Bicycle ridership and safety

LESSON 1

EQUIPMENT
- Parent introduction letter / permission slip
- Video: *First Gear*
- Pre-test (1 per student)
- Chalk/chalkboard

OVERVIEW

Purpose:
This lesson introduces traffic laws, the basics of bicycling in traffic and proper cycling conduct.

Topics covered:
- Introduction
- Basic bicycle etiquette via video
- Traffic laws
- Intersection behavior
- Traffic signs

Options:
Teachers may also consider contacting the local branch of Trauma Nurses Talk Tough (TNTT) to get an assembly presentation to kickoff a bicycle safety week. The TNTT presentation is not part of the curriculum. TNTT, the Bicycle Transportation Alliance or another advocacy organization may also conduct at-cost helmet sales. Teachers must promote the helmet sales to their own and other classrooms prior to the sale to ensure their students bring money (see page 89 for resources).

STATEWIDE EDUCATION GOALS

Health
Controllable health risks
- Understand and apply prevention and risk reduction strategies
- Predict consequences of behaviors

Physical education
Self-management and social behavior
- Apply rules, procedures and etiquette that are safe and effective for specific activities / situations

Bicycle ridership and safety

BACKGROUND

WHAT: A brief description of the ten day program and an optional investigative theme that may accompany the program.

PURPOSE: To briefly introduce the students to the Bicycle Safety Program.

LESSON

PROGRAM OVERVIEW AND INTRODUCTION TO INVESTIGATION

Introduce the Bicycle Safety Program (BSP) to the students. The following paragraphs will provide ideas for introducing the BSP:

> The BSP is a hands-on curriculum with in-class lessons and on-the-bicycle training that will be done outside. We will have various speakers and people helping out including: police officers, a person (name) from an organization that advocates for bicycles — the Bicycle Transportation Alliance (BTA) — and other people to help us learn about cycling. Helmets will be for sale for $5-8. We will have a bike to school day, an assembly, and after school rides (announce only if these will actually happen).

Distribute permission slip to all students. They are required to get the slips signed by a parent or guardian and returned. See sample in *Handouts*, page 99.

> The first four lessons (in-class lessons) will teach us how to "drive a bike". We will learn some basic laws and skills that teach us how to drive. Yes, the same rules apply for driving a car and riding a bike. Safety rules include: stopping at stop signs, riding on the right side of the road and using hand signals. In the last six lessons, we will go outside and ride bicycles. We will learn basic riding skills, including: riding with one hand, quick stops and quick turns, and how to properly ride in traffic, again — how to drive a bike!
>
> If the class performs well we will go on rides through the community.

LESSON

BICYCLE INVESTIGATION

Optional theme

In addition to learning how to ride bikes we are going to launch an investigation to study our school's travel and bicycle behavior. Do our schoolmates ride bikes to school? We will go and measure the daily bicycle ridership to school (activities that involve charts and graphs, see *Handouts* chapter) and then promote cycling; we will observe changes in travel behavior. We will also investigate other facilities that influence bicycling, e.g. does our school have a safe place to park our bikes? Is it easy to bike to school or is there too much traffic? We will figure out ways to make our school a better place to bike. We will try to implement some of these solutions during our bike-to-school day promotion and by talking with the principal about the need for such changes.

BACKGROUND

For additional information on promoting bicycling to schools, contact the BTA at (503) 226-0676.

BACKGROUND

WHAT: A written test to test the knowledge of the students prior to the implementation of the curriculum.

PURPOSE: The pre-test is strictly for informational purposes. It will be graded and evaluated in comparison with the post-test.

LESSON

ACTIVITY 15 MINUTES

PRE-TEST

1. Introduce the pre-test. Ask students if the know what a pre-tests is; what is a post-test? Tell students they have 15 minutes to complete the pre-test which will be graded but just for informational purposes, it will not reflect on their grade. At the end of the curriculum, we will then take the EXACT SAME TEST and compare their grades to that of the pre-test. This process will allow us to evaluate the effectiveness of the curriculum. In other words, we are testing you on your knowledge and testing ourselves on how well we are teaching you.

2. Administer the pre-test. Give them 15 minutes. Many students will not finish, advise them to skip questions that they do not know at all and go back if they have time. This is good test-taking practice.

Note: Consider administering the Pre-test prior to the arrival of the BTA instructor to save time.

LESSON

ACTIVITY

12-18 MINUTES

BICYCLE VIDEO

MATERIALS

- *First Gear* (21 minutes)

❶ *First Gear* is a 21 minute bicycle safety video designed for 10 year olds and up. The video moves sequentially, starting with bicycle safety checks, equipment and gear before discussing traffic safety. The video focuses on traffic laws to teach cyclists how to be safe and predictable cyclists. The video introduces terminology that will be used throughout this curriculum in order to convey basic traffic concepts.

❷ Discuss the video for a few minutes afterwards. Include the importance of riding by the laws: riding by the laws makes you safe and predictable so you do not get into crashes with cars. The helmet aspect of safety is taught in *Lesson 2*.

Ask the students to tell you a new concept they learned from the video. It is also a good idea to review hand signals with the class.

OTHER VIDEOS (SEE RESOURCES, PAGE 96, FOR ORDERING INFORMATION):

The Bicycle Zone (3 – 5th grade)
Pedal Smarts (5 – 7th grade)

BACKGROUND

WHAT: Show the class a bicycle safety video and discuss.

PURPOSE: To introduce new bicycle safety and helmet safety issues to students. Concepts will be applied later in curriculum in order to properly learn to ride bicycles on the road.

First Gear can be obtained through the Bicycle Transportation Alliance, (503) 226-0676, or www.bta4bikes.org

BACKGROUND

WHAT: A discussion about laws, enforcement and punishment. A second discussion explains the traffic laws that bicyclists must follow.

PURPOSE: Teach students about laws so they will understand the consequences of violation and abide by them generally. Teach students traffic laws and regulations so they will be safer riders and avoid potential crashes.

Users of the road must be aware of the traffic that is around them. As has been discussed in the video, bicyclists generally ride on the right side of the road. When changing lanes or preparing for a left hand turn bicyclists look back into the lane to see if any other traffic is there.

Looking back: explain the scenarios where you use looking back by drawing a two-lane, two-way street with intersection on the board. Demonstrate that the cyclist is riding in the right lane in position 3 for a left hand turn and wants to move into position 1 for a left turn. The cyclist must:

- First look for traffic by looking behind.
- If no traffic, the bicyclist signals left and looks back again.
- Then moves through position 2 into position 1.
- Stop at the stop sign and follow right-of-way rules.
- Finally, the cyclist signals left and turns from position 1 into position 3 on the adjacent street.

LESSON

Traffic laws

WHY DO WE HAVE LAWS?

Question: What is a law?

"A rule or regulation set up by a government to be followed by all of the people…"

There are many different types of laws. Some laws are made to prevent people from stealing and for punishing them if they do…Some laws are made to help keep people safe and healthy….

The logic behind a law is to set rules that we are supposed to follow. The rules are generally set up so people can remain safe and healthy.

Example: One example is the requirement that people must have a driver's license before driving a car.

This law ensures that people understand the rules of driving and that they should drive safely so they do not crash and kill someone. Another example is a law that prohibits drunk driving. A drunk driver is a person who has consumed alcohol and then drives a car. Alcohol decreases people's reaction speeds and ability to make decisions, increasing the chance for a crash and thus making it very dangerous to drive.

Of course there are certain consequences to breaking laws. Because it is very dangerous to drive while under the influence of alcohol, when drunk drivers are caught they are usually arrested, go to court and often go to prison and lose their drivers license. If they crash and hurt or kill a person they may go to prison for many years.

There is also a law REQUIRING people under that age of 16 to wear a bicycle helmet whenever riding a bike. The penalty for this offense is a $50 fine. That is a lot of money to pay for not wearing a helmet. But how often do the police enforce this law? (explain enforcement; use their bed times or eating their vegetables as an example). So enforcement and severity of punishment are two major considerations when thinking about our laws.

Let's look more closely at these laws so we can all get a better understanding of laws:

Law: Must wear a bike helmet.
Reason: To protect our heads.
If violated: $50 fine

Law: Must stop at a red light.
Reason: There are certain traffic rules that everyone follows and if you violate them you put yourself and other people in danger.
If violated: $150 fine; if you cause a crash you might have to pay for the other person's property. If you kill another person, motorist, bicyclist or pedestrian, you may have to go to prison even if you didn't mean it.

Law: No drinking and driving.
Reason: To prevent crashes due to drivers who are intoxicated and operate a vehicle.
If violated: Possibility of paying a $1,000 fine, losing driver's license, and going to prison.

Why do different laws have different punishments? If a law has a lesser punishment than another, are they both important?

Being responsible for your actions is called liability. You are responsible (liable) for the way you behave and if you break a rule you may go to the principal's office, get detention, etc. Liability is important because if you injure someone or their property and break the law, you are liable for the damages.

Example: you don't stop at a stop sign, and get into a crash.

This means that you may have to replace their property, pay for a doctor, pay a fine, or go to jail.

SO, laws are put in place to create order, to keep us safe and protect our stuff. In traffic, laws are essential so others can predict what we are going to do. Bicycles must ride like all other vehicles to remain Predictable and Safe!

Vocabulary for bike laws

Law: a rule or regulation set up by a government to be followed by all of the people.

Enforcement: the actions taken by police officers or other persons instructed to make sure people do not break rules or laws. For example, a referee enforces the rules in a basketball game and calls a foul if rules are broken.

Severity of punishment: the degree of punishment one may receive when violating a rule or law. In a basketball game the team often gets foul shots when a rule is broken. A $50 fine is the punishment for not wearing a bicycle helmet.

Liability: to be responsible for an action. You are responsible (liable) for the way you behave and if you break a rule you may go to the principal's office for a punishment.

Be predictable: to act so other people will know what you are going to do. "You are so predictable, you always want pizza for dinner." Bicyclist must travel in a predictable manner so other motorists and cyclists know what they will do. Predictability prevents crashes.

Bicycle ridership and safety

BACKGROUND | LESSON

The five key rules for bikes

1. Ride in the Same Direction as Traffic
2. Obey All Traffic Signs
3. Ride on the Road
4. Use Hand Signals
5. Stay to the Right

ORS means Oregon Revised Statute.

Skateboards, rollerblades and scooters in some areas have the same responsibilities as bicycles, which means that they have to follow the rules of the road, not act like a walker. This means that they have to give audible calls when passing walkers on the sidewalk and have to be especially careful when traveling across intersections because cars do not expect people in the crosswalk to be moving quickly through the intersection.

DISCUSSION 5 MINUTES

WHAT ARE THE TRAFFIC LAWS?

Bikes generally must follow the same rules of the road as automobiles. Therefore when we teach you the rules of the road for bicycling, you are also learning how to drive a car. Riding on the sidewalk is dangerous and is only recommended for children ages 9 and under.

A "bicycle" means a vehicle. *ORS 801.150.*

Helmets always first. The Helmet Law: "A person commits an offense… if the person is under 16 years of age…operates or rides a bicycle…on premises open to the public and is not wearing protective headgear." *ORS 814.408, Section 2.*

Bicycles must act like cars. "Every person riding a bicycle upon a public way is subject to the provisions applicable to and has the same rights and duties as the driver of any other vehicle." *ORS 814.400.*

There are some valid reasons for riding with traffic/like an automobile:

- The law requires cyclists to ride with traffic (in the same direction as cars).
- Motorists do not expect to see traffic coming in the opposite direction. In order to be seen bicyclists must ride where motorists expect to see traffic, on the right.
- Wrong-way riding results in nearly one fourth of all car/bike crashes.
- Traffic control devices (i.e. stop signs and traffic lights) face the normal flow of traffic.
- Cyclists who ride with the traffic, on the right, face the danger of a head-on crash with a wrong-way rider.

Bike lanes. In Oregon bicyclists are supposed to ride in bike lanes when they are provided unless when turning or if the bicyclist doesn't feel that it is safe. While in the bike lane, bicyclists possess additional right-of-way privileges. In fact, bicyclists can legally pass on the right side of cars and cars are not allowed to turn in front of bicyclists in bike lanes. Bicyclists should still remain cautious of cars when in bike lanes.

LESSON

BACKGROUND

ACTIVITY

10 MINUTES

RIDING ON THE ROAD AND THROUGH INTERSECTIONS

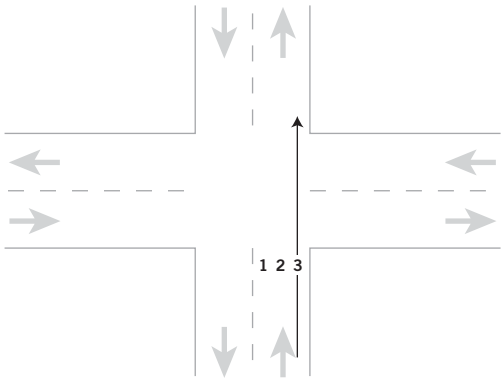
MATERIALS

- Intersection overhead (see page 99, *Lesson 4*)
- Intersection worksheets, 1 per student

❶ As said above, bicyclists must ride on the right. But what happens when they travel through intersections? We will draw the proper road positioning for each type of turn.

❷ Teachers should draw intersections or use the intersection handout (see page 99) to make an overhead or worksheets for students to label along with them. Each lane of travel should be labeled with three positions, 1 (inside), 2 (middle), 3 (outside or right) and the direction of travel should be indicated. When demonstrating turning, show normal placement of travel (on right), and then proper turning positions. Follow the below examples.

Intersection 1. Straight



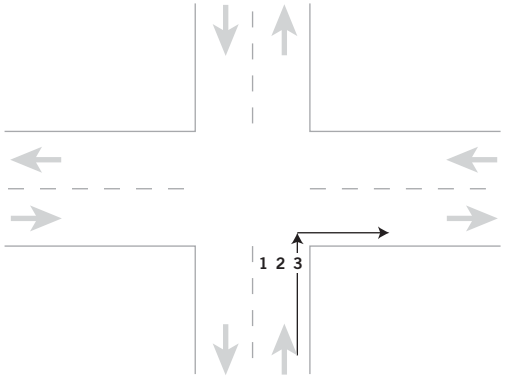
The bicyclist normally rides in position 3, 3 feet from the curb, and remains in position 3 when going straight through an intersection. Bicyclists often move into position 2 when there are parked cars or hazards on the side of the road.

BACKGROUND

Lane striping on a one-way street is usually a while dotted line in the middle of lanes; two way streets have yellow lines in the middle separating travel directions.

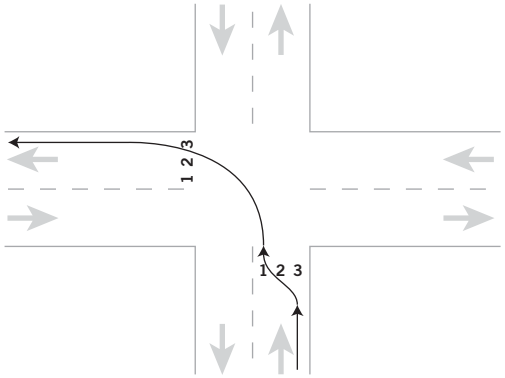
LESSON

Intersection 2. Right



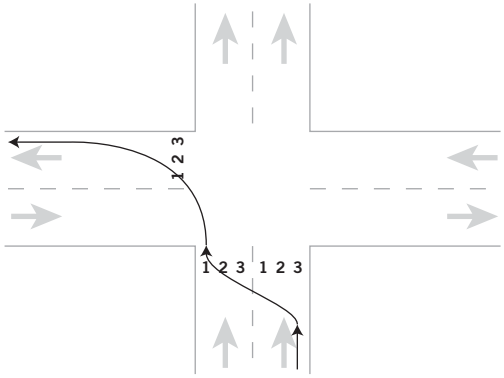
The bicyclist normally rides in position 3 and remains in position 3 when turning right through an intersection.

Intersection 3. Left



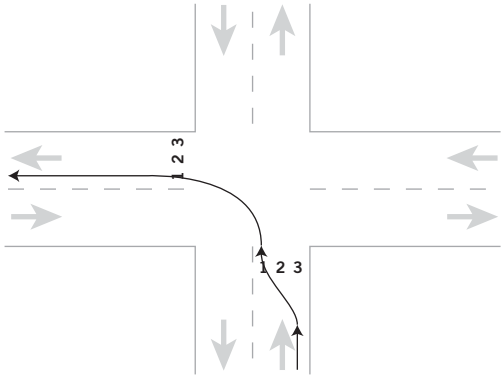
The bicyclist normally rides in position 3 but when turning left, they must move to position 1. To get to position 1 they must look back and check for traffic, signal left and then signal again before turning. They complete the turn at position 3.

Intersection 4. Positioning and left turns on a 2-lane, one-way street



The bicyclist normally rides in position 3 but when turning left, they must move to position 1. When riding on a one-way street, they must get to position 1 the left lane, the one closest to the turn. If they turn from the right lane, they may be hit by traffic on the left.

Intersection 5. Example of an <u>incorrect</u> left turn



A common mistake that students make when completing the turn is to turn from position 1 into position 1. It is important to emphasize that this is dangerous, as it puts the cyclist close to oncoming traffic and into the path of cars from behind.

NARRATIVE WRITING

We are going to create a journal or add to existing journals for the BSP.

Journal Topic

Describe how I normally get around. How do I go to school? My friend's house? To the park? By bus, bike, walking, car. Which way do I like best? Why? Why don't I like some ways?