



SKILL-BASED ACTIVITY

Scanning

Timeframe

Beginner: 5-7 minutes
Intermediate: 5 minutes
Advanced: 5 minutes

Objectives

At the conclusion of this activity the student will be able to:

1. Demonstrate exceptional or reliable performance of scanning as measured by the scanning rubric. (Psychomotor)
2. Demonstrate exceptional or reliable social behavior as measured by the social behavior rubric. (Affective)

National Standards

Standard 1
Standard 2
Standard 3
Standard 4

Equipment

- Bicycles
- Helmets
- Head barriers
- Allen wrench
- Cones, domes, polypots or chalk to mark riding course
- Red floor tape

Teacher Overview

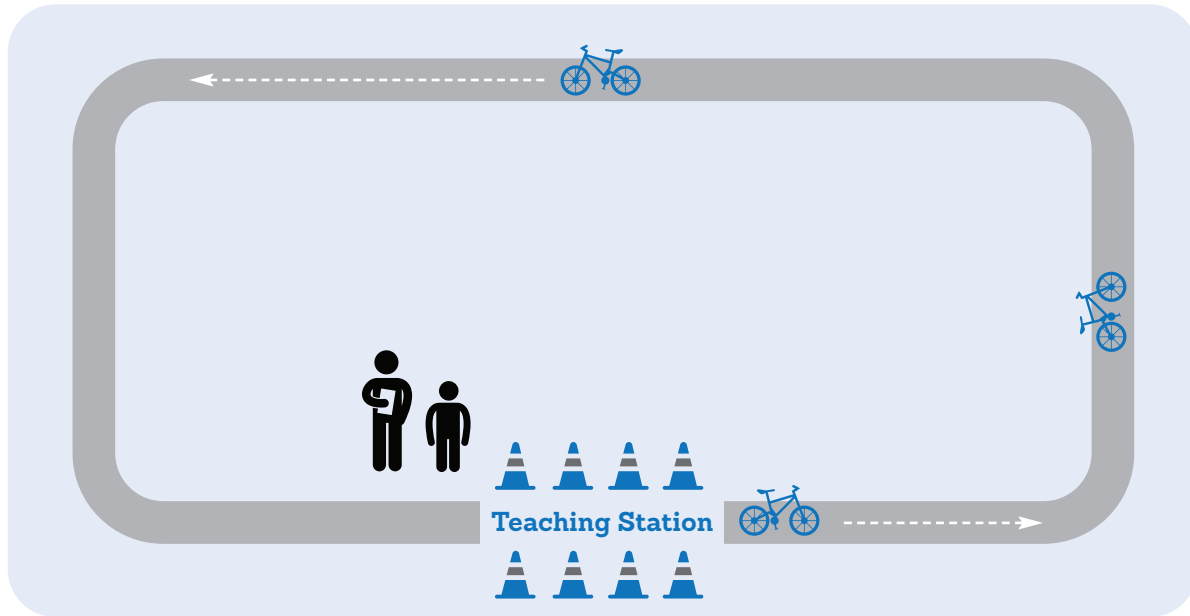
This activity teaches students how to scan behind them as they ride. When riding in traffic, bicyclists need to scan left and right for traffic and obstacles in the roadway on an ongoing basis. When preparing to turn or change lane positions, however, bicyclists like drivers, must not only scan left and right, but also scan for any traffic behind them. This skill involves looking over one's shoulder, identifying an object while looking (car, numbers of fingers, other object), all while maintaining a straight line on the bicycle. This is something that takes practice. Many will find that scanning over either the right or left shoulder is easier than the other. This activity is designed to give students practice scanning over both shoulders. This will require students to be able to balance while riding a bicycle.

Preparation

1. Designate a riding course that enables the teacher to see the students at all times. This will enable students to ride throughout the class period, even when they are not performing skills.
2. Set up a "chute" using cones, to indicate where the student will perform the skill and the teacher will conduct the assessment. This area should also serve as a teaching station in which the skill will be demonstrated for the students, and where students will return when instructed.

3. If bicycles have both front and rear brakes: Wrap the left handle of the bicycle with red floor tape to discourage students from using the front brake, until proper braking skill is taught.
4. Practice the scanning skill before demonstrating to students.

Diagram: Scanning Course



Directions

1. Introduce this activity using the following prompt:

*Today, we are going to practice looking to the rear while you are riding. This skill is called **scanning**. Because a bicyclist's surroundings are always changing, it is important to scan repeatedly during a ride. This makes scanning an essential bicycle safety skill. Bicyclists will sometimes find that scanning on one side is easier than the other. However it is important to be able to safely perform this skill from both sides. Therefore this skill will be practiced using both shoulders.*

2. Use the following sample questions to prompt students' thinking about the content in this activity.

Q: How do riders know when it is safe to change lanes?

A: Riders must look around to see if cars are coming up behind them.

Q: What steps are necessary to scan?

A: Remain in the seated position, glance over the shoulder and continue riding in a straight line.

3. Explain and demonstrate skills to students in the teaching station reinforcing the following points. Riders should:

- Stay seated upon entering the chute.
- Glance over the shoulder - touching the chin to the shoulder - and continue riding in a straight line within the lines of the chute. **(Cue)**

Cue:

Chin to shoulder.



- Maintain a straight line of travel. This is one of the biggest challenges with scanning. To assist those students who continue to turn the handlebars of the bicycle when they scan, instruct those students to release the hand on the same side that the rider is scanning from the handlebar and drop it to the thigh while scanning.

4. Instruct students to begin riding the designated course with a Power Start.
5. Position yourself along the side of the chute with polypots, some other type of colored objects or large pictures of objects or signs. It is important for students not just to glance quickly, but to actually focus on surroundings behind the rider. The student will need to be able to identify what is being held up.
6. Instruct student to look over their left shoulder upon entering the chute and identify the color of the object being held up by the teacher, while remaining within the boundaries of the chute.
7. Repeat activity steps #4-6 using the right shoulder.
8. Provide more practice opportunities, for students by instructing them to ride multiple laps around the designated course. While students are riding, the teacher should blow a whistle signaling for the students to scan over either shoulder for five seconds and then continue riding.

Assessment

1. Assess performance of scanning for each student using the following rubric:

PERFORMANCE RUBRIC: SCANNING

Exceptional	Reliable	Inconsistent	Struggling/ Survival
<p>Student is able to scan over his shoulder for a longer period of time, enabling him to clearly see what is behind him;</p> <p>Student can scan without weaving or losing control of the bike.</p>	<p>Student is able to scan over his shoulder, but the scan may too brief to see much;</p> <p>Student may occasionally weave as a result of scanning, but is able to get the bike under control quickly.</p>	<p>Student is able to briefly glance over his shoulder (right or left), but typically then weaves/loses control as a result of turning his body and/or handlebars while scanning;</p> <p>Student does not understand the importance of scanning while riding.</p>	<p>Student is unable to scan while riding, so he must stop first and then look over his shoulder (right or left) to scan, then begin riding again;</p> <p>Because student has difficulty with balance and straight line riding, scanning is difficult and not safe to do while riding;</p> <p>Student may also not understand the importance of scanning.</p>

2. Assess the performance of social behavior for each student using the following rubric.

PERFORMANCE RUBRIC: SOCIAL BEHAVIOR

Exceptional	Reliable	Inconsistent	Struggling/ Survival
<p>Student is respectful toward classmates, teacher, and equipment;</p> <p>Student receives and uses feedback from teacher and peers in a courteous manner;</p> <p>Student participates fully, without teacher prompting or supervision;</p> <p>Student is able to work cooperatively and productively with classmates, including during peer assessments;</p> <p>Student perseveres, even through difficult skills/activities, and maintains a positive attitude;</p> <p>Student is committed to learning;</p> <p>Student is committed to engaging in cycling in a safe manner, and keeping all classmates safe during the cycling unit.</p>	<p>Student is respectful toward classmates, teacher, and equipment;</p> <p>Student receives and uses feedback from teacher and peers in a courteous manner;</p> <p>Student participates fully, but needs some teacher prompting and/or supervision;</p> <p>Participates in most class activities at an appropriate and productive level;</p> <p>Student is most often able to work cooperatively and productively with classmates, including during peer assessments;</p> <p>Student is able to work hard and not get frustrated with setbacks;</p> <p>Student is committed to learning;</p> <p>Student is committed to engaging in cycling in a safe manner, and keeping all classmates safe during the cycling unit.</p>	<p>Student may not always be respectful toward classmates, teacher, and equipment;</p> <p>Student may listen to feedback from teacher or peers, but may not attempt and/or have difficulty applying it;</p> <p>Student requires some teacher supervision, but does exhibit some self-control at times;</p> <p>Student demonstrates the ability to work cooperatively and productively with classmates, but may need teacher direction or supervision;</p> <p>Student participates in most class activities;</p> <p>Student is willing to try, but may get frustrated with setbacks, and pout and/or verbalize frustration;</p> <p>Student may fluctuate between riding safely and unsafely at times.</p>	<p>Student may struggle with being respectful toward classmates, teacher, and equipment and/or show anger and/or blame others for cycling mishaps;</p> <p>Student does not listen to feedback from teacher or peers, and does not attempt to apply it;</p> <p>Student requires ongoing supervision and does not ride safely;</p> <p>Student may be unprepared and show very little interest in learning or the activity;</p> <p>Student becomes frustrated easily and may quit participating.</p>

Safety



1. Follow the 2-2-2-2 Rule (2 wheels on the ground; 2 feet on the pedals; 2 hands on the handlebars; 2 fingers on the brake levers) while riding the bicycle.
2. Use the rear brake only to stop the bicycle, until the skill level advances to be able to safely use the front brake.
3. Instruct students to ride the bicycles on the designated course and demonstrate the skill components in the “chute.”
4. Instruct students to keep at least three-bikes-lengths between each rider.
5. Instruct students that when they scan over the right shoulder, they will need to keep both hands on the handlebar to ensure that if braking is needed, it is done with the rear brake.

Differentiating Instruction

Adapted and Beginner

- Beginning students who have difficulty with straight line riding will likely have difficulty scanning while riding.
- Beginners may need to ride, stop and scan and then ride again, slowly moving to the point of not stopping.
- Having a wider course/chute for beginners is necessary.

Intermediate and Advanced

- Set up a more difficult course for more experienced bicyclists.
- Have students scan and call out what they see.
- Make objects more difficult to see while scanning.

Best Practices



1. Provide a discreet opportunity and safe environment for students to share information pertaining to their ability and comfort level for riding a bicycle.
2. Complete the Helmet Fit and ABC Quick Check at the beginning of every class when students will be riding. The use of peers/partners to practice, inspect, and correct each other will make the most efficient use of class time and reinforce bicycle safety skills. This should not replace teacher assessment.
3. Review the three-bikes-lengths rule to promote safe riding. This is a reminder for students to keep a safe distance between each other while riding single-file. To help maintain proper spacing, use a marker on the course so students can see when it is their turn to go: when the person in front of them gets to the marker, the next student may start.

