



Service Learning Lesson Guide

*Lesson Topic: Helmets – Teen-to-Teen
Don't Lose it All in a Fall*

What's the Point?

This lesson is designed to be used by high school students to educate middle school students about the dangers of riding a bicycle without a helmet or a helmet that doesn't fit properly. Teachers can adapt it to fit specific curriculum goals and time constraints. This lesson can be incorporated into a variety of courses including: Public Speaking, Physics, Statistics, Anatomy and Physiology and Civics.

Objectives

- Students will learn how to properly fit a bicycle helmet.
- Students will learn about traumatic brain injuries and how lives change as a result of those injuries.
- Students will commit to wearing properly fitted helmets when out bicycling.
- Students can examine why more teenagers and adults don't wear bicycle helmets.
- Students can look for ways communities and advocacy groups across the country are working to change this and how they can help.

Materials

- Data on bicycle crashes and injuries
- Materials for creating experiments
- Videos on how to properly fit helmets
- Bicycle helmets
- Handouts for teens

Interest Grabber

Think of provocative questions to ask the middle school students. For example, "Would you jump off a four story building with no safety net?" Most students will answer no but this risk is similar to the risk many make if they ride a bicycle without a helmet. Falling off a bicycle without a helmet is similar to hitting the pavement at the end of a two to four story fall. Conduct an informal survey of middle school aged children before your presentation. Spend time observing groups of them to see how many you notice wearing helmets when riding a bicycle. You can use this anecdotal information in your presentation.

Teaching Steps

1. Share some of the statistics related to bicycle crashes with the class. Use the sources on the NOYS website for example statistics.
2. Visit www.thinkfirst.org to learn about how traumatic brain injuries are caused and how they impact the lives of survivors. Share what you learn with the class.
3. Use an experiment to demonstrate how fragile the brain is and how a helmet provides protection. Examples of demonstration projects can be found in "Demonstrating Bicycle Helmet Effectiveness: A How-To Guide" by the National Highway Traffic Safety Administration (NHTSA). A link to the report can be found on the NOYS website.
4. Watch the NHTSA videos on proper fit for bicycle helmets. Fit a helmet yourself and talk through the installation steps until you can show someone else how to fit it properly.
5. Create a survey to ask the middle school students before and after your presentation to see what they learned and if they will modify their behavior.
6. Determine the best way to share what you have learned with middle school students. For example:
 - Put together a presentation that highlights the dangers of riding a bicycle without a helmet. Break into smaller groups and conduct experiments to highlight how fragile the brain is and capture their attention.
 - Share some of the statistics related to bicycle crashes. Use the sources found on the NOYS website for statistics. You could also make a notes sheet for students to complete.
 - Brainstorm with middle school students to get them thinking about how their lives would be impacted whether they were killed, injured or disfigured in a bicycle crash.
 - Play some video testimony to show first-hand how a traumatic brain injury can impact a young person's life. The Think First Foundation has video clips of young people talking about how brain injuries have impacted their lives. They are short clips that can be used in your outreach efforts.

Teaching Steps Continued

- Ask students how many wear helmets. Ask someone who wears one if they know how to check if it is on properly. Talk about the six steps to a proper fit and show a video clip of demonstrating this. A link to a NHTSA video can be found on the NOYS website.
7. Distribute “Roll Model” brochures on proper fit and pledges to wear bicycle helmets to students. Ask them to share what they learned today with their parents.
 8. Ask students to fill out the post-presentation survey and collect them.
 9. Back at school, review the results of the surveys. What did the middle school students learn? What messages impacted them the most? How many indicated they would change behavior? Discuss how you could change the presentation to make it more impactful.
 10. Think about your own behavior. Do you use a bicycle helmet when you ride? Are you willing to be a “Roll Model”?
 11. Think about ways to reach more young people with this life saving message. Maybe start a helmet drive/donation during the

Evaluation

The activities and follow-up can be evaluated using a teacher-created rubric. Student participation in the lesson and discussions can also be evaluated using a teacher-created rubric.