

Characteristics of young cyclists

Grades K to 2

(Ages 5 - 7)

Many young cyclists first learn to ride when they are six or seven years old. Depending on the amount of training they get (usually from a parent), they will develop a variety of riding styles. These young cyclists, however, do have much in common.

In a grade 1 or 2 class, it is common to find that students are already riding bikes, mostly within a short radius of their homes. Many will ride to school. For these students, effective bicycle education combines classroom instruction with controlled environment training.

For students who have learned to ride a bike, the following characteristics are common and can be addressed in introductory level on-bike instruction (such as a simple bike rodeo).

Outlook

- Ⓒ *Fearless*: Many young children have not developed an understanding of danger.
- Ⓒ *Easily distracted*: Many young children can focus on only one thing at a time. If they are distracted while riding, they may turn unexpectedly, often in front of traffic.
- Ⓒ *Narrow field of vision*: Children have about only two-thirds of the peripheral vision of adults.
- Ⓒ *I-can-see-you, you-can-see-me*: Children often assume that if *they* can see an approaching vehicle, the driver can see them.
- Ⓒ *Poor judgement of speed*: Children may "dart" out into traffic because they believe it is safe to do so, when in fact traffic is moving much faster than they think.

Physical Development

- Ⓒ *Small size reduces visibility*: Because they are so small, young cyclists and their small bicycles are difficult for motorists to spot in traffic.
- Ⓒ *Size and strength affect handling*: Young cyclists can have a difficult time with hand brakes, both because of the forces needed to squeeze the levers and because tiny fingers can have trouble reaching.

⌄ *Centre of gravity is high:* Children's heads are larger and heavier in proportion to the rest of their bodies, compared to adults. This causes their centre of gravity to be higher. This not only affects bicycle handling, but often results in children striking the ground head first in a fall. Since children also have softer bones than adults, the consequences can be disastrous.

Crashes and Injuries

⌄ *Falls:* For all cyclists, falls are the number one cause of injury. To an even greater extent than older, more experienced cyclists, children can be expected to fall more when learning new techniques.

⌄ *Driveway and mid-block rideouts:* Children enter the roadway from driveways, parking lots and sidewalks without stopping and watching for traffic. This behaviour is the most frequent cause of car-bike collisions involving children.

⌄ *Wrong-way riding:* Riding facing traffic is among the most hazardous practices, greatly increasing the chances that a cyclist will be struck by a motor vehicle.

⌄ *Unexpected left turns:* Young cyclists turn or swerve without warning into the paths of overtaking cars or cars approaching from the opposite direction. A similar situation is created when wrong-way cyclists turn or swerve to the right into oncoming traffic.

⌄ *Sidewalk riding:* Although a leading cause of cyclist injury, many young cyclists are encouraged to ride on the sidewalk. When a cyclist rides on the sidewalk, every lane and driveway becomes an intersection that road users would not encounter. As well, motorists do not expect to encounter vehicle traffic coming from the sidewalks, especially when sidewalk cyclists approach the roadway from the motorist's right or are obscured by bushes, hedges or fences.

How this resource complements Saskatchewan's Health Education Curriculum

Kindergarten instructional theme is "Following Models".

Grade 1 instructional theme is "Being Examples".

Grade 2 Instructional theme is "Discovering Patterns".

Use these themes to provide focus for lessons (see Key Concepts chart at the beginning of this manual).

For example, in presenting the concept of the "rules of the road", you could ask kindergarten students to point out examples of bicycle riders using the right side of the roadway or waiting for other traffic to pass before proceeding (examples can be found in this manual or by watching the behaviour of older students on their way to and from school). Grade 1 students can be encouraged to describe instances in which they have used the rules of the road when they were on their bikes. Grade 2 students can explore the consistency of traffic principles (integrating the concepts of rules of the road, predictability and cooperation).

Use classroom instruction extensively. Cyclists below the age of eight are difficult to manage in groups. Their fearless outlook, narrow field of vision, poor judgement of speed and easily distracted attention make them poor candidates for on-road instruction in groups. Programs which involve group riding practice on streets and roadways should not be attempted.

However, students will benefit from practicing new skills in a closely supervised and carefully controlled riding environment, such as presented in Smart Cycling parking lot drills or a community-organized bike rodeo. In addition, individual instruction, such as can be provided by a parent, is very effective with cyclists younger than eight.

Students respond best to concepts expressed in concrete terms and accompanied by examples. Concepts such as "yielding" and "right of way" may be too abstract, depending on how they are presented. For example, learning that traffic on the left must yield right of way is more complex and abstract than learning that cars on the right go first. Very young riders may respond better if they are instructed to wait until all cars have gone by or stopped. Older riders can be told to let traffic on their right go first.

Instructional Tactics

Use techniques that respond to the outlook of these students:

- Ⓒ Avoid "scare tactics". Emphasize positive behaviour and its rewards.
- Ⓒ Encourage students to always look around ahead of time, whenever they are going to cross an area where there might be traffic.
- Ⓒ Encourage students to scan, shoulder check and look left and right before proceeding through traffic.
- Ⓒ Encourage students to wait until a car has stopped completely or passed before they attempt to enter traffic.
- Ⓒ Emphasize the use of approved cycling helmets, properly fitted.

Compensate for the effects of their physical development:

- Ⓒ Get students to wear bright clothes and (safely) decorate their bicycles and helmets in bright colours.
- Ⓒ Encourage children to ride where they can be seen on the road (lane and destination positioning).
- Ⓒ Check that students can operate hand-brake equipped bikes. Otherwise, coaster brakes (pedal operated) are recommended.

Emphasize behaviours that reduce risk of injury:

- Ⓒ Encourage students to wear helmets and to wear them correctly.
- Ⓒ Teach young cyclists early to always stop and look for traffic before entering the street.
- Ⓒ Curtail wrong-way riding early. Encourage students to ride on the right hand side of the roadway.
- Ⓒ If children ride on the sidewalk, teach them to watch for traffic at every driveway and to walk their bikes when they come to lanes and cross streets. Make sure they never ride across driveways, lanes or streets when their view of these areas is blocked by fences or bushes. Get them to warn pedestrians before passing and to give them lots of room.
- Ⓒ Encourage children to ride during daylight hours only.

Sustain their interest:

- Ⓒ Ask questions.
- Ⓒ Circulate samples (bright clothing, helmets).
- Ⓒ Use overheads or other visuals (Cycle Right and other overheads and in this guide).
- Ⓒ Demonstrations and participation (hand signals, helmet fitting).
- Ⓒ Bring a bike into the classroom (point out parts, demonstrate bike fit and safety check).
- Ⓒ Make use of community resources (bicycle police, EMT personnel, bicycle shop staff), both to add variety to your lessons and to serve as role models.
- Ⓒ Activity break (Smart Cycling p. 27).
- Ⓒ Keep on-bike activities brief and group sizes small.
- Ⓒ See also Grades 3 to 4.