education, they were asked to indicate that the topic was "not covered at all". These responses were excluded from the analyses.

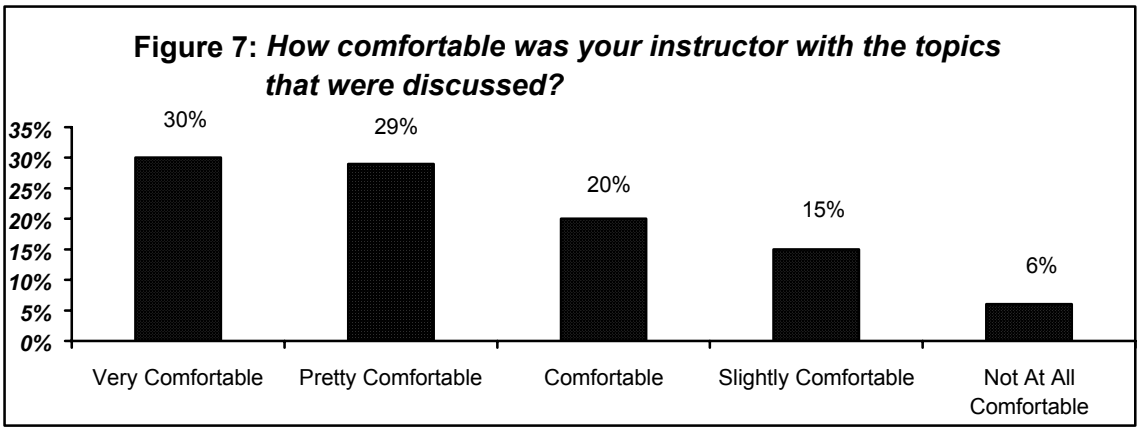
Students who had received sexual health education indicated that all of the topics were covered to some degree except sexual pleasure/enjoyment (see Table 2). None of the topics received an overall rating of "covered very well" and only puberty was rated as having been "covered well". Correct names for genitals, reproduction, sexually transmitted diseases, birth control methods, and sexual assault were all rated as "covered". The students reported that personal safety, sexual decision-making, and abstinence were topics that were "covered poorly".

*Table 2: Extent to which sexual health topics were covered in sexual health education classes.*

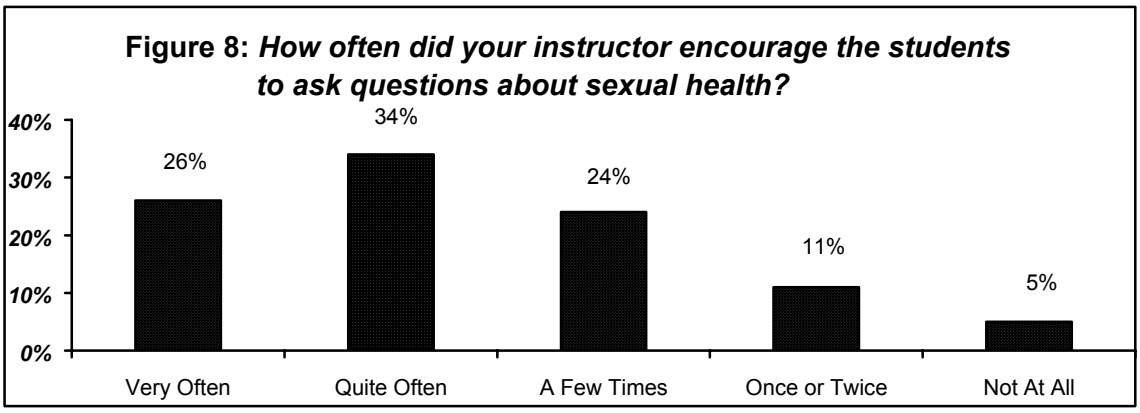
| Rating | Topic | Mean | Standard Deviation | Median |
|---|---|---|---|---|
| ***Covered Well*** | Puberty | 3.64 | .90 | 4 |
| ***Covered*** | Correct names for genitals | 3.39 | 1.02 | 3 |
| | Reproduction | 3.38 | 1.08 | 3 |
| | Sexually transmitted diseases | 3.19 | 1.18 | 3 |
| | Birth control methods | 2.94 | 1.23 | 3 |
| | Sexual coercion/assault | 2.57 | 1.14 | 3 |
| ***Covered Poorly*** | Abstinence | 2.44 | 1.18 | 2 |
| | Sexual decision-making | 2.36 | 1.14 | 2 |
| | Personal safety | 2.26 | 1.15 | 2 |
| ***Not Covered*** | Sexual pleasure/enjoyment | 1.77 | 1.07 | 1 |

## How Sexual Health Education is Taught

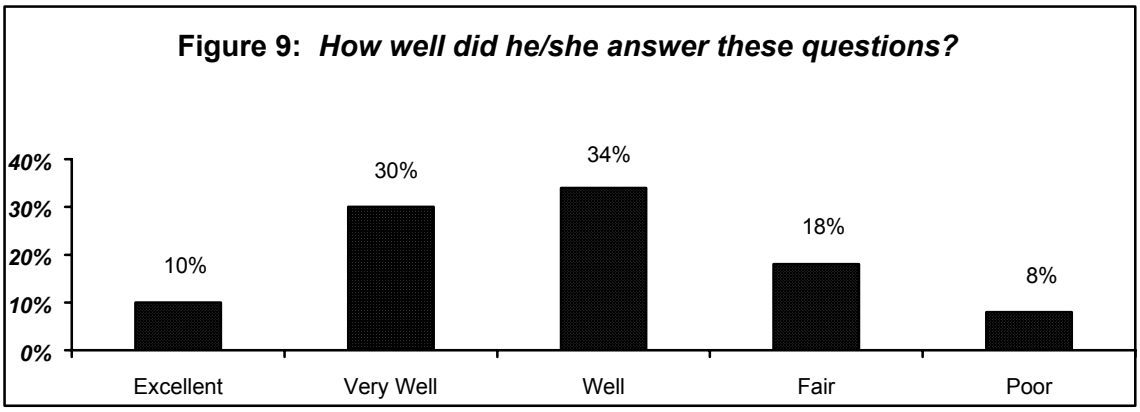
In this section, high school students were asked to think about their most recent sexual health education teacher and then answer questions concerning the comfort level of that teacher and the teaching methods used. Seven percent of students said that they had not received any sexual health education. Of those who had received sexual health education, 59% felt that their teacher was pretty comfortable to very comfortable with the topics discussed (see Figure 7). Almost one-quarter (21%) felt that their teacher was slightly or not at all comfortable.




High school students were also asked how often their instructor encouraged students to ask questions about sexual health and how well the instructor answered these questions. Sixty percent of students felt the teacher encouraged students to ask questions very often (26%) or quite often (34%). However, 40% felt that students were rarely encouraged to ask questions (see Figure 8).




Forty percent of students felt that their instructors answered sexual health questions very well (30%) or excellently (10%) (see Figure 9). An additional 34% felt the questions were answered well.




Another issue related to teaching sexual health education is whether boys and girls should be taught about sexuality separately or together. Of those high school students who had received sexual health education, most (93%) had been taught in co-ed classes. When asked their preference, 11% preferred to be taught separately, 57% preferred to be taught together, and 32% did not have a preference. There was no significant difference in preference based on the gender of the respondents.

Students were asked to indicate whether their most recent sexual health instructor had used any of eight teaching methods. For each method, they were also asked to rate how much the method would help them learn about or stay interested in the sexual health topics being taught. Their ratings were made on a scale of 1 (it wouldn't help at all), 2 (it would help somewhat), or 3 (it would help a lot). If they had not received any sexual health education, they were to omit the first part but were encouraged to complete the second part indicating the helpfulness of the teaching method.

Students indicated that the most frequently used teaching method was videos (80%) followed closely by lectures (76%). A question box (69%), readings (63%), and group discussions (62%) were also commonly used. Guest speakers (25%), role play and games (17%), and individual projects (15%) were used much less frequently.

Table 3 indicates that high school students felt that a question box, videos, and group discussion are the three most helpful teaching methods for sexual health topics. Further, respondents rated the remaining teaching methods as helping somewhat.

*Table 3: Ratings of the helpfulness of teaching methods for sexual health*

| Rating | Method | Mean | Standard Deviation | Median |
|---|---|---|---|---|
| ***It would help a lot*** | Question box | 2.54 | .65 | 3 |
| | Videos | 2.49 | .60 | 3 |
| | Group discussion | 2.44 | .65 | 3 |
| ***It would help somewhat*** | Guest speakers | 2.30 | .70 | 2 |
| | Lecturing | 2.00 | .63 | 2 |
| | Readings | 1.96 | .62 | 2 |
| | Roleplay, drama, games | 1.92 | .77 | 2 |
| | Individual projects | 1.72 | .71 | 2 |

## Grade Level at which Schools Should Introduce Sexual Health Topics

High school students were asked to indicate the grade level at which they thought schools should **start** teaching each of 27 sexual health topics. The percentage of high school students who endorsed each grade level is presented in Table 4. For example, 45% of high school students felt that personal safety should be introduced in grades K-5. According to the overall patterns of results, there is strong support for the inclusion of all 27 topics in the sexual health curriculum.

The grade levels at which the majority of high school students thought schools should introduce sexual health topics are summarized in Table 5. The mean, median, mode, and cumulative percentages of students' ratings for each topic were examined. In general, students believed that a range of topics should be included in the sexual health curriculum and that most of these topics should be introduced in grades 6-8. Personal safety was the only topic that was divided between K to 5 and grades 6 to 8. However, a substantial minority (>25%) thought that personal safety, correct names for genitals, being comfortable with the other sex, body image, and sexual coercion and sexual assault should be introduced in grades K to 5. Teenage prostitution, sex as part of a loving relationship, building equal romantic relationships, and sexual pleasure and orgasm were topics that were divided between grades 6 to 8 and grades 9 to 12.

*Table 4: Percentage of high school students who indicated sexual health topics should be introduced at each grade level.*

| Topic | Percentage Who Thought Topic Should be Introduced in Each Grade Level | | | |
|---|---|---|---|---|
| | K to 5 | 6 to 8 | 9 to 12 | Should not be included |
| Personal safety* | 45.1 | 44.1 | 9.1 | 1.7 |
| Correct names for genitals* | 31.1 | 62.2 | 4.7 | 2.0 |
| Being comfortable with the other sex | 27.1 | 58.9 | 12.2 | 1.7 |
| Body image | 25.3 | 66.1 | 7.3 | 1.4 |
| Sexual coercion & sexual assault* | 25.2 | 59.5 | 14.0 | 1.3 |
| Puberty* | 19.4 | 77.4 | 2.8 | .3 |
| Menstruation | 18.4 | 72.6 | 6.8 | 2.2 |
| Wet dreams | 12.9 | 75.0 | 7.1 | 5.0 |
| Abstinence* | 11.1 | 64.2 | 16.1 | 8.5 |
| Reproduction & birth* | 10.6 | 65.6 | 23.0 | .9 |
| Sexual behaviour (e.g., French kissing, intercourse) | 9.9 | 70.0 | 17.0 | 3.1 |
| Masturbation | 9.7 | 65.1 | 11.2 | 14.0 |
| Sexually transmitted diseases/AIDS* | 8.8 | 70.2 | 20.7 | .3 |
| Pornography | 8.4 | 41.5 | 28.8 | 21.3 |
| Homosexuality | 8.2 | 47.6 | 25.7 | 18.5 |
| Communicating about sex | 7.6 | 58.3 | 32.7 | 1.4 |
| Dealing with peer pressure to be sexually active | 7.3 | 71.6 | 19.0 | 2.1 |
| Sexuality in the media | 6.8 | 58.5 | 26.6 | 8.1 |
| Attraction, love, intimacy | 6.6 | 50.2 | 39.8 | 3.4 |
| Sex as part of a loving relationship | 6.0 | 49.9 | 40.0 | 4.1 |
| Sexual problems & concerns | 5.4 | 62.1 | 30.9 | 1.6 |
| Sexual decision-making* | 4.4 | 61.8 | 30.1 | 3.7 |
| Teenage prostitution | 4.2 | 45.9 | 35.1 | 14.7 |
| Building equal romantic relationships | 4.0 | 50.0 | 41.8 | 4.2 |
| Sexual pleasure & orgasm* | 3.9 | 45.7 | 41.1 | 9.2 |
| Teenage pregnancy/parenting | 3.7 | 61.7 | 34.1 | .5 |
| Birth control methods & safer sex practices* | 3.6 | 63.0 | 32.9 | .4 |

** indicates topics that were also included on Middle School Questionnaire*

*Table 5: Grade levels at which the majority of high school students think schools should introduce sexual health topics*.

| Grade Level | Topic |
|---|---|
| ***Divided between K to 5 and 6 to 8*** | Personal safety |
| ***6 to 8*** | Correct name for genitals<br>Being comfortable with the other sex<br>Body image<br>Sexual coercion and sexual assault<br>Puberty<br>Menstruation<br>Wet dreams<br>Abstinence<br>Reproduction and birth<br>Sexual behaviour (e.g., French kissing, intercourse)<br>Masturbation<br>Sexually transmitted diseases/AIDS<br>Pornography<br>Homosexuality<br>Communicating about sex<br>Dealing with peer pressure to be sexually active<br>Sexuality in the media<br>Attraction, love, intimacy<br>Sexual problems and concerns<br>Sexual decision-making<br>Teenage pregnancy/parenting<br>Birth control methods and safer sex practices |
| ***Divided between 6 to 8 and 9 to 12*** | Teenage prostitution<br>Sex as part of a loving relationship<br>Building equal romantic relationships<br>Sexual pleasure and orgasm |

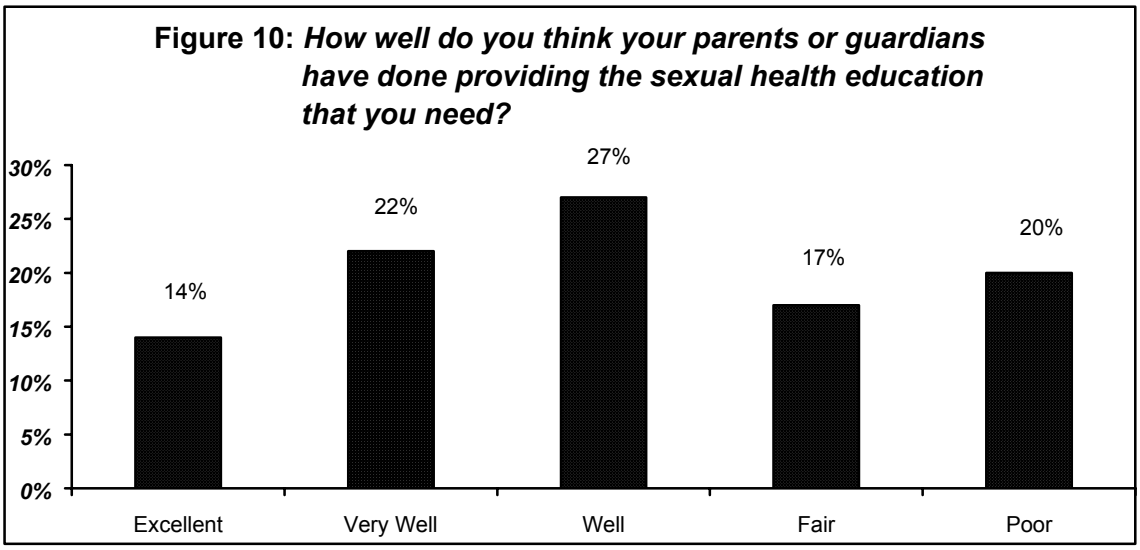
A significant minority of high school students (i.e., >18%) indicated that the topics of homosexuality and pornography should not be included in the curriculum. Between 6% and 15% of students indicated that abstinence, masturbation, sexuality in the media, teenage prostitution, and sexual pleasure and orgasm should not be included in the curriculum.

Gender differences were found for only 3 of the 27 sexual health topics. Girls would like to learn about menstruation sooner than boys (26% of girls wanted it taught in grades K to 5 while only 10% of boys wanted it taught this early ($F$ (1, 1332) = 85.1, $p < .001$)). Boys would like to learn about sexual pleasure and enjoyment ($F$ (1, 1332) = 51.1, $p < .001$), and pornography ($F$ (1, 1332) = 85.4, $p < .001$) sooner than girls. Thirteen percent of girls felt that sexual pleasure and enjoyment should not be taught in school at all compared with 5% of boys; 30% of girls felt that pornography should not be taught in school at all compared with 11% of boys.

## Sexual Health Education at Home

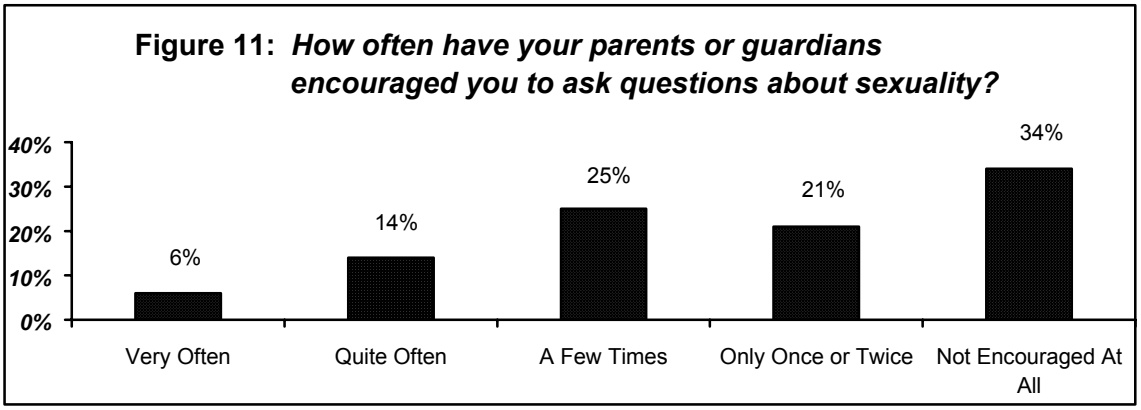
Students were asked about the quality of the sexual health education that they had received from their parents or guardians. One third of students felt that their parents/guardians have done excellent (14%) or very well (22%), and 27% felt that their parents/guardians have done well in providing them with sexual health education (see Figure 10). However, more than one third of students felt that their parents/guardians have done only a fair (17%) or a poor (20%) job in providing them with sexual health education. Students who rated the sexual health education their parents had provided less highly were less likely to support shared responsibility between parents and schools for sexual health education ($r = .25$, $p < .001$).

**Figure 10:** ***How well do you think your parents or guardians have done providing the sexual health education that you need?***

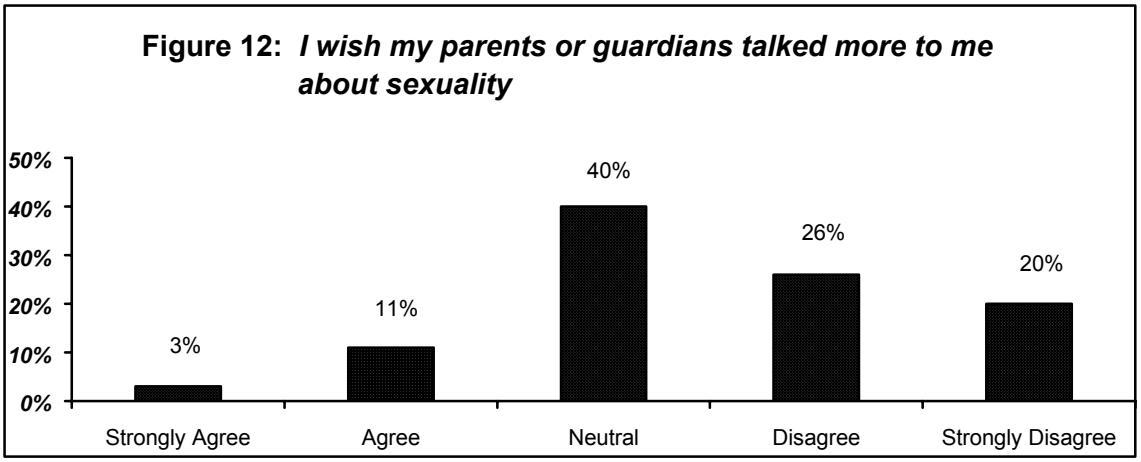



Students also were asked about the frequency with which their parents/guardians encouraged them to ask questions about sexuality. Most

reported that they were rarely encouraged to ask questions (80%); approximately one-fifth of students were encouraged to ask questions quite often (14%) or very often (6%) (see Figure 11).

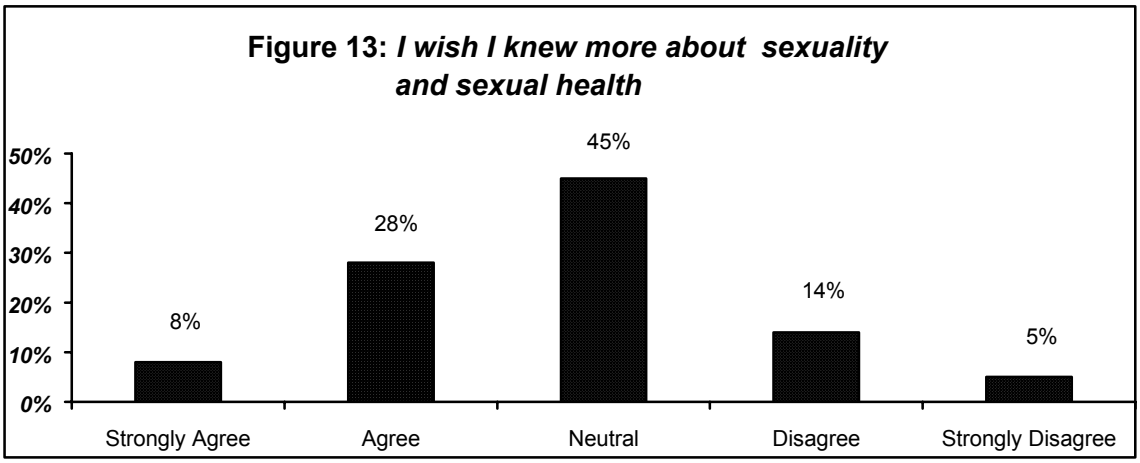



Further, almost half the students disagreed (26%) or strongly disagreed (20%) that they wanted their parents/guardians to talk to them more about sexuality (see Figure 12); 40% were neutral. This is qualified by a gender difference. Fifty-six percent of boys did not want to talk with their parents more compared to 39% of girls ($F$ (1, 1163) = 54.6, $p < .001$); however, more girls than boys indicated that they neither agreed nor disagreed with wanting to talk with their parents more. This suggests that many students are more comfortable obtaining their sexual health information from sources other than their parents or guardians.




When asked if they wished that they knew more about sexuality and sexual health, approximately one third of the students agreed (28%) or strongly

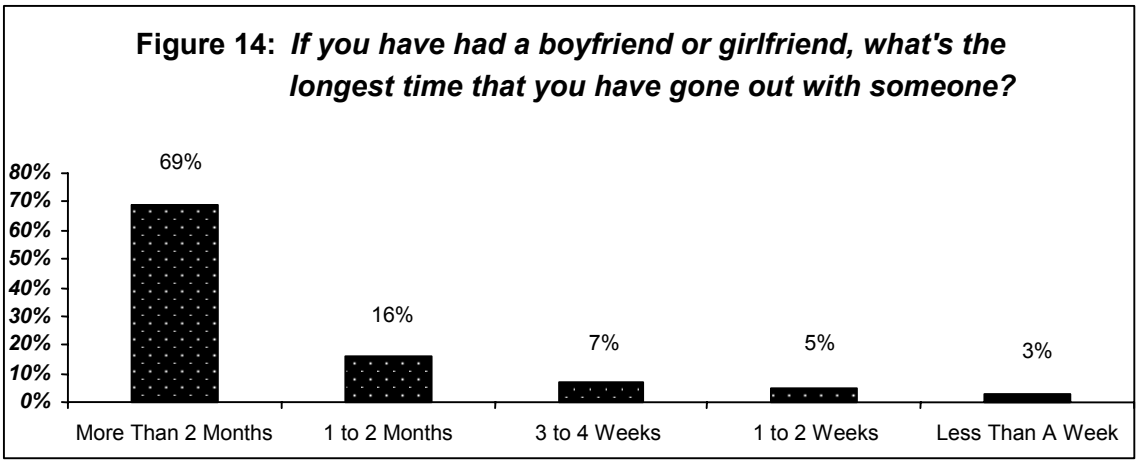
agreed (8%) (see Figure 13). Forty-five percent neither agreed nor disagreed with this statement.




## Students' Dating Experiences

High school students were asked three questions about their dating experiences. First, they were asked if they had ever had a boyfriend or girlfriend. They were then asked how long they had dated someone. The final question focused on the sexual activities in which they had engaged.

Of the respondents, 89% had had a boyfriend or girlfriend, and about two-thirds (69%) had dated someone for longer than two months (see Figure 14).

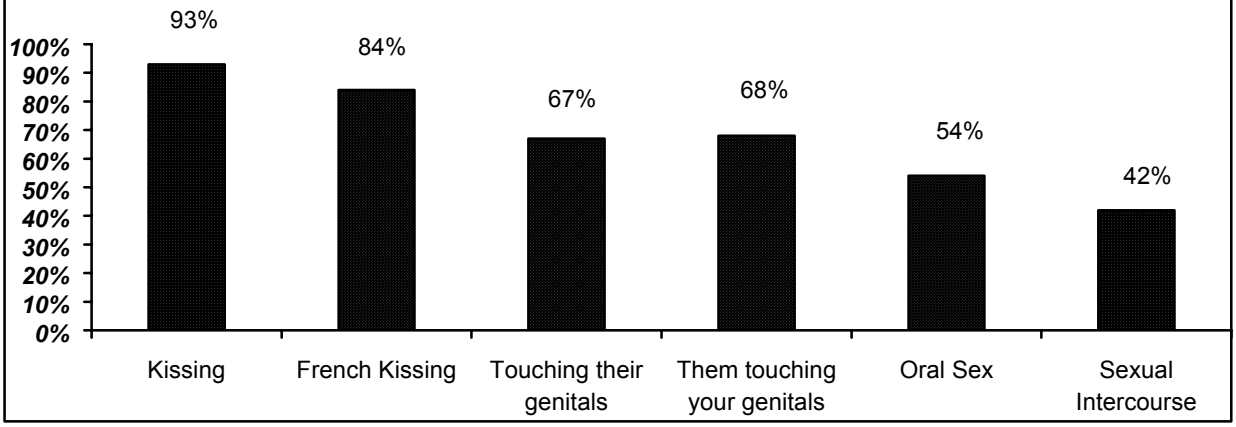



Six sexual activities were listed and students were asked whether they had ever engaged in each of these activities. Some students (12-21%) chose not

to respond to one or more of these activities. Thus, these results must be interpreted with caution. Figure 15 indicates the percentage of respondents who answered yes to each of these activities. Most students reported that they had engaged in kissing (93%) and French kissing (84%). Two-thirds had engaged in touching genitals (67%) and having their genitals touched (68%). One half had engaged in oral sex (54%) and 42% had had sexual intercourse. Students in the higher grades were significantly more likely to have engaged in the following activities: touching their partners' genitals, their partner touching their genitals, oral sex, and sexual intercourse ($r$ = .20 - .28, $p$ < .001). Of the respondents who indicated that they had engaged in sexual intercourse ($n$ = 559), 64% said that they had used a condom the last time they had had sexual intercourse.

In order to determine whether the extent of sexual experience was an important influence on students' responses to items about sexual health education, sexual experience was calculated by summing the number of different sexual activities the students reported that they had engaged in. This total of sexual activities engaged in did not correlate with the importance ratings of sexual health topics or with grade level at which schools should introduce the 27 sexual health topics.

**Figure 15:** ***Although some boys and girls your age are sexually active, many are not. Which of these sexual activities have you engaged in with a boyfriend or girlfriend?***



**Responses to Open-Ended Questions**

Students were asked to list any two questions about sexual health that they would like to learn about. To evaluate their responses, specific topics and themes were identified. Topics reflected the sexual health area of interest (e.g., birth control/abstinence/safe sex and sexually transmitted diseases). Themes focused on the way the response was written. For example, one student wrote "How to put on a condom?" and another student asked "How effective are condoms?" Both responses concern condoms, however, one is looking for a practical aspect or skill while the other wants information.

Five hundred and seventeen students (31%) provided at least one response. A total of 897 responses were recorded. Responses were grouped according to themes and topics so that percentages could be determined. Of these responses, only 4% were coded as "inappropriate comments", suggesting that most students took the survey seriously.

Overall, the most frequent of the eight topics identified were birth control/abstinence/safe sex (22%), reproduction/biological functions (19%), sexual techniques/activities (18%), and sexually transmitted diseases (16%). For example, one student wrote, "How can you tell if you have been infected with a STD without going to a doctor?" This question suggests that the student wants to learn concrete factual information and skills in this area. The percent of responses corresponding to other topics were: sexual decision making/dating relationships (8%); personal safety/sexual coercion/assault/ abuse (7%); sexual pleasure and enjoyment (6%); and other topics (4%).

In terms of the four themes identified, 70% of responses were requests for facts and information. Of these requests for information, the most frequent topics were reproduction/biological functions, birth control/abstinence/safe sex, sexually transmitted diseases, and sexual techniques/activities. The following are examples of requests for information: "What % of teenagers have sex?"; "How many types of STD's are there?"; "What happens when you have sex?"; and "General safety".

Twenty-four percent of students wanted information related to practical skills. The main topics were birth control/abstinence/safe sex, sexual techniques/activities, sexual decision making/dating relationships, and

personal safety/sexual coercion/assault/abuse. Responses in this category included: "How do you tell someone how far you want to go?"; "What different things can you say or do to feel less pressured into having sex?"; and "How do you go about using Birth Control?"

Issues around values accounted for 5% of responses and were focused on sexual techniques/activities and sexual decision-making/dating relationships. For example, one student wrote "Is it alright to have sexual practices in the teen years if you're careful?" and another wrote, "How far should you go on a date?"

Comments in which students stated their opinions accounted for only 1% of responses and all were remarks about the curriculum and resources at school. For example, one student wrote, "I would like to know more about things that are useful for males. I feel that it covers mostly female problems."

# STUDY 2: SURVEY OF MIDDLE SCHOOL STUDENTS

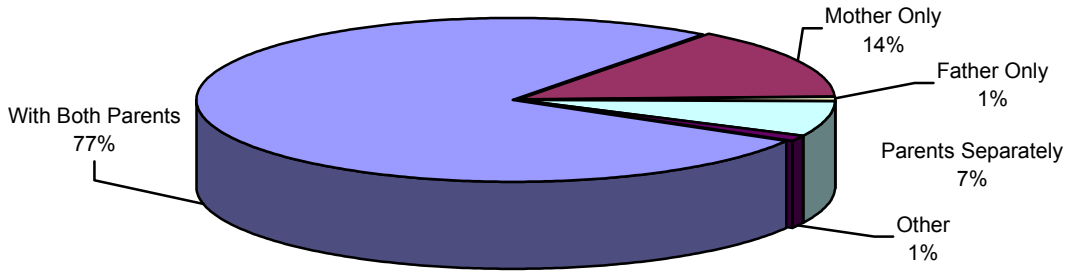
## METHOD

### Participants

As was the case with the high school survey, one half of the sample of middle school students was recruited from two of the three primarily urban school districts in New Brunswick. The other half was recruited from schools in rural school districts, which were sampled geographically from around the province. Two combined schools (grades 6-12), and nine middle schools were selected; all but one school participated. Each of the middle schools and combined schools selected for this study participated in the previous surveys of teachers' and parents' attitudes regarding the sexual health curriculum.

In total, middle school students from across New Brunswick completed 745 surveys. The response rate in the various schools ranged from 10% to 64% with an average of 26%. Of the middle school students who completed the survey, about one half (54%) were girls. Each grade was equally represented and the gender of the participants was equally represented in each grade. Three-quarters of the respondents (77%) lived with both parents (see Figure 16).

**Figure 16:** ***With whom do you live right now?***




### Procedure

Following ethics approval from the University of New Brunswick, the New Brunswick Department of Education sent a letter describing the project to

the directors of the selected school districts and notified them which schools had been selected to participate. The researchers then contacted the principals of the selected schools by telephone in order to obtain their consent to participate in the survey, to explain the procedure, and to verify the number of students in the school.

At the request of the Department of Education, written parental consent was required for participation by middle school students. Thus, middle school students were given a letter at school describing the nature and purpose of the study (see Appendix). They were asked to take the letter home to their parent or guardian and to return the attached consent form (see Appendix) to their school if they wished to participate in the study.

Members of the research team visited each school to administer the survey to groups of youths. Students completed surveys in group settings (e.g., in an available classroom or library). Before the surveys were distributed, students were informed about the nature and purpose of the study and asked to read and sign a consent form if they wished to participate (see Appendix). Students were informed that they could omit any questions they were uncomfortable answering and that they could withdraw from the study at any time. The survey was completed in one class period.

**Survey**

The survey was divided into seven parts (see Appendix for the items). Parts A to D, F, and G were identical to the high school survey (see p. 15 of this report). As was the case with the high school survey, Part E asked the grade level at which schools should begin covering specific sexual health topics. However, high school students were given 27 specific topics whereas the middle school students were given only 10 of these topics to rate.

**Data Analysis**

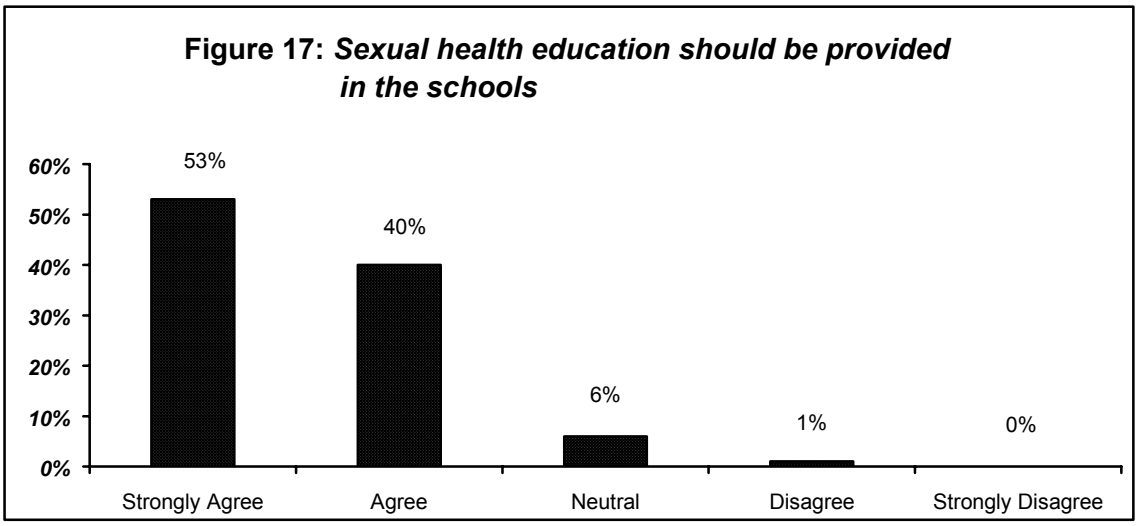
Frequencies and means were used to describe students' responses to individual questions. Analyses of variance and correlations were used to assess the relationships between specific variables. However, due to the large sample size, only significant results that accounted for more than 4% of the variance in the criterion are described in this report. In general, there were no differences in attitudes based on family structure (i.e., two-parent or single-parent family), parents' level of education, or gender of respondents.

# RESULTS

## Middle School Students' Opinions about Sexual Health Education

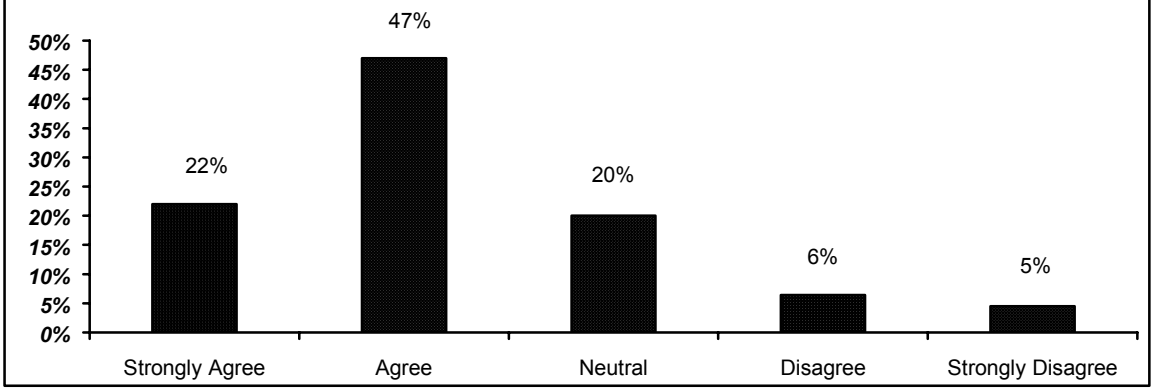
Middle school students were asked for their opinions about general aspects of sexual health education in school. The results indicated that there is overwhelming support among New Brunswick middle school students for the provision of sexual health education in school. Ninety-three percent of students either agreed (40%) or strongly agreed (53%) that sexual health education should be provided in school (see Figure 17).

**Figure 17:** ***Sexual health education should be provided in the schools***



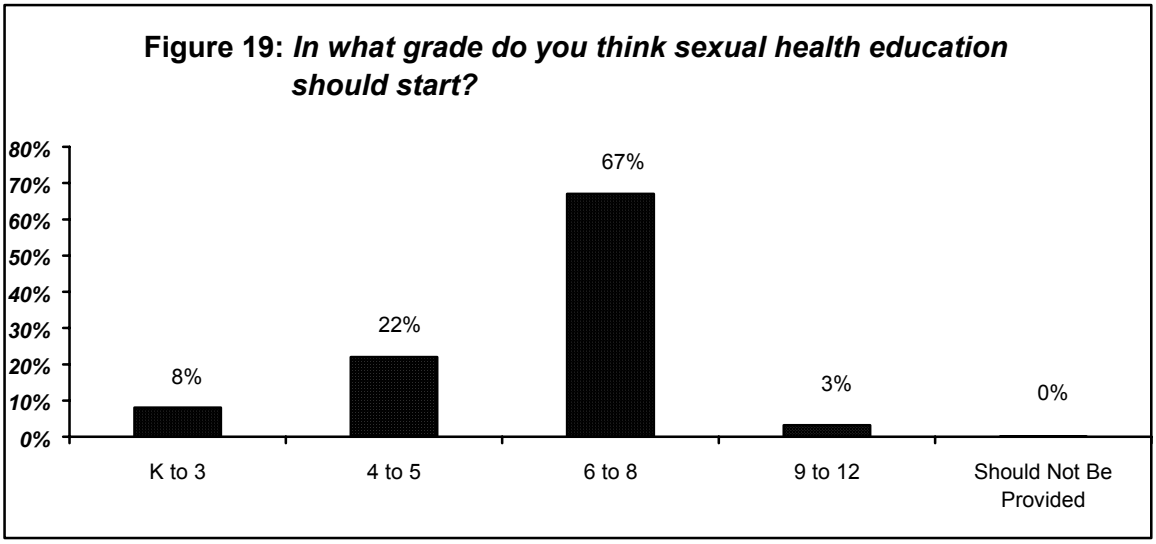

Two-thirds of the middle school respondents agreed (47%) or strongly agreed (22%) that schools and parents should share responsibility for providing sexual health education to students (see Figure 18). Thus, consistent with previous studies, the majority of middle school students prefer to learn about sexual health from both schools and parents. However, a substantial minority (24%) was in favour of sexual health education in school, but not in favour of sharing the responsibility between schools and parents, suggesting that they prefer to learn about sexuality in school.

**Figure 18:** ***The school and parents should share responsibility for providing children with sexual health education***




Thirty percent of students felt that sexual health education should begin in grades K to 5. Two-thirds of the middle school students felt that sexual health education should begin in middle school. Only 3% of students thought that sexual health education should start in grades 9 to 12, and only 1 of the 742 students who completed the survey felt that sexual health education should not be provided in school (see Figure 19).

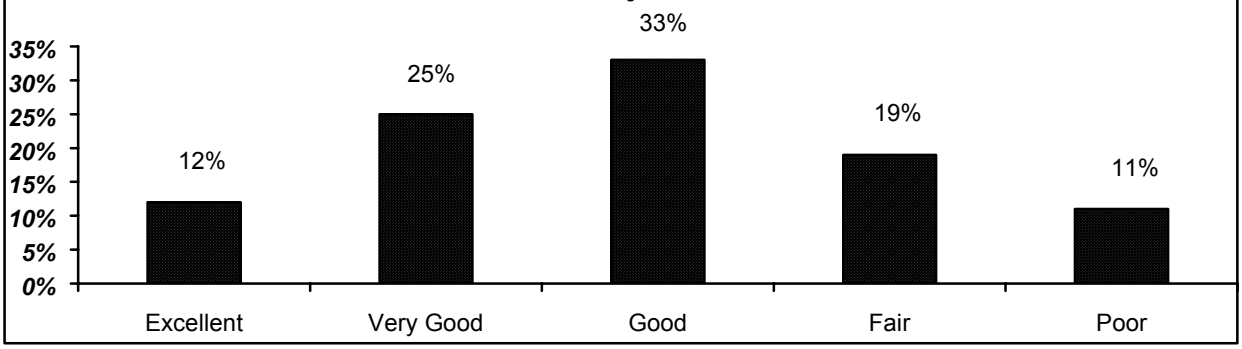
**Figure 19:** ***In what grade do you think sexual health education should start?***




Twenty-three percent of middle school students indicated that they had not received any sexual health education at school. Forty-seven percent of Grade 6 students, 13% of Grade 7 students, and 5% of Grade 8 students reported that they had not received any sexual health education at school. Those students who had received sexual health education were asked to rate the

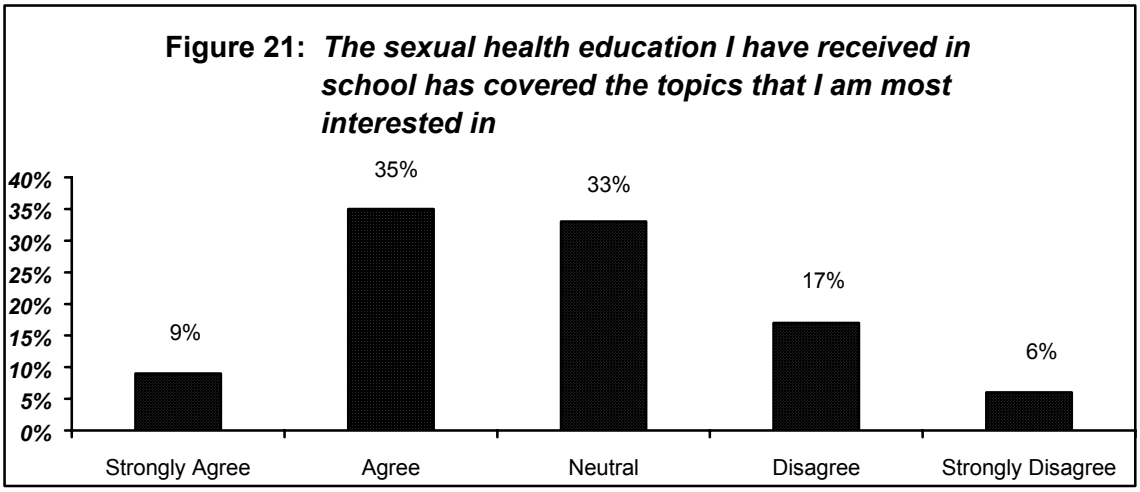
quality of that education (see Figure 20). Approximately one third rated the quality as very good (25%) or excellent (12%). Another one third (33%) rated the quality as good, and a substantial minority rated the quality as fair (19%) or poor (11%).

**Figure 20:** ***Overall, how would you rate the quality of the sexual health education that you have received in school***




Finally, students were asked whether the sexual health education they received in school covered the topics that they were most interested in (see Figure 21). Of those students who had received sexual health education, only 44% either strongly agreed (9%) or agreed (35%) that topics they were most interested in had been covered.

**Figure 21:** ***The sexual health education I have received in school has covered the topics that I am most interested in***




Students in the higher grades tended to rate the sexual health education that they had received as better ($r = .23$, $p < .001$) and covering more topics of interest ($r = .27$, $p < .001$). These patterns suggest that as students progress through middle school, they are more likely to view the quality of sexual

health education more positively. This result may reflect students' increased exposure to sexual health education by the time they are completing middle school, or that they have a clearer idea about which topics are relevant to them as they mature.

## Importance of Topics for the Sexual Health Curriculum

Middle school students were asked to indicate how important it is for each of 10 sexual health topics to be covered in the sexual health curriculum. Their ratings were made on a scale from 1 (not at all important) to 5 (extremely important). Students rated all of the topics as important to the sexual health curriculum (see Table 6). They thought that it was extremely important that the curriculum include information on sexually transmitted diseases. They rated the topics of personal safety, birth control methods, puberty, sexual assault, sexual decision-making, and reproduction as very important. Although they placed less importance on sexual pleasure and enjoyment, correct names for genitals, and abstinence than on other topics, the students still rated these topics as important to cover.

*Table 6: Importance middle school students assigned to possible topics in the sexual health curriculum.*

| Rating | Topic | Mean | Standard Deviation | Median |
|---|---|---|---|---|
| ***Extremely Important*** | Sexually Transmitted Diseases | 4.38 | .91 | 5 |
| ***Very Important*** | Personal Safety | 4.09 | 1.07 | 4 |
| | Birth Control Methods | 4.03 | 1.09 | 4 |
| | Puberty | 3.87 | 1.05 | 4 |
| | Sexual Coercion/Assault | 3.86 | 1.15 | 4 |
| | Sexual Decision-Making | 3.85 | 1.14 | 4 |
| | Reproduction | 3.82 | 1.00 | 4 |
| ***Important*** | Sexual Pleasure/Enjoyment | 3.32 | 1.4 | 3 |
| | Correct Names for the Genitals | 3.31 | 1.21 | 3 |
| | Abstinence | 3.08 | 1.33 | 3 |

Girls rated abstinence as more important to cover than boys did ($F$ (1, 668) = 28.1, $p < .001$). Boys rated sexual pleasure and enjoyment as more important than girls did ($F$ (1, 668) = 74.2, $p < .001$). Boys and girls did not differ significantly in their ratings of the other eight topics.

Overall, it appears that middle school students feel that it is important to include a broad range of topics in the sexual health education curriculum.

**Topics Covered in Sexual Health Education**

Middle school students were asked to indicate how well each of 10 sexual health topics was covered in the sexual health education that they had received. Their ratings were made on a scale from 1 (not covered at all) to 5 (covered very well). If they had not received any sexual health education, they were asked to indicate that the topics were "not covered at all". These responses were excluded from these analyses.

Students who had received sexual health education indicated that all of the topics were covered to some degree except sexual pleasure and enjoyment (see Table 7). None of the topics received a rating of "covered very well" and only puberty was rated as having been "covered well". Correct names for genitals, reproduction, and sexually transmitted diseases were all rated as "covered". The students reported that sexual coercion/assault, birth control methods, personal safety, sexual decision-making, and abstinence were topics that were "covered poorly".

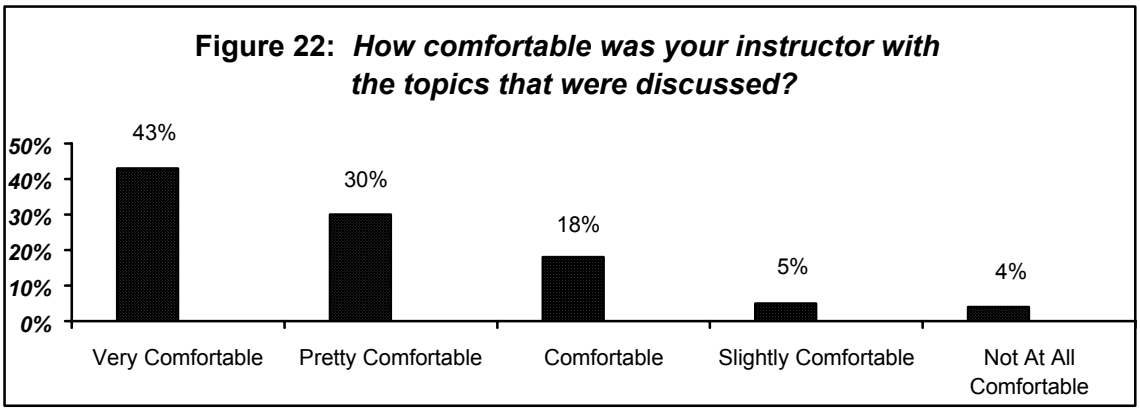
Students in the higher grades tended to feel that correct names for genitals ($r$ = .31, $p < .001$), puberty ($r$ = .34, $p < .001$), and reproduction ($r$ = .28, $p <$ .001) were topics that had been better covered than students in the lower grades. There were no grade differences for the other seven topics.

*Table 7: Extent to which sexual health topics were covered in sexual health education classes.*

| Rating | Topic | Mean | Standard Deviation | Median |
|---|---|---|---|---|
| ***Covered Well*** | Puberty | 3.70 | 1.18 | 4 |
| ***Covered*** | Correct Names for Genitals | 3.41 | 1.32 | 3 |
| | Reproduction | 3.05 | 1.41 | 3 |
| | Sexually Transmitted Diseases | 2.77 | 1.40 | 3 |
| ***Covered Poorly*** | Sexual Coercion/Assaullt | 2.53 | 1.40 | 2 |
| | Birth Control Methods | 2.49 | 1.40 | 2 |
| | Personal Safety | 2.44 | 1.43 | 2 |
| | Sexual Decision-Making | 2.30 | 1.37 | 2 |
| | Abstinence | 2.22 | 1.32 | 2 |
| ***Not Covered at all*** | Sexual Pleasure/Enjoyment | 1.99 | 1.29 | 1 |

## How Sexual Health Education is Taught

Middle school students were asked to think about the most recent teacher who taught them sexual health education and then to answer questions concerning the comfort level of that teacher and the teaching methods used. Twenty-three percent of students said that they had not received any sexual health education. Of those who had received sexual health education, most (73%) felt that their teacher was pretty comfortable or very comfortable with the topics discussed (see Figure 22). Few students (9%) thought that their teacher was slightly comfortable or not at all comfortable.




Middle school students were also asked how often their instructor encouraged students to ask questions about sexual health and how well the instructor answered these questions. Sixty-two percent of students felt that the teachers encouraged students to ask questions very often (33%) or quite often (29%) (see Figure 23). The other 38% indicated that they were rarely encouraged to ask questions. Many students also felt that instructors answered sexual health questions well (23%), very well (36%), or excellently (24%) (see Figure 24).

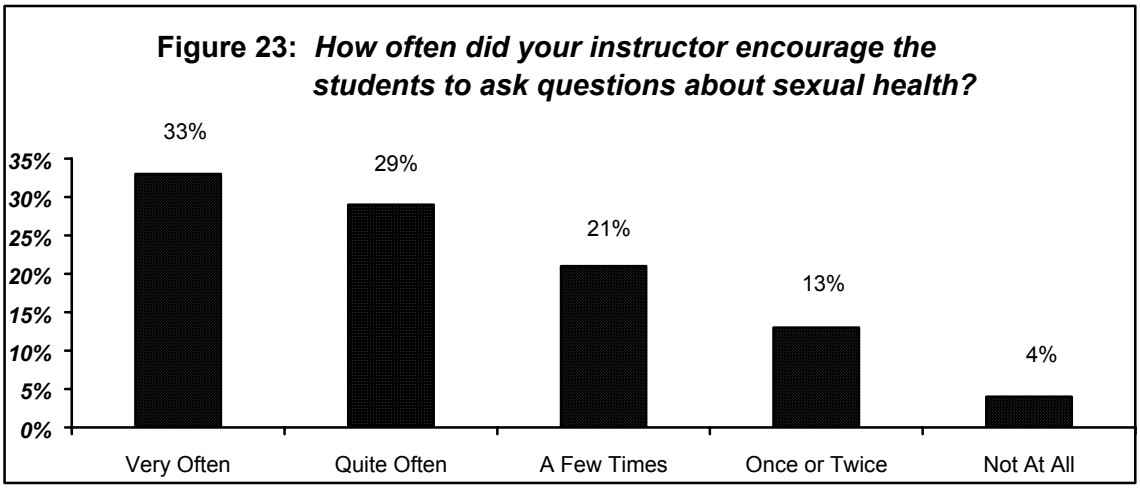
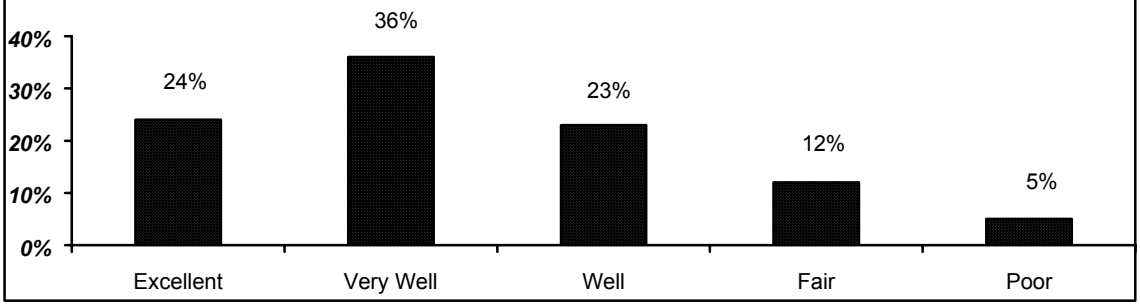


**Figure 24:** ***How well did he/she answer these questions?***




Students in the higher grades tended to perceive their teacher as more comfortable teaching sexual health ($r = .42$, $p < .001$), as more likely to encourage students to ask questions ($r = .42$, $p < .001$), and as doing a better job of answering questions ($r = .34$, $p < .001$).

Of those who had received sexual health education, most middle school students (80%) were taught in co-ed classes. When asked for their preference, 25% preferred to be taught separately, 44% preferred to be taught together, and 31% did not have a preference. There was no significant difference in preference based on the gender of the respondents.

Students were asked to indicate whether their most recent sexual health instructor had used any of eight teaching methods. For each method, they were also asked to rate how much the method would help them learn about or stay interested in the sexual health topics being taught. Their ratings were made on a scale of 1 (it wouldn't help at all), 2 (it would help somewhat), and 3 (it would help a lot). If they had not received any sexual health education, they were to omit the first part but were encouraged to complete the second part indicating the helpfulness of the teaching method.

Students indicated that the most frequently used teaching methods were videos (64%), group discussions (61%), and lectures (60%). A question box (56%) and readings (45%) were also commonly used. Role play and games (21%), guest speakers (19%), and individual projects (15%) were used much less frequently.

Table 8 indicates that middle school students felt that a question box and videos are the two most helpful teaching methods for sexual health topics.

Further, students felt that all the other teaching methods would help somewhat.

*Table 8: Helpfulness of teaching methods.*

| Rating | Method | Mean | Standard Deviation | Median |
|---|---|---|---|---|
| ***It would help a lot*** | Videos | 2.53 | .62 | 3 |
| | Question Box | 2.48 | .73 | 3 |
| ***It would help somewhat*** | Group Discussion | 2.34 | .71 | 2 |
| | Guest Speakers | 2.10 | .75 | 2 |
| | Lecturing | 2.02 | .67 | 2 |
| | Roleplay/Drama/Games | 1.97 | .82 | 2 |
| | Readings | 1.95 | .70 | 2 |
| | Individual Projects | 1.66 | .73 | 2 |

## Grade Level at which Schools Should Introduce Sexual Health Topics

Middle school students were asked to indicate the grade level at which they thought schools should **start** teaching each of 10 sexual health topics. The percentage of middle school students who endorsed each grade level is presented in Table 9. For example, just over one-third of middle school students felt that personal safety (38%) and correct names for genitals (37%) should be introduced in grades K-5. According to the overall patterns, there is strong support for the inclusion of all 10 topics in the sexual health curriculum.

The grade levels at which the majority of middle school students thought schools should introduce sexual health topics were examined. In general, students indicated that a range of topics should be included in the sexual health curriculum and that all of these topics should be introduced in grades 6-8. However, a substantial minority (> 25%) thought that personal safety, correct names for genitals, sexual coercion and sexual assault, and puberty should be introduced in grades K to 5.

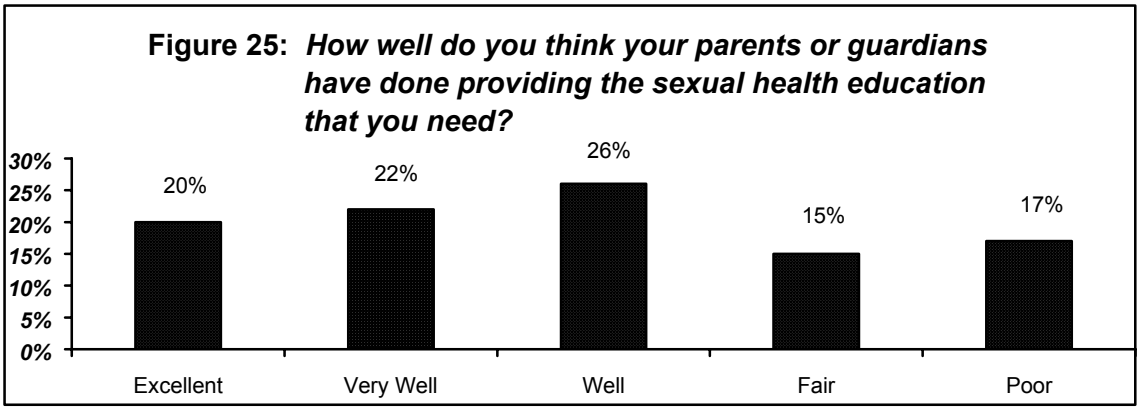
*Table 9: Percentage of middle school students indicating at which grade level various sexual health topics should be introduced.*

| Topic | Percentage Who Thought Topic Should be Introduced in Each Grade Level | | | |
|---|---|---|---|---|
| | K to 5 | 6 to 8 | 9 to 12 | Should not be included |
| Personal safety | 38.0 | 50.4 | 9.8 | 1.8 |
| Correct names for genitals | 37.0 | 58.9 | 3.2 | 1.0 |
| Sexual coercion & sexual assault | 28.4 | 57.6 | 11.8 | 2.2 |
| Puberty | 25.2 | 70.5 | 3.7 | .6 |
| Abstinence | 17.0 | 64.8 | 13.4 | 4.9 |
| Sexually transmitted diseases/AIDS | 16.0 | 70.6 | 12.6 | .7 |
| Sexual decision-making | 9.7 | 72.3 | 14.7 | 3.2 |
| Reproduction & birth | 9.2 | 67.5 | 22.5 | .8 |
| Sexual pleasure & orgasm | 8.1 | 53.9 | 29.1 | 8.9 |
| Birth control methods & safer sex practices | 6.4 | 63.6 | 28.6 | 1.4 |

## Sexual Health Education at Home

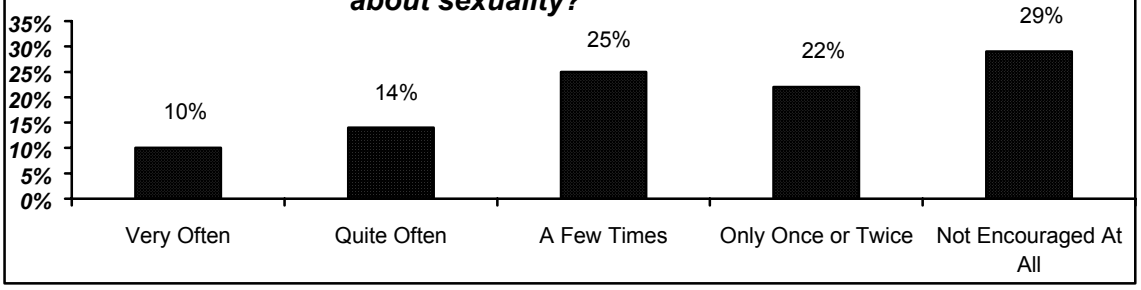
Middle school students were asked about the quality of the sexual health education that they have received from their parents or guardians (see Figure 25). Less than one half of students felt that their parents/guardians have done excellent (20%) or very well (22%) in providing them with sexual health information; 26% felt that they had done well. Approximately one third of youth felt that their parents/guardians have done only a fair (15%) or a poor (17%) job providing sexual health information.

**Figure 25:** ***How well do you think your parents or guardians have done providing the sexual health education that you need?***



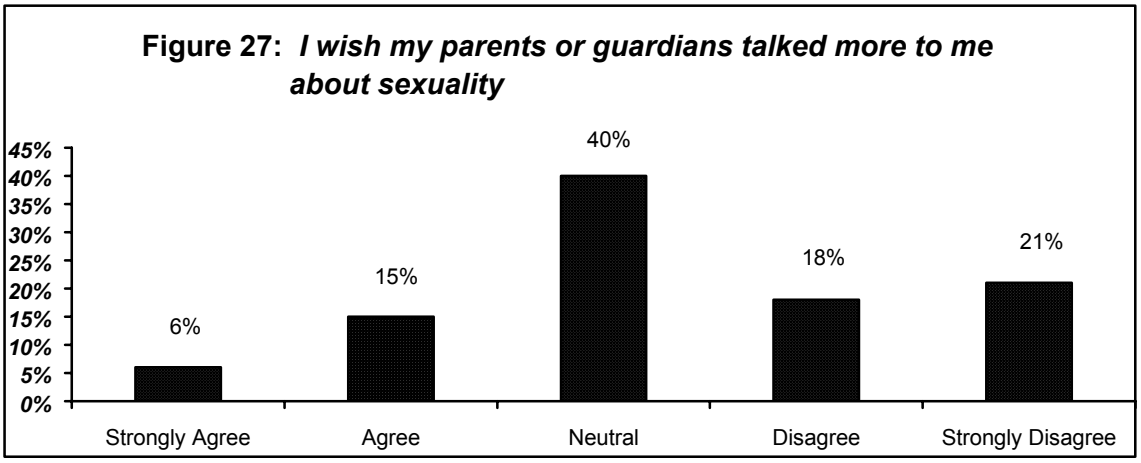
The students were also asked about the frequency with which their parents/guardians encouraged them to ask questions about sexuality (see Figure 26). Most students (76%) reported that they were rarely encouraged to ask questions; only about one quarter of students reported being encouraged to ask questions quite often (14%) or very often (10%).

**Figure 26:** ***How often have your parents or guardians encouraged you to ask them questions about sexuality?***

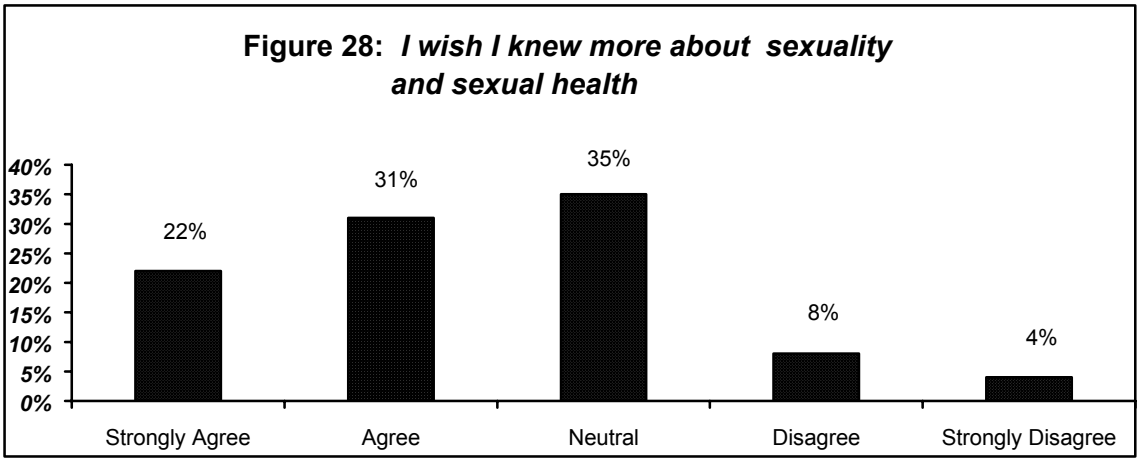



Further, students appear not to want their parents/guardians to talk with them more about sexuality. Many middle students disagreed (18%) or strongly disagreed (21%) with the statement that they wanted their parents/guardians to talk more to them about sexuality (see Figure 27). Forty percent of students were neutral and only 21% agreed or strongly agreed with this statement.

**Figure 27:** ***I wish my parents or guardians talked more to me about sexuality***



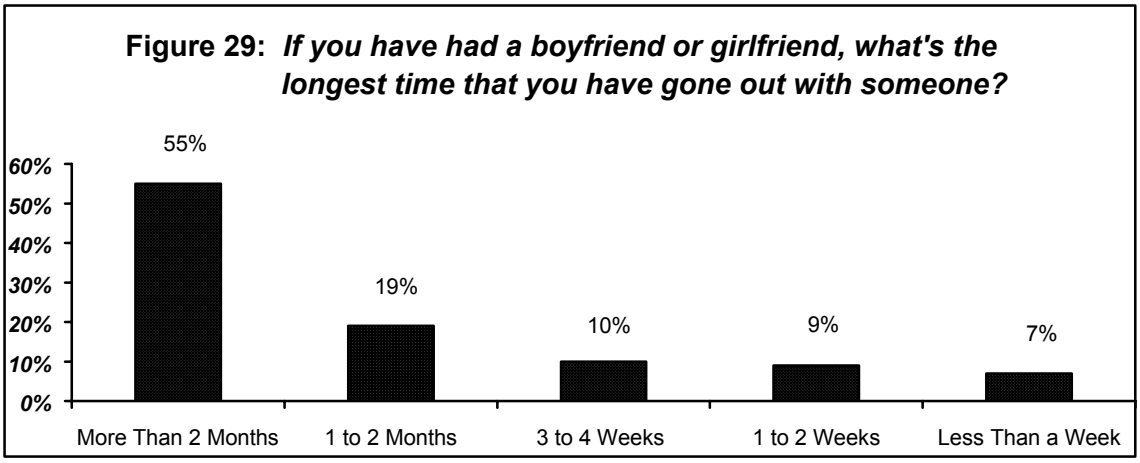

When asked whether they wished that they knew more about sexuality and sexual health, half of middle school respondents agreed (31%) or strongly agreed (22%) (see Figure 28). Thirty-five percent were neutral and only 12% of students disagreed (8%) or strongly disagreed (4%).




## Students' Dating Experiences

Middle school students were asked three questions about their dating experiences. First, they were asked if they had ever had a boyfriend or girlfriend. Then, they were asked how long they had dated someone. The last question focused on the sexual activities in which they had engaged.

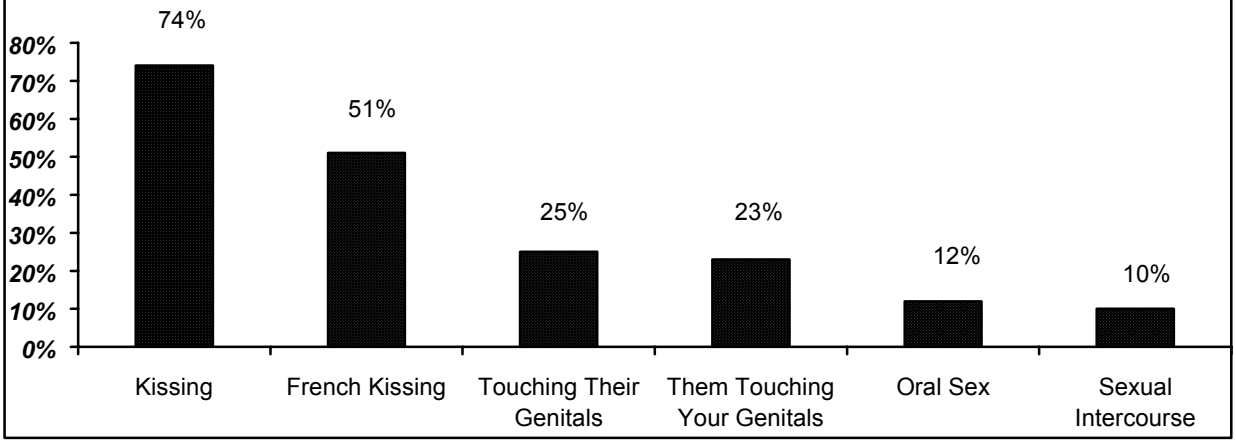
Of the respondents, 80% had had a boyfriend or girlfriend and about half (55%) had dated someone for longer than two months (see Figure 29).




Six sexual activities were listed and students were asked whether they had ever engaged in each of these activities. Some students (18%-25%) chose not to respond to one or more of these activities. Thus, these results must be interpreted with caution. Figure 30 indicates the percentage of respondents who answered yes to each of these activities. Many students (74%) reported

that they had engaged in kissing and 51% had engaged in French kissing. One quarter had touched their partner's genitals and 23% had had their genitals touched by a partner. Twelve percent had engaged in oral sex and 10% had engaged in sexual intercourse. The students in the higher grades were more likely to have engaged in touching their partner's genitals ($r = .29$, $p < .001$), and in having their partner touch their genitals ($r = .21$, $p < .001$). Of the 56 middle school respondents who indicated that they had engaged in sexual intercourse, 48% said that they had used a condom the last time they had had sexual intercourse.

**Figure 30:** ***Although some boys and girls your age are sexually active, many are not. Which of these sexual activities have you engaged in with a boyfriend or girlfriend?***




In order to determine whether the extent of sexual experience was an important influence on students' responses to items about sexual health education, sexual experience was calculated by summing the number of different sexual activities the students reported that they had engaged in. Middle school students with more sexual experience tended to see the topic of abstinence as less important than less sexually experienced students ($r = -.22$, $p < .001$). They also tended to see sexual pleasure and enjoyment as more important than less sexually experienced students ($r = .35$, $p < .001$). Sexual experience was not related to the importance ratings of the remaining eight topics. Middle school students with more sexual experience also tended to indicate that birth control ($r = -.20$, $p < .001$) and sexual pleasure and enjoyment ($r = -.23$, $p < .001$) should be introduced at an earlier grade level than less sexually experienced students. Sexual experience was not related to the grade level at which schools should introduce the other sexual health topics.

**Responses to Open-Ended Questions**

Students were asked to list any two questions about sexual health that they would like to learn about. To evaluate their responses, specific topics and themes were identified. These topics and themes were identical to those reported by high school students in the previous survey. Again, topics reflected the sexual health areas of interest and themes focused on the way the response was written.

Two hundred and seventy-eight middle school students (37%) provided at least one response. A total of 478 responses were recorded. Responses were grouped according to themes and topics so that percentages could be determined. Only 4% of these responses were coded as "inappropriate comments", suggesting that most students took the survey seriously.

Overall, the most frequent of the eight topics identified were: reproduction/biological functions (32%), and sexual techniques/activities (24%). The percentage of responses corresponding to the other topics were as follows: birth control/abstinence/safe sex (11%), sexual pleasure and enjoyment (10%), sexually transmitted diseases (9%), sexual decision making/dating relationships (7%), personal safety/sexual coercion/ assault/ abuse (3%), and other topics (4%).

In terms of the four themes identified, 75% of responses were requests for facts and information. Of these requests for information, the most frequent topics were reproduction/biological functions and sexual techniques/activities. Examples of information requests are "Is sex comfortable?", "Can you still get pregant [sic] with a condom on?", "Do you get preganet [sic] without having your period" and "How we can stop aids [sic] from being transmitted"?

Twelve percent of responses focused on practical skills. Most frequently, practical skills related to birth control/abstinence/safe sex and sexual techniques/activities were requested. A typical request was "How to use a condom?" However, other responses included "Dating (Eg, [sic] How to break up, starting a relationship, kissing)", "How to have good sex when your [sic] ready" and "How to use protecting [sic] properly and where to get it".

Value issues accounted for 10% of the responses. Students' comments focused on sexual techniques/activities and sexual decision making/dating relationships. Examples of this category included: "How old should you be?" "Is it normal to be gay?" and "Is there a right age for dating and sex?"

Three percent of responses included comments about the curriculum and resources at school such as "How come in the earlier grades the boys & girls are seperated [sic] to learn about our bodies?"

# CONCLUSIONS AND RECOMMENDATIONS

The New Brunswick health curriculum for elementary and middle school students, which includes sexual health education, is currently being revised. The present surveys of high school and middle school students are two of four studies that were conducted to inform these revisions. In order to design an effective sexual health curriculum, it is important to consider the adolescent perspective (Campbell & Campbell, 1990; McKay & Holowaty, 1997). It is also important to address three aspects of education that have been identified as barriers to effective sexual health education: curriculum, teachers, and students (Langille et al., 2000).

## *Curriculum*

One of the clearest conclusions of this study is that New Brunswick students are overwhelmingly supportive of sexual health education in school. Ninety-two percent of high school students and 93% of middle school students are in favour of sexual health education in school, even though 7% of high school students and 23% of middle school students have not had sexual health education at school. This strong support is consistent with the results of McKay and Holowaty's (1997) study which found that 89% of Ontario adolescents in grades 7 to 12 supported sexual health education in school. This support is also consistent with New Brunswick parents' attitudes (Weaver et. al., 2001) and New Brunswick teachers' attitudes (Cohen et al., 2001). Thus, it is clear that there is substantial support for sexual health education in New Brunswick schools.

Seventy-seven percent of high school students and 69% of middle school students thought that parents and schools should share responsibility for sexual health education. However, students' opinions may depend on the quality of sexual health education they are receiving at home. For example, high school students who rated their parents' efforts less highly were less likely to support shared responsibility between parents and schools. Further, 80% of high school students and 76% of middle school students reported that their parents/guardians rarely encouraged them to ask questions about sexuality. This is corroborated by Weaver et al. (2001) who reported that 49% of New Brunswick parents rarely encouraged their children to ask them questions about sexuality. However, when students were asked if parents should talk to them more about sexual health education, 46% of high school

students and 39% of middle school students preferred that their parents not talk to them. This highlights the need for sexual health education in school. Following from these findings, we strongly recommend that sexual health education begin or continue to be provided in all New Brunswick schools.

**Recommendation 1:** Sexual health education should be provided in all New Brunswick schools.

In general, most students are not satisfied with the quality of the sexual health education that they have received in school. Only 13% of high school students and 37% of middle school students rated the quality of the sexual health education they received as very good or excellent. In addition, only 28% of high school students and 44% of middle school students reported that the topics of most interest to them were covered in the sexual health education that they had received. Although these two groups of students rated all sexual health topics listed as important, neither group felt that these topics were covered very well; the only topic that was even rated as "covered well" was puberty. Finally, middle school students in the higher grades rated the quality of sexual health education more positively and as covering more of their interests than middle school students in the lower grades. Therefore, the curriculum should be re-examined, especially in terms of what is taught at the lower middle school grades.

Together, these findings suggest that students' age-appropriate needs are not being met with the current sexual health education. Thus, we strongly recommend that the sexual health curriculum be revised.

**Recommendation 2:** The sexual health education curriculum needs to be revised to better meet the needs of high school and middle school students.

Both high school and middle school students rated each of 10 sexuality topics as important to extremely important to cover. Thus, they feel that it is important that sexual health education include information about birth control methods, abstinence, sexual coercion/assault, personal safety, correct names for genitals, puberty, reproduction, sexual decision-making, and sexual pleasure and enjoyment. Consistent with previous research (e.g., McKay & Holowaty, 1997), most high school and middle school students rated the topic of sexually transmitted diseases as extremely important. These results suggest that students want a comprehensive sexual health education program. In addition, students indicated that it is important that

sexual health education go beyond providing factual information and also include teaching practical skills.

**Recommendation 3:** The New Brunswick sexual health education curriculum should cover a wide range of sexual health topics.

The majority of high school and middle school students indicated that they want sexual health education to begin by middle school: 90% of high school students and 97% of middle school students reported wanting age-appropriate sexual health education to begin by grades 6-8; 23% and 30%, respectively, wanted it to begin by grades 4-5; and 5% and 8%, respectively, by grades K-3.

There is less agreement among students about the grade levels at which certain topics should be introduced. However, when asked about the appropriate timing for specific topics in the curriculum, a substantial number of high school and middle school students felt that personal safety, sexual coercion/assault, and correct names for genitals should be covered in grades K-5. This suggests that students prefer to have some sexual health education begin in grades K-5.

Given that this survey did not provide details about the meaning of each of the listed topics, it is possible that some additional students would support sexual health education in the lower grades if they knew more about what is considered age-appropriate. Thus, it is likely that there is substantial support among students for introducing sexual health education in the elementary grades.

**Recommendation 4:** Sexual health education should begin in grades K-5. However, some topics should be taught in later grades.

*Teaching*

Another potential barrier to effective sexual health education is teaching style. Teachers' attitudes and comfort level may affect the quality of sexual health education (Hamilton & Levenson-Gingiss, 1993; Langille et al., 2000). Teaching techniques also impact the effectiveness of sexual health education (Eisenberg & Wagenaar, 1997; Locker, 1990).

About one-half of high school students and three-quarters of middle school students indicated that their instructors were pretty comfortable to very comfortable with the topics discussed and answered students' questions well. Nevertheless, many students, particularly high school students, felt that their teachers were not as comfortable as they could have been. In keeping with this finding, 40% of high school students and 38% of middle school students indicated that their teachers rarely encouraged them to ask sexual health questions. Cohen et al. (2001) found that New Brunswick teachers were only somewhat comfortable with most sexual health topics. However, their comfort level depended upon the topic being taught and how controversial it is. Thus, it is important to improve teachers' comfort with teaching a wide range of sexual health topics.

High school students reported that videos and lectures were the teaching methods used most frequently by their teachers. Middle school students indicated that videos, group discussion, and lectures were the most frequently used teaching methods. Although many students may not have experienced all of the suggested teaching methods and therefore were unable to evaluate some of them, the students indicated that all of the eight potential teaching methods of sexual health education would be helpful. Middle school students felt that videos and a question box would be the most helpful and individual projects the least helpful. High school students agreed with the middle school students with the exception that they viewed group discussion as being most helpful. This is consistent with Eisenberg and Wagenaar's (1997) study, which found that students in Minnesota preferred nonlecture teaching methods, such as group discussion and guest speakers, over a lecture approach. In addition, Fisher and Fisher (1992) found that sexuality education that involves skill-building experiences as well as information significantly reduces risky sexual behavior. Thus, it is important to encourage teaching methods that are more interactive, such as the use of a question box and group discussion.

Teachers need to be made aware of these results so that they can best meet the needs of the students, and use teaching methods that students feel would help the most. Knowing students' opinions about sexual health education may also increase teachers' comfort level regarding teaching sexual health education.

**Recommendation 5:** New Brunswick teachers should be made aware of the results of these studies.

**Recommendation 6:** New Brunswick teachers should be supported and provided with in-service training to increase their comfort level and ability to use creative teaching techniques. They also need to be provided with the resources required to provide effective sexual health education (i.e., resources that support the use of interactive techniques).

Another factor involved in teaching is the composition of the class. Ninety-three percent of high school students and 80% of middle school students were taught sexual health in co-ed classes. McKay and Holowaty (1997) found that 60% of girls and 35% of boys thought that single-sex classes would be more appropriate for some sexual health topics. When asked their preference, only 57% of high school students and 44% of middle school students preferred to be taught in co-ed classes. There were no differences between boys and girls in this regard. Thus, as McKay and Holowaty (1997) point out, although co-ed sexual health classes are beneficial in encouraging understanding and comfort between genders, single-sex classes are also beneficial in allowing students the opportunity to discuss feelings and issues that they might feel uncomfortable talking about in co-ed settings. Possible benefits and losses involved in separating boys and girls for some sexual health topics need to be explored.

**Recommendation 7:** The Department of Education should investigate whether it would be best to teach some sexual health topics in single-sex classes instead of or in addition to teaching them in co-ed classes.

*Students*

Students' attitudes and behaviour are also important components of effective sexual health education. In the present studies, among high school students, there were no differences in attitudes across grade levels and, with few exceptions, there were no gender differences. Similarly, among middle school students, there were very few gender or grade level differences in attitudes.

Eighty-nine percent of high school students have had a boyfriend or girlfriend and 85% of students indicated that they have had a relationship lasting longer than one month. Most of these students (93%) had engaged in kissing and 42% had engaged in sexual intercourse. These results are similar to those reported in the Canada Youth and AIDS study which found that

47% of grade 11 students had engaged in sexual intercourse (King et al., 1988). Eighty percent of middle school students have had a boyfriend or girlfriend and 74% of students indicated that they have had a relationship lasting longer than one month. Most of these students (74%) had engaged in kissing and 10% had engaged in sexual intercourse. Given that many students have engaged in sexual activities, it is important to provide them with appropriate knowledge and skills in order to achieve the goals of sexual health enhancement and prevention of sexual health problems outlined by Health Canada (1994). Middle school students with more sexual experience tended to indicate that the topics of birth control and sexual pleasure and enjoyment should be introduced at an earlier grade level than suggested by less sexually experienced students. This is consistent with McKay (2000) who concluded that effective sexual health education must be both age and experience appropriate. Therefore, it is recommended that the revised curriculum be both age and experience appropriate. This means providing information concerning puberty in grade 4, since many students are going through puberty in grade 4, and beginning discussion of sexual relationships and personal safety in elementary school.

**Recommendation 8:** The curriculum should be timed to be both age and experience appropriate.

The attitudes of New Brunswick students toward sexual health education are consistent with the attitudes of parents and teachers found in our previous two studies (Cohen et al., 2001; Weaver et al., 2001). This makes a strong statement about the climate of attitudes towards sexual health education in New Brunswick. As was the case with both parents and teachers, the majority of students support sexual health education in school, rate a range of sexual health topics as important to the curriculum, and feel that at least some sexual health topics should be introduced in grades K to 5.

**Recommendation 9:** In revising the sexual health education curriculum, the results of these two student surveys should be interpreted in conjunction with the results of surveys of New Brunswick teachers' and parents' opinions about sexual health education.

## REFERENCES

Baldwin, J.L., Whitely, S., & Baldwin, J.D. (1990). Changing AIDS and fertility–related behavior: The effectiveness of sexual education. *Journal of Sex Research, 27,* 245-263.

Barrett, M. (1990). Selected observations on sex education in Canada. *SIECCAN Journal, 5,* 21-30.

Barrett, M. (1994). Sexuality education in Canadian schools: An overview in 1994. *Canadian Journal of Human Sexuality, 3,* 199-255.

Campbell, T.A., & Campbell, D.E. (1990). Considering the adolescent's point of view: A marketing model for sex education. *Journal of Sex Education & Therapy, 16*, 185-193.

Cohen, J.N., Byers, E.S., Sears, H.A., & Weaver, A.D. (2001). *New Brunswick teachers' ideas about sexual health education*. Report prepared for the New Brunswick Department of Education, Fredericton, NB.

Connell, D.B., Turner, R.R., & Mason, E. (1985). Summary of findings of the school health education evaluation: Health promotion effectiveness, implementation, and costs. *Journal of School Health, 55,* 316-321.

Eisenberg, M.E., & Wagenaar, A. (1997). Viewpoints of Minnesota students on school-based sexuality education. *Journal of School Health, 67,* 322-327.

Fisher, J.D., & Fisher, W.A. (1992). Changing AIDS-risk behavior. *Psychological Bulletin, 111,* 455-474.

Haffner, D.W. (1996). Sexual health for America's adolescents. *Journal of School Health, 66,* 151-152.

Hamilton, R., & Levenson-Gingiss, P. (1993). The relationship of teacher attitudes to course implementation and student responses. *Teaching & Teacher Education, 9,* 193-204.

Health Canada. (1994). *Canadian guidelines for sexual health education.* Ottawa, ON: Health Canada.

Health Canada. (1999). *HIV/AIDS epi update: Sexual risk behaviour of Canadians.* Bureau of HIV/AIDS, STD, & TB Update Series, Laboratory Centre for Disease Control, Health Canada, May 1999. Available online: www.hc-sc.gc.ca.

Health Canada. (2000). *HIV/AIDS epi update: HIV and AIDS among youth in Canada.* Bureau of HIV/AIDS, STD, & TB Update Series, Laboratory Centre for Disease Control, Health Canada, April 2000. Available online: www.hc-sc.gc.ca.

King, A.J.C., Beazley, R.P., Warren, W.K., Hankins, C.A., Robertson, A.S., & Radford, J.L., (1988). *Canada youth and AIDS study.* Kingston, ON: Queen's University.

King, B.M., & Lorusso, J. (1997). Discussions in the home about sex: Different recollections by parents and children. *Journal of Sex & Marital Therapy, 23,* 52-60.

Kirby, D. (1992). School-based programs to reduce sexual risk-taking behaviors. *Journal of School Health, 62,* 280-287.

Langille, D., Graham, J., Marshall, E., Blake, M., Chitty, C., Doncaster-Scott, H. (2000). *Developing understanding from young women's experiences in obtaining sexual health services and education in a Nova Scotia community: Lessons for educators, physicians, and pharmacies.* Halifax, NS: Dalhousie University, Department of Community Health and Epidemiology.

Locker, S. (1990). An adolescent's perspective of sexuality education. In M.E. Perry (Ed.), *Handbook of sexology: Vol. VII. Childhood and adolescent sexology* (pp. 125-134). New York: Elsevier Science.

Mackie, W., & Oickle, P. (1996). Comprehensive school health: The physician as advocate. *Canadian Medical Association Journal, 156,* 1301-1305.

McCall, D., Beazley, R., Doherty-Poirier, M., Lovato, C., MacKinnon, D., Otis, J., & Shannon, M. (1999). *Schools, public health, sexuality, and HIV: A status report.* Toronto, ON: Council of Ministers of Education.

McKay, A. (2000). Common questions about sexual health education. *Canadian Journal of Human Sexuality, 9,* 129-137.

McKay, A., & Holowaty, P. (1997). Sexual health education: A study of adolescents' opinions, self-perceived needs, and current and preferred sources of information. *Canadian Journal of Human Sexuality, 6,* 29-38.

Melchert, J., & Burnett, K.F. (1990). Attitudes, knowledge, and sexual behavior of high-risk adolescents: Implications for counselling and sexuality education. *Journal of Counseling & Development, 68,* 293-298.

Munro, B., Doherty-Poirier, M., Mayan, M.L., & Salmon, T. (1994). Instructional strategies used in HIV/AIDS education: Correlations with students' knowledge, attitudes, and intended behavior. *Canadian Journal of Human Sexuality, 3,* 237-243.

Weaver, A.D., Byers, E.S., Sears, H.A., Cohen, J.N., & Randall, H.E.S. (2001). *New Brunswick parents' ideas about sexual health education*. Report prepared for the New Brunswick Department of Education, Fredericton, NB.

# APPENDICES