



# Maryland State Department of Education Service-Learning Special Education Unit

**G.E.R.M.**

*(Growing in Environments Resistant to Microbes)*

**Primary Subject:** Health

**Grade Level:** 4<sup>th</sup> - 8<sup>th</sup> (Alt-MSA)

**Additional Subject Area Connections:** Reading/English/Language Arts, Science

**Unit Title:** GERM: Creating a Healthy Environment

**Type(s) of Service:** Direct, Indirect and/or Advocacy

*Students participating in service-learning projects have a wide range of abilities, challenges, and needs. Teachers and parents may provide a greater amount of guidance and assistance before, during, and at project completion. Procedures and steps described in the unit may be enhanced, modified, or excluded, as dictated by the needs of the students. Various assistive technologies may be used to meet the individual needs of students in order to complete the project.*

**Unit Description:** According to the Centers for Disease Control and Prevention, nearly 22 million school days are lost annually due to the common cold alone. (CDC, 1996) This situation can be mitigated through the teaching and application of hygienic practices. This unit will help students understand the importance of hygienic practices, and increase awareness of how germs are transmitted. This knowledge will be used to engage in various service-learning projects to reduce the spread of germs and promote better health.

## Maryland State Curriculum Indicators

### Health Education:

Grade 6 5.B.2.a- Give examples of practices that promote safe living in the home, in the bathroom, using electrical/power tools, being home alone, or on the internet.

Grade 5 7.A.1.b- Identify the modes of transmission, such as air, touches, food, and body fluids.

Grade 5- 3.A.1- Identify and practice health enhancing behaviors to reduce health risks for safer, healthier lives.

Grade 5- 3.B.1.a- Identify current health care issues and the health services available in the school.

Grade 7- 3.B.1.b- Describe health care services, such as physicians/specialists, local health departments, hospitals, rehabilitation facilities, and holistic medicines.

Grade 8- 3.A.1- Access and evaluate health enhancing behaviors and reduce health risks to live safer, healthier lives.

**Additional Indicators Follow**

### **Potential Service-Learning Action Experiences:**

- Hold a health fair for the school and community. (*direct, indirect, advocacy*)
- Conduct a soap drive. (*indirect*)
- Petition to get hand sanitizer dispensers throughout the school. (*advocacy*)
- Make and display posters on health issues or present healthy habit skits. (*advocacy*)
- Create and broadcast public service announcements (PSAs). (*advocacy*)

# Alignment with Maryland's Best Practices of Service-Learning:

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### 1. Meet a recognized community need

Students will create an awareness campaign of safe health practices to prevent the spread of communicable diseases such as the flu and the common cold. The students will organize a health fair focused on the prevention of the spread of germs. Students will collect soap and hand sanitizer and distribute it to participants at the health fair.

### 2. Achieve curricular objectives through service-learning

Students will use oral, written, and visual presentations to demonstrate their understanding of the importance of limiting the transmission of communicable diseases. They will identify current health care issues and the modes of transmission of communicable diseases.

Students will create solutions to address the issues. They will evaluate healthy behaviors and practice safe living in the home and school. Students will practice skills in sequencing, comprehension, picture or word recognition, and communication.

### 3. Reflect throughout the service-learning experience

Students will complete a pre-/post- survey checklist of their awareness of germs. They will also keep a learning log which will consist of notes and materials about what they are learning about germs. They are also going to record observations of daily interactions of how people might unknowingly spread germs. This can either be written or illustrated. Students can categorize healthy practices and non-healthy practices. As a final reflection, they can compare their pre- and post-surveys to create a picture book of the top 10 ways the spread of germs can be prevented. Students will also reflect on how their service-learning project is helping their community and what it means to be a good citizen.



### 4. Develop student responsibility (Students have opportunities to make decisions about the service-learning project.)

Students will work in committees to organize a health fair, conduct a soap and hand sanitizer drive, and send invitations to community businesses and local health agencies to speak at the school and donate soap. The students will create persuasive letters, make how-to posters, and produce public service announcements and skits on reducing the spread of germs.

**5. Establish community partnerships**

Partnerships will be established with local health agencies, health care facilities (to provide speakers for the health fair and literature), as well as with businesses (for donations of soap & sanitizers).

**6. Plan ahead for service-learning**

Students will plan an outline of activities they can undertake and schedule them during the health fair. Students could watch a film such as “Osmosis Jones.” Students and teachers could make a story, using pictures or a tool such as Boardmaker, describing how a person can get sick. Letters should be sent home to parents describing the service-learning project.

**7. Equip students with knowledge and skills needed for service**

Students need to have planning, organization, and communication skills in order to achieve their objectives. They should also have some knowledge of computer and Internet use. They will also need training on maintaining a daily record of their learning. Students will not only acquire knowledge of prevention of the spread of germs, but they will also show application of this knowledge. Students will discuss service-learning and the importance of helping others and being civically active.



**Additional Maryland State Curriculum Indicators Met**

**Reading/ELA:**

Grade 6- 4.A.2- Compose oral, written, and visual presentations that express personal ideas, inform, and persuade.

**Science:**

Grade 5-1.A.1- Gather and question data from many different forms of scientific investigations which include reviewing appropriate print resources, observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments.

Grade 6-1.A.1-Design, analyze, or carry out simple investigations and formulate appropriate conclusions based on data obtained or provided.

# Procedures with Resources:

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*These procedures represent activities that can be incorporated into a service-learning lesson on this specific topic, but can be changed to meet individual classroom interests or varying community needs. You are encouraged to adapt these procedures to fit your unique classroom and community and to solicit student input in planning and decision making.*

### I. Project Steps

1. Develop a pre- and post-assessment survey to determine safe-health practices at school and at home.
2. Introduce the service-learning project by discussing service-learning, being a good citizen and helping others, and safe-health practices with students and engaging them in activities to explore these themes. Resources to support these topics can be found at [www.dhmh.state.md.us/swineflu/](http://www.dhmh.state.md.us/swineflu/) and [www.servicelearning.org/resources/bring\\_learning/](http://www.servicelearning.org/resources/bring_learning/).
3. Introduce the concept of safe-health practices at school and at home to minimize the spread of communicable disease. Students can begin by reviewing proper hand washing techniques. Some good resources on this topic include: <http://www.scrubclub.org/home.aspx>, <http://www.henrythehand.com/>
4. Invite a guest speaker and/or have students draw their concept of a germ as strategies for exploring this topic.
5. Brainstorm as a whole group ways to address the health issue of spreading communicable diseases. The students could analyze school bathrooms for proper hand washing accessories (operational soap dispensers, functioning sinks), design and post posters on hand washing, even analyze rest rooms in public places.
6. Have students determine the most effective way to collect bars of soap or disinfectant liquids. They can solicit donations from local businesses or hold a collection drive.

### Additional Interdisciplinary Connections



- **Reading/ELA** – letter writing and oral, written communication. Components of a persuasive writing piece, audience, view point

7. Work with the school nurse as a resource on your project.
8. Plan the health fair/germ prevention campaign.
9. Send a letter home to parents explaining the service-learning project and its goals.
10. Design posters for school-wide distribution promoting the health fair/germ prevention campaign.
11. Hold health fair/germ prevention campaign activities (set-up, event, clean-up).
12. Engage in discussions and analysis of the progress of the project, its impact, and things that you might do differently if you were to carry out the project in the future.
13. Write thank you letters to community sponsors.
14. Continue reflection activities by having students complete the post-survey, finish their learning logs, and by completing the *Maryland's Seven Best Practices of Service-Learning Evaluation Tool* which can be found at [http://www.marylandpublicschools.org/MSDE/programs/servicelearning/docs/best\\_practices.htm](http://www.marylandpublicschools.org/MSDE/programs/servicelearning/docs/best_practices.htm).

## **II. Links to Resources**

- ⌘ <http://kidshealth.org/kid/>
- ⌘ <http://www.foodsafety.gov/~dms/cbook.html>--coloring book
- ⌘ <http://www.cdc.gov/flu/school/>
- ⌘ <http://kids.gov> -health, fitness, and safety and other topics by grade level
- ⌘ <http://www.amnh.org/nationalcenter/infection/>
- ⌘ <http://www.kidsandcooking.co.uk/TeachingKidsFoodHygiene.html>
- ⌘ <http://fooddetectives.com/welcome.html>
- ⌘ <http://archive.food.gov.uk/hea/index2.html>

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