



Bike Control



Time: 30-45 minutes

Studies have demonstrated that skill-building activities are the most effective way to promote student retention of bicycling safety skills. Lesson objectives set the stage for building safety skills, which are emphasized through students' participation in class activities. This curriculum does not cover every possible scenario that a child may encounter as a bicyclist but instead addresses the basic skills needed to be a safe bicyclist. Teachers should use their discretion to break up material to accommodate their daily schedules. The following Skill-Building Activities are an essential component to this curriculum, and all lessons should be complemented with the reinforcement of safe bicycling behavior. More time can be spent on practicing skills if children are already familiar with the core material.

Lesson Objectives

The objective of this lesson is to help children develop skills to control their bikes and communicate with other road users.

The children will be able to:

- Know how to properly fit their bike and helmet,
- Use the Power Pedal to start off smoothly and quickly,
- Stop quickly and smoothly,
- Stop at the end of the driveway or at a stop sign,
- Ride their bikes in a straight line without wobbling, and
- Signal their intentions to others around them.

Why This Lesson is Important

While second and third graders should still be cycling with an adult or experienced rider, they still need to learn how to handle their bikes skillfully and safely, perform basic maneuvers such as starting off and stopping smoothly and efficiently, control their bikes by riding in a straight line and signal their intentions. This practice prepares them for more advanced instruction in grades 4 and 5 and for eventually riding safely on the street.

Essential Standards

<p>PE.2.MS.1.2: Execute a variety of manipulative skills while maintaining good balance and follow-through.</p> <p>PE.2.PR.4.3: Use safe practices when engaging in physical education activities with little or no prompting.</p> <p>PE.2.MC.2.1: Use equipment to illustrate multiple movement concepts.</p> <p>PE.2.HF.3.2: Identify enjoyable and challenging physical activities that one can do for increasing periods of time without stopping.</p> <p>2.MEH.1.2: Summarize behaviors that help to avoid risks.</p> <p>2.C.2.1: Use improvisation to communicate problems and resolutions.</p> <p>2.CU.2.1: Illustrate how to share focus with others in a group setting.</p>	<p>PE.3.MS.1.2: Apply basic manipulative skills while moving/traveling.</p> <p>PE.3.MC.2.1: Illustrate how practice, attention and effort are required to improve skills.</p> <p>PE.3.HF.3.2: Identify enjoyable and challenging physical activities that one can do for increasing periods of time without stopping.</p> <p>PE.3.PR.4.1: Use self-control to demonstrate personal responsibility and respect for self and others.</p> <p>3.PCH.3: Understand necessary steps to prevent and respond to unintentional injury.</p> <p>3.C.2.1: Use improvisation to present a variety of simple stories or situations.</p>
--	---

Common Core

<p>CCSS.ELA-Literacy.SL.2.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.</p> <p>CCSS.ELA-Literacy.SL.2.4: Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.</p>	<p>CCSS.ELA-Literacy.SL.3.1: Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others ideas and expressing their own clearly.</p> <p>CCSS.ELA-Literacy.SL.3.4: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.</p>
---	--

Guidance

<p>RED.C.2.1: Identify situations from your daily life in terms of problems and solution strategies.</p> <p>EEE.SE.1.2: Illustrate personal responsibility in a variety of settings and situations.</p> <p>P.SE.1.2: Use self determination to build independence.</p>
--

Materials

- Instructor bicycle
- One bike for each child
- Bicycle helmet for each child and instructor
- Extra helmet sizing pads of various thicknesses
- Surgical or painter's cap for each child (wear under helmet to keep it clean)
- Small zip lock bag for each child, labeled with his/her name (to store caps between lessons)
- Bicycle tools: A variety of hex keys (also called Allen wrenches, typically metric) and adjustable crescent wrenches for seat and handlebar adjustments; pedal wrench to remove pedals.
- Bike pump(s)
- Bike Control Course Activities
- Bike Control Course Set Up Diagram
- 2 rolls of 2" masking tape
- 10' or 12' tape measure
- Props: Free-standing stop sign
- Whistle
- Parent/Caregiver Tip Sheet
- Child Assessment – Initial Skills Checklist for Grades 2-3 (Class)
- Child Assessment – Initial Skills Checklist for Grades 2-3 (Individual)

Preparation

Review the *Let's Go Biking! Teaching The Skill-Building Activities* video which can be found in the For Instructors portion of the *Let's Go NC! Interface*.

Check general condition of helmets and bikes. Ensure enough time to fit helmets. This will go more quickly with knowledgeable volunteers assigned to this specific task.

With masking tape, lay out the course according to the *Bike Control Course* diagram found in the materials section. This course will be used for Ride in a Straight Line, Stop at End of Driveways, and Practice Hand Signals in Lesson 4.

NOTE: The course should be set up so that there is sufficient space for children to circle around the course on their bikes to go through the course again. This course will be used again for skills in Lesson 5.

Review and prepare the *Initial Skills Checklist for Grades 2-3*. The checklist should be sent home after the Skill-Building Activity along with the Parent/Guardian Tip sheets included in this lesson. Copy the individual checklist onto the back of the Parent/Caregiver Tip Sheet.

Have additional persons on hand to help during class time to assist with fitting helmets, preparing bicycles, and conducting the on-bike skill building activities. Helmet fitting can be time consuming. Coordinate with assistants in advance.

Lesson 4 – Demonstration and Skill-Building Activity



► **Time:** 30-45 minutes

1. **Helmet Fitting**
2. **Bike Fitting**
3. **Start Off with Power Pedal**
4. **Stop Quickly and Safely**
5. **Stop at End of Driveway**
6. **Ride in a Straight Line**
7. **Practice Hand Signals**

Introduction

All new skills require practice – it's required for proficiency and expertise. Cyclists need to be predictable to motorists and to others who may share roads, sidewalks, paths or trails with cyclists. Further, cyclists often ride in confined lanes or on sidewalks or paths. In order to be predictable and safe, cyclists must be proficient in starting, stopping, and riding steadily and in a straight line. This lesson gives children the opportunity to practice their bicycling skills in a safe environment away from traffic.

Children with disabilities may have compromised balance and still be able to ride a 3-wheeled bicycle (trike). See the Instructor's Guide for more detailed information on working with children of all abilities.

Assess the class using the ***Child Assessment – Initial Skills Checklist for Grades 2-3 (Class)*** during the lesson to track a child's performance throughout the course activities.

1. Helmet Fitting

Have children work in pairs to practice fitting helmets (their own or helmets they use as part of the course) in preparation for the on-bike lessons to follow.

- Use the straps and sizing pads to get it to fit just right. The helmet should sit level on the head and cover the top of the forehead, so that you can put 2 fingers between your eyebrows and the helmet.
- Straps should be adjusted to fit snugly, but not tightly, forming a V under each ear. A helmet with loose straps can come off in a crash. With your helmet buckled, you should not be able to take it off, rock it from side to side or back and forth.
- Use the ***Fitting Your Bike Helmet Guide*** at the end of Lesson 1 for more helpful pointers.

2. Bike Fitting

- Check to make sure the bike fits.
 - Diamond frame: Stand over the frame with 1 to 3 inches of clearance.
 - Step-through frame: Seat can be adjusted low enough to fit.
- Adjust the seat height to assure a safe and comfortable ride.
 - Beginners: When you sit on the seat, you should be able to touch both feet on the ground.
 - Advanced riders: When you sit on the seat with your foot on the pedal in its lowest position, your leg should be slightly bent.

3. Start Off with Power Pedal

Even when kids already know how to ride a bike, they may not be proficient in steering and balancing. Getting a strong start is important to gaining your balance quickly. Have children use the “Power Pedal” method to start each time they ride.

- Demonstrate to children how to start using the “Power Pedal” method:
 - Begin straddling the bicycle with both feet on the ground.
 - Arrange your bike so that one pedal is up high in a “2 o’clock” (right foot start off) or “10 o’clock” (left foot start off) position. (Either foot can be used.) This is the power pedal, as you will push down on it with one foot to get started. Note: cyclists riding geared bicycles should shift into a low (easy to pedal) gear before beginning the power position start.
 - Put your foot on the high pedal and push down to start the bike rolling.
 - As the bike begins to roll, lift your other foot and place it the second pedal, and sit on the saddle as you’re pedaling forward. You’re off!
- Line children up side by side along one side of the course/parking lot, allowing one arm’s length on either side.
- Have children practice starting off with the Power Pedal, ride to the other side of the course/parking lot and stop.
- Have them turn their bikes and practice the Power Pedal start and ride back to the first side.
- Continue practicing until they can propel themselves forward with ease using the “Power Pedal” method.

4. Stop Quickly and Safely

- Have the children perform a “Whistle Stop.”
- Have children turn their bikes to face the parking lot.
- Explain that while they are riding, you will blow your whistle, and they need to use their brakes to stop safely but quickly when they hear the whistle.
- Remind them to use the brakes to come to a complete stop. With hand brakes, effective stopping requires pressure on both the front and rear brake levers. Encourage young children to use both hand brakes when stopping.
- After coming to a complete stop, children should put one foot on the ground and return pedals to the power position to be ready to start again.
- Have them use the Power Pedal to start each time and ride in a straight line toward the opposite side of the course/parking lot.
- Give them time to start off and get balanced, then blow the whistle for them to stop. Repeat a few more times and observe how the children are performing.

5. Ride in a Straight Line

It’s important for cyclists to be predictable to others when they are riding. Riding in a straight line can help cyclists avoid other vehicles and be predictable. Get them started by having them practice straight line riding on the ***Bike Control Course***.

- Explain that children will be riding on the right side of course, which represents a street. They should try to steer straight and stay within the lane.
- Send children onto the course one at a time, leaving a few seconds between riders.
- Have them ride the course at least twice to demonstrate that they can ride in a straight line and steer their bikes properly.

6. Stop at End of Driveways

Ask children to pretend that the **Bike Control Course** is a driveway from their house or apartment. Even though driveways don't have stop signs, cyclists should always stop at the end of the driveway to check for vehicles and pedestrians before entering a street.

- Explain to children that they will be expected to ride between the lines and come to a complete stop at the end of the driveway.
- At the end of the driveway, children should look both ways for pedestrians or vehicles, give a hand signal and turn right or left to circle back to the beginning of the course.
- Explain to children that this is not a race.
- Have each child go through the course a few times demonstrating that they can stop completely at the end of the driveway.

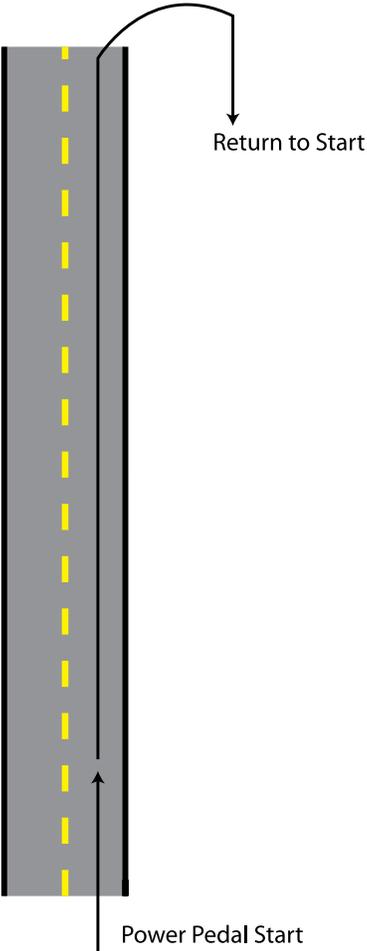
7. Practice Hand Signals

Have children ride through the **Bike Control Course** again, this time practicing controlling the bike in a straight line while using hand signals. This exercise is a step in getting them comfortable controlling the bike while performing a hand signal. Place the stop sign near the end of the course.

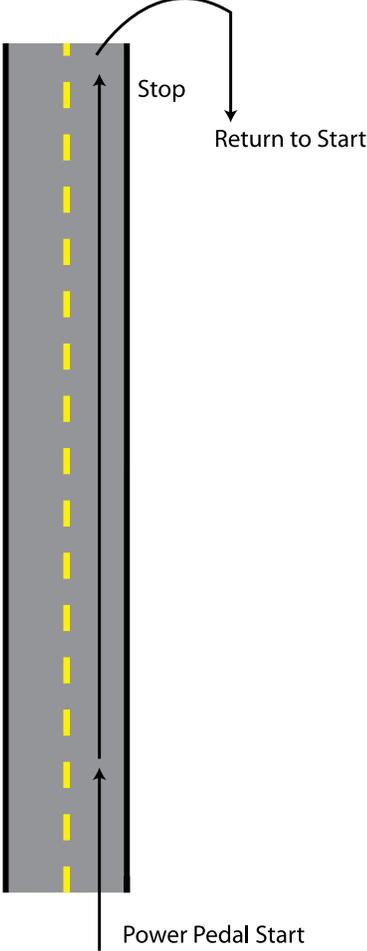
- Demonstrate the hand signals that they should use for left, right, and slow/stop.
- Have children ride through the course again, giving the left turn signal in the lane, the slow/stop signal as they approach the stop sign, and the right signal before they start off from the stop sign.
- Have all children complete the course (several times is optimal). Have them try to hold each signal they perform for 2-3 seconds.

At the end of the Lesson 4, transfer skills assessments to **Initial Skills Checklist (Individual)**. This assessment can be copied onto the back of the Parent/Caregiver Tip Sheet and sent home with the child.

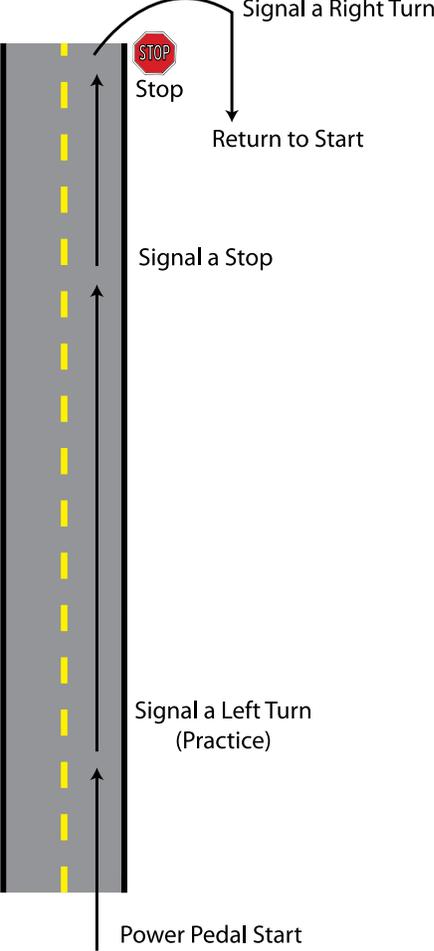
Bike Control Course Activities



5. Ride in a Straight Line



6. Stop at End of Driveways



7. Practice Hand Signals



Suggestions for a Balanced Curriculum

Grades
2-3
Lesson 4

Bike Control

These optional activities are included to extend the lesson into other areas of learning. Most activities presented may be completed within a 20-minute time period or may be assigned as homework opportunities.

English Language Arts

Have children recount an experience about cycling to a favorite location. Children should use appropriate facts and relevant descriptive details. Have children present their story to the class speaking audibly in coherent sentences.

If they haven't ridden a bicycle in the past, have them tell a story about a place they'd like to go by bicycle.

Arts Education

Divide children into groups of four or five. Assign each group a topic related to bicycle safety (safe street crossing, hand signals, stopping at driveways, etc.).

Instruct each group to develop a short skit (2-3 minutes long) that informs the audience about the topic and demonstrates safety concepts by using verbal and non-verbal communication. Each skit should include a problem and resolution.

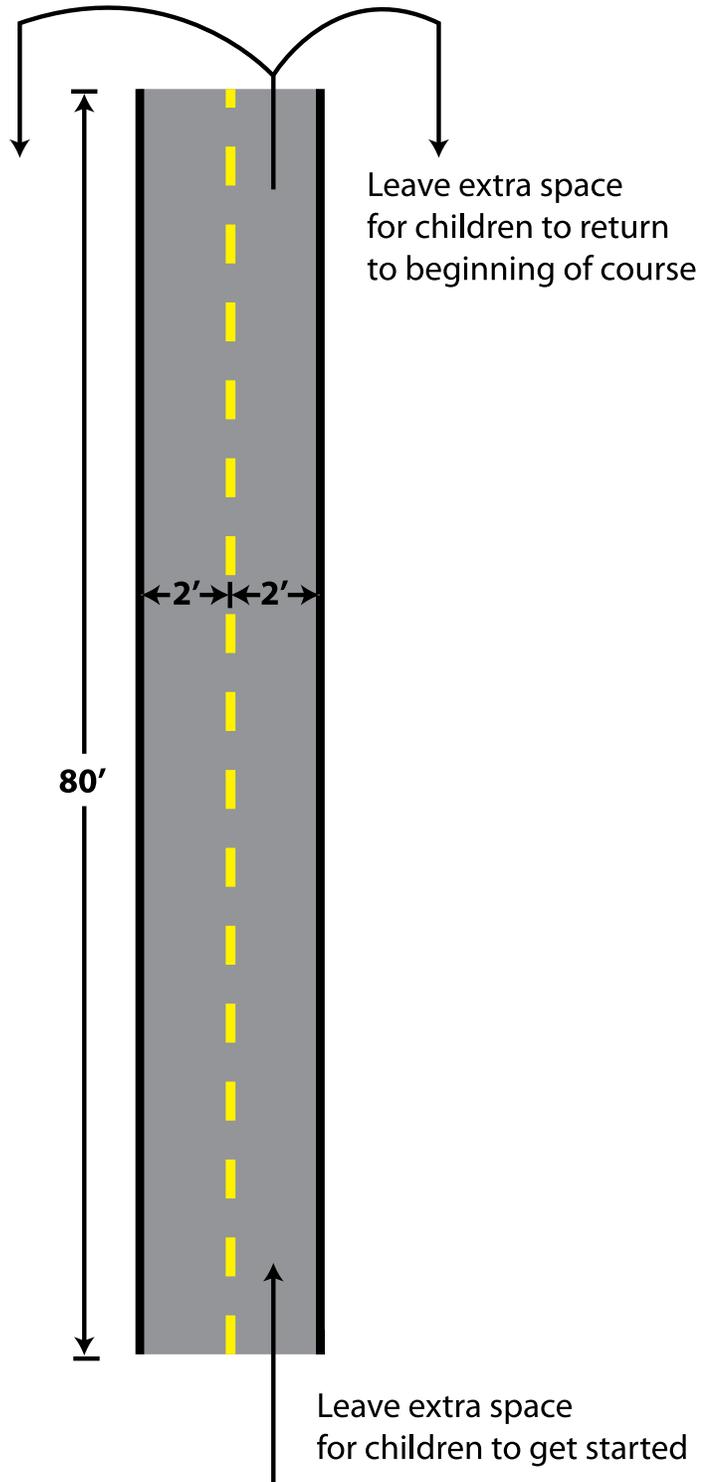
Have the children in each group share their concepts for the skit one at a time, so every child has a chance to include his or her own ideas. After about 10 minutes of writing and rehearsing, have each group perform the skit for the class. **Video submissions of skits to the NC Safe Routes to School Program are encouraged!**



Set Up Diagram

Bike Control Course

Use this diagram to set up your skills course for Lesson 4. If space and staffing permit, you can lay out a second course beside the first one so more children can participate at one time.





Parent/Caregiver Tip Sheet

Bike Control

Today your child learned how to control a bicycle by practicing in a supervised, safe environment.

After reviewing helmet fitting guidelines and ensuring bike fit, your child learned how to place the pedals on his/her bicycle to get the bike rolling quickly and safely.

- **Ask your child to demonstrate! Have them describe the “Power Pedal” position and have them perform a few “starts” on their bicycle.**

We discussed and practiced safe stopping techniques. We also talked about when is the right time to stop (at ends of driveways and at stop signs).

- **Help your child practice! Have him or her ride in a straight line and stop quickly when you call out a “Whistle Stop!”**

On a course we set up for practice, the children practiced bike control and riding in straight lines. When they were comfortable with those skills, we reviewed and used hand signals.

- **Ask your child to demonstrate bicycle hand signals for a left turn, right turn, and slow/stop.**

Driveway ride-out is the most frequent cause of crashes that injure or kill young children, so it's important that your child know to stop at the end of the driveway and look for vehicles before entering the street. Riding in a straight line and using hand signals helps your child ride more predictably and communicate to others any intended moves.

PRACTICE AT HOME!

Encourage your child to continue practicing bike control by setting up a simple skills course in your driveway or nearby park. Use chalk, tape or empty cans/plastic bottles to set up a course 2 feet wide by 30 feet long. Ask your child to demonstrate and practice these skills:

- Starting Off with Power Pedal
- Stopping at End of Driveway
- Riding in a Straight Line
- Using Hand Signals
- Stopping Quickly and Safely



Did you know?

Children in second and third grade:

- Enjoy testing muscle strength and skills,
- Typically have developed a good sense of balance,
- Learn best through active, concrete experiences. and
- Are old enough to grasp more complex information about laws, traffic signs, safety concepts, and personal responsibility for safety.



Name _____

Child Assessment

Initial Skills Checklist for Grades 2-3

Parent/Guardian: Please sign this report below and have your child return it to the instructor.

During the Basics of Bicycling course, your child worked on the bicycle skills shown below to help prepare him or her to bicycle safely in traffic. The following scoring symbols indicate your child's level of achievement:

Good **+**

Satisfactory **✓**

Needs more work **—**

Please encourage your child to continue working on these skills to master them!

Knows how helmet and bike should fit	Uses the Power Pedal to start off smoothly and safely	Is able to balance and steer the bike	Can ride consistently in a straight line without swerving	Uses the brakes to stop quickly and safely	Remembers to stop at the end of the driveway	Knows and uses proper hand signals while controlling the bike

Comments:

Signature of parent/guardian

Date