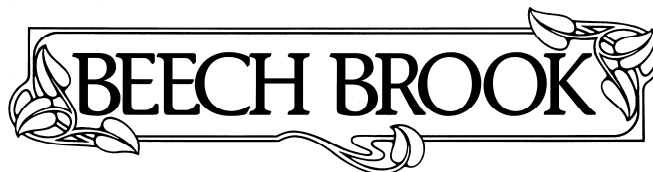


**Comprehensive Sex Education Evaluation Report**  
**Cuyahoga County Board of Health Programs**  
**2010-2011 School Year**

**This program is brought to you by the Cuyahoga County Board of Health's  
Teen Wellness Initiative thanks to funding provided by the  
Cuyahoga County Family and Children First Council on behalf of the  
Cuyahoga County Office of Health and Human Services**



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## **Executive Summary**

This report evaluates Beech Brook's Comprehensive Sex Education (CSE) programs under the Cuyahoga County Board of Health contract for the 2010-2011 school year. Beech Brook evaluated services provided in six of the seven districts where comprehensive sexual health programming was implemented. Evaluation districts included: Cleveland Heights/University Heights, Richmond Heights, East Cleveland, Euclid, Warrensville Heights, and South Euclid/Lyndhurst. During the 2010-2011 school year, a total of 5,141 5<sup>th</sup> through 8<sup>th</sup> grade students completed programming with 3,204 of those students participating in the program evaluation.

Two strategies were used to evaluate the program:

1. Tests were administered before and after each curriculum to measure learning. *F.L.A.S.H.* curriculums were taught in 5<sup>th</sup> and 6<sup>th</sup> grade and *Draw the Line* curriculums were taught in 7<sup>th</sup> and 8<sup>th</sup> grade.
2. Evaluation surveys were completed by students, classroom teachers, and parents after the program to assess satisfaction and opportunities for improvement.
3. Classroom observations were held to support model fidelity.
4. Surveys were administered after parent meetings to assess parent attitudes regarding the program.

Key findings of the evaluation include:

1. Overall test scores for students improved after the *F.L.A.S.H.* and *Draw the Line* curriculums. These improvements were statistically significant ( $p < 0.001$ ) for all districts and grade levels.
2. Students were highly satisfied with the program and instructor. Student satisfaction was highest (93%) with the class being taught so that they could understand it.
3. Teachers rated the CSE program very positively this year, with 99% to 100% reporting satisfaction on each survey question.
4. Facilitator observations showed 93-100% compliance with model standards and other expectations.
5. Surveys administered after parent meetings suggested that parent attendees are more likely to discuss sexual health with their child and that most parents valued the curriculum.

Overall, this evaluation report suggests 1) that Beech Brook succeeded in teaching students the *F.L.A.S.H.* and *Draw the Line* curriculums and 2) that students were satisfied with the program. The findings of this evaluation support the program need and efficacy.

## **Program Introduction and Background**

### **School-based comprehensive sexual health education:**

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

### **Cuyahoga County Board of Health – Agency History:**

Since 1919, the Cuyahoga County Board of Health (CCBH) has successfully implemented large-scale health promotion programs for the diverse and multi-cultured Northeastern Ohio population guided by a mission to *prevent disease and injury, promote positive health outcomes and provide critical services to improve the health status of the community*. All of CCBH's activities are clearly and directly tied to its Organizational Vision, *to optimize the public health status of the community through transformational programming that creates a clear line of sight between what we do every day and how the organization performs*.

In 1997, CCBH began coordinating teen pregnancy prevention activities throughout Cleveland and its inner-ring suburbs through its Teen Wellness Initiative. The Primary objectives of the Teen Wellness Initiative are:

- Provide youth with the necessary information, motivation, and behavioral skills to make informed choices about their sexual and reproductive health
- Provide parents/guardians with a variety of tools that promote increased communication with their teens
- Increase access to adolescent health services
- Develop policies that incorporate and support public health principles

One aspect of the programming that falls under the Teen Wellness Initiative at CCBH is the administration of school-based comprehensive sexual health education programming. With the ultimate goal of reducing one or more sexual behaviors that lead to unintended pregnancy and STDs/STIs, comprehensive sexual health programming provides young people with the information and skills that will enable them to make sound decisions now and in the future.

Thanks to funding provided by the Cuyahoga County Family and Children First Council, CCBH contracted with Beech Brook during the 2010/2011 grant year to provide comprehensive sexual health programming to a total of 5,141 5<sup>th</sup>-8<sup>th</sup> grade students throughout seven inner-ring school districts. Six of the seven partnering school districts participated in the program evaluation outlined in this report.

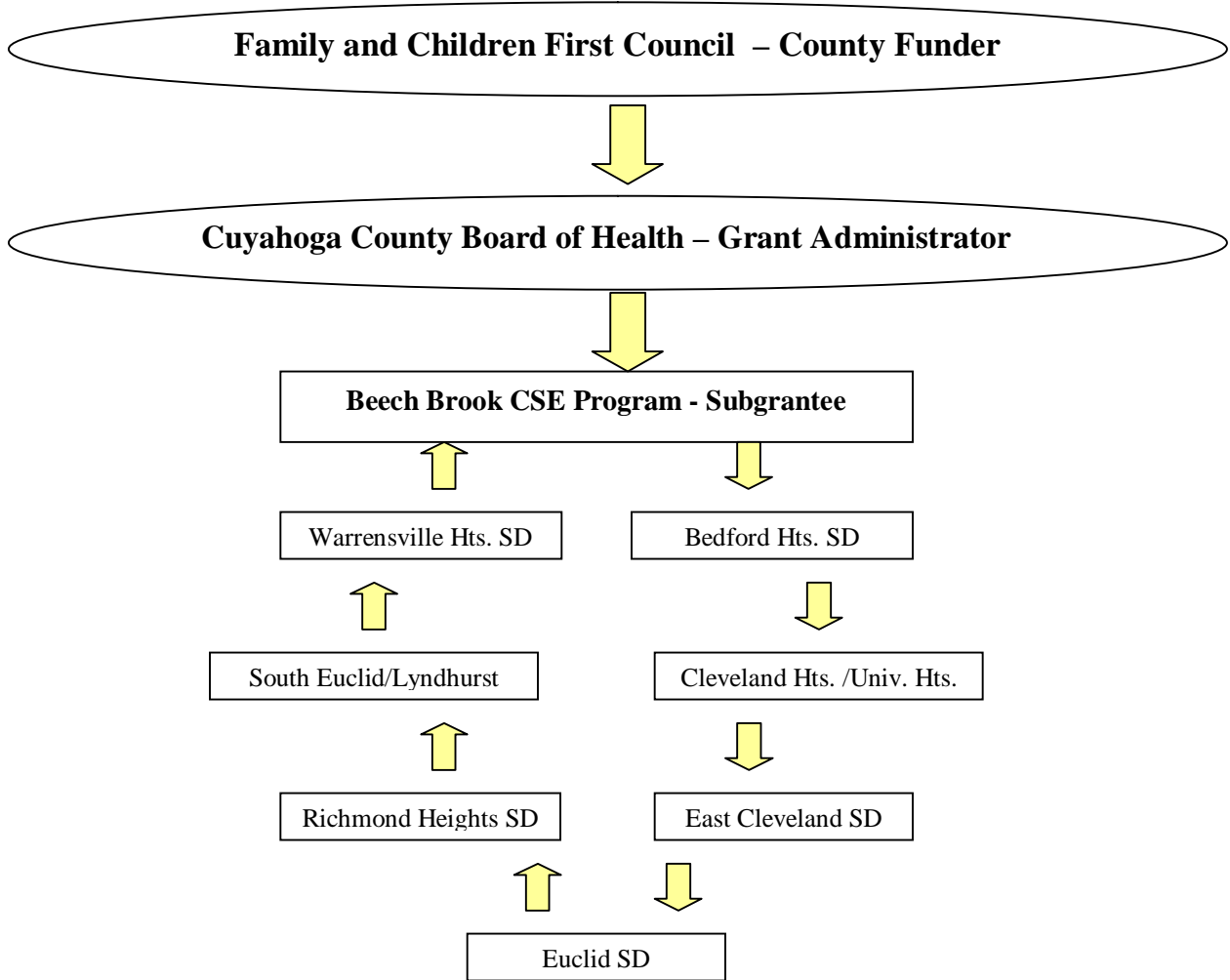
### **Beech Brook - Agency History:**

Founded in 1852, Beech Brook's mission statement is "To advance the emotional well-being of children, youth and their families by providing effective, innovative behavioral health, permanency and educational services and by serving as a strong voice for children, youth, and families." Beech Brook serves children, youth, and families in Cuyahoga, Lorain, Summit and Geauga counties. Beech Brook is accredited by the Council on Accreditation and the Joint Commission on Accreditation of Healthcare Organizations and is licensed by the Ohio Department of Human Services and the Ohio Department of Mental Health.

Beech Brook's Family Health division offers a wide range of school-based, in-home and community-based programs designed to strengthen and support families and children. Under this division, Beech Brook coordinates parenting and support groups offered throughout the county as well as Early Start services for at-risk children. Important components to all Family Health programs are the respect for families, the importance of honoring cultural diversity, and a working partnership with families and their communities.

For over fifty years, Beech Brook has provided sexual-health programming through their Comprehensive Sex Education (CSE) division to school-aged youth throughout Cuyahoga County. Today, as part of the Teen Wellness Initiative, Beech Brook educators provide modified versions of two evidence-based sexual health curricula to 5<sup>th</sup>-8<sup>th</sup> grade students throughout the following partnering school districts: Bedford Heights, Cleveland Heights / University Heights, East Cleveland, Euclid, Richmond Heights, South Euclid/Lyndhurst, and Warrensville.

**Program Flow Chart:**



## **2010-2011 Evidence-Based Sexual Health Curricula**

Two evidence-based sexual health curricula, *Family Life And Sexual Health* (F.L.A.S.H.) and *Draw the Line / Respect the Line*, were used throughout the targeted school districts during the 2010-2011 grant year. These curricula were chosen based on their recognition as evidence-based programs that work by national organizations considered to be the authorities on teen pregnancy prevention. These organizations include: The National Campaign to Prevent Teen and Unplanned Pregnancy, Mathematica Policy Research, the Centers for Disease Control and Prevention (CDC), and SIECUS (Sexuality Information and Education Council of the United States).

National evaluation results from the *F.L.A.S.H.* curriculum showed an increase in students' knowledge and improved attitudes about such things as puberty (less fear, more confidence) and sexual exploitation (their confidence in their ability to say "no" and tell a trusted adult). Results from the *Draw the Line / Respect the Line* curriculum showed increased knowledge and improved perceptions of peer norms about sex and delayed initiation of sex among males.

The curricula were modified so that the lessons could be taught in the district classrooms over a two year period. The lessons included in the curricula include a wide range of topics related to sexual and reproductive health. The following two pages provide a brief outline of each program.

### ***F.L.A.S.H. (Family Life And Sexual Health)***

The *F.L.A.S.H.* curriculum is an evidence-based comprehensive sexual health education curriculum designed by Public Health – Seattle & King County, Family Planning Program.

#### Goal of the *F.L.A.S.H.* Curriculum

The goals of F.L.A.S.H. are to assist in the development of persons:

- Who are knowledgeable about human development and reproduction
- Who respect and appreciate themselves, their families, and all persons
- Who will neither exploit others nor allow themselves to be exploited

#### Overview of the *F.L.A.S.H.* Curriculum

This curriculum consists of 19 lesson plans for the intermediate classroom (grades four through six). *F.L.A.S.H.* is based on a behavior change theory called the Health Belief Model. The curriculum addresses:

- Perceived Susceptibility
- Perceived Severity
- Perceived Benefits
- Perceived Barriers
- Self-Efficacy

#### Local Implementation

Beech Brook and CCBH have modified this evidence-based curriculum to a twenty session delivery plan divided evenly over a two year period. The specific topics covered throughout each grade are as follows:

Fifth Grade: Ten-session delivery including the following topics / themes:

- Self Esteem
- Family / Friendship
- Decision Making
- Consequences
- Puberty
- Reproduction
- Pregnancy
- Sexual Exploitation

Sixth Grade: Ten-session delivery including the following topics / themes:

- Decision Making
- Behaviors / Consequences
- Puberty
- Conception
- Pregnancy
- Childbirth
- HIV/AIDS
- Support Systems
- Personal Safety



## **DRAW THE LINE / RESPECT THE LINE**

*Draw the Line/Respect the Line* is an evidence-based sexual health curriculum created by the University of California, San Francisco Center for AIDS Prevention Studies and ETR Associates to help students develop personal sexual limits and practice the skills needed to maintain those limits.

### Goal of the *Draw the Line / Respect the Line* Curriculum

The curriculum is designed to help students achieve five objectives:

- To know their personal sexual limit
- To identify their motivation for that limit
- To identify threats to their limit
- To use interpersonal skills to maintain their sexual limit
- To respect the limits of others

### Overview of the Curriculum

This curriculum consists of 19 lesson plans for middle school students (grades six through eight). Using group discussions, small group activities, and role playing, the program aims to delay the initiation of sex in order to reduce the incidence of STDs, including HIV/AIDS and pregnancy. The program uses social cognitive theory and social inoculation theory based on the assumption that knowledge and constant skill practice can influence risk-taking behaviors.

### Local Implementation

Beech Brook and CCBH have modified this evidence-based curriculum to a twenty session delivery plan divided evenly over a two-year period. The specific topics covered throughout each grade are as follows:

Seventh Grade: Ten-session delivery including the following topics / themes:

- |                       |                          |
|-----------------------|--------------------------|
| • Reproductive Health | • HIV/AIDS               |
| • Teen Pregnancy      | • Healthy Relationships  |
| • Decision Making     | • Goals and Consequences |
| • Sexual Pressures    | • Sexual Exploitation    |
| • STI/STDs            |                          |

Eighth Grade: Ten-session delivery including the following topics / themes:

- |                          |                       |
|--------------------------|-----------------------|
| • Healthy Relationships  | • STIs/STDs           |
| • Reproductive Health    | • Teen Pregnancy      |
| • Risk Taking Behavior   | • HIV/AIDS            |
| • Goals and Consequences | • Sexual Exploitation |

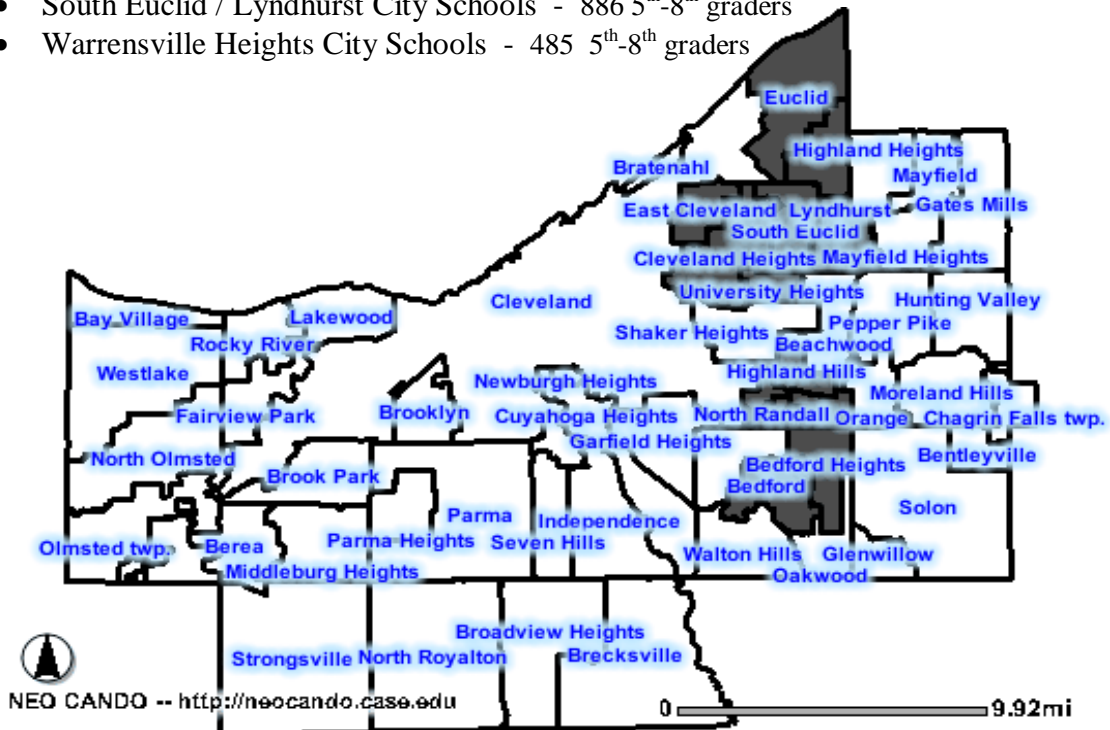
## Targeted School Districts for the 2010/2011 Initiative

With funding provided by the Cuyahoga County Family and Children First Council (FCFC), CCBH worked to target the inner-ring school districts of the county for the school-based program component of the Teen Wellness Initiative. Schools who agreed to partner with CCBH were provided with free classroom curricula delivered by Beech Brook as well as parent education programming and resource assistance for their district. Participating school districts were required to sign a letter of agreement with the Cuyahoga County Board of Health stating that:

- The District agrees to work with Beech Brook and provide only evidence-based comprehensive sexual health education programming to the students of their district.
- The District agrees to allow Beech Brook into their schools and will assist them with program scheduling as needed.

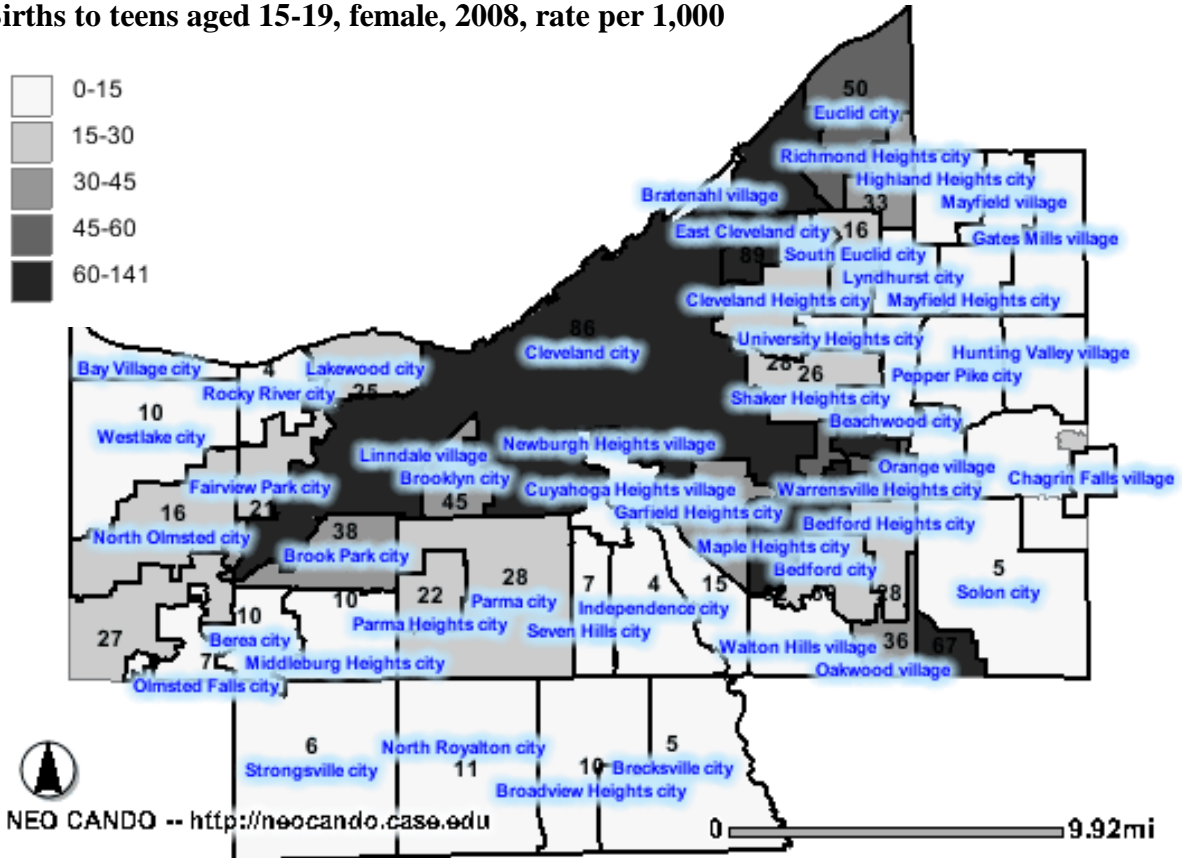
After approaching several inner-ring school districts throughout the county, CCBH and Beech Brook solidified partnerships with the seven districts listed below and were able to serve a total of 5,141 5<sup>th</sup> through 8<sup>th</sup> grade students throughout the 2010/2011 grant year.

- Bedford City School District - 524 5<sup>th</sup>-6<sup>th</sup> graders
- Cleveland Heights / University Heights City School District - 963 5<sup>th</sup>-8<sup>th</sup> graders
- East Cleveland City Schools - 669 5<sup>th</sup>-8<sup>th</sup> graders
- Euclid City Schools - 1,350 5<sup>th</sup>-8<sup>th</sup> graders
- Richmond Heights Local Schools - 264 5<sup>th</sup>-8<sup>th</sup> graders
- South Euclid / Lyndhurst City Schools - 886 5<sup>th</sup>-8<sup>th</sup> graders
- Warrensville Heights City Schools - 485 5<sup>th</sup>-8<sup>th</sup> graders



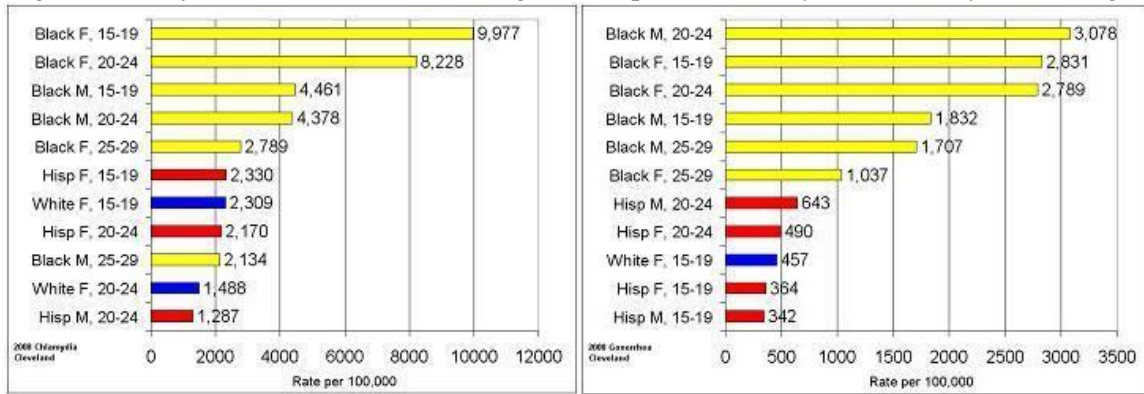
The graph and table below demonstrate the teen birth rates for the cities of Cuyahoga County.

**Births to teens aged 15-19, female, 2008, rate per 1,000**



Youth also represent the highest rates of Chlamydia and Gonorrhea infections in Cuyahoga County with approximately 40% of all Chlamydia and 30% of all Gonorrhea cases reported among 15-19 year olds.

**Highest Chlamydia (left) and Gonorrhea (right) rates per 100,000, by race/ethnicity, sex and age.**



\*Cleveland Department of Public Health – February 22, 2010 [www.clevelandhealth.info](http://www.clevelandhealth.info)

## **2010-2011 School-Based Program Staff Profiles**

The CCBH has a history of working in the area of teen pregnancy prevention and has the programmatic, administrative, and fiscal capacity to manage large scale projects, conduct contract negotiations, and communicate with partners at all levels. The decision-making and supervisory structure of CCBH is designed to ensure successful implementation of the Teen Wellness Initiative and the activities that fall under it. The supervisor of the Teen Wellness Initiative has a Masters Degree in Public Health and a twelve-year history with the agency. The grant coordinator has 10 years of experience in public health programming and social services, and has been coordinating county-wide teen pregnancy prevention grants since December, 2006.

During the 2010-2011 grant year, Beech Brook had both a supervisor and a program manager working on their CSE Program. Both of these employees have been with the agency for over ten years and have a long history of managing and delivering reproductive health programs. Both the supervisor and the manager of the program have Bachelors degrees in Psychology and have been trained by the nationally recognized Training Institute in Sexual Health Education (TISHE) program through Rutgers University, Answer Project.

Beech Brook also contracted with nine CSE educators to deliver programming throughout the targeted school districts of this grant. All educators started their year with a two-day intensive training on the approved curricula. They were also required to attend monthly continuing education program meetings as well as participate in co-teaching activities and classroom observations. The 2010-2011 CSE educators have a combined total of forty-nine years experience delivering comprehensive sexual health programming. Two of the educators have their Masters Degrees, six have Bachelors and one has an Associates degree. The educators come from a variety of back-ground specialties including certified teachers, licensed social workers, and anger management specialists.

## **Methods**

Seven instruments were used to evaluate Beech Brook's Comprehensive Sex Education (CSE) program: the *5<sup>th</sup> Grade F.L.A.S.H. test*, the *6<sup>th</sup> Grade F.L.A.S.H. test*, the *7<sup>th</sup> Grade Draw the Line test*, the *8<sup>th</sup> Grade Draw the Line test*, the *Student Evaluation Survey*, *Teacher Evaluation Survey*, and the classroom observation form.

The *5<sup>th</sup>* and *6<sup>th</sup>* *Grade F.L.A.S.H. tests* and *7<sup>th</sup>* and *8<sup>th</sup>* *Grade Draw the Line tests* measure students' comprehension of core curriculum components. The instruments were administered before instruction began and after each course was completed to measure how much students learned. The questionnaire is designed with a True/False response format. Students also have the option to indicate "Not Sure".

The CSE *Student Evaluation* was administered to all students at the end of each curriculum. The survey contains four items designed with a 5-point Likert-scale response format and two open-ended questions that allow students to comment on the program in their own words. The four Likert-scale items ask students to evaluate the sexual education teacher and curriculum in key competency areas. The open-ended questions ask students to indicate the most important thing they learned and for ideas on how to change the program.

The CSE *Teacher Evaluation* is administered at the end of the program. The survey contains four items designed in a 5-point Likert-scale response format and three open-ended questions for teacher comments.

As a means of monitoring program implementation and fidelity, program managers from the Cuyahoga County Board of Health (CCBH) and Beech Brook completed classroom observation forms throughout the school year for each of the CSE facilitators. Forms were designed to measure whether the facilitator followed the implementation design plan, whether the facilitator was prepared for the class, and whether the classroom responded well to the facilitator.

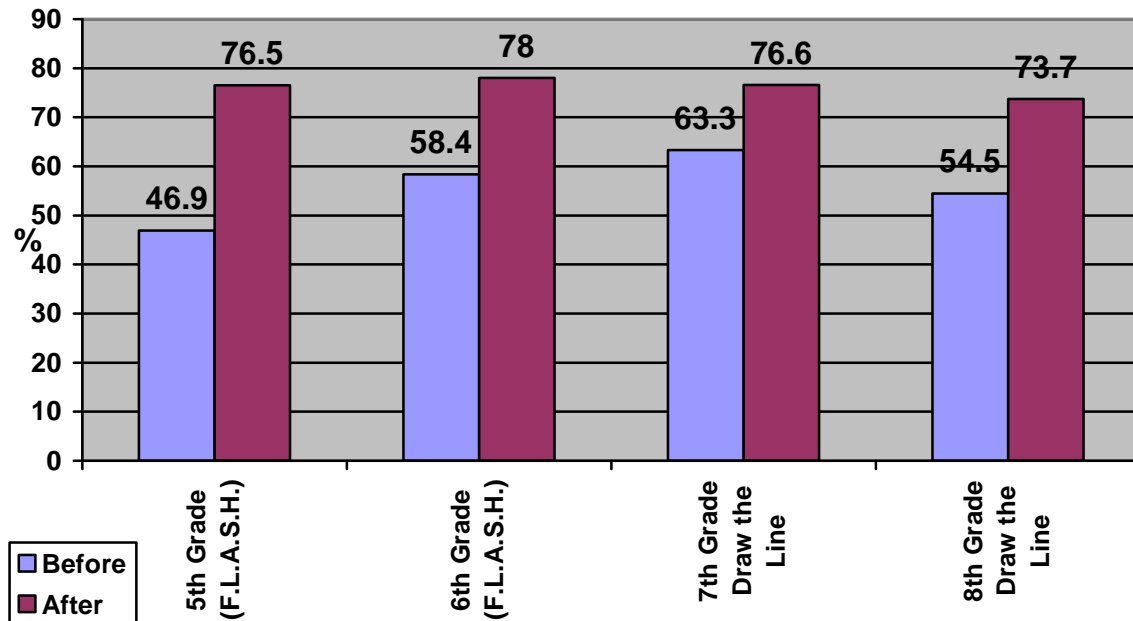
## Findings

### 1. Testing Summary by Grade Level (Districts Combined)

The initial analysis examined average test scores before and after each curriculum for all six districts combined. These results provide a snapshot summary of the efficacy of the Comprehensive Sexual Education program. As depicted in Table 1 and Figure 1 below, test scores increased significantly for each grade level curriculum ( $p < .001$ ). This demonstrates that students in each grade level learned the respective curricula.

<b>Curriculum Test Summary Results by Grade Level (All Districts Combined)</b>						
	<i>Pre-test N</i>	<i>Pre-test Correct (%)</i>	<i>Post-test N</i>	<i>Post-test Correct (%)</i>	<i>T</i>	<i>p value (Sig.)</i>
5 <sup>th</sup> Grade F.L.A.S.H.	824	46.9	882	76.5	33.5	0.000
6 <sup>th</sup> Grade F.L.A.S.H.	1066	58.4	939	78.0	23.1	0.000
7 <sup>th</sup> Grade Draw the Line	719	63.3	618	76.6	12.8	0.000
8 <sup>th</sup> Grade Draw the Line	595	54.5	511	73.7	17.1	0.000

**Figure 1: Test Scores Before and After Comprehensive Sexual Education Curricula, All Districts Combined**

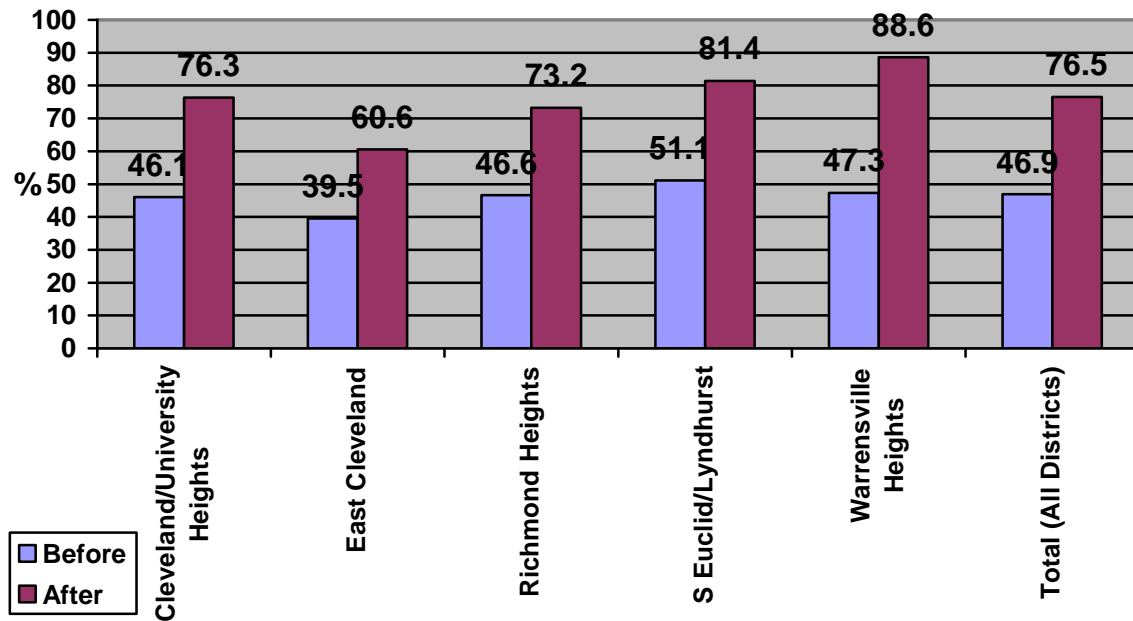


## 2. 5<sup>th</sup> Grade F.L.A.S.H. Test Results

The 5<sup>th</sup> Grade F.L.A.S.H. Test was administered to 5<sup>th</sup> graders in Cleveland Heights /University Heights, East Cleveland, Richmond Heights, South Euclid/Lyndhurst, and Warrensville Heights. Average scores increased from pre-test to post-test for each school district. The improvement was statistically significant ( $p < 0.001$ ) for each district. Please see Table 2 and Figure 2 below for details. Furthermore, there was statistically significant improvement on each of the individual test questions. Please see Table 3 for details.

<b>Table 2</b>						
<b>FLASH 5<sup>th</sup> Grade Overall Test Score Results by School District</b>						
	<i>Pre-test N</i>	<i>Pre-test Correct (%)</i>	<i>Post-test N</i>	<i>Post-test Correct (%)</i>	<i>T</i>	<i>p value (Sig.)</i>
Cleveland /University Heights	248	46.1	335	76.3	19.1	0.000
East Cleveland	134	39.5	136	60.6	9.9	0.000
Richmond Heights	53	46.6	56	73.2	8.1	0.000
South Euclid/Lyndhurst	265	51.8	261	81.4	21.4	0.000
Warrensville Heights	124	47.3	94	88.6	21.1	0.000
Total (All Districts)	824	46.9	882	76.5	33.5	0.000

**Figure 2: Test Scores Before and After F.L.A.S.H. 5th Grade**



<b>Table 3</b>						
<b>F.L.A.S.H. 5<sup>th</sup> Grade Overall Test Score Results, Individual Items</b>						
	<i>Pretest N</i>	<i>% Correct Before</i>	<i>Posttest N</i>	<i>% Correct After</i>	<i>T</i>	<i>p value (Sig.)</i>
<i>1. The changes caused during puberty are only physical.</i>	824	42.1	882	72.5	13.3	0.000
<i>2. Generally speaking, girls begin puberty before boys.</i>	824	43.1	882	89.2	22.9	0.000
<i>3. Mood swings and increased appetite are two changes that can happen during puberty.</i>	824	61.3	882	86.9	12.5	0.000
<i>4. All boys and girls begin puberty at age 9.</i>	824	77.7	882	89.1	6.4	0.000
<i>5. The pituitary gland releases (sends) the hormone that starts puberty.</i>	824	28.6	882	82.2	26.3	0.000
<i>6. In boys, testosterone causes the vocal cords to thicken which makes the voice deeper.</i>	824	72.5	882	91.3	10.3	0.000
<i>7. The male reproductive cells are called "sperm".</i>	824	69.5	882	93.4	13.2	0.000
<i>8. About once a month, the lining of the uterus is shed during a girl's menstruation.</i>	824	33.6	882	59.6	11.2	0.000
<i>9. The menstrual period happens every three to eight days.</i>	824	38.8	882	53.0	5.9	0.000
<i>10. When a woman is pregnant the baby grows in the stomach.</i>	824	13.6	882	82.2	39.0	0.000
<i>11. The main organs of the female reproductive system are the spinal cord, the brain, and the nerves.</i>	824	16.0	882	46.6	14.5	0.000
<i>12. Wet dreams are abnormal.</i>	824	26.0	882	73.2	22.1	0.000
<i>13. When a woman is pregnant, the baby grows in the bladder.</i>	824	56.9	882	65.5	3.7	0.000
<i>14. Every action has a consequence, positive or negative.</i>	824	76.2	882	86.4	5.4	0.000

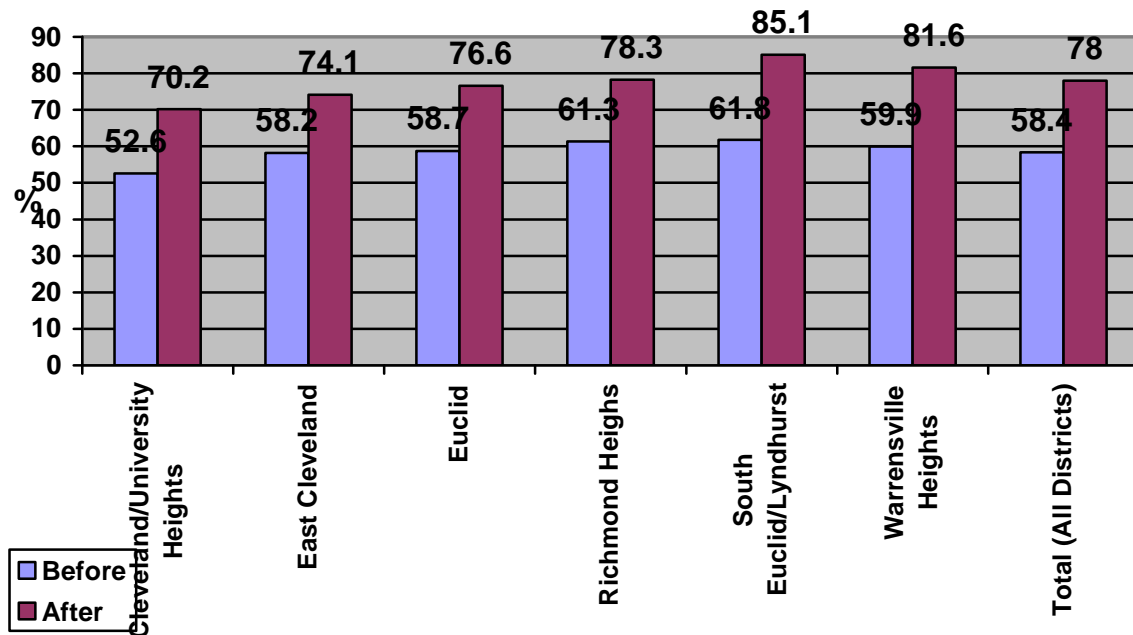


### 3. 6<sup>th</sup> Grade F.L.A.S.H. Test Results

The 6<sup>th</sup> Grade F.L.A.S.H. Test was administered to students in the Cleveland Heights /University Heights, East Cleveland, Euclid, Richmond Heights, South Euclid/Lyndhurst, and Warrensville Heights school districts. Average scores increased from pre-test to post-test for each district. The improvement was statistically significant ( $p < 0.001$ ) for each school district. Please see Table 4 and Figure 3 for more details. Analysis of individual questions on the test showed statistically-significant improvement for each question. Please see Table 5 for more details.

	<i>Pre-test N</i>	<i>Pre-test Correct (%)</i>	<i>Post-test N</i>	<i>Post-test Correct (%)</i>	<i>T</i>	<i>p value (Sig.)</i>
Cleveland/ University Heights	186	52.6%	157	70.2%	7.1	0.000
East Cleveland	159	58.2%	144	74.1%	7.6	0.000
Euclid	362	58.7%	237	76.6%	12.1	0.000
Richmond Heights	55	61.3%	53	78.3%	5.1	0.000
South Euclid/Lyndhurst	186	61.8%	245	85.1%	14.3	0.000
Warrensville Heights	118	59.9%	103	81.6%	8.6	0.000
Total (All Districts)	1066	58.4%	939	78.0%	23.1	0.000

**Figure 3: Test Scores Before and After F.L.A.S.H. 6<sup>th</sup> Grade**



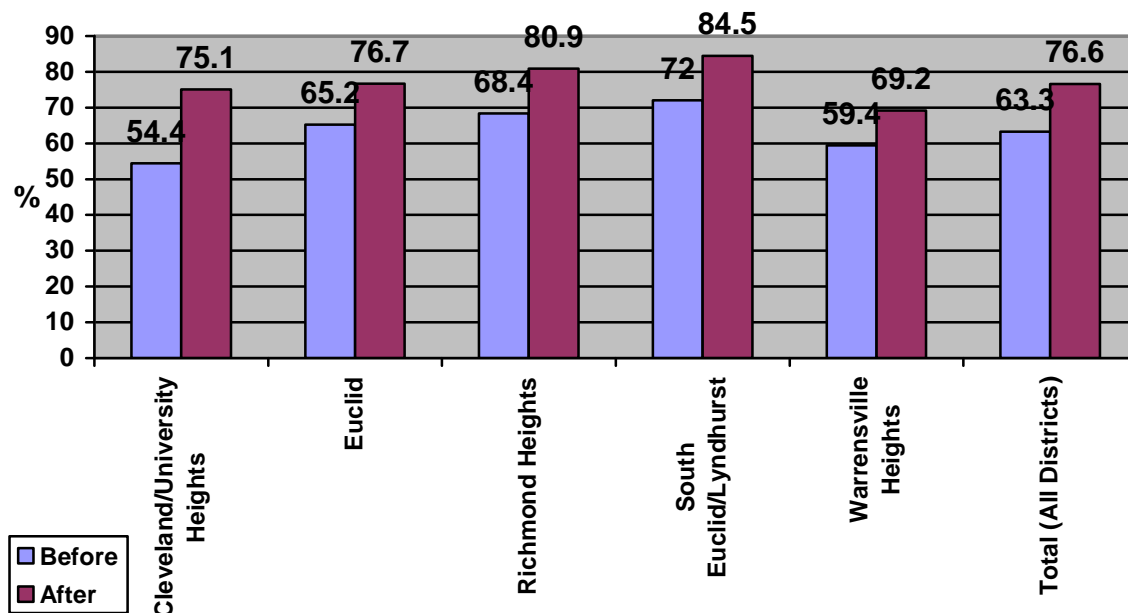
<b>Table 5</b>						
<b>F.L.A.S.H. 6<sup>th</sup> Grade Overall Test Score Results, Individual Items</b>						
	<i>Pretest N</i>	<i>% Correct Before</i>	<i>Posttest N</i>	<i>% Correct After</i>	<i>T</i>	<i>p value (Sig.)</i>
<i>1. Puberty involves physical, emotional, and social changes.</i>	1066	91.0%	939	95.7%	4.3	0.000
<i>2. Mood swings are often part of puberty.</i>	1066	73.0%	939	89.2%	9.6	0.000
<i>3. The pituitary gland releases (sends) the hormone that starts puberty.</i>	1066	41.7%	939	73.2%	15.0	0.000
<i>4. The main organs of the female reproductive system are the spinal cord, the brain, and the nerves.</i>	1066	28.1%	939	54.4%	12.3	0.000
<i>5. Semen is the fluid that contains sperm.</i>	1066	58.5%	939	88.8%	16.6	0.000
<i>6. Wet dreams are abnormal.</i>	1066	48.6%	939	75.0%	12.7	0.000
<i>7. You can get HIV/AIDS by hugging someone who has HIV/AIDS.</i>	1066	74.7%	939	91.5%	10.4	0.000
<i>8. The ovaries contain the egg cells.</i>	1066	59.3%	939	83.9%	12.8	0.000
<i>9. Fraternal twins happen when 2 different eggs are released from the ovaries.</i>	1066	45.8%	939	67.4%	10.0	0.000
<i>10. When a woman is pregnant, the baby grows in the stomach.</i>	1066	50.0%	939	62.7%	5.8	0.000
<i>11. Menstruation (a girls period) is when the uterus sheds or releases its blood-rich lining.</i>	1066	62.8%	939	78.7%	8.0	0.000
<i>12. Sex abuse is always the child's fault.</i>	1066	86.8%	939	93.2%	4.8	0.000
<i>13. HIV/AIDS can be spread by people who look and feel perfectly healthy.</i>	1066	40.2%	939	67.4%	12.7	0.000
<i>14. A miscarriage is the natural way that a woman's body removes a baby that has not survived in her uterus.</i>	1066	56.9%	939	70.7%	6.5	0.000

#### 4. 7<sup>th</sup> Grade Draw the Line Test Results

The 7<sup>th</sup> Grade Draw the Line Test was administered to students in Cleveland Heights / University Heights, Euclid, Richmond Heights, South Euclid/Lyndhurst, and Warrensville Heights. Average scores increased from pre-test to post-test for each school. The improvement was statistically significant ( $p < 0.001$ ) for each school. Table 6 and Figure 4 provide more details. Item-level analysis of the students' responses to individual test questions showed average improvement on each question. Thirteen of the 14 questions had statistically significant improvement at the  $p < 0.05$  or  $p < 0.001$  level. No significant improvement was found for question 2, "all STD's can be prevented". Moreover, at the 7<sup>th</sup> grade level, a high percentage of students had correct responses at pretest to the three questions significant at the  $p < 0.05$  level (questions 8, 9, and 11), suggesting that these test questions were a bit easy for students.

Table 6						
<i>Draw the Line 7th Grade Overall Test Score Results by School District</i>						
	<i>Pre-test N</i>	<i>Pre-test Correct (%)</i>	<i>Post-test N</i>	<i>Post-test Correct (%)</i>	<i>T</i>	<i>p value (Sig.)</i>
Cleveland/ University Heights	140	54.4%	141	75.1%	8.1	0.000
Euclid	350	65.2%	266	76.7%	7.8	0.000
Richmond Heights	74	68.4%	73	80.9%	4.2	0.000
South Euclid/Lyndhurst	62	72.0%	60	84.5%	4.4	0.000
Warrensville Heights	93	59.4%	78	69.2%	3.7	0.000
Total (All Districts)	719	63.3%	618	76.6%	12.8	0.000

**Figure 4: Scores Before and After the Draw the Line 7th Grade**



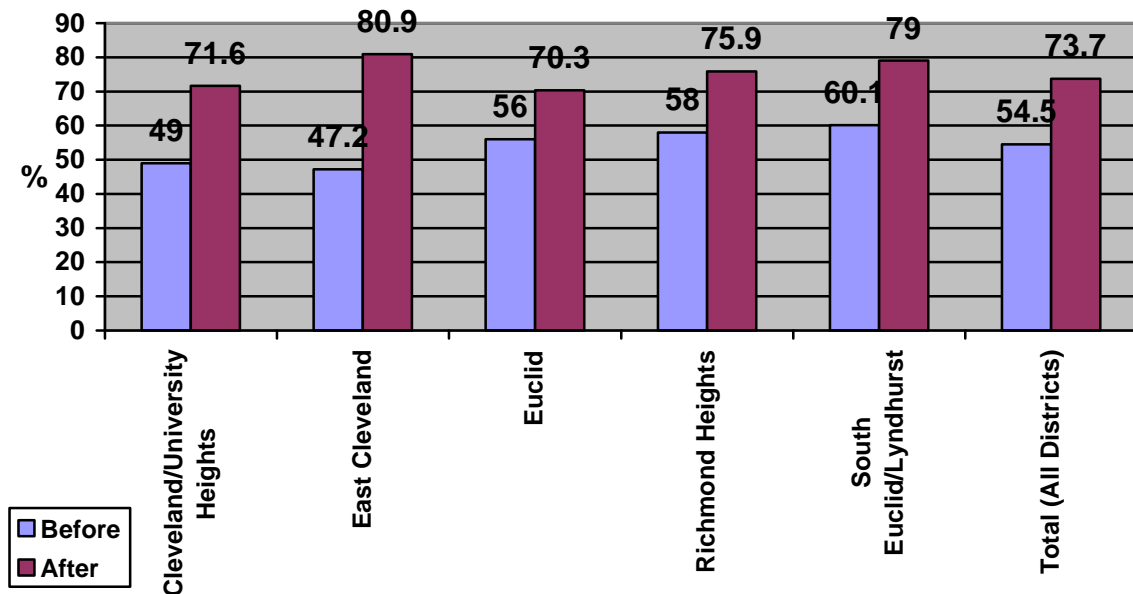
<b>Table 7</b>						
<b>Draw the Line 7th Grade Overall Test Score Results, Individual Items</b>						
	<i>Pretest N</i>	<i>% Correct Before</i>	<i>Posttest N</i>	<i>% Correct After</i>	<i>T</i>	<i>p value (Sig.)</i>
<i>1. All STD's (Sexually Transmitted Diseases) can be cured if discovered early.</i>	718	40.4	615	68.6	10.7	0.000
<i>2. All STD's can be prevented.</i>	715	63.6	616	67.1	1.3	0.192
<i>3. HIV is not an STD.</i>	713	52.6	612	63.4	4.0	0.000
<i>4. Some STD's can be cured and some cannot be cured.</i>	714	61.6	613	75.9	5.7	0.000
<i>5. An additive of a relationship, such as sex, is something that you need to make a relationship healthy.</i>	714	63.6	613	78.1	5.9	0.000
<i>6. A "risky situation" might include either the use of alcohol, drugs, or being alone with your partner.</i>	713	73.2	615	81.6	3.7	0.000
<i>7. When saying "no" your body language is extremely important.</i>	715	71.6	617	87.7	7.5	0.000
<i>8. Peer pressure can make it more difficult to "drawn the line" or "say no".</i>	715	82.5	614	86.6	2.1	0.037
<i>9. Respect is an important component (part) in all relationships.</i>	714	90.2	612	93.6	2.3	0.021
<i>10. Eye contact is not necessary when trying to communicate effectively.</i>	714	65.6	608	71.2	2.2	0.027
<i>11. People always know if they have an STD.</i>	715	82.4	608	90.0	4.0	0.000
<i>12. The labia, clitoris, and ovaries are all part of the female reproductive system.</i>	713	55.3	610	76.6	8.4	0.000
<i>13. One of the ways to avoid getting an STD or AIDS is to use latex condoms.</i>	713	65.8	609	81.6	6.7	0.000
<i>14. The most common symptom of any STD is no symptom at all.</i>	715	23.6	612	60.8	14.7	0.000

## 5. 8<sup>th</sup> Grade *Draw the Line* Test Results

The 8<sup>th</sup> Grade *Draw the Line* test was administered to students in the Cleveland/University Heights, East Cleveland, Euclid, Richmond Heights, and South Euclid/Lyndhurst school districts. Average scores increased from pre-test to post-test for each school district. The improvement was statistically significant ( $p < 0.001$ ) for each district. Table 8 and Figure 5 provide further detail. Analysis of improvement on individual test questions showed statistically-significant improvement on all but two of the questions, questions number 3 and 7. Note that for these two questions, a high percentage of students answered correctly at pre-test, leaving little room for improvement.

	<i>Pre-test N</i>	<i>Pre-test Correct (%)</i>	<i>Post-test N</i>	<i>Post-test Correct (%)</i>	<i>T</i>	<i>p value (Sig.)</i>
Cleveland/University Heights	99	49.0	71	71.6	7.2	0.000
East Cleveland	72	47.2	56	80.9	9.9	0.000
Euclid	291	56.0	242	70.3	9.4	0.000
Richmond Heights	52	58.0	50	75.9	4.7	0.000
South Euclid/Lyndhurst	81	60.1	92	79.0	7.2	0.000
Total	595	54.5	511	73.7	17.1	0.000

**Figure 5: Test Scores Before and After the Draw the Line 8th Grade**



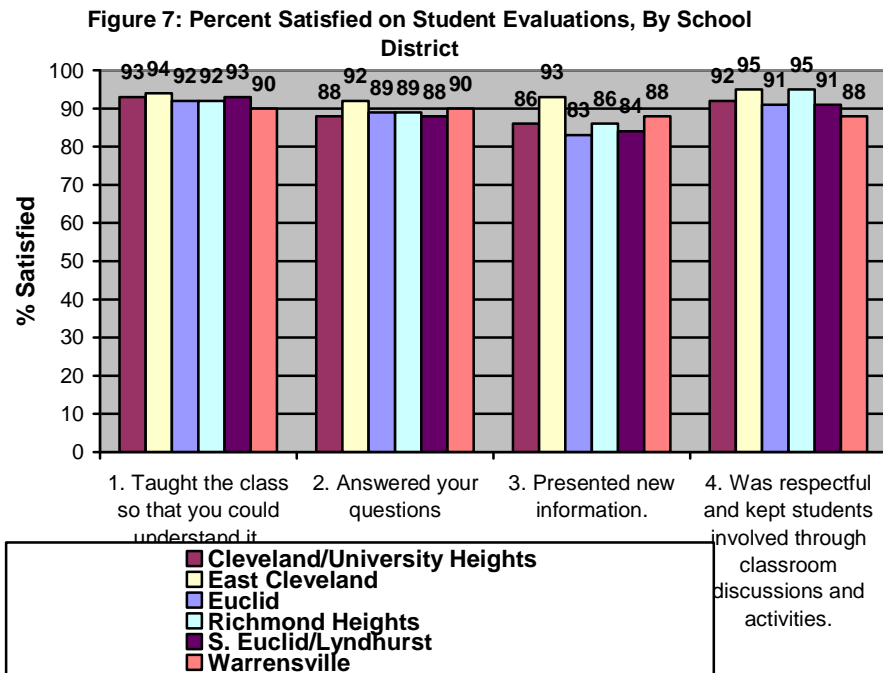
<b>Draw the Line 8th Grade Overall Test Score Results, Individual Items</b>						
	<i>Pretest N</i>	<i>% Correct Before</i>	<i>Posttest N</i>	<i>% Correct After</i>	<i>T</i>	<i>p value (Sig.)</i>
<i>1. Some STD's can make a person infertile or unable to have children.</i>	594	49.0%	511	69.9%	7.2	0.000
<i>2. Being an I.V. (intravenous drug) user puts a person at higher risk for HIV disease.</i>	594	48.0%	510	82.2%	12.8	0.000
<i>3. A healthy relationship needs to be based on a foundation of trust, communication, honesty, respect, commitment, and equality.</i>	591	92.1%	507	93.3%	0.8	0.431
<i>4. There is presently a cure for HIV/AIDS.</i>	591	69.9%	509	91.2%	9.4	0.000
<i>5. HIV/AIDS can be spread by people who look and feel perfectly fine.</i>	589	75.6%	507	88.6%	5.7	0.000
<i>6. Chlamydia is a bacterial STD that can be cured.</i>	586	36.9%	507	62.5%	8.7	0.000
<i>7. If a person tests negative for HIV, that person does not need to use condoms during sex.</i>	590	86.4%	507	90.1%	1.9	0.056
<i>8. The birth control pill protects you from unwanted pregnancy and STD's.</i>	588	55.6%	509	68.4%	4.4	0.000
<i>9. Latex or polyurethane condoms and abstinence are the only two forms of protection that can protect you against pregnancy, STD's, and HIV/AIDS.</i>	588	42.5%	507	66.3%	8.1	0.000
<i>10. Sex with a latex condom and baby oil is a risky situation.</i>	591	27.4%	507	69.6%	15.4	0.000
<i>11. Only people who are sick with AIDS can pass HIV disease to another person.</i>	586	35.7%	506	48.4%	4.3	0.000
<i>12. Once people get an STD, they cannot get the same STD again.</i>	586	48.1%	505	71.9%	8.3	0.000
<i>13. Effective communication steps may include proper body language such as putting hands on hips, crossing arms, and direct eye contact.</i>	582	49.7%	507	61.3%	3.8	0.000
<i>14. The epididymis, prostate, and testes are all part of the male reproductive system.</i>	582	54.5%	508	73.7%	7.6	0.000

## 6. Student Evaluation Surveys

Three thousand twenty-nine *Student Evaluation Surveys* were collected and analyzed this year for Beech Brook’s Comprehensive Sex Education program.

<b>Student Evaluation Surveys Collected</b>					
	<i>5<sup>th</sup> Grade</i>	<i>6<sup>th</sup> Grade</i>	<i>7<sup>th</sup> Grade</i>	<i>8<sup>th</sup> Grade</i>	<i>Total</i>
Cleveland/University Heights	306	139	141	69	655
East Cleveland	202	145	16	57	420
Euclid	0	287	301	244	832
Richmond Heights	0	48	72	48	168
South Euclid/Lyndhurst	260	390	58	76	786
Warrensville	90	78	0	0	168
<b>TOTAL</b>	<b>858</b>	<b>1085</b>	<b>588</b>	<b>494</b>	<b>3029</b>

First, the percent of students indicating satisfaction on each Likert-style item was calculated (the percent of students who responded with of ‘4’ or ‘5’). As the charts below demonstrate, the results reveal satisfaction among the vast majority of students. In the overall analysis, the percent satisfied was highest for question 1, “taught the class so you can understand it.” Satisfaction was lowest on question 3, “presented new information.” The percentage of students agreeing to this question decreased for each grade level, suggesting that more of the material was a review for the higher grade levels. Analyses were also conducted separately for each school district, yielding no consistent trend except that student satisfaction was particularly strong in East Cleveland.



## Student Comments:

Students responded to two open-ended questions: “What was the most important thing you learned?” and “How would you change the program?” Responses to open-ended questions were reviewed to identify major themes.

### *What is the most important thing you learned?*

Almost 2,500 students commented on the “most important” question. The major themes included the following:

- Accurate information about human reproduction, including pregnancy and pregnancy prevention
- Sexually-transmitted disease detection, transmission, and protection
- Emotional and physical symptoms of puberty
- Abstinence and safer sex
- Healthy relationships
- Sexual exploitation and internet safety
- Actions and consequences, how to say no
- Everything

### *How would you change the program?*

There were almost 2,000 student comments for the “what would you change” question. Most students said that they wanted no change, and the program is great as is. The major themes among students who suggested a change were as follows:

- Have more program activities/ student involvement
- Provide more information or explanation
- Expand or make the program longer/year long
- Make the program more comfortable, less graphic, or less embarrassing
- Integrate more visual demonstration/videos
- Answer more questions
- Separate boys and girls
- Have speakers
- Have snacks
- Improve listening/classroom management
- Have a male teacher
- Change classrooms
- Include handouts (e.g. books, condoms)
- Improve teacher demeanor/kindness
- Make shorter

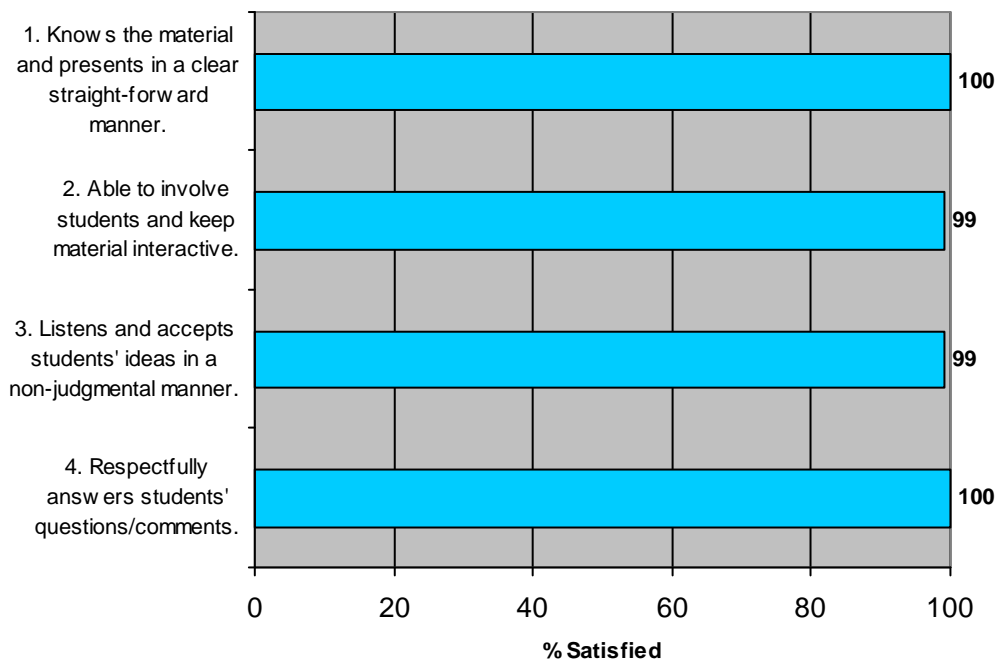


## 7. Teacher Evaluations

Seventy-four *Teacher Evaluation Surveys* were collected this year. The distribution of those surveys by curriculum and school are shown below. The percent satisfied on each response item was calculated. Teacher satisfaction with the program was high across the board. 100% of teachers knew the material and presented in a clear, straightforward manner. 100% agreed that the teacher respectfully answered students' questions. 99% said the CSE teachers listened to student ideas in a non-judgmental manner and kept students involved through interactive materials.

<b>Teacher Evaluation Surveys Collected</b>					
	<i>5<sup>th</sup> Grade</i>	<i>6<sup>th</sup> Grade</i>	<i>7<sup>th</sup> Grade</i>	<i>8<sup>th</sup> Grade</i>	<i>Total</i>
Cleveland/University Heights	10	2	5	6	23
East Cleveland	6	8	1	0	15
Euclid	0	1	0	0	1
Richmond Heights	0	3	3	3	9
South Euclid/Lyndhurst	8	4	4	2	18
Warrensville Heights	4	3	0	1	8
<b>TOTAL</b>	<b>28</b>	<b>21</b>	<b>13</b>	<b>12</b>	<b>74</b>

**Figure 8: Teacher Evaluation Survey Results, All Districts**



### Teacher Comments:

In their comments, teachers were complimentary of the instructors' ability to answer questions frankly and comfortably and to create a safe environment for students. Teachers were complimentary to the instructors' demeanor, organization, competence, sensitivity, and professionalism. The programs were described as informative, age-appropriate, and of crucial importance. In terms of suggestions, teachers said students might benefit from more information on the following topics:

- Bullying
- "Sexting"/Texting and internet issues
- Abuse
- Personal hygiene
- Decision making
- Health relationships
- Puberty/understanding their bodies
- Sexually transmitted diseases
- More time for questions
- Reproduction

## **8. Facilitator Observations**

As a means of monitoring program implementation and fidelity, observers from the Cuyahoga County Board of Health and Beech Brook conducted classroom site visits throughout the school year. A total of 13 observations were conducted for nine trained Beech Brook facilitators. During these visits, observers completed Facilitator Observation Forms assessing the trained facilitator's skills and the behavior of the students in the classroom.

Overall, observers gave the program facilitators high marks finding that 93% of facilitators followed the curriculum syllabus, and 100% provided appropriate answers to all of the students questions. They also found that in 93% of the classrooms, the students seemed engaged and interested in the materials being presented.

N=14	Yes
Was the facilitator on time?	93%
Was the facilitator prepared?	93%
Did the facilitator follow the curriculum/topic?	93%
Did the facilitator invite students to ask questions?	100%
Did the facilitator answer questions appropriately?	100%
Did the facilitator check with students to make sure they understood the materials?	93%
Did the students seem to have difficulty with understanding the topics?	0
Did the students seem interested in the topic that was being presented?	93%

## **9. Parent Meetings**

Parent meetings are designed to help familiarize parents/guardians with the curricula that we will be delivering at their child’s school and to help provide them with some basic information about how to talk to their children about sexual and reproductive health. Topics covered during the program include: growth and development stages, common questions from children, and becoming an “askable” adult. We also provide each parent with a resource packet to take home. At the end of the hour-long program, parents are given a survey to complete.

During the 2010/2011 school year, we had a total of 40 parents/guardians complete a Parent Meeting Evaluation form. Although parent meetings were held at five of our participating school districts, only parents from the following districts completed the survey: Cleveland Heights/University Heights; Euclid; Richmond Heights; and South Euclid/Lyndhurst. Here are some of the key findings:

- 98% of attendees believe that it is important that parents talk to their children about reproductive and sexual health.
- 100% of attendees believe that it is important that schools provide children with medically accurate, age appropriate sexual health information.
- 100% of attendees said that they are more likely to ask their child about what they learned in the class presented by Beech Brook after attending this program.
- When asked “Do you think your child should receive information about the following topics in school?” parents responded with the following information:

	Yes	No	I Don’t Know		Yes	No	I Don’t Know
Sexual Growth and Development	92%		8%	Sexual Abuse and Prevention	97%		3%
Resisting Peer Pressure	97%		3%	Healthy Relationships	94%	3%	3%
Discussions About Families and Gender Roles	78%	15%	7%	HIV/AIDS	92%	3%	5%

## **Conclusion**

Overall, the findings of this evaluation are very positive. Outcome findings using the pre-tests and post-tests of the curricula show students learned the material. Results from the Student and Teacher Evaluations show a high level of satisfaction with the program. This evaluation report suggests the ongoing need, as well as the social importance, of the school-based comprehensive sexual education program funded by the Cuyahoga County Family and Children First Council. Beech Brook and Cuyahoga County Board of Health staff will review these findings carefully for opportunities for performance improvement.

Comprehensive Sex Education Evaluation Report Prepared by:

Julia M. Noveske, M.A.  
Research and Evaluation Supervisor  
Beech Brook

Heather Hoffstetter  
CSE Supervisor  
Beech Brook

Kate Burnett  
Grant Coordinator, Teen Wellness Initiative  
Cuyahoga County Board of Health

All pre-test surveys, post-test surveys, student evaluations, and teacher evaluations were processed and analyzed by Beech Brook Research and Evaluation Supervisor, Julia Noveske.

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Cuyahoga County Family and Children First Council on behalf of the  
Cuyahoga County Office of Health and Human Services**

