

Comprehensive Sex Education:
CMSD – Safer Choices
Wellness Schools – FLASH & Draw the
Line

Evaluation Period: School Year 2013-2014 (August – June)

Purpose

The primary goal of school-based sexual health education is to help young people build a foundation as they mature into sexually healthy adults. School-based sexual health education is designed to complement and augment the sexual education children receive from their families, religious and community groups, and health care professionals. Sexual health education should assist young people in understanding a positive view of sexuality, provide them with information and skills for taking care of their sexual health, and help them make sound decisions now and in the future.

Comprehensive sexuality education programs promote abstinence as the most effective way to prevent teen pregnancy and sexually transmitted infections (STI) while also teaching accurate and age-appropriate information on healthy relationships, contraception, and STI's. Providing this information to adolescents allows them to make responsible decisions about sexual activity.

Numerous studies and evaluations published in peer-reviewed literature have found that comprehensive sexual health programs that teach teens about both abstinence and contraception/disease prevention are effective strategies to help young people delay their initiation of sexual intercourse. Reviews of published evaluations of comprehensive sexual health education have shown a positive impact on the behaviors of adolescents, including:

- An increase in the use of contraception
- A decrease in the onset of sexual activity
- A decrease in the number of sexual partners
- A decrease in the frequency of sexual activity

Findings

The comprehensive sexual education program was conducted in the Cleveland Municipal School District (CMSD) using the Safer Choices curriculum and Wellness Schools using F.L.A.S.H. and Draw the Line curriculum. Beech Brook and Planned Parenthood conducted the classes for CMSD while districts in the Wellness school program conducted their own. Measurements were taken at the beginning and end of the program to assess knowledge acquisition. The following results indicated that both programs were successful in delivering the curriculum to the student body:

- All programs were successful in providing students with information they did not have at the beginning of the school year.
- CMSD students scored comparably across grade level.
- CMSD teachers were very satisfied with the program instructors, agreeing at both grade levels that information was clear, students were kept involved, respected, and had their questions answered.
- The F.L.A.S.H. program showed the most improvement with the 6th graders having the highest post-test scores (>80%).
- Wellness school teachers were also very satisfied with the program instructors, providing very high satisfaction scores.

- Students in the Wellness Schools provided very high satisfaction scores for the program. Students across all grades were showed satisfaction scores greater than 90%.

Program Findings

Cleveland Municipal School District – Safer Choices

The Safer Choices comprehensive sex education program was conducted in the CMSD. Eleven schools participated in the program. The schools taught through Beech Brook staffed teachers were: James Ford Rhodes, School of the Arts, Design Lab, John F. Kennedy Entertainment Media Academy, John F. Kennedy Interactive Media, Cleveland Early College @ John Hay, Cleveland School of Architecture and Design @ John Hay, Cleveland School of Medicine @ John Hay, Martin Luther King Jr. Health Careers Center, Martin Luther King Jr. Law & Municipal Careers, & Lincoln – West (10th grade only); while the rest were staffed by Planned Parenthood: Ginn Academy, Glenville Health Exercise Sports & Recreation Academy, Facing History New Tech, Collinwood College Board & New Tech, Success Tech, Max Hayes High School, Thomas Jefferson Newcomers Academy, and John Marshall (main campus). Ninth and tenth grades participated in the program. Participants were tested at the onset of the program to gauge baseline knowledge of the content and at the close, giving a pre-test-post-test comparison of retained information. The same test was administered at both intervals. The test consists of 22 questions: 10 true-false and 12 4-point Likert type scaled questions with choices “Strongly Agree” to “Strongly Disagree”.

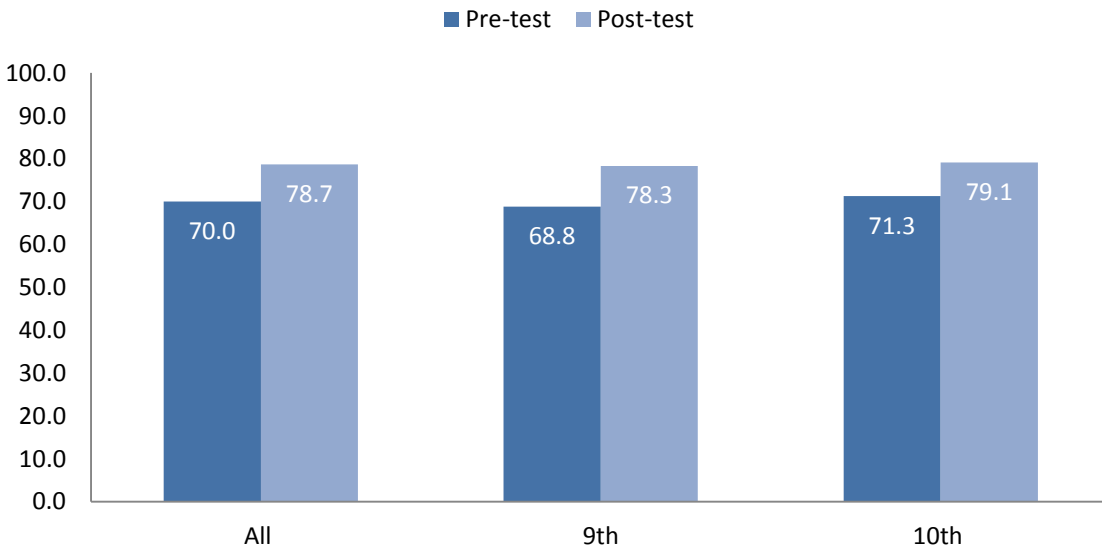
Overall evaluation

For the entire program, an analysis of the data indicated that improvement occurred across testing periods, with post-test scores reaching into the C+ range. The median score was 77%; the range was 5% to 100%. Although the average retention was moderate, improvement at post-test was significant ($p < .001$) with a mean change of 8.7% improvement (see Table 1) Furthermore, scores were generally high at pre-test which could result in less of an improvement at post -test. Students are coming away with acquiring more information than they began the course with (also see Chart 1). All results were found to be statistically significant in confidence.

	Pre-test N	Pre-test (%)	Post-test N	Post-test (%)	% change	<i>p</i> value (Sig.)
Overall	13092[1]	70.0	2676	78.7	8.7	0.000
9 th	1554	68.8	1311	78.3	9.5	0.000
10 th	1536	71.3	1365	79.1	7.8	0.000

[\[1\] 2 pre-test cases did not have a grade labeled](#)

Chart 1: Safer Choices evaluation score %



Question-level evaluation

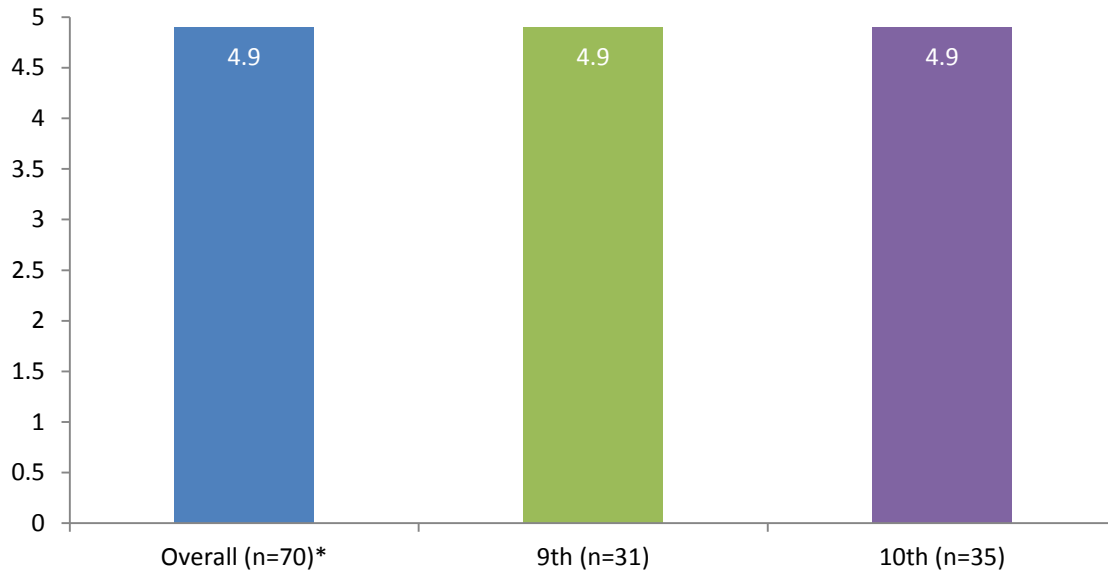
Analysis was conducted at the question level to compare pre-test and post-test improvement. Eight of the 12 questions showed improvement at post-test. Questions 12 and 13 showed the largest improvement (+7.9 and +8.1). Although questions 14, 17, 18, and 22 had declines in score at post-test these movements are small and most likely due to variance (i.e. there are very low scores skewing the post-test mean; there are differences in n-size from pre-test to post-test). See chart 2 (pg. 7) for a visual explanation.

Program Satisfaction

Satisfaction surveys were collected from teachers at CMSD at the end of the program. Questions were concerned with whether the program instructor’s information was clean and interactive, if students were treated non-judgmentally, and if their questions were properly answered. Scores were recorded using a 5-point Likert scale for agreement with 1 showing less agreement and 5 showing the most. Additionally teachers were given the opportunity to express their views in open-comment form regarding the most important topic discussed, what more information could be provided, and any additional comments. Seventy (70) teachers provided surveys for analysis.

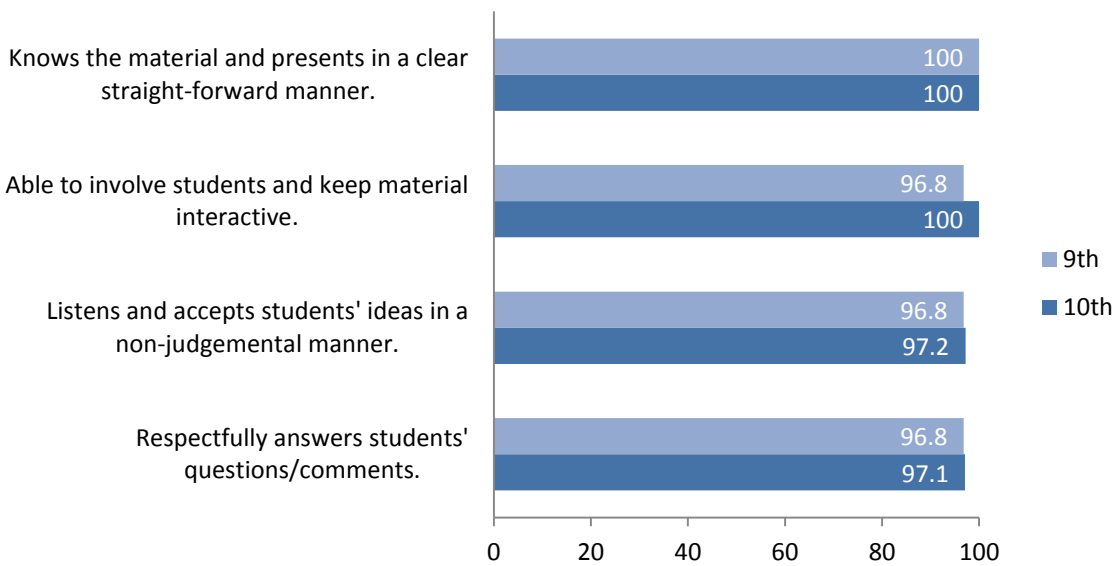
Analysis of the information resulted in equally high satisfaction for grades 9th and 10th at CMSD. Teachers were in very high agreement (4.9 out of 5) that the program instructors provided the straightforward material, involved students, were non-judgmental to them, and answers all their questions and comments. There were no differences in average satisfaction scores at the two grade levels (see Charts 3, 4).

Chart 3: Safer Choices - Satisfaction mean scores



*4 surveys were missing grade information

Chart 4: Safer Choices satisfaction % per question



Comments

There were 65 comments for the question, “What do you think is the most important thing your students learned?” The most common themes were safe sex practices to avoid STDs and pregnancy, and removing misconceptions regarding sex.

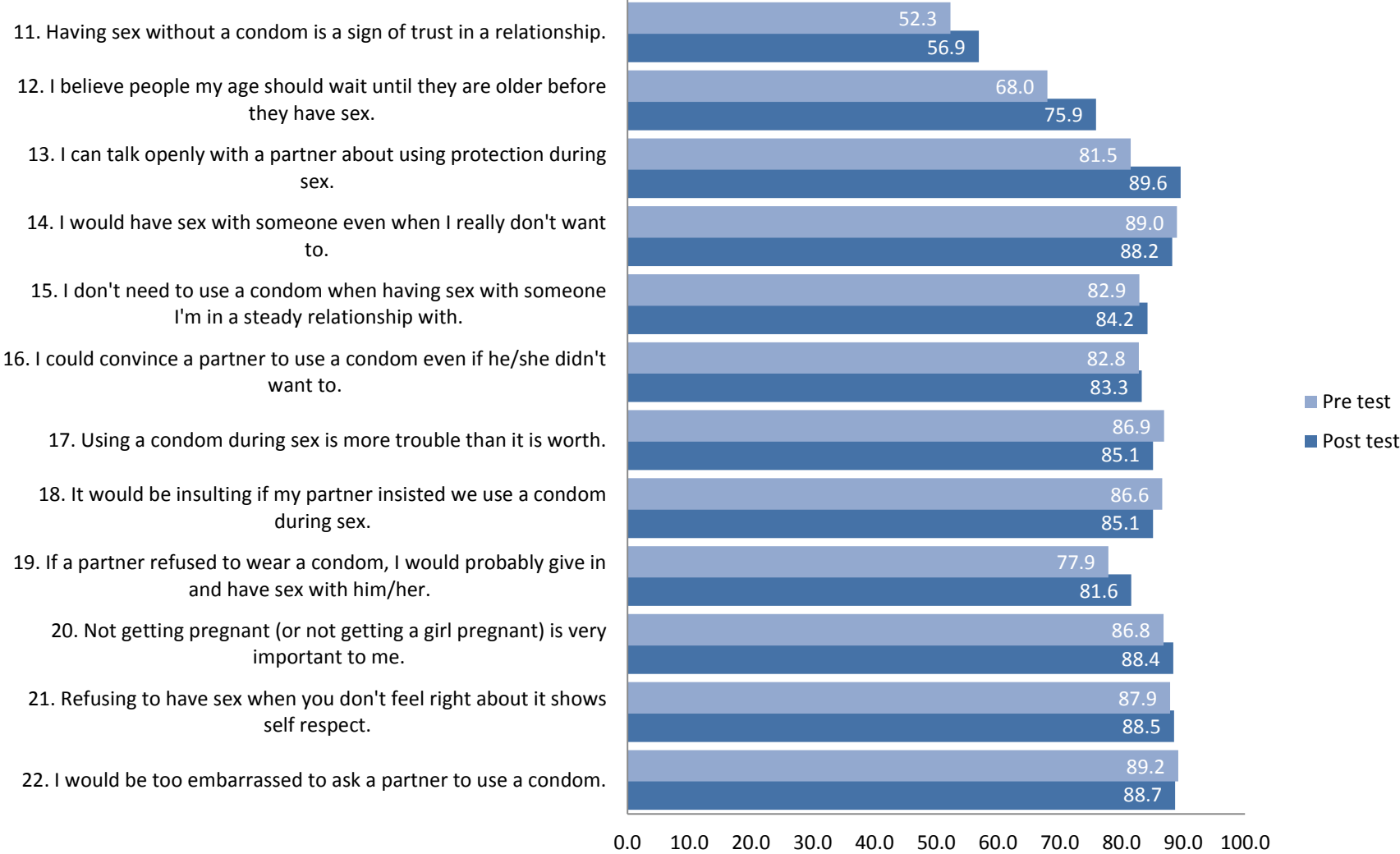
There were 62 comments for the question, “What do you think your students need more information on?” The most common themes were the reiteration of the importance safe sex practices/abstinence,

resources for those that are pregnant or have an STD, and real-world statistics about sexual activity in teens.

Lastly, additional comments were provided of which most provided praise:

- EVERYTHING WENT OK.
- BEST PROGRAM IN MANY YEARS.
- GOOD PROGRAM - GOOD PRESENTATION
- GREAT PRESENTER.
- [PRESENTER] WAS A JOY! SHE WAS ABLE TO RELATE TO THE STUDENTS AND PRESENT MATERIAL IN A STRAIGHT FORWARD MANNER.
- [PRESENTER] PRESENTED THE PROGRAM PROFESSIONALLY AND THE STUDENT SRESPONDED WELL FOR HER. THEY WERE ENGAGED AND FELT COMFORTABLE ASKING QUESTIONS.
- OUR INSTRUCTORS WERE VERY KIND AND PATIENT. DESPITE THE DISRESPECT OF SOME OF MY STUDENTS, THE INSTRUCTOR FARED VERY WELL.
- OUR PRESENTER WAS GREAT! AT TIME OUR STUDENT POPULATION CAN BE VERY DIFFICULT. THANK YOU FOR BEING PATIENT.
- TEACHER WAS PATIENT AND RESPECTFUL.
- THANK YOU SO MUCH. I HAVE SERIOUS CONCERN ABOUT THE SEXUAL ACTIVITIES OF MY STUDENTS.
- THEY WERE GREAT! I'D RECOMMEND THEM TO OTHER TEACHERS AND CLASSROOMS.

Chart 2: Pre-test Evaluation score % per question



Wellness Schools – F.L.A.S.H. & Draw the Line

Seven schools consist of the Wellness program: Bedford, Brooklyn, Cleveland Heights-University Heights, Euclid, Richmond Heights, South Euclid-Lyndhurst, and Warrensville Heights. All districts participated in the F.L.A.S.H. program for 5th and 6th. Bedford and Cleveland Heights-University Heights did not participate in the “Draw the Line” 7th and 8th grade programs. The evaluation consists of a preliminary test at the beginning of the program and a retest at the end of the program.

Over three thousand (3104) student participated in a Wellness program. F.L.A.S.H. had 2091 students, and Draw the Line had 1013 students. Euclid and South Euclid-Lyndhurst had the largest populations of students (Table 2).

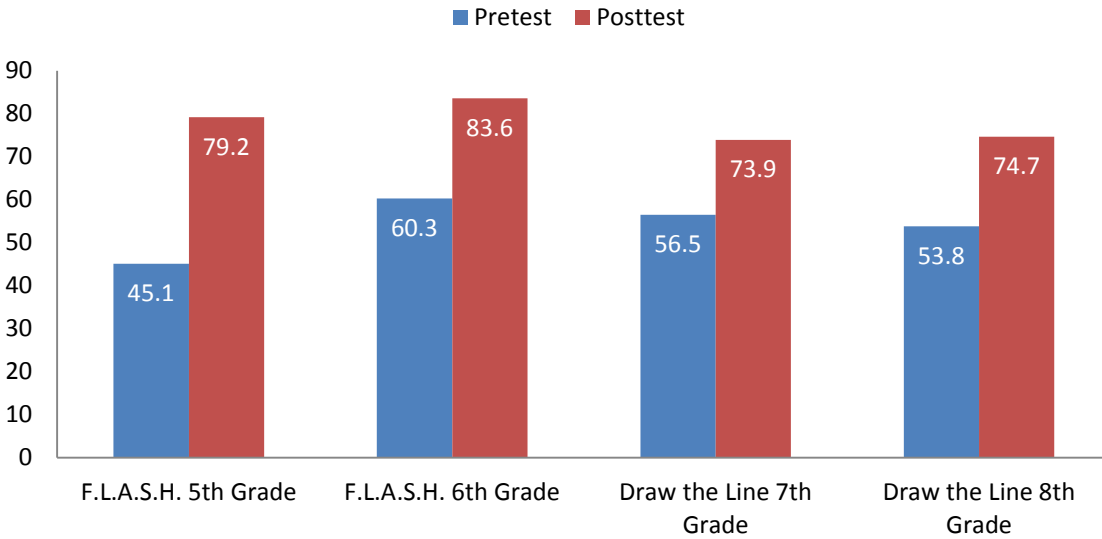
Program-level Evaluation

Both programs showed improvement at retest indicating that students began with minimal knowledge of the sex education curriculum and completed with high knowledge retention. This occurred with statistically significant confidence. F.L.A.S.H. 5th graders had the largest improvement followed by F.L.A.S.H. 6th graders, Draw the Line 8th graders, and Draw the Line 7th graders. Given the difference in population sizes for each participating grade, assumptions cannot be made regarding on grade’s improvement versus another’s. What is important to take away is that each grade improved substantially at post-test with statistically significant confidence (Table 3, Chart 5).

Program	Grade	N	Bedford	Brooklyn	CH-UH	Euclid	Richmond	SE-LYN	Warrensville
F.L.A.S.H.	5	1535	214	184	662	475	105	472	146
	6	556	123	100	-	333	104	440	148
Draw the Line	7	403	-	-	-	403	94	-	150
	8	610	-	182	-	428	88	137	155
Total	-	3104	337	466	662	1639	391	1049	599

	Pre-test N	Pre-test (%)	Post-test N	Post-test (%)	Mean change	p value (Sig.)
F.L.A.S.H. 5 th Grade	1168	45.1	1082	79.2	+34.1	0.000
F.L.A.S.H. 6 th Grade	614	60.3	632	83.6	+23.3	0.000
Draw the Line 7 th Grade	338	56.5	309	73.9	+17.4	0.000
Draw the Line 8 th Grade	507	53.8	483	74.7	+20.9	0.000

Chart 5: F.L.A.S.H. & Draw the Line evaluation scores (all districts)



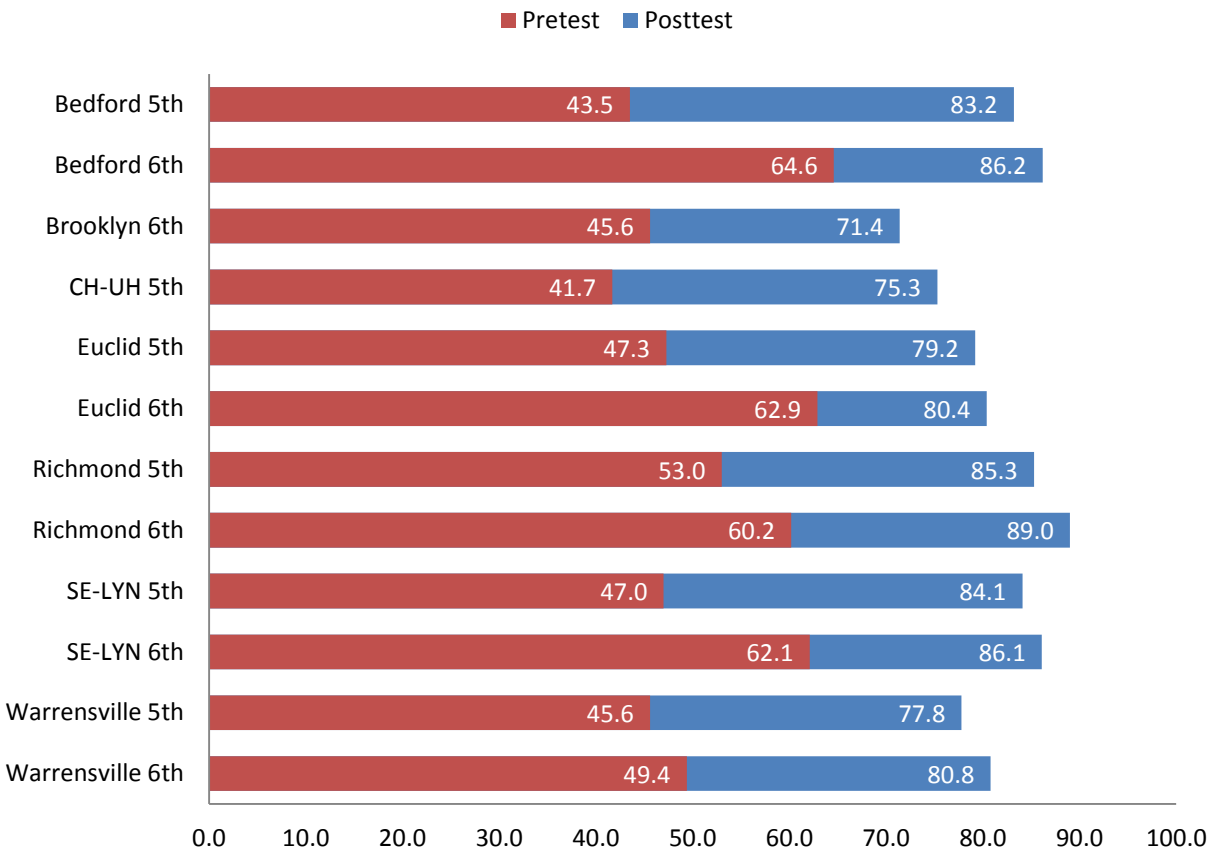
Grade-level Evaluation

F.L.A.S.H.

Improvements were seen at post-test for each district and each grade with statistical significant confidence. The largest improvement was seen in the Bedford schools 5th grade, while the smallest improvement occurring in the Euclid schools 6th grade (see Table 4). Richmond heights 6th graders obtained the highest scores, and Brooklyn 6th graders had the lowest. All districts were above 70% at post-test. Furthermore, all districts that implemented F.L.A.S.H. for consecutive grades showed improvement from 5th to 6th grade. This suggests knowledge was retained from the previous school year (see Chart 6).

District	Grade	Pre-test N	Pre-test (%)	Post-test N	Post-test (%)	Mean change	p value (Sig.)
Bedford	5	107	43.5	107	83.2	+39.7	0.000
	6	58	64.9	65	86.2	+21.3	0.000
Brooklyn	5	85	45.6	91	71.4	+25.8	0.000
	6	50	56.1	50	77.6	+21.5	0.000
CH-UH	5	369	41.7	293	75.3	+33.6	0.000
Euclid	5	237	47.3	238	79.2	+31.9	0.000
	6	172	62.9	159	80.4	+17.5	0.000
Richmond Hts.	5	53	53.0	52	85.3	+32.3	0.000
	6	54	60.2	50	89.0	+28.8	0.000
SE-LYN	5	241	47.0	231	84.1	+37.1	0.000
	6	207	62.1	233	86.1	+24.0	0.000
Warrensville	5	76	45.6	70	77.8	+32.2	0.000
	6	73	49.4	75	80.8	+31.4	0.000

Chart 6: F.L.A.S.H. evaluation scores by District



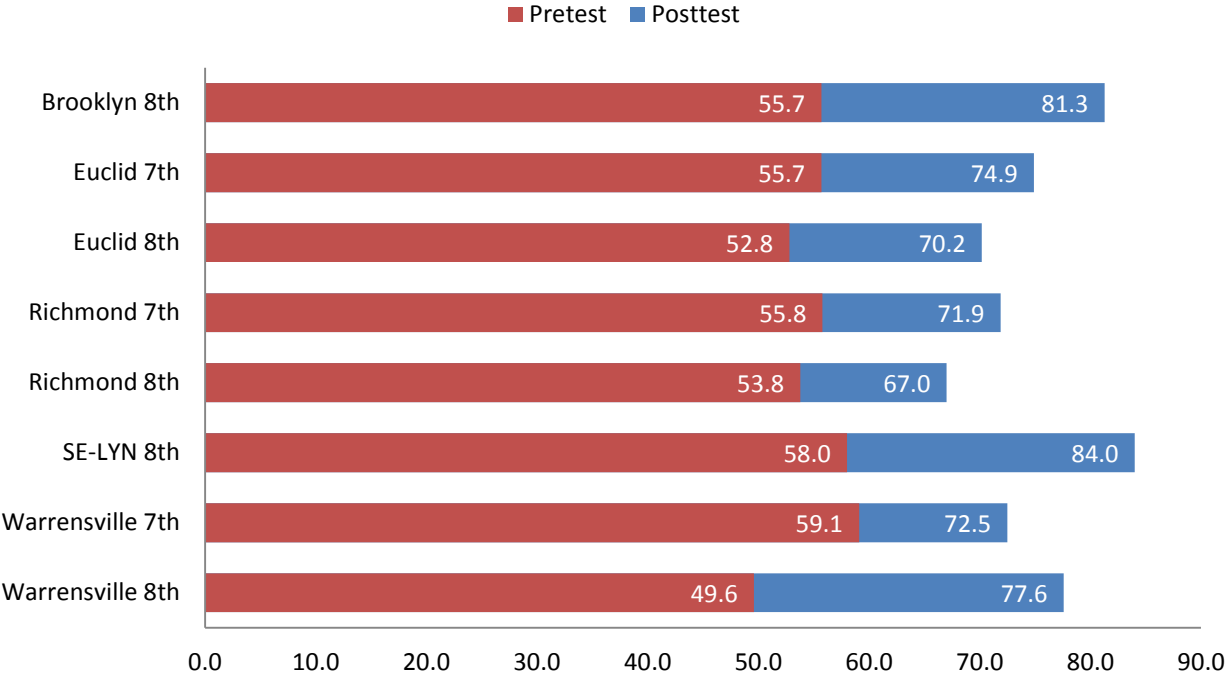
Draw the Line

While there were less students participating in Draw the Line compared to F.L.A.S.H. results were still notable with all districts and grades improving at post-test. Brooklyn 8th graders had the largest improvement with Richmond Heights 8th graders had the least improvement. Interestingly, 8th graders in Euclid and Richmond Heights had less improvement than their 7th grader peers. Assuming these students participated in Draw the Line in the previous year, this suggests that some information was not retained. All results were statistically significant in confidence (see Table 5, Chart 7).

Table 5: Draw the Line evaluation scores							
District	Grade	Pre-test N	Pre-test (%)	Post-test N	Post-test (%)	Mean change	p value (Sig.)
Brooklyn	8	105	55.7	77	81.3	+25.6	0.000
Euclid	7	209	55.7	194	74.9	+19.2	0.000
	8	211	52.8	217	70.2	+17.4	0.000
Richmond	7	46	55.8	48	71.9	+16.1	0.000

	8	43	53.8	45	67.0	+13.2	0.001
SE-LYN	8	76	58.0	61	84.0	+26.0	0.000
Warrensville	7	83	59.1	67	72.5	+13.4	0.000
	8	72	49.6	83	77.6	+28.0	0.000

Chart 7: Draw the Line evaluation scores by District



Question-level Evaluation

F.L.A.S.H.

The evaluation also examined improvement by each question. F.L.A.S.H. 5th graders showed large improvements from pre-test to post-test. The most notable of these was question #10 with a mean change of +70.6%. The least improvement was for question #14 with a mean change of +10.6%. However, the pre-test score of 75.6% was the highest recorded percentage at pre-test among questions. Therefore it is possible that with since the majority of students attained this knowledge prior to the program, fewer students needed to acquire this at post-test, which could explain the small growth (see Chart 8.)

Although, F.L.A.S.H. 6th graders did not acquire comparable mean changes as the 5th graders, all questions showed improvement at post-test. This makes sense given the likelihood that many of these students participated in F.L.A.S.H. at the 5th grade level; receiving similar information. The largest mean change occurred for question #13 with an improvement of +41.8%. The smallest change occurred for question #1 with an improvement of +7.4%; however the average pre-test score was 90.7% (see Chart 9).

Chart 8: F.L.A.S.H. 5th Grade evaluation scores by question

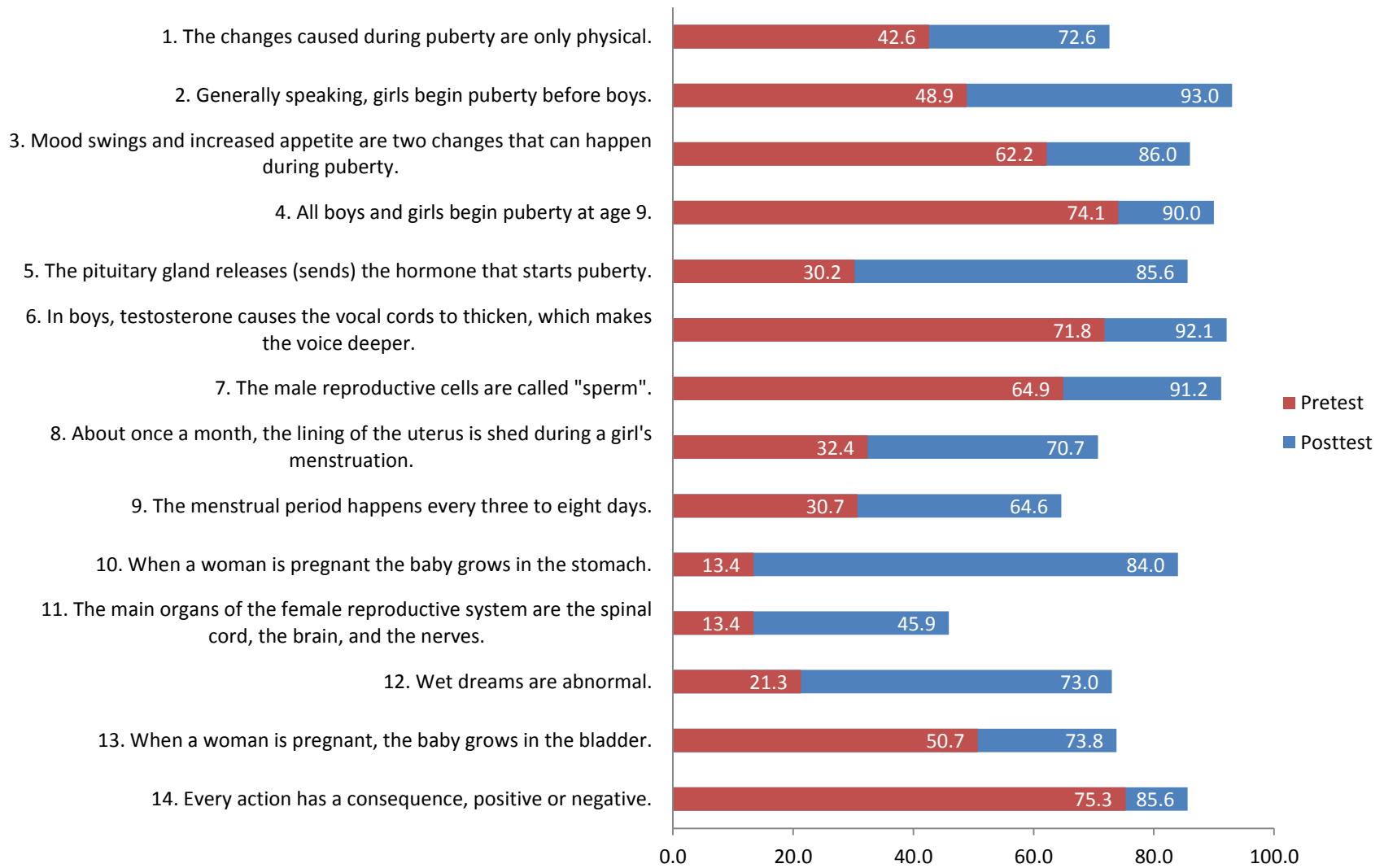
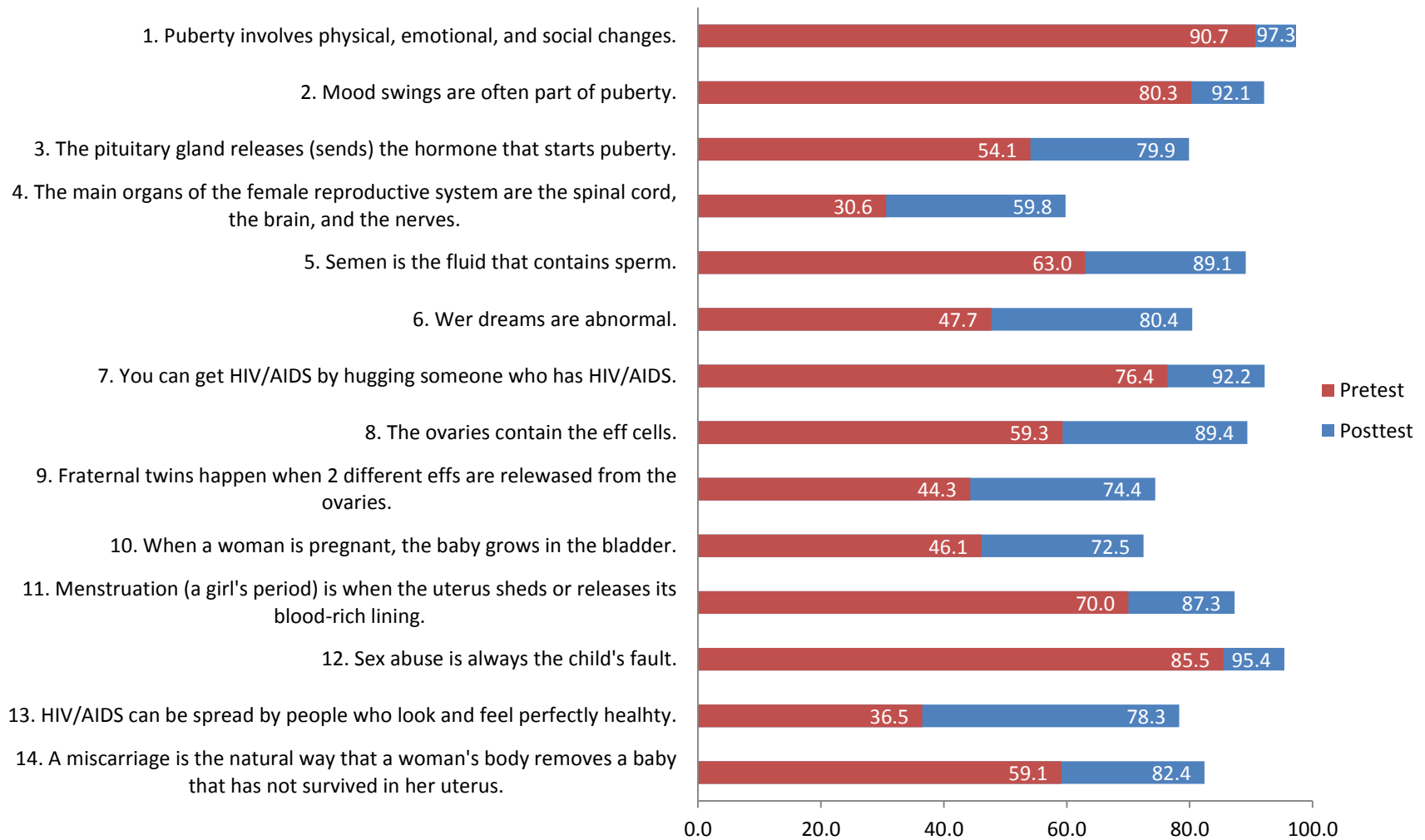


Chart 9: F.L.A.S.H. 6th Grade evaluation scores by question



Draw the Line

Draw the Line 7th graders showed improvements for each question. The magnitude of improvement varied, with low and high pre-test and low and high post-test scores. For example, question #9 had a high pre-test and only improved 1.3% at post-test; however question #10 had a low pre-test and improved 0.6%. This is contrasted by question #7 and question #1 respectively. The highest post-test score was 90.6% and the lowest score was 46%. In short, it appears that while students improved on each question, there were topics that they understood better than others (see Chart 10).

Draw the Line 8th graders showed improvement for each question as well. Again, the magnitude of improvement varied by question. In general, 8th graders had higher post-test scores by question than did the 7th grade population, as well as, larger improvements. The highest post-test score was 95%, and the lowest was 46.8%. It is likely that the improvement from 7th to 8th grade is a reflection of knowledge carrying over from the previous year. In short, although the post-test scores and improvement was not at the level gain by the F.L.A.S.H. program, clearly the student body is acquiring knowledge throughout the program history (see Chart 11).

Chart 10: Draw the Line 7th Grade evaluation scores by question

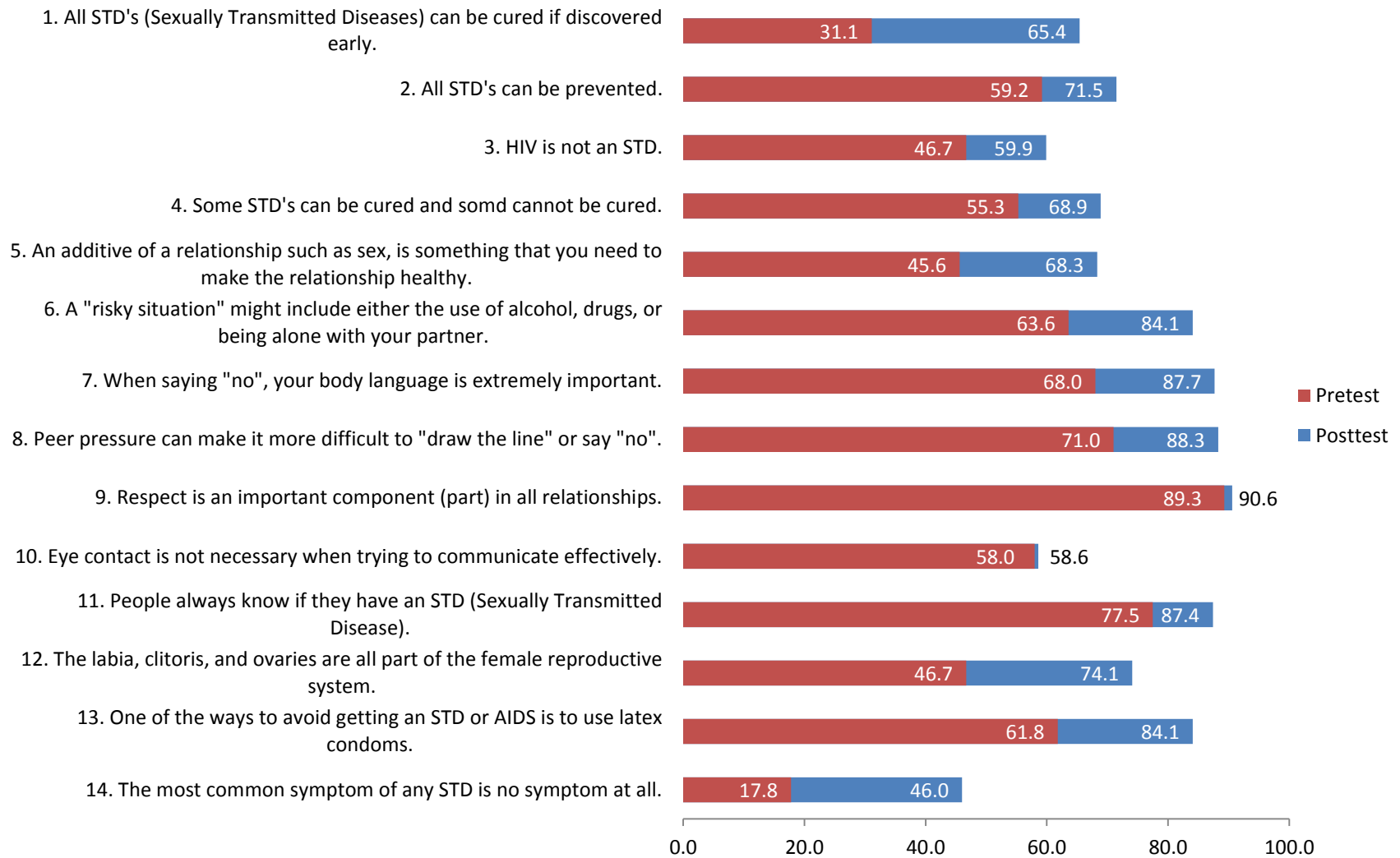


Chart 11: Draw the Line 8th Grade evaluation scores by question



Program Satisfaction

Students

A total of 1942 students provided satisfaction surveys for analysis. Results are reported for students that were satisfied (4) and mostly satisfied (5). Students were highly satisfied with the program across all grades with 5th grade showing the most satisfaction and 7th showing the least. Each grade had satisfaction levels for each question greater than 80%. No question revealed a distinctive satisfaction difference however students tended to be in higher agreement regarding how the class was taught (see Chart 12, Table 6).

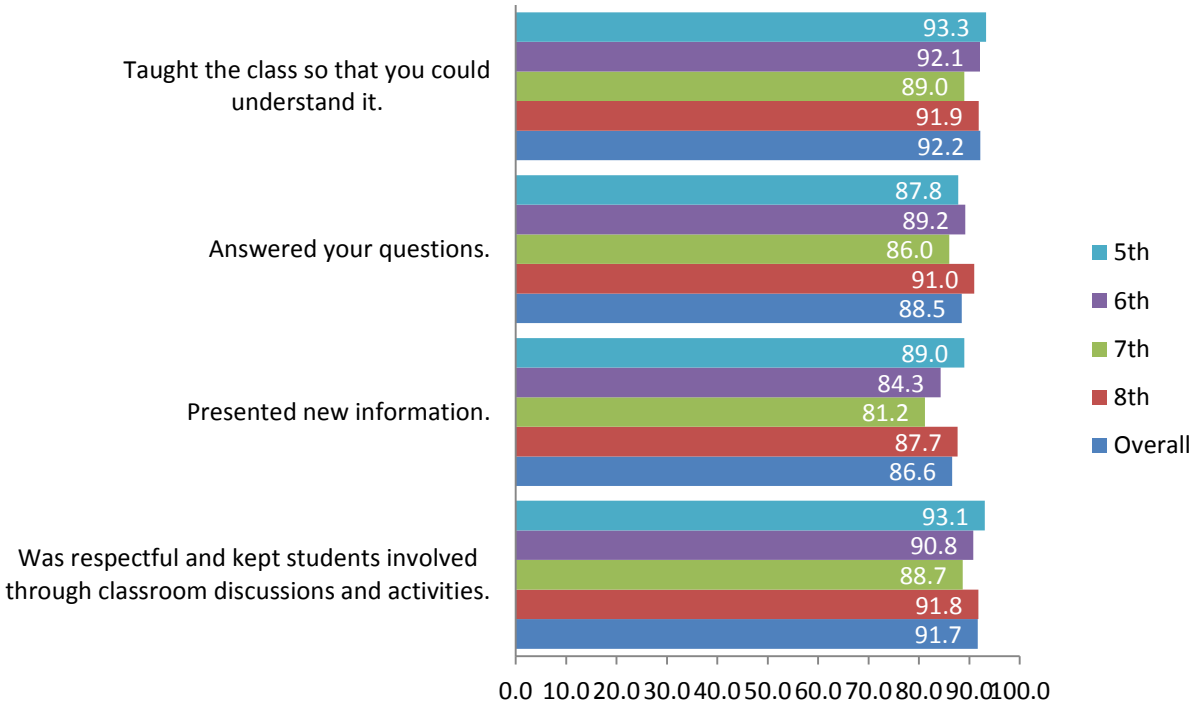
There were 1830 responses to the question, “What do you think is the most important thing learned?” Of these responses the most common centered on contraction of and protection from HIV/AIDS and other sexually transmitted diseases, puberty, and human reproduction.

There were 1562 responses to the question, “How would you change the program?” Of these responses the most common centered on dividing the class by gender, making the program longer, adding more videos, showing less videos, and changing nothing.

Table 6: Satisfaction Survey Numbers		
Grade	Student	Teacher
5	821	28
6	429	12
7	292	3
8	379	5
Total	1921*	48

*21 surveys were missing grade level

Chart 12: Student satisfaction % by grade



Teachers

A total of 48 teachers provided satisfaction surveys for analysis, with the majority having been submitted by 5th grade F.L.A.S.H. schools (see Table 5). Results are reported for teachers that were satisfied (4) and mostly satisfied (5). Teachers were highly satisfied with the program, providing ratings above 90% and as high as 100% (see Table 6, Chart 13).

There were 47 comments for “What do you think is the most important thing your students learned?” The most common response was awareness of human sexual development, human reproduction, the importance of cleanliness, and sexual responsibility.

There were 39 comments for “What do you think your students need more information on?” The most common response was information on anatomy and bodily changes, consequences of STDs, personal hygiene, respecting personal boundaries and saying “no”, and nothing.

There were 38 additional comments listed as well; most of which were regarding praise for the program. here is a sample of comments:

- Wonderful job again.
- [Presenter] was awesome. Very understanding, calm voice, made these kids feel comfortable!
- Our presenter was so professional, knowledgeable, and warm. My students felt as comfortable as they could [be] learning about difficult topics.

- I think [presenter] did a wonderful job by being prepared and well organized with her information. She really did a good job at keeping the students engaged with activities, questions, and responses. I really enjoyed the scenarios presented in class.
- [Presenter] did such an awesome job presenting the material to the students. The students felt comfortable asking her questions about relationships, sex, and STDs. Her answers were always very appropriate for this age group.
- Thanks for your effort and time with our students.
- [Provider] was the best instructor the Boulevard has had. (I have been involved with this course for 5 years). She was very easy to understand and explained everything in a kid-friendly manner. Thank you [presenter]. Can we please have [presenter] next year too!
- I think [presenter] did a fine job presenting the information in a clear, concise manner. She answered all the student's questions and explained things in a way that the students could understand. The video on puberty was good.
- I was very impressed with the way [presenter] answered the students' questions.
- [Presenter] is professional and speaks to kids in such a way we all feel comfortable. I loved her delivery of info! She is amazing!

Chart 13: Teacher satisfaction % per question

