Dear Fellow P²D² Collaborators,

I am eternally grateful to all of the amazing people who have worked so hard to make the P²D² program what it has become: a national endeavor. A major driving force behind this program has always been Eric Bohm. He has been involved in every aspect of the program from the beginning and has been a major influence on all of us. If it were not for the Illinois-Indiana Sea Grant Program (Robin, Terri, Susan, and Beth), and Illinois Environmental Protection Agency (Dave and Dennis) our program would never have had the tools to survive. Each of the following groups of people has been so vital to our success:

- The educators whose curriculums are being showcased (Eric, Mike, Nick, Xavier, Heather, Tara, Betty, Bob, and Keith)
- Pharmacists (Nick, Ken, Erika, Jen, and Ted)
- Police officers (Dale, and Hugh)
- Water treatment managers (Tim, and Karen)
- Wastewater treatment manager (Dave)
- City officials (Scott, Glenn, John, and Chris)
- Hospital marketing specialists (Sue and Deann)
- Family members (Mom, Dad, Jay, Baylee, Taylor, Jen, and John)
- Students (all of them and Jordyn)

…and the thousands of volunteers—there are so many names that need to be mentioned, but I would not know where to end. The good thing is that all of them know who they are and what impact they have made on our society as a result of being a part of the P²D² team.

There is one name, however, that stands out. The P²D² Program would not exist if it were not for my wife Jodee, whose fundamental and yet incredibly profound question of “What do we need to do?,” which still resonates strongly. This program was developed with these three philosophies:

- “Think Globally, Act Locally”
- “Students are the agents of change.”
- “If we all do our part, the world will be a better place.”

Knowing that the P²D² Program is a work in progress, I realize that it will evolve in response to our global needs. I do hope that people will look at it in years to come and see that we gave everything we could to be the catalyst for inspiration, innovation, and knowledge. My life has forever changed as a result of the P²D² Program and its eye-opening impacts. Therefore, I dedicate this material to our children—they are the future of our world.

Paul Ritter
Ecology Teacher/P²D² Program Coordinator
Pontiac Township High School
Pontiac, Illinois
The Nuts and Bolts of the P²D² Program

What is the P²D² Program?
The Prescription Pill and Drug Disposal Program (P²D²) began as a collaborative effort between local pharmacies, officials, and Pontiac Township High School students in Paul Ritter's Ecology class and Eric Bohm's Illinois Studies class. The purpose is to educate the public about the harm done to the environment due to the current prescription and non-prescription drug disposal practices and to provide the community with an alternative disposal approach that ensures the quality of our water for future generations.

History of the Program
The idea for the program started when Mr. Ritter’s wife, Jodee, asked what she should do with some unused prescription pills in their medicine cabinet. Not sure about the correct method of disposal, Mr. Ritter posed the question to his Ecology students and they went right to work. The young ecologists accessed information from the Internet, books, journal articles, and through interviews with scientists. They also enlisted the help of local officials from Illinois American Water Plant Manager Tim Tuley, Pontiac’s Street Superintendent Chris Brock, and Mayor Scott McCoy of Pontiac, IL. Students’ hard work and research-based efforts uncovered startling information pertaining to the effect of pharmaceuticals on the quality of drinking water around the world. They found that scientists with the U. S. Geological Society have detected drugs such as antibiotics, antidepressants, birth control pills, seizure medication, cancer treatments, painkillers, tranquilizers and cholesterol-lowering compounds in varied groundwater sources. (“National Stream Reconnaissance,” http://toxics.usgs.gov/regional/emc/streams.html, USGS Website, May 2008)

Informing the Community through Service-Learning Activities
Students also learned that, currently, wastewater treatment methods in the United States are not designed to remove these chemicals from our water supply. Scientists are worried about the impact to humans; i.e., the chemicals in our water could increase rates of breast, testicular, and prostate cancer, as well as lower sperm counts and disrupt hormones. Furthermore, the scientists also fear that increased levels of antibiotics in our environment could lead to eventual increases in bacterial resistance. Through their investigations, students also discovered that people played a role in the introduction of these chemicals based on a lack of knowledge regarding how to properly dispose of their unwanted medicines. From their own research, the Ecology students put together presentations for their local pharmacies, including Sartoris Super Drugs, K-Mart, Wal-Mart and Walgreen’s Drugstore. These retailers were asked to allow patrons to bring in unused prescription drugs for proper and safe disposal.

Civics and Engagement
The initial project inspired a host of students from other classes to get involved. For example, Mr. Bohm’s Illinois Studies class led a letter-writing campaign to ask federal, state, and local officials to help educate the citizenry about the benefits of proper disposal of their prescription and non-prescription drugs. Numerous legislators, environmental groups, and educators have returned letters and stated they are encouraged by the work of
the Illinois Studies and Ecology students and hope students in their area will also initiate the program.

**Media and Promotion**
The student media group has played an important role on the P²D² team, informing various television and radio stations, which led to a great public response. After contacting a popular radio show in Bloomington, Illinois, word of the Program spread like wildfire. This project has gained statewide attention from officials in Springfield, Illinois, the State capital. The Illinois Studies class has greatly enhanced the P²D² program, furthering its goal of inspiring people of the world to be good stewards and take it upon themselves to help preserve our living (biotic) and non-living (abiotic) natural resources.

**Positive Partnership with Law Enforcement**
The Pontiac Police Department began the drug collection program after learning from Mr. Ritter about its benefits to the community and positive impacts on the local aquatic environment. Mr. Ritter had done extensive research on the issues of water contamination due to pharmaceutical medication being flushed down the drain in people’s homes. In addition, the Salt Lake County Sheriff’s Department assisted in creating the Pontiac Township High School program by providing a sample policy and ideas for the locked collection box.

In addition to the benefits associated with the environment, the Pontiac Police Department felt this program could be used to educate the community about the dangers these medications pose to our youth. This program creates a positive interaction between the community and the police force. It brings people into the police department where they are exposed to additional informational resources available to them.

The pharmaceuticals are retrieved from the locked box by the evidence officer. The Evidence Officer is the only one with keys to retrieve the discarded medications. The pharmaceuticals are retrieved, weighed, and photographed in bulk prior to placing in evidence. The items are transported for incineration with other illegal drugs when quantities dictate.

**P²D² Program Identity**
The P²D² Program has created a logo that should be incorporated into other schools’ instructional and promotional materials that have incorporated this program into their local setting. Please visit the Program’s homepage to access the logo. [http://www.p2d2program.org](http://www.p2d2program.org)
Pill Bottle Phil has been a popular costumed character used at many community events, education conferences, and other public gatherings to get the word out about the P^2D^2 Program.

If you would like to borrow the costume or create one of your own, please contact Paul Ritter at 815/844-6113 or PRitter@pontiac.k12.il.us

P^2D^2: An Award-Winning Education Program

Proclamation by Illinois Governor Pat Quinn—P^2D^2 Day in Illinois
On May 1, 2009, Governor Quinn officially honored the P^2D^2 Program and its significant achievements through a State Proclamation.

2008 Governor’s Green Youth Award for Excellence
The hard work and commitment of students to exhibit environmental leadership and stewardship was recognized. These awards, administered by the Illinois Environmental Protection Agency, acknowledged outstanding environmental protection and conservation projects by Illinois’ young people. “These projects demonstrate the innovative ways young people throughout the state are working to protect Illinois’ environment,” said Illinois EPA Director Doug Scott. “Through these awards, we hope to teach other young people about the importance of environmental protection.”

2008 Lt. Governor’s Environmental Hero Award
On April 21, 2008, Lt. Governor Pat Quinn saluted the students and teachers of Pontiac Township High School who are taking immediate and preemptive action to reduce the amount of prescription and non-prescription drugs in the water supply.

“The students and teachers of Pontiac Township High School are not waiting around for tests to prove that their drinking water may contain trace amounts of drugs,” said Lt. Governor Quinn. “They dove directly into the problem and surfaced with a solution. We want to salute these students and teachers for launching the P^2D^2 Program.”

On October 23, 2008, PTHS received the 2008 Governor’s Pollution Prevention Award, presented by Illinois Governor Rod Blagojevich.

For full text of the press releases recognizing the positive contributions of the P^2D^2 Program, please visit this Webpage, http://www.p2d2program.org/Contacts.html.
Creating a Prescription Drug Disposal Program in Your Own Community

The following information is also described on the P²D² website. An overview of the Program website follows this section.

How to Begin

- Decide which students and which classes you want to be involved in the project.
- Create a list of the pharmacies in your area.
- Have the students research problems associated with pharmaceuticals in the water.
- Instruct students to research currently accepted disposal methods of pharmaceuticals.
- Contact all area pharmacists and local officials and ask them if they would be willing to help discover possible solutions/prevention methods of improper disposal of pharmaceuticals in the environment.
- Have students provide formal presentations of their research to area pharmacists and local officials that will inform them of the possible pharmaceutical disposal methods that are available in your area.
- Develop an informational brochure/poster for display at various businesses with all contact names and numbers. In addition, create a flyer with the same information that can be easily stapled to small paper bags.
- Contact all local media outlets (both print and broadcast) to inform them of the program and its many benefits.
- Branch out to other schools, corporations, etc. and share your program. Serve as a mentor to these newly partnering schools.

Who Should You Partner With?

- Pharmacists
- Public Works Director
- Water Department and Sewage Treatment Plant Manager/Operator
- Solid Waste Management Districts
- Mayor
- County Board Member
- Local Farm Bureau Staff Member
- State Legislator
- U.S. Congressional Leaders
- University Scientists
- Government Agency Researchers
- Media Outlets (radio/tv stations, newspapers, etc.)
How to Work with Your Community to Start a Drug Collection Event

- Generate a list of the special/important people in their community who should become involved in this project.
- Have your students reach out with letters or phone calls.
- Invite these community members to the school to listen to presentations given by the P²D² students.
- Combine pertinent information from everyone’s PowerPoint presentations to create a comprehensive presentation to give to these important community members.
- Have students choose representatives from the various student workgroups in the class to deliver the presentations to each target group; e.g., a pharmacist, wastewater treatment plant official, police officer, representative from the Mayor’s office, City Council member, County Board member, Rotary Club member, etc.
- The representatives (business members, decisionmakers, interested citizens, etc.) should be invited to the school to learn about the P²D² Program because it will bring them to an “environment” that the kids are familiar with and are comfortable in. This approach also demonstrates to the community members the learning environment where the P²D² Program is being taught and implemented.

In preparing their presentations and deciding who to invite, students are always encouraged to think outside the box. One interesting example of an unlikely community business partner was an ATV dealership that wanted to deliver the P²D² message. They connected with Paul Ritter and got ahold of the P²D² logo, which they affixed to the side of their ATV quad vehicle, which brought visibility to the Program with a new audience.

How to Branch Out to Other Schools to Get them Involved in the P²D² Network

So far, the P²D² Program has expanded beyond Illinois to schools and communities in Wisconsin, Washington, Texas, and Florida. Teachers at Pontiac Township High School continue to work diligently to involve schools in many more states.

“We encourage our kids to divide and conquer,” says P²D² Program Coordinator Paul Ritter. “We are always looking for new school partners to give away our P²D² Program.” Ritter and his students will communicate with a town that has expressed an interest or a school that seems to be a good, logical choice. For example, a pharmacist from LaSalle-Peru, IL, asked Ritter about the Program, so he visited him after school hours to talk about it. Ritter has contacted fellow science teachers at other schools; emailed superintendents of other school districts; and called police departments and pharmacies to describe the Program and invite their participation.

An example of P²D² Program expansion is the very successful partnership between Pontiac Township High School and Westfield High School in Houston, Texas. Students in the Spanish National Honor Society learned about the P²D² Program and decided to help spread the messages to the Spanish-speaking community by translating the P²D²
Website into Spanish. Mr. Xavier Salat-Foix was the lead teacher in that project. The description of that Spanish Web development project is found later in this section. The website is located at http://www.p2d2program.org/espanol.html.

Sometimes, a young person will become inspired after learning about P²D² and work on an individual basis to implement the project. For example, a 14 year old student from Reedsburg, Wisconsin, Jordyn Schara, worked in her own community to inform the public and organize a collection event.

Paul Ritter is very interested in getting Indiana schools on board, especially because that state has a very active Household Hazardous Waste Program in each of its counties. The Indiana Department of Environmental Management engages schools to help students develop life-long recycling habits to help preserve natural resources.

**Student Participation at Community Events—Getting the Word Out**

It is important to get the students involved in after-school activities and public events to share their projects and spread the P²D² message. For example, the Pontiac students exhibited the project at the September, 2009 Farm Progress Show in Decatur, IL. P²D² students participated at *It’s Our River Day Festival* held at Navy Pier, Chicago, on September 19, 2009. Students displayed the P²D² rainbarrel to show that water is our most precious resource. This event gave our kids the opportunity to reach out to other young people. Art is a big part of P²D². Not only does the artwork created by students get the message across, but it also provides youth with a skill they can use throughout their life.

P²D² Green Day was an expansion of the Prescription Pill and Drug Disposal Program. About 500 pounds of unused prescription and over the counter medicines were collected for proper disposal in McLean County. P²D² students were involved in delivering the important program messages as they helped pharmacists hand out magnets and flyers to inform visitors of proper disposal methods. They also helped evaluate the effectiveness of this collection event by counting the number of cars that came through to drop off unwanted medicines.

There are many examples of approaches to publicize these collection events found on Illinois-Indiana Sea Grant’s Unwanted Medicine Toolkit Page—*Disposal of Unwanted Medicines: A Resource for Action in Your Community*. Check out these helpful approaches, including sample flyers, postcards, and other public outreach materials at http://www.iisgcp.org/unwantedmeds/ch4.html.
**Pontiac Police Department’s Collection Policy**

*Drug Collection/Disposal Program*
1. The drug collection and disposal program provides a safe disposal location for citizens to properly dispose of unused prescription medications.
2. Pontiac Police Department will provide a steel mailbox style collection box in which citizens may deposit these medications.
3. The Evidence Officer will be the sole possessor of keys to the collection box.

*Collection Box Specifications*
Standard steel mail courier box. Pontiac High School used one that is 20” W x 49” H x 26” D. Package drop opening: 15-3/4” W x 7” H. Storage area: 19” W x 28” H x 21” D, 160 lbs. Cost: approximately $550.

**Pontiac Pharmacy’s Collection Policy for Non-controlled, Over-the-counter Medicine**

1. Individuals take their unused and unwanted prescription and non-prescription drugs to participating pharmacies.
2. Pharmacists take the pharmaceuticals and place them into secure bins. Please note that only licensed pharmacists and assistants handle the returned pharmaceuticals.
3. When the bins fill up, pharmacists send them off to be incinerated.
4. The company that incinerates the pharmaceuticals creates energy that is used to power homes and businesses.
The P²D² Program website features award-winning student projects and activity highlights, as well as the history of the program. The site links the latest news articles on the topic of impacts from improper disposal of unwanted medicines. Also included is a link to a useful background toolkit for student research—Illinois-Indiana Sea Grant’s Disposal of Unwanted Medicines: A Resource for Action in Your Community.

The site describes the important role that pharmacists and law enforcement officials play as partners with high schools in the successful execution of the program. Through this website, helpful suggestions are provided for teachers who wish to start a P²D² service-learning program in their community.
Environmental Science

$P^2D^2$

Pontiac Prescription Drug Disposal:
A Cooperative Program between High School Students, Local Officials, and Pharmacies
www.p2d2program.org

Lesson Plan
Environmental Science Lesson—P²D²

Creating an Effective Presentation to Inform the Public

Objectives

*Students will:*

1. Understand the effects of unused pharmaceuticals on the environment, citizens, and issues surrounding people ingesting medicine that was not meant for them.

2. Learn the proper methods of pharmaceutical disposal.

3. Serve as an important agent for change to help protect and improve the quality of our waters.

4. Learn how to defend their research findings to an audience.

5. Learn how to make PowerPoint presentations, posters, and billboards or other large displays that will deliver messages to help people understand how medicines can be harmful to people, pets, and the environment.

Based on successful attainment of these objectives, the P²D² Program will:

- **Bring awareness** to every community of the potential dangers of improper disposal of pharmaceuticals.
- **Educate** citizens in reducing and eliminating pharmaceuticals from entering our environment.
- **Initiate** positive working relationships between schools, pharmacies, communities, local government, and city officials.
- **Enable** communities to improve their physical environments and quality of life through environmental education.
- **Reduce** consumer waste in the environment.
- **Assess** quantity of household pharmaceutical waste disposed of in an area.
- **Engage** all involved in the production, distribution, sales and consumption of medicines in Environmentally-preferable practices.
- **Foster** community health by providing an opportunity to work together towards a common goal.

Illinois Learning Standards

The standards associated with this lesson are extensive and may be found in this publication in the “Alignment to State and National Science Standards” section.

Procedure

Day 1 – Establish four student teams. Direct the students to research problems associated with pharmaceuticals in the water. Have the students use computers, books, magazines, and leading researchers to gather any and all information about the issues related to pharmaceuticals in the water.

Day 2 – Have the students continue investigating the problem and have them keep their records in a binder. The students will also create a list of pharmacies in the area.

Day 3 - Instruct students to research current accepted disposal methods of pharmaceuticals, as they continue investigating the problem, and document findings in a binder.

Day 4 – Students will continue to research the current accepted disposal methods of pharmaceuticals. Direct the students to contact all area pharmacists and local officials and ask them if they would be willing to collaborate in determining possible solutions/prevention methods of improper disposal of pharmaceuticals in the environment. Send out formal invitations to participate in this community stewardship project.
Days 5-7 – Instruct the students on best practices for creating effective PowerPoint presentations. (This instruction can take more than one day if needed.) Have the students develop their information into a PowerPoint presentation. (Depending on the student’s abilities, this can take several school days to complete.)

Day 8 - Students will give formal presentations of their research to area pharmacists and local officials that inform them of the best practices for disposal methods available in your area. (Refer to P²D² Guidelines for Standard Operating Procedures regarding Collection of Unused/Expired Meds—Role of the Pharmacy.)

Day 9-10 – Students will develop an informational brochure/poster to display at local businesses. This product should include contact information for the public to learn about how and where they can bring their unwanted medicine. Participating sponsors should be acknowledged. In addition, students will create a flyer with this information that can be easily stapled to small paper bags for public distribution.

Day 11 – Students will contact local media outlets (print and broadcast) to inform them of this program and its benefits. In addition, students can create informational videos that will be linked on the P²D² website and on YouTube™ for broader dissemination. (Sample descriptions of selected videos posted on YouTube can be found in the section, “Sample Student Stewardship Projects to Initiate Action.”)

Day 12 – Students will develop a billboard to put up near or on the interstate, or other high-traffic area. (Ask a billboard company if they will donate a billboard; P²D² teachers have found they will say yes or produce one at minimal cost.)

Day 13 – Share this project with other schools, corporations, etc. and share your program/curriculum unit(s). Identify community medicine collection events or other local festivals and events where students can distribute information to educate the public about safe disposal practices, for example Pontiac Township High School students participated in the P²D² Green Day in partnership with St. Joseph Medical Center (see promotional flyer following this lesson plan).

Developed By: Paul Ritter, Science Department, Pontiac Township High School
Information for Student Presentations to Pharmacists: P2D2 Guidelines for Standard Operating Procedure for Pharmacists Regarding Collection of Unused/Expired Meds

Role of the Pharmacy

- Individuals take their unused and unwanted prescription and non-prescription drugs to participating pharmacies.
- Pharmacists take the pharmaceuticals and place them into secure bins. Please note that only licensed pharmacists and assistants handle the returned pharmaceuticals.
- When the bins fill up, pharmacists send them off to be incinerated.
- The company that incinerates the pharmaceuticals creates energy that is used to power homes and businesses.

1. Have a three-vial box system in place
   A. The first box is for pills.
      - Take the tablets or capsules out of the vials or container.
      - Pour into a lined vial box.
   B. The second box is for creams and ointments.
      - Most liquids are stable with others.
      - Pour out similar products into one bottle, making it full.
      - Cough meds can be added together; over-the-counter products like Pepto Bismol can be combined.
      - Inhalers like Nasonex and Flonase: Take off the caps or mouthpiece to free up space.
      - This should be in a lined vial box also.
   C. The third box is for blister packs.
      - Take the product out of the box.
      - Do not put in PPI or other papers.
      - This should be in a vial box.
   D. You can also have a fourth and fifth smaller box; one for mercury thermometers and one for aerosol products.
      - Keep these separate from the rest.
      - With any inhaler, remove the mouthpiece to free up space.

2. You can drop the boxes off to the designated area at the collection site for proper placement in the EPA-provided drums.
Returned medication is separated at the pharmacy counter into four basic classifications for disposal. Boxes and containers are removed and can be added to normal recycling.

1. Pills and Tablets
2. Liquids, Creams, and Ointments
3. Blister packs
4. Pressurized Inhalers
# Rubric: Creating an Effective P²D² Power Point Presentation (Days 5-7)

**Student Name:** ____________________________  

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<thead>
<tr>
<th>CATEGORY</th>
<th>5</th>
<th>3</th>
<th>1</th>
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</thead>
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<tr>
<td>6-7 slides</td>
<td>6-7 slides</td>
<td>4-5 slides</td>
<td>2-3 slides</td>
<td>under 2 slides</td>
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<td>Color and Font</td>
<td>Font is readable and color on all pages.</td>
<td>Font is readable and color on all pages on at least 5 pages.</td>
<td>Font is readable and color on all pages on at least 3 pages.</td>
<td>Font is readable and color on all pages under 3 pages.</td>
</tr>
<tr>
<td>Creativity and Animation</td>
<td>Slides are unique in creativity and show animation.</td>
<td>Slides are unique in creativity and show animation on at least 5 pages.</td>
<td>Slides are unique in creativity and show animation on at least 3 pages.</td>
<td>Slides are unique in creativity and show animation under 3 pages.</td>
</tr>
<tr>
<td>Reasons for P²D²</td>
<td>More than five reasons.</td>
<td>Five reasons.</td>
<td>Three reasons.</td>
<td>Under three reasons.</td>
</tr>
<tr>
<td>Participation</td>
<td>Participated all days.</td>
<td>Participated four out of five days.</td>
<td>Participated three out of five days.</td>
<td>Participated under three days.</td>
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<tr>
<td>Time</td>
<td>Finished on time.</td>
<td>Took one extra day.</td>
<td>Took two extra days.</td>
<td>Took more than two extra days.</td>
</tr>
<tr>
<td>Research</td>
<td>More than five sources.</td>
<td>At least five sources.</td>
<td>At least three sources.</td>
<td>Under three sources.</td>
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<td>Organization</td>
<td>More than five slides are organized and have no grammar errors.</td>
<td>At least five slides are organized and have under three errors.</td>
<td>At least three slides are organized and have under five errors.</td>
<td>under three slides are organized and have more than five errors.</td>
</tr>
<tr>
<td>Effort</td>
<td>Effort out of everyone all five days.</td>
<td>Effort out of everyone for three days.</td>
<td>Effort out of everyone for one day.</td>
<td>No effort was shown.</td>
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# Rubric: Creating an Effective P²D² Poster Project (Days 9-10)

Maximum Points: 50

## Student Name: ____________________________

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<td>Quote</td>
<td>There is a quote about pharmaceuticals</td>
<td>There is a quote about pharmaceuticals</td>
<td>There is no quote about pharmaceuticals</td>
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<td>Color</td>
<td>Color is on entire poster.</td>
<td>Color is on 3/4 of poster.</td>
<td>Color is on 1/2 of poster.</td>
<td>No color</td>
</tr>
<tr>
<td>Picture</td>
<td>There is a picture of a pharmaceutical.</td>
<td>N/A</td>
<td>N/A</td>
<td>No picture</td>
</tr>
<tr>
<td>Creativity</td>
<td>Poster is unique and creative in</td>
<td>Poster shows creativity but not unique.</td>
<td>Poster shows little creativity and not</td>
<td>No creativity</td>
</tr>
<tr>
<td></td>
<td>design.</td>
<td></td>
<td>unique.</td>
<td></td>
</tr>
<tr>
<td>Sponsors</td>
<td>All sponsors are listed.</td>
<td>More than 1 sponsor is missing.</td>
<td>More than 2 sponsors are missing.</td>
<td>No sponsors are listed.</td>
</tr>
<tr>
<td>Acknowledgment of the high school ecology</td>
<td>Pontiac Township High School Ecology</td>
<td>N/A</td>
<td>N/A</td>
<td>Pontiac Township High School</td>
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<tr>
<td></td>
<td>class is on poster.</td>
<td></td>
<td></td>
<td>Ecology class is not on poster.</td>
</tr>
<tr>
<td>Student group identified</td>
<td>Student names are acknowledged.</td>
<td>N/A</td>
<td>N/A</td>
<td>No Name</td>
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<td>Prescription Pill and Drug Disposal Program</td>
<td>Prescription Pill and Drug Disposal</td>
<td>N/A</td>
<td>N/A</td>
<td>Prescription Pill and Drug</td>
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<tr>
<td>Acknowledgment</td>
<td>Program is on the poster.</td>
<td></td>
<td></td>
<td>Disposal Program is not on the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>poster.</td>
</tr>
<tr>
<td>Use of attention-getter to effectively deliver</td>
<td>Catch phrase is on the poster.</td>
<td>N/A</td>
<td>N/A</td>
<td>No Catch phrase is on the poster.</td>
</tr>
<tr>
<td>the message</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Grammar</td>
<td>All Grammar is correct.</td>
<td>One Grammatical Error</td>
<td>Two Grammatical Errors</td>
<td>More than two Grammatical Errors</td>
</tr>
</tbody>
</table>
Illinois Studies*  

P²D²  

Pontiac Prescription Drug Disposal:  
A Cooperative Program between High School Students, Local Officials, and Pharmacies  
www.p2p2program.org  

Lesson Plans  

* This can be easily adapted for civics/social studies classes.
Lesson 1
The Powers and Duties of Illinois Government

Objectives
Students will:
1. Explain how the various levels of government work together to solve problems.
2. Discuss the role of citizens and the press in the operation of government, especially as types of government work together.
3. Explain the concept of “separation of powers.”
4. Describe the basic function of each branch of government.
5. Explain some of the basic services that Illinois provides.

Illinois Learning Standards
14.A.4 Analyze how local, state, and national governments serve the purposes for which they were created.
14.A.5 Analyze the consequences of participation and non-participation in the electoral process.
14.D.5+ Interpret a variety of public policies and issues from the perspectives of different individuals and groups.

Materials
Whiteboard
“Why Do We Need Government” from the Governing Illinois Textbook, 2003

Procedure
1. Ask students to come up with a list of reasons why we need government. (“Why Do We Need Government?” pp. 19-20)
   Have students write their reasons on the whiteboard.
   Discuss as a class.
2. Ask students to list the three branches of government on the whiteboard
   Ask students: Why are the powers of government separated?
   Review the powers of each branch
3. Ask students what kind of complaints they have heard about the government.
   Think, pair, share.
4. Discuss the services provided by the government.

Assessments
1. Ask students if the above services could be provided privately (by corporations, for instance).
   What would be the advantages? The disadvantages?
2. Have students read pp 17-29 in Governing Illinois and complete the accompanying study guides.
   Discuss answers as a class.

Developed By: Eric Bohm, Social Studies Department, Pontiac Township High School
P2D2 Program-15
Lesson 2
Local Governments of Illinois

Objectives
Students will:
1. Understand the importance of local government on their lives.
2. Explain the different types of local governments in Illinois, and how they can and do work together (and sometimes against each other).
3. Discuss how local government is influenced, and how individuals, like the students themselves, can be effective in doing so.

Illinois Learning Standards
14.A.4 Analyze how local, state, and national governments serve the purposes for which they were created.
17.D.4 Explain how processes of spatial change have affected human history.
14.B.5 Use methods of social science inquiry to study the development and functions of social systems and report conclusions to a larger audience.

Materials
A Plat book
Governing Illinois Textbook

Procedure
1. List the units of local government in Illinois.
   Discuss each governmental unit.
2. Discuss the advantages and disadvantages of having so many units of local government.
   Ask students: Do the advantages outweigh the disadvantages, or vice-versa?
3. Inform students that in other states, local government units take on larger ranges of function.
   Ask students: Can they, then, do these multiple jobs as well?
4. Ask students: How can the units of local government affect us (the class) as we sit here (in the classroom) right now? What rule has each governing unit made that affects us (the class) right now?
   Have students come up with a list.
   Think, pair, share.
5. Ask students: What services are provided by our local government? Are there any services you wish were improved upon? How would you improve them if you were in a leadership position?
6. Ask the mayor to come in and discuss his/her role in the local government. Make sure students have prepared questions prior to the event.

Assessments
1. Have students look in a Plat book and find out what township they live in, describe the geographical features, and explain the jobs of all the township trustees.
2. Have students read pp 93-110 in Governing Illinois and complete the accompanying study guides.

Developed By: Eric Bohm, Social Studies Department, Pontiac Township High School
P2D2 Program-16
Lesson 3

Getting Involved: Beginning the Process of the Prescription Pill and Drug Disposal Program

Objectives

Students will:
1. Understand the importance of individual participation to the function of our democracy.
2. Describe the ways in which students can participate in government.
3. Understand government in terms of it being our possession vs. a mysterious entity unattached to us.

Illinois Learning Standards

14.A.4 Analyze how local, state, and national governments serve the purposes for which they were created.
14.A.5 Analyze the consequences of participation and non-participation in the electoral process.
15.B.4b Analyze the impact of current events on consumer prices.
15.C.4b Explain the importance of research, development, invention, technology and entrepreneurship to the United States economy.
15.E.4a Explain why government may intervene in a market economy.
16.A.4a Analyze and report historical events to determine cause and effect relationships.
17.B.4a Explain the dynamic interactions within and among the Earth’s physical systems including variation, productivity and constructive and deconstructive processes.
17.B.5 Analyze international issues and problems using ecosystems and physical geography concepts.
17.D.5 Analyze the historical development of a current issue involving the interaction of people and geographic factors.
18.B.5 Use methods of social science inquiry to study the development and functions of social systems and report conclusions to a larger audience.

Materials

Whiteboard
U.S. Geological Survey article

Procedure

1. Have students read U.S. Geological Survey article.
   Have students write down main points of the article.
   Have students write down main points on the whiteboard.
   Discuss as a class.
2. Ask students what they can do to help keep water safe for future generations.
   Brainstorm ideas.

Assessments

1. Ask students pointed questions about the article.
2. Have students create a list of ways they can reduce, reuse, or recycle products.
   Discuss as a class.

Developed By: Eric Bohm, Social Studies Department, Pontiac Township High School
Lesson 4
Getting Involved: Beginning the Prescription Pill and Drug Disposal Program

Objectives
Students will:
1. Understand the importance of individual participation to the function of our democracy.
2. Describe the ways in which students can participate in government.
3. Understand government in terms of it being our possession vs. a mysterious entity unattached to us.

Illinois Learning Standards
14.A.4 Analyze how local, state, and national governments serve the purposes for which they were created.
14.C.5 Analyze the consequences of participation and non-participation in the electoral process.
15.B.4b Analyze the impact of current events on consumer prices.
15.C.4b Explain the importance of research, development, invention, technology and entrepreneurship to the United States economy.
15.E.4a Explain why government may intervene in a market economy.
16.A.4a Analyze and report historical events to determine cause and effect relationships.
17.B.4a Explain the dynamic interactions within and among the Earth’s physical systems including variation, productivity and constructive and destructive processes.
17.B.5 Analyze international issues and problems using ecosystems and physical geography concepts.
17.D.5 Analyze the historical development of a current issue involving the interaction of people and geographic factors.
18.B.5 Use methods of social science inquiry to study the development and functions of social systems and report conclusions to a larger audience.

Materials
Whiteboard
“Creating an Action Plan” Guideline worksheet
Governing Illinois

Procedure
1. Inform students of the Prescription Drug and Disposal program and its benefits.
2. Ask students who should be informed about the program.
   Make a list on the whiteboard.
3. Break class up into the following groups:
   Research and Development
   Media
   Documentation
   IL Representatives
     Republicans
     Democrats
IL Senators
  Republicans
  Democrats
U.S. Representatives
  Committee Members
  Subcommittee Members
U.S. Senators
  Committee Members
  Subcommittee Members

4. Discuss the roles of committees and subcommittees. Show students how to access information pertaining to committee and subcommittee assignments.

5. Discuss what an Action Plan is and how it is important when working on a project.

Assessment
1. Have students get into their groups and develop an Action Plan.
   Discuss with each group.
Creating an Action Plan

Team Names

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________

Action Plan Title

________________________________________

________________________________________

________________________________________

________________________________________

Final Goal

________________________________________

________________________________________

________________________________________

________________________________________

List a goal for each week spent on this project. (How will you plan your work and work your plan?)

________________________________________

________________________________________

________________________________________

________________________________________

List 5 or more actions steps that you plan to take to help accomplish your goals.

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________

What are some possible problems that you think could make it difficult for you to accomplish your project goals?

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________
What actions will help you overcome these obstacles?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

List the community partner/s that will work with your team.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

What role will each team member be responsible for? List the person’s name and job title.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Answer the following questions with your team. Be prepared to share your responses with the larger group.

What went well and what needs improvement?

________________________________________________________________________
________________________________________________________________________

How did the experience affect you?

________________________________________________________________________

What impact will it have on your future actions?

________________________________________________________________________

This Action Plan Template was developed by Terri Halley, Illinois-Indiana Sea Grant Program.
Lesson 5

Getting Involved: Preparing an Informational Letter and Fax to Get the Word Out about the Prescription Pill and Drug Disposal Program

Objectives

Students will:
1. Understand the importance of individual participation to the function of our democracy.
2. Describe the ways in which students can participate in government.
3. Understand government in terms of it being our possession vs. a mysterious entity unattached to us.

Illinois Learning Standards

14.A.4 Analyze how local, state, and national governments serve the purposes for which they were created.
14.C.5 Analyze the consequences of participation and non-participation in the electoral process.
15.B.4b Analyze the impact of current events on consumer prices.
15.C.4b Explain the importance of research, development, invention, technology and entrepreneurship to the United States economy.
15.E.4a Explain why government may intervene in a market economy.
16.A.4a Analyze and report historical events to determine cause and effect relationships.
17.B.4a Explain the dynamic interactions within and among the Earth’s physical systems including variation, productivity and constructive and destructive processes.
17.B.5 Analyze international issues and problems using ecosystems and physical geography concepts.
17.D.5 Analyze the historical development of a current issue involving the interaction of people and geographic factors.
18.B.5 Use methods of social science inquiry to study the development and functions of social systems and report conclusions to a larger audience.

Materials

Computer
Paper
“Letter Writing Evaluation Sheet” rubric

Procedure

1. In the computer lab, have students find the names, addresses, e-mail addresses, phone numbers, and other contact information for each of their assigned groups determined in the previous lesson.
2. Have each group create a spreadsheet with all the contact information. (This will be vital to stay organized.)
3. Have the Documentation Group work on a letter that can be sent out to all members of the Illinois General Assembly.
4. Students who are in groups that will be contacting U.S senators and representatives will need to track down fax numbers.
Assessments
1. Have students explain, in a paragraph, what they have specifically done in their group.
2. Refer to “Letter Writing Evaluation Sheet” for sample rubric.

Developed By: Eric Bohm, Social Studies Department, Pontiac Township High School
Lesson 6
Getting Involved: Class Critique of an Informational Letter and Fax about the Prescription Pill and Drug Disposal Program

Objectives
Students will:
1. Understand the importance of individual participation to the function of our democracy.
2. Describe the ways in which students can participate in government.
3. Understand government in terms of it being our possession vs. a mysterious entity unattached to us.

Illinois Learning Standards
14.A.4 Analyze how local, state, and national governments serve the purposes for which they were created.
14.C.5 Analyze the consequences of participation and non-participation in the electoral process.
15.B.4b Analyze the impact of current events on consumer prices.
15.C.4b Explain the importance of research, development, invention, technology and entrepreneurship to the United States economy.
15.E.4a Explain why government may intervene in a market economy.
16.A.4a Analyze and report historical events to determine cause and effect relationships.
17.B.4a Explain the dynamic interactions within and among the Earth’s physical systems including variation, productivity and constructive and destructive processes.
17.B.5 Analyze international issues and problems using ecosystems and physical geography concepts.
17.D.5 Analyze the historical development of a current issue involving the interaction of people and geographic factors.
18.B.5 Use methods of social science inquiry to study the development and functions of social systems and report conclusions to a larger audience.

Materials
Computer
Paper
Address labels
Envelopes
Fax forms
“Letter Writing Evaluation Sheet” rubric

Procedure (on reverse side)
Procedure
1. Hand out a copy of the letter created by the Documentation Group.
   Review as a class.
   Make changes as needed.
   Save on shared drive
2. In the computer lab, have groups access letter on the shared drive and set it up as a
   form letter using their spreadsheet.
3. Have students print out their letters and sign.
4. Have students create address labels.
5. Have students prepare the letters to be sent out.
6. U.S. Senators and Representatives Groups will need to fill out a fax form as they will
   not be sending via USPS.

Assessments
1. Have students write an essay rating each of their group members and explain how they
   have contributed to the goals of the group.
2. Have students write an essay explaining the importance of a program such as P^2D^2.
3. Refer to the “Letter Writing Evaluation Sheet” for sample rubric.
Rubric for Lessons 5 and 6

Letter Writing Evaluation Sheet

Name: ____________________
Subject: ___________________
Date: _____________________

Focus: Score _____
• Introductory section (main idea) is in proper format and appropriate length.
• Topic (subject matter) is clearly stated.
• Purpose is clearly implied.
• Unity or oneness is maintained throughout.
• Conclusion brings sense of finality.

Comments:

Support/Elaboration: Score _____
• Each idea is fully addressed.
• Support is valid and effective.
• Details or elaboration and/or examples are given.
• Relevant vocabulary is used effectively.

Comments:

Organization: Score _____
• Composition is logically organized.
• Clarifying devices or transitions are used effectively.

Comments:

Conventions: Score _____
• No major grammatical errors are made.
• Minor mechanical errors are avoided.
• No slang or nonstandard English is included in dialogue.

Comments:

Integration: (Point value is often doubled.) Score _____
• All elements combine for a strong overall effect.
• Generally strong writing occurs throughout.
• Goal of assignment is achieved.
• Students’ evaluation of the effectiveness of their project as a whole.

Comments:

Total Score _____
Lesson 7
Getting Involved: Sending an Informational Letter and Fax about the Prescription Pill and Drug Disposal Program

Objectives
Students will:
1. Understand the importance of individual participation to the function of our democracy.
2. Describe the ways in which students can participate in government.
3. Understand government in terms of it being our possession vs. a mysterious entity unattached to us.

Illinois Learning Standards
14.A.4 Analyze how local, state, and national governments serve the purposes for which they were created.
14.C.5 Analyze the consequences of participation and non-participation in the electoral process.
15.B.4b Analyze the impact of current events on consumer prices.
15.C.4b Explain the importance of research, development, invention, technology and entrepreneurship to the United States economy.
15.E.4a Explain why government may intervene in a market economy.
16.A.4a Analyze and report historical events to determine cause and effect relationships.
17.B.4a Explain the dynamic interactions within and among the Earth’s physical systems including variation, productivity and constructive and destructive processes.
17.B.5 Analyze international issues and problems using ecosystems and physical geography concepts.
17.D.5 Analyze the historical development of a current issue involving the interaction of people and geographic factors.
18.B.5 Use methods of social science inquiry to study the development and functions of social systems and report conclusions to a larger audience.

Materials
Computer
Stamps
Fax machine
“Assessment Guide for Oral Presentation” rubric

Procedure
1. Send out letters to all members of the Illinois General Assembly.
2. Have students go to the office and send out the faxes to all members of the committees and subcommittees they selected.
Assessments
1. Have groups create a PowerPoint presentation that explains, in detail, the processes they went through to complete their group’s objectives.
2. Refer to “Assessment Guide for Oral Presentations” for sample rubric for this lesson.
Rubric for Lesson 7

Assessment Guide for Oral Presentations

Group Assignment: ________________________________________________
Group Members: __________________________________________________

|                                                                 5 | 4 | 3 | 2 | 1 |
|---------------------------------------------------------------|---|---|---|---|---|

<table>
<thead>
<tr>
<th><strong>Group Assessment</strong></th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Needs Improvement</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The group made good use of its preparation time.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. The presentation reflected analysis of the issues under consideration.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. The presentation was coherent and persuasive.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. The group incorporated relevant sections of the background reading into its presentation.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. The group’s presenters spoke clearly, maintained eye contact, and made an effort to hold the attention of their audience.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. The presentation incorporated contributions from all the members of the group.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Individual Assessment</strong></th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Needs Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The student cooperated with other group members.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2. The student was well-prepared to meet his or her responsibilities.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3. The student made a significant contribution to the group's presentation.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>