Let’s Talk About STIs

By

Jeffrey Bradley
Ann Arbor Skyline High School
Ann Arbor, Michigan

Mario Godoy-Gonzalez
Royal High School
Royal City, Washington

In Collaboration with
Jo Valentine, MSW
Centers for Disease Control and Prevention

Disclaimer: The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Let's Talk about STIs

Jeffrey Bradley
Ann Arbor Skyline High School
Ann Arbor, Michigan

Mario Godoy-Gonzalez
Royal High School
Royal City, Washington

Summary
This lesson is designed for a high school biology or health class to learn about sexually transmitted infections (STIs), understand and evaluate the risks of STIs among teenagers, and discuss the leading strategies to prevent STIs. The culminating activity for this lesson is the creation of informative posters or brochures aimed at the prevention and treatment of STIs in the local community.

Included in this lesson are reading, writing, statistics, and artistic activities that lead to a wide variety of collaboration and team teaching.

Learning Outcomes
• Students will use a Know, Want, How, Learn (KWHL) chart to activate their prior knowledge and build background about STIs. The KWHL chart is a type of graphic organizer that helps students organize what they know and what they want to learn about a topic before and after the research is done.
• Students will use graphic organizers to summarize and share information presented in the Overview Fact Sheet on STIs from the American Social Health Association (ASHA).
• Students will research five (5) reliable websites to find facts and information about STIs.
• Students will create posters or brochures to disseminate information, prevention, and treatment facts associated with STIs.

Materials
1. Sticky-easel pad sheet (30”x25”) 1 each needed per each group of 4 students for the KWHL Activity.
2. Overview Fact Sheet on STIs from ASHA
3. Computers with Internet access (1 for each group of 4 students.)
4. Poster boards (1 for each group interested in making informative posters.)
5. Printer (1 for each groups interested in brochure making.)
6. Post-It® notes to use during the silent conversation on Step 2.

* Use of trade names and commercial sources is for the identification only and does not imply endorsement by the Office of Workforce and Career Development, CDC, nor the U.S. Department of Health and Human Services.

Total Duration
5 hours, 50 minutes
**Procedures**

**Teacher Preparation**
The teacher should select three to five of the STI-related websites listed below prior to the activity. These will be the only websites students will use to gather information throughout this lesson. The teacher will review the contents of each of the chosen websites to grasp an idea of the facts and information they offer.

The teacher should also read the ASHA Overview Fact Sheet on STIs prior the beginning of the lesson. Make two copies of the ASHA Overview Fact Sheet on STIs per group (needed for Step 2). The teacher will need to reserve the use of computers and printer for Step 3.

**Web Resources**

**Title:** The American Social Health Association  
**URL:** [http://www.ashastd.org/learn/learn_overview.cfm](http://www.ashastd.org/learn/learn_overview.cfm)  
**Description:** "Since 1914, the American Social Health Association (ASHA) has been dedicated to improving the health of individuals, families, and communities, with a focus on preventing sexually transmitted diseases and infections (STDs/STIs) and their harmful consequences."

**Title:** The American Social Health Association’s website for teenagers.  
**URL:** [http://www.iwannaknow.org/](http://www.iwannaknow.org/)  
**Description:** Iwannaknow.org answers questions about teen sexual health and sexually transmitted diseases."

**Title:** Nemours Foundation’s KidsHealth and TeenHealth website  
**URL:** [http://kidshealth.org/teensexual_health/STDs/STD.html](http://kidshealth.org/teensexual_health/STDs/STD.html)  
**Description:** TeensHealth was created for teens looking for honest, accurate information and advice about health, relationships, and growing up. We offer a safe, private place that's accessible 24 hours a day to get the doctor-approved [information needed] to understand the changes [teens] may be going through — and to make educated decisions . . ."

**Title:** The CDC National Prevention Information Network  
**Description:** "The CDC National Prevention Information Network (NPIN) is the U.S. reference, referral, and distribution service for information on HIV/AIDS, sexually transmitted diseases (STDs), and tuberculosis (TB). NPIN produces, collects, catalogs, processes, stocks, and disseminates materials and information on HIV/AIDS, STDs, and TB to organizations and people working in those disease fields in international, national, state, and local settings."

**Title:** The CDC’s Healthy Youth Website for Health Topics: Sexual Risks Behavior  
**URL:** [http://www.cdc.gov/healthyyouth/sexualbehaviors/index.htm#1](http://www.cdc.gov/healthyyouth/sexualbehaviors/index.htm#1)  
**Description:** The CDC’s Division of Adolescent and School Health (DASH) provide the latest data and statistics on sexual risks behavior among teenagers. The website reviews, modifies, and updates facts and data periodically.

**Introduction**

The teacher will explain to students that STIs are also known as Sexually Transmitted Diseases or STDs. The teacher will have students create groups of four. The lesson will be introduced by using a KWHL (Know, Want, How, Learn) chart. In order to activate students’ prior knowledge
and build background, the teacher should give each group a sticky easel pad sheet. Divide the sheet into four sections as follows:

1. “K” stands for what students already know. (It includes what students think they know and even any misconceptions) about the topic.
2. “W” stands for what students want to learn about the topic.
3. “H” stands for how will students find information about the topic.
4. “L” stands for what students learn from the lesson.

Each group receives a chart sheet and starts a 3 to 5-minute brainstorming session to complete the “K” chart’s section. Allow students to write down all information they may think they know about the topic. After the 5-minute period, ask for one volunteer per group to share what his or her group wrote. Next, repeat the procedure for “W” section. Lastly, have students write down what they would like to know about the topic.

Note: Every group should decide on three things they would like to learn. Then, groups will complete section “H” with resources. The resources are what the students use (or will be using) to find information and learn the facts they want to know about the topic. Emphasize the importance of searching for reliable and current information in non-commercial websites and resources (particularly those URLs ending in .gov, .edu, and .org). The students must choose resources from the teacher-selected websites noted in the Teacher Preparation section of the lesson. The charts should be on display in the classroom.

**Supplemental Document**

**Title:** K-W-H-L Chart  
**Description:** This chart will help students gather information, solve problems, and think through research topics.

**Step 2:**  
**Duration:** 50 Minutes

After students have completed the first three sections of the chart, they will read the ASHA Overview Fact Sheet on STDs to focus on basic information and facts about STIs, as well as prevention efforts, treatments, and policies.

Students will use a graphic organizer (concept map or idea web) to summarize the main information and facts presented in the fact sheet. At the center or top of the graphic organizer, have them write “STIs” and a brief definition. Students should use every subtitle as a main idea or main concept and add at least five facts or pieces of information to share with the class. Post the graphic organizers around the classroom for all to read.

Finally, using the silent conversation technique — that is — an exchange of comments and ideas written on paper. Allow the students to read all graphic organizers and write comments for each one (compliments, opinions, etc.).

**Web Resource**

**Title:** Overview Fact Sheet on STIs from the American Social Health Association  
**URL:** [http://www.ashastd.org/pdfs/STDOverview_factsheet.pdf](http://www.ashastd.org/pdfs/STDOverview_factsheet.pdf)  
**Description:** A 2-page document that offers an overview on STIs: basic facts, efforts to stop the spread of STIs; costs and consequences; prevention and treatment efforts; public health and policy issues; and facts about STIs among women, youth, and people of color.
Step 3  

Duration: 2 hours, 30 minutes

Using the list of websites provided by the teacher, students should choose one (1) specific STI topic to research in depth (specific diseases with symptoms, main risks, prevention efforts, STIs among men compared to women, STIs among people of color, STIs among teens, etc.)

Students will gather information related to their topic and prepare a first draft of a poster or brochure using either the Poster Evaluation Rubric or Brochure Evaluation Rubric for assessment. Have students turn in the first draft — allowing for an assessment for content, accuracy of data, resources used, spelling, and proofreading. Students cannot start working on their poster or brochure without getting the teacher’s comments and clearance.

Supplemental Documents

Title: Poster Evaluation Rubric
Description: Rubric to be used in the assessment of students’ posters.

Title: Brochure Evaluation Rubric
Description: Rubric to be used in the assessment of students’ brochures.

Conclusion  

Duration: 2 hours, 30 minutes

The groups are now ready to complete the “L” section of the KWHL chart. The “L” section should include what students learned during the lesson. Give emphasis to the clarification of false information or misconceptions that students could have included on the “K” section.

A class show-and-tell poster and brochure session will conclude the lesson. Each group will take turns to have a 10-minute oral presentation in front of the class. Each member of the group will be asked one question by the teacher based on the information provided on the group’s poster or brochure.

Rubric for presentation evaluation is included as supplemental material at the end of the lesson plan.

Supplemental Document

Title: Oral Presentation Rubric
Description: Rubric to be used in the assessment of students’ show and tell oral presentations.

Assessment

Teacher will use either the Poster Evaluation Rubric or the Brochure Evaluation Rubric (Step 3) to assess each group’s knowledge. Evaluate individual students using the Presentation Rubric described in the conclusion.

Modifications

Extensions

One extension idea would be to challenge students to present their poster or brochure in front of another biology or health class.
Students could also make copies of their brochures to distribute among their peers at school. (The teacher should request permission from administration prior to sharing the brochures.)

Encourage students to be smart consumers of information by teaching or reviewing how to read and understand data using the graphs and data offered in most of the websites included in the resources list.

Invite a school nurse or local healthcare provider to talk about the places students can find professional health-care support and treatment (if needed) for STIs.

**Other modifications**

Allow ELL students whose primary language is Spanish to use the information provided in Spanish in the recommended websites to create a Spanish version of their brochure.

Make the materials multilingual by encouraging other ELL students to help students write at least the basic facts, important information, and even sentences for the poster or brochure in their primary language.

This lesson includes reading, writing, statistics, and artistic creativity that may lead to a wide variety of collaboration and team teaching across curriculum. For example, ask an art teacher to give advice on how to create visually attractive posters and brochures or involve math teachers to review graphs using the statistics provided on the websites, etc.

**Education Standards**

**State Standards**

**Washington State’s** HIV/AIDS education (RCW 28A.230.070) and Bully and Harassment Policy (WAC 392-190-056) requirements are supported by the objectives of sex education. The goal of sex education is **safe and healthy people.** These are individuals who:

- Express love and intimacy in appropriate ways
- Avoid exploitative or manipulative relationships
- Recognize their own values and show respect for people with different values
- Take responsibility for and understand the consequences of their own behavior
- Communicate effectively with family, friends and partners
- Talk with a partner about sexual activity before it occurs, including sexual limits
- (Their own and their partner's), contraceptive and condom use, and meaning in the relationship
- Plan effectively for reproductive health and disease prevention regardless of gender
- Seek more information about their health as needed
This chart will help you gather information, solve a problem, or think through your research topic. Fill in this chart with notes, data, and ideas, rather than complete sentences. Use this sheet to help you think through your learning experience.

What is your topic or problem?
What do you hope to prove or discover about it? What is your goal?
What is your central research question or problem?

<table>
<thead>
<tr>
<th>K</th>
<th>What I Know?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>W</th>
<th>What I Want to Know? or What I Want to Solve?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H</th>
<th>How Will I find Information? (Which resources, Web pages, texts, formulas, methods, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L</th>
<th>What I Learned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Brochure Evaluation Rubric**

Let's Talk About STIs  
Jeffrey Bradley and Mario Godoy-Gonzalez  
CDC's 2008 Science Ambassador Program

Teacher’s Name: _____________________  Student’s Name: _____________________

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sources</strong></td>
<td>Careful and accurate records were kept, documenting the source of 95%–100% of the facts and graphics in the brochure.</td>
<td>Careful and accurate records were kept documenting the source of 94%–85% of the facts and graphics in the brochure.</td>
<td>Careful and accurate records were kept documenting the source of 84%–75% of the facts and graphics in the brochure.</td>
<td>Sources are not documented accurately or have not been kept on many facts and graphics.</td>
</tr>
<tr>
<td><strong>Content - Accuracy</strong></td>
<td>All facts in the brochure are accurate.</td>
<td>90%–99% of the facts in the brochure are accurate.</td>
<td>80%–89% of the facts in the brochure are accurate.</td>
<td>Fewer than 80% of the facts in the brochure are accurate.</td>
</tr>
<tr>
<td><strong>Attractiveness and Organization</strong></td>
<td>The brochure has exceptionally attractive formatting and well-organized information.</td>
<td>The brochure has attractive formatting and well-organized information.</td>
<td>The brochure has well-organized information.</td>
<td>The brochure's formatting and organization of material are confusing to the reader.</td>
</tr>
<tr>
<td><strong>Spelling and Proofreading</strong></td>
<td>No spelling errors remain after one person other than the typist reads and corrects the brochure.</td>
<td>No more than one spelling error remains after one person other than the typist reads and corrects the brochure.</td>
<td>No more than three spelling errors remain after one person other than the typist reads and corrects the brochure.</td>
<td>Several (more than three) spelling errors remain in the brochure.</td>
</tr>
<tr>
<td><strong>Knowledge Gained</strong></td>
<td>All students in the group can accurately answer all questions related to facts in the brochure and to technical processes used to create the brochure.</td>
<td>All students in the group can accurately answer most questions related to facts in the brochure and to technical processes used to create the brochure.</td>
<td>Most students in the group can accurately answer most questions related to facts in the brochure and to technical processes used to create the brochure.</td>
<td>Several students in the group appear to have little knowledge about the facts or technical processes used in the brochure.</td>
</tr>
<tr>
<td><strong>Graphics and Pictures</strong></td>
<td>Graphics go well with the text and there is a good mix of text and graphics.</td>
<td>Graphics go well with the text, but there are so many that they distract from the text.</td>
<td>Graphics go well with the text, but there are too few and the brochure seems text-heavy.</td>
<td>Graphics do not go with the accompanying text or they appear as if they were selected at random.</td>
</tr>
<tr>
<td><strong>Writing and Organization</strong></td>
<td>Each section in the brochure has a clear beginning, middle, and end.</td>
<td>Almost all sections of the brochure have a clear beginning, middle, and end.</td>
<td>Most sections of the brochure have a clear beginning, middle, and end.</td>
<td>Less than half of the sections of the brochure have a clear beginning, middle, and end.</td>
</tr>
</tbody>
</table>
# Poster Evaluation Rubric

**Let’s Talk About STIs**  
Jeffrey Bradley and Mario Godoy-Gonzalez  
CDC’s 2008 Science Ambassador Program

Teacher’s Name: ___________________ Student’s Name: _______________________

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title</strong></td>
<td>Title can be read from 6-feet away and is quite creative.</td>
<td>Title can be read from 6-feet away and describes the content well.</td>
<td>Title can be read from 4-feet away and describes the content well.</td>
<td>The title is too small or does not describe the content of the poster well.</td>
</tr>
<tr>
<td><strong>Content - Accuracy</strong></td>
<td>At least 7 accurate facts are displayed on the poster.</td>
<td>5–6 accurate facts are displayed on the poster.</td>
<td>3–4 accurate facts are displayed on the poster.</td>
<td>Less than 3 accurate facts are displayed on the poster.</td>
</tr>
<tr>
<td><strong>Knowledge Gained</strong></td>
<td>Student can answer accurately all questions related to facts in the poster and processes used to create the poster.</td>
<td>Student can answer accurately most questions related to facts in the poster and processes used to create the poster.</td>
<td>Student can answer accurately about 75% of questions related to facts in the poster and processes used to create the poster.</td>
<td>Student appears to have insufficient knowledge about the facts or processes used in the poster.</td>
</tr>
<tr>
<td><strong>Required Elements</strong></td>
<td>The poster includes all required elements, as well as additional information.</td>
<td>All required elements are included on the poster.</td>
<td>All but one of the required elements is included on the poster.</td>
<td>Several required elements were missing.</td>
</tr>
<tr>
<td><strong>Labels</strong></td>
<td>All items of importance on the poster are clearly labeled with labels that can be read from at least 3-feet away.</td>
<td>Almost all items of importance on the poster are clearly labeled with labels that can be read from at least 3-feet away.</td>
<td>Several items of importance on the poster are clearly labeled with labels that can be read from at least 3-feet away.</td>
<td>Labels are too small to view or no important items were labeled.</td>
</tr>
<tr>
<td><strong>Grammar</strong></td>
<td>There are no grammatical errors on the poster.</td>
<td>There is one grammatical error on the poster.</td>
<td>There are two grammatical errors on the poster.</td>
<td>There are more than two grammatical errors on the poster.</td>
</tr>
<tr>
<td><strong>Graphics - Relevance</strong></td>
<td>All graphics are related to the topic and make it easier to understand. All borrowed graphics have a source citation.</td>
<td>All graphics are related to the topic and most make it easier to understand. All borrowed graphics have a source citation.</td>
<td>All graphics relate to the topic. Most borrowed graphics have a source citation.</td>
<td>Graphics do not relate to the topic or several borrowed graphics do not have a source citation.</td>
</tr>
</tbody>
</table>
Oral Presentation on STIs Rubric
Let’s Talk About STIs
Jeffrey Bradley and Mario Godoy-Gonzalez
CDC’s 2008 Science Ambassador Program

Teacher’s Name: __________________ Student’s Name: __________________

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td>Shows a full understanding of the topic.</td>
<td>Shows a good understanding of the topic.</td>
<td>Shows a good understanding of parts of the topic.</td>
<td>Does not seem to understand the topic very well.</td>
</tr>
<tr>
<td><strong>Comprehension</strong></td>
<td>Student is able to accurately answer almost all questions posed by classmates about the topic.</td>
<td>Student is able to accurately answer most questions posed by classmates about the topic.</td>
<td>Student is able to accurately answer a few questions posed by classmates about the topic.</td>
<td>Student is unable to accurately answer questions posed by classmates about the topic.</td>
</tr>
<tr>
<td><strong>Preparedness</strong></td>
<td>Student is completely prepared and has obviously rehearsed.</td>
<td>Student seems mostly prepared, but might have needed a little more rehearsing.</td>
<td>The student is somewhat prepared, but it is clear that rehearsal was lacking.</td>
<td>Student does not seem at all prepared to present.</td>
</tr>
<tr>
<td><strong>Posture and Eye Contact</strong></td>
<td>Stands up straight, looks relaxed and confident. Establishes eye contact with everyone in the room during the presentation.</td>
<td>Stands up straight and establishes eye contact with everyone in the room during the presentation.</td>
<td>Sometimes stands up straight and establishes eye contact.</td>
<td>Slouches or does not look at people during the presentation.</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>Volume is loud enough to be heard by all audience members throughout the presentation.</td>
<td>Volume is loud enough to be heard by all audience members at least 90% of the time.</td>
<td>Volume is loud enough to be heard by all audience members at least 80% of the time.</td>
<td>Volume often too soft to be heard by all audience members.</td>
</tr>
<tr>
<td><strong>Enthusiasm</strong></td>
<td>Facial expressions and body language generate a strong interest and enthusiasm about the topic in others.</td>
<td>Facial expressions and body language sometimes generate a strong interest and enthusiasm about the topic in others.</td>
<td>Facial expressions and body language are used to try to generate enthusiasm, but seem somewhat faked.</td>
<td>Very little use of facial expressions or body language. Did not generate much interest in topic being presented.</td>
</tr>
<tr>
<td><strong>Vocabulary</strong></td>
<td>Uses vocabulary appropriate for the audience. Extends audience vocabulary by defining words that might be new to most of the audience.</td>
<td>Uses vocabulary appropriate for the audience. Includes 1–2 words that are new to most of the audience, but does not define them.</td>
<td>Uses vocabulary appropriate for the audience. Does not include any vocabulary that might be new to the audience.</td>
<td>Uses several (5 or more) words or phrases that are not understood by the audience.</td>
</tr>
</tbody>
</table>