





# Mapping a safe course: motorcycles

The Graduated Licensing Program curriculum for motorcycle training schools in B.C.

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# introduction

There were 98,639 motorcycles licensed in B.C. during 2007 and 235,732 drivers licensed to operate motorcycles.

B.C. Traffic Collision Statistics, 2007

B.C.'s Graduated Licensing Program (GLP) is designed to reduce the number of crashes among new drivers of any age. Under GLP, new drivers and riders gain experience gradually, under conditions that expose them to less risk. There is a 12-month learner stage and a two-year novice stage before a new driver or rider is eligible for a full-privilege driver's licence.

New riders that successfully complete an ICBC-approved rider education course during their learner stage are eligible for a six-month reduction in the novice stage as long as they have no violations or at-fault crashes during the first 18 months of their novice stage. As well, high school students who successfully complete an approved GLP course can receive two Grade 11 credits by taking their *Declaration of Completion* to their secondary school administration office.

Mapping a safe course: motorcycles is the curriculum guide to be used by rider training schools to develop courses to meet ICBC-approved Class 8 GLP rider education course standards.

An *Instructor resource kit* has been prepared as a companion to the curriculum for passenger vehicles. It has a section specifically for motorcycle instructors and many of the suggested methods and materials for passenger vehicles can be adapted for use by Class 8 instructors.

# background

Motorcyclists are seven times more likely to be killed in a crash than other road users. Young drivers between the ages of 16 and 25 tend to be involved in more crashes in general, including motorcycle-related collisions.

ICBC sharing the road with motorcycles fact sheet, 2009

**Curriculum** — a blueprint for developing a driver education course. It is not a course outline or a course package. One-in-five new drivers are involved in a crash within their first two years of driving. GLP's goal is to improve new driver safety.

Mapping a safe course, the Class 7 curriculum, was developed in response to a view shared by many in the driver training industry — that a standard driver education curriculum would help reduce the crash rate among new drivers by improving driver education. Similarly, studies have pointed to a need for rider training to focus on safe interaction with other road users and avoidance of hazardous situations. Mapping a safe course: motorcycles was adapted for schools who choose to offer an ICBC-approved course for motorcycles.

The top five contributing factors assigned to motorcycle riders (as a percentage of total motorcycle collisions) were:

- speed
- driver inattentive
- driver error/confusion
- alcohol
- wildlife

(B.C. Traffic Collision Statistics, 2007)

Mapping a safe course: motorcycles is intended to help members of B.C.'s professional driver training industry develop rider education courses that will improve the safety of riders and the public. Courses developed from this curriculum and the curriculum for new drivers of passenger vehicles are both intended to:

- help new riders develop respectful and responsible attitudes toward riding which will contribute to community safety
- improve the riding competence of new riders
- help new riders understand that today's riding is a complex activity that requires training, education and experience.

# philosophy of the curriculum

The driver training industry has identified responsible driving attitudes as the most important quality of a good driver. To accomplish the goal of helping new riders develop responsible attitudes, *Mapping a safe course: motorcycles* uses a philosophical approach based on learning outcomes and learner-centred strategies. These two components are the cornerstones of this curriculum. They contribute to helping new riders develop responsible driving attitudes.

#### Learning outcomes —

descriptions of what the new rider is expected to know and be able to do when a riding course is completed and learning outcomes can be measured.

A learner-centred curriculum revolves around the learner, not the instructor or the curriculum content.

### Learning-outcomes approach

A learning-outcomes approach means that the curriculum is organized around what the student will actually need to learn and achieve in order to become a responsible rider. A traditional curriculum is more concerned with what course content is to be covered. In *Mapping a safe course: motorcycles*, what the student needs to learn is always the main focus and the course content is used to support the learning.

The learning outcomes of this curriculum are descriptions of what an instructor can expect a student to be able to do after completing a riding course. Instructors can measure student performance of the learning outcomes by using assessment tools or techniques.

### Learner-centred approach

Mapping a safe course: motorcycles is a learner-centred curriculum. An instructor-centred curriculum gives control to the instructor and he or she makes all of the decisions about the learning experience. With a learner-centred approach, responsibility for the educational experience is shared by the instructor and the student.

A learner-centred approach recognizes that:

- students need to be active in their own learning
- people have unique rates of learning
- learning happens in group settings and in individual situations
- learning is most effective when it happens through personal experiences.

A learner-centred curriculum creates broader roles for the instructor. Instructors become facilitator-teachers. This means that the instructor will take on the role of "helper" or "mentor" to the student as well as the "telling" or "imparting" role of the teacher. The primary role of the facilitator-teacher is to design lessons and use teaching strategies that will help new riders achieve the learning outcomes.

# elements of the curriculum

Mapping a safe course: motorcycles is structured around three elements:

- seven curriculum goals
- 42 learning outcomes
- various required topics.

## The seven curriculum goals

The seven goals in this curriculum are broad statements of what students are expected to learn. They describe the attitudes, knowledge and skills of saferiding behaviour. Riding knowledge, skills and attitudes are often separated in riding courses. However, in this curriculum, attitudes, knowledge and skills are fully blended into each of the goal statements. By acquiring knowledge, practising new skills, and examining their attitudes, students can become responsible riders.

One of the aims of good riding education is to create thinking, competent drivers who can go beyond mechanical driving actions.

#### Risk avoidance

To develop knowledge, understanding and appreciation of risk avoidance as it relates to safe riding.

#### Driver psychology

To develop knowledge, understanding and appreciation of safe and responsible riding attitudes.

#### Social responsibilities

To develop knowledge, understanding and appreciation of safe-riding responsibilities from the perspective of the individual, other road users, and the community.

#### Legal responsibilities

To understand and comply with the rules of the road.

#### Safe driving

To develop knowledge, skills and appreciation of riding safely.

# Vehicle performance

To develop knowledge and understanding of vehicle performance and how this contributes to safe riding.

#### Motor skills

To develop competence in integrating the attitudes, skills and knowledge of safety and riding responsibilities into the correct execution of motor skills in traffic.

Through these seven curriculum goals, instructors can help new riders become safe riders — ones who understand the reasons behind safe-riding practices. Although these goals are core components of the GLP curriculum, the way they're presented here doesn't reflect the way a course is sequenced. Instructors are best able to decide how to shape a course to fulfill their students' needs.

#### **Extending integration**

Instructors can make connections by:

- integrating riding practice with riding theory
- developing integrated programs based on this curriculum
- working with family members of their students to reinforce safe-riding behaviours
- working with members of the community and schools to help integrate good rider education into public awareness.

### The learning outcomes

The 42 learning outcomes in this curriculum describe what a student is expected to achieve by the end of any course based on this curriculum. Learning outcomes begin with the phrase: *The new rider will ...* 

Each learning outcome contributes to the learning students need to do in order to achieve the seven goals. The outcomes are written as expected achievements and behaviours that can be measured with assessment tools and techniques. A student who has successfully completed this curriculum should be able to perform the learning outcomes and become a safe, lawabiding and responsible rider. The numbering of the learning outcomes doesn't reflect how a riding course should be organized.

#### Required topics

A list of topics to be used to teach the specific achievements and behaviours expected of students is included in the curriculum chart.

These topic headings are brief descriptions only. It's expected that instructors will expand these subjects appropriately.

# curriculum chart

# 1. Risk avoidance

A good motorcycle rider understands the risks of riding and takes steps to avoid them.

To develop knowledge, understanding and appreciation of risk avoidance as it relates to safe riding.

Learning outcomes The new rider will	Required topics
1.1 Describe the hazards of riding.	<ul> <li>weather/environmental conditions</li> <li>road conditions</li> <li>driver and rider attitudes</li> <li>vehicle conditions</li> <li>animals</li> <li>other road users</li> <li>unpredictable driving and riding behaviours</li> <li>sources of riding error</li> <li>rider vulnerability.</li> </ul>
1.2 Define the characteristics of risk taking.	<ul> <li>factors that affect rider risk perception:         <ul> <li>rider age</li> <li>rider experience</li> <li>riding environment</li> </ul> </li> <li>caution versus risk</li> <li>judging risk in various situations</li> <li>role of under/over-confidence in inaccurate risk perception</li> <li>motorcyclists as risk takers.</li> </ul>
1.3 Evaluate how risk perception is affected by personal factors.	<ul> <li>mental factors: <ul> <li>self-esteem</li> <li>aggression</li> <li>frustration</li> <li>impatience</li> <li>feelings of power</li> <li>over-confidence</li> <li>awareness of consequences</li> </ul> </li> <li>physical factors</li> <li>role of self-control</li> <li>need for peer approval</li> <li>perception of other drivers and riders</li> <li>rider experience.</li> </ul>

Learning outcomes  The new rider will	Required topics
1.4 Explain how impairment affects risk perception and riding behaviour.	<ul> <li>effects of drug and alcohol impairment on perception</li> <li>effects of fatigue, illness and mental stress</li> <li>consequences of impaired riding</li> <li>ways to avoid riding while impaired.</li> </ul>
1.5 Evaluate the costs of taking risks while riding.	<ul> <li>personal costs</li> <li>social costs</li> <li>financial costs</li> <li>health costs.</li> </ul>
1.6 Assess personal risk tolerance.	<ul> <li>thinking for oneself</li> <li>role of self-control</li> <li>role of under/over-confidence</li> <li>identifying personal limits and abilities.</li> </ul>
1.7 Demonstrate realistic risk perception in riding behaviours.	<ul> <li>accurate risk perception</li> <li>quick and effective reaction times</li> <li>proactive versus reactive riding actions</li> <li>expectations of other road users</li> <li>consequences of not doing what other road users expect</li> <li>safe time margins to complete riding manoeuvres.</li> </ul>

# 2. Rider psychology

A good motorcycle rider is someone who thinks that riding is a serious task.

To develop knowledge, understanding and appreciation of safe- and responsible-riding attitudes.

Learning outcomes The new rider will	Required topics
2.1 Evaluate how positive and negative personal factors influence riding attitudes.	<ul> <li>personal riding values and beliefs</li> <li>motives that influence riding</li> <li>riding as thrill-seeking</li> <li>how motives change under different circumstances</li> <li>how values, beliefs and motives influence attitudes toward riding.</li> </ul>
2.2 Explain how positive and negative social factors influence riding attitudes.	<ul> <li>influence of advertising</li> <li>societal attitudes toward cars and driving/motorcycles and riding</li> <li>influence of other people's driving and riding habits</li> <li>peer pressure and riding.</li> </ul>
2.3 Demonstrate riding behaviours that reflect safe, healthy and courteous riding attitudes.	<ul> <li>overcoming negative motives</li> <li>riding courteously</li> <li>resisting negative influences.</li> </ul>

# 3. Social responsibilities

A good motorcycle rider looks out for others.

To develop knowledge, understanding and appreciation of safe-riding responsibilities from the perspective of the individual, other road users and the community.

Learning outcomes The new rider will	Required topics
3.1 Explain the factors that make riding a lifelong learning process.	<ul> <li>the rider as a lifelong learner</li> <li>factors that contribute to changes in riding skill</li> <li>changing motorcycle technology</li> <li>changing riding standards and laws.</li> </ul>
3.2. Demonstrate understanding of the complexity of the riding task for the new rider.	<ul> <li>ongoing assessment of personal riding skills</li> <li>how feedback can help riders improve their skills.</li> </ul>
3.3 Explain how to share the road safely.	<ul> <li>cyclists</li> <li>pedestrians</li> <li>large and slow-moving vehicles</li> <li>animals</li> <li>emergency vehicles</li> <li>passenger vehicles.</li> </ul>
3.4 Demonstrate appropriate communication with other road users.	<ul> <li>vehicle signals</li> <li>hand signals</li> <li>horn</li> <li>eye-to-eye contact</li> <li>non-verbal communication.</li> </ul>
3.5 Explain how to show leadership with family members, peers and other community members in promoting safe riding.	<ul> <li>individual leadership skills</li> <li>community and school rider safety programs.</li> </ul>
3.6 Identify environmental concerns in the use of motorcycles.	<ul> <li>efficient riding behaviours</li> <li>disposal of vehicle fluids and parts</li> <li>role of motorcycle maintenance.</li> </ul>

# 4. Legal responsibilities

A good motorcycle rider follows the rules.

To understand and comply with the rules of the road.

	rning outcomes e new rider will	Required topics
	Explain the procedures to be taken when involved in a crash or when arriving at the scene of a crash.	<ul><li>minor crashes</li><li>major crashes.</li></ul>
	Explain the meaning of all traffic- control devices.	<ul><li>signs</li><li>signals</li><li>markings.</li></ul>
4.3	Explain the reasons for riding laws.	<ul> <li>speed</li> <li>parking</li> <li>impairment</li> <li>licensing requirements</li> <li>vehicle insurance</li> <li>emergency vehicles</li> <li>helmets.</li> </ul>
	Explain rules of the road that relate to sharing the road.	<ul> <li>traffic control persons</li> <li>cyclists and pedestrians</li> <li>emergency vehicles</li> <li>motorcycles.</li> </ul>
	Explain, in general terms, the legal requirements and responsibilities when riding.	<ul> <li>B.C. licence classes and restrictions</li> <li>B.C.'s GLP</li> <li>driver penalties including:         <ul> <li>fines</li> <li>Driver Penalty Point Premium</li> <li>Driver Risk Premium</li> <li>penalties for impaired and unsafe riding including suspensions, prohibitions and vehicle impoundment</li> </ul> </li> <li>registered owner responsibilities</li> <li>responsibility for passengers</li> <li>helmet requirements</li> <li>requirements in other jurisdictions.</li> </ul>

# 5. Safe riding

A good motorcycle rider uses the skills of safe riding.

To develop knowledge, skills and appreciation of riding safely.

Learning outcomes The new rider will	Required topics
5.1 Explain why riding to minimize risk involves the three steps of safe riding: see-think-do.	<ul><li>defensive riding</li><li>collision avoidance.</li></ul>
5.2 Demonstrate proficiency in using observation skills to minimize risk.	<ul> <li>knowing where to observe:     -360-degree vision     - distance scanning     - blind spots     - visual obstructions     - limits of observation</li> <li>knowing how to observe:     - shoulder checks     - peripheral vision     - mirrors.</li> </ul>
5.3 Demonstrate mental alertness to analyze riding situations.	<ul> <li>maintaining attention/alertness</li> <li>recognizing potential hazards accurately</li> <li>using decision-making skills to ride safely:         <ul> <li>anticipating what might happen</li> <li>predicting possible solutions</li> <li>prioritizing situations and solutions</li> <li>making appropriate choices under pressure</li> <li>identifying consequences</li> </ul> </li> <li>effects of impairment on decision-making skills</li> <li>role of personal motives on decision-making skills.</li> </ul>
5.4 Demonstrate appropriate riding actions to minimize risk.	<ul> <li>choosing safe margins (front, rear, side)</li> <li>choosing safe riding speeds</li> <li>braking and stopping safely</li> <li>accelerating safely</li> <li>covering the brake and horn</li> <li>yielding if uncertain</li> <li>point of no return.</li> </ul>
5.5 Demonstrate competence in using safety devices.	helmets, eye protection and clothing.

# 6. Vehicle performance

A good motorcycle rider respects the power of motorcycles.

To develop knowledge and understanding of vehicle performance and how this contributes to safe riding.

Learning outcomes The new rider will	Required topics
6.1 Explain the forces of physics as they apply to riding.	<ul> <li>vehicle traction</li> <li>vehicle weight shift/transfer</li> <li>vehicle balance</li> <li>speed versus time and stopping distances</li> <li>crash severity versus speed</li> <li>vulnerability of the human body to injury</li> <li>gear (transmission) selection.</li> </ul>
6.2 Describe the most common collision situations and characteristics.	<ul> <li>common crash situations for new riders</li> <li>critical crash factors for new riders: <ul> <li>high risk tolerance</li> <li>faulty risk perception</li> <li>level of rider skills.</li> </ul> </li> </ul>
6.3 Analyze the role of traction in riding control.	<ul> <li>space management (front, rear, side)</li> <li>stopping distances</li> <li>braking distances</li> <li>following too closely</li> <li>point of no return</li> <li>lane position.</li> </ul>
6.4 Explain how hazardous riding situations relate to friction conditions.	<ul> <li>how road surfaces affect stopping</li> <li>seasonal changes on road surfaces</li> <li>tire types and conditions</li> <li>tire inflation</li> <li>speed for conditions</li> <li>bicycle steering and gyroscopic steering.</li> </ul>
6.5 Demonstrate judgment in riding behaviours to compensate for hazardous riding conditions.	<ul> <li>speed control</li> <li>steering control</li> <li>speed versus stopping distances</li> <li>risk perception versus accurate knowledge.</li> </ul>

# 7. Motor skills

A good motorcycle rider drives as safely and responsibly as possible.

To develop competence in integrating the attitudes, skills and knowledge of safety and riding responsibilities into the correct execution of motor skills in traffic.

Learning outcomes The new rider will	Required topics
7.a Demonstrate proper riding techniques starting on a closed circuit.	<ul> <li>starting</li> <li>accelerating</li> <li>decelerating</li> <li>braking</li> <li>steering</li> <li>lane tracking</li> <li>maintaining a consistent track</li> <li>gear (transmission) selection</li> <li>bicycle steering and gyroscopic steering.</li> </ul>
7.b Demonstrate proper operation of a motorcycle on a closed circuit.	<ul> <li>balance and braking</li> <li>starting, moving off and stopping</li> <li>straight-line riding</li> <li>slow-speed manoeuvres</li> <li>gear change</li> <li>shoulder checks</li> <li>hand and electric signals</li> <li>basic traffic signs and lines</li> <li>road position</li> <li>higher-speed operation (including cornering, changing lanes, accelerating and braking).</li> </ul>
7.c Demonstrate proper hazard avoidance techniques on a closed circuit.	<ul><li>steering</li><li>accelerating</li><li>braking</li><li>decision-making.</li></ul>
7.1 Demonstrate competence in conducting pre-ride inspections.	pre-ride inspections.
7.2 Demonstrate control, safety and responsibility in basic riding.	<ul> <li>starting</li> <li>accelerating</li> <li>decelerating</li> <li>braking</li> <li>steering</li> <li>lane tracking</li> <li>maintaining a consistent track</li> <li>gear (transmission) selection</li> <li>bicycle steering and gyroscopic steering.</li> </ul>

Learning outcomes  The new rider will	Required topics
7.3 Demonstrate safe, legal and confident vehicle control while changing directions.	<ul> <li>yielding</li> <li>crossing intersections</li> <li>merging</li> <li>changing lanes and passing</li> <li>maintaining correct lane tracking.</li> </ul>
7.4 Demonstrate legal, safe and responsible execution of right-of-way manoeuvres.	<ul> <li>stop signs</li> <li>two- and four-way stops</li> <li>traffic circles</li> <li>yield signs</li> <li>controlled and uncontrolled intersections</li> <li>T-intersections</li> <li>malfunctioning traffic-control devices</li> <li>emergency vehicles.</li> </ul>
7.5 Demonstrate competence, safety, legality and responsibility in making turns.	<ul> <li>left turns</li> <li>right turns</li> <li>maintaining correct lane tracking</li> <li>U-turns.</li> </ul>
7.6 Demonstrate safe, responsible and proper parking techniques.	<ul> <li>stall parking (forward and reverse)</li> <li>hill parking (up and down)</li> <li>angle parking</li> <li>shoulder parking.</li> </ul>
7.7 Demonstrate competence in riding safely, legally and responsibly on highways.	<ul> <li>entering and exiting</li> <li>curves</li> <li>shoulders</li> <li>grade of road</li> <li>passing</li> <li>changing lanes</li> <li>nighttime riding</li> <li>emergency conditions.</li> </ul>
7.8 Demonstrate competence in riding safely, legally and responsibly on freeways.	<ul> <li>entering and exiting</li> <li>curves</li> <li>grade of road</li> <li>passing</li> <li>changing lanes</li> <li>nighttime riding</li> <li>emergency conditions.</li> </ul>

# educational settings

The aim of this curriculum is to help students develop responsible riding attitudes and become competent riders. A curriculum with such broad aims needs to be taught in a variety of educational settings. This may include classroom, closed circuit or other sessions where students and instructors can exchange thoughts and opinions. The first required standard of this curriculum is that any ICBC-approved course must be taught in both classroom settings and in practice situations (on a closed circuit and in traffic).

Some people assume that riding skills can only be taught on a motorcycle and that the classroom can only be used for teaching theory. However, this may not always be the case. For example, the motorcycle practice time may offer excellent opportunities to teach theoretical points, while simulators and computer games can be used in the classroom to increase scanning and observation skills.

# instructional hours

Students must develop competency in riding skills, acquire a considerable depth of riding knowledge and work on developing responsible-riding attitudes. Students need time to gain riding knowledge and apply this knowledge during practice sessions. They'll also need time to explore and assess their attitudes towards riding.

The minimum instructional time required for an ICBC-approved course is 39 hours. The number of hours that must be spent in each component is outlined below.

Instructional hou	rs
Closed circuit practical instruction	10 hours
The minimum number of instructional hours required to be spent on a motorcycle on a closed circuit.	
On-road practical instruction	14 hours
The minimum number of instructional hours required to be spent on a motorcycle in traff	ic.
Classroom instruction	13 hours
The minimum number of instructional hours required to be spent in the classroom.	
Discretionary allocation of time	2 hours
The minimum number of additional instruction hours to be used as the instructor determine necessary. The time can be spent in the classroom, on the motorcycle, or both.	- · · · <del>-</del> · ·
 Total	39 hours

### Informal road practice

The times allotted for the components of this curriculum are minimum standards. Because of the varying needs of individual learners, many new riders may require additional hours to successfully achieve the learning outcomes. ICBC's *Tuning up for riders* guide recommends that new riders should obtain at least 60 hours of practice. *Tuning up* includes a practice log for learners to record their practice time. When practising outside of a riding school, learners must obey the conditions and restrictions shown on their learner's licence, such as speed and supervisor restrictions. The practice time will be most valuable when instructors work with supervisors and learners to make the practice time meaningful.

The *Instructor resource kit* gives suggestions on how to work with parents and supervisors of learners. These suggestions can be adapted for use when planning an ICBC-approved motorcycle course.

# key instructional strategies

Mapping a safe course: motorcycles is based on learning outcomes. Instructors will have the opportunity to concentrate as much on the learner as on the topics of riding. Three key aspects of delivering courses based on this curriculum will be:

- expanding the instructional role to both facilitating and teaching
- meeting individual and regional needs
- teaching values and attitudes.

What are some good ways to promote participatory learning?

- group work
- peer discussions
- student-led activities
- small-group problem solving
- interactive multimedia productions
- computer-based simulations
- asking questions.

#### The facilitator and the teacher

A facilitator is an instructor who designs a learning environment that encourages active participation of the learner. A teacher is a person who imparts knowledge or wisdom to the student. Because rider education students will either be adults or be taking on adult-like roles, this curriculum encourages instructors to move more into the role of facilitator than of teacher.

Teaching an outcomes-based course means that some traditional ways of teaching will not be effective in helping students achieve the curriculum goals. For example, lecturing students on what they should know about risk taking doesn't allow them enough opportunity to examine their own risk perceptions.

Students need to feel ownership and control over their learning if new learning is to become relevant. Students also need to be able to apply the concepts they're learning to real-life situations. The kind of instructional strategies that an instructor chooses has a strong bearing on how well a student learns.

#### Meeting individual and regional needs

Rider education programs in B.C. must be structured to meet a range of rider needs.

- Some new riders may have limited knowledge of Canadian driving and riding habits and speak English as a second language. During the road test, students must be able to understand and follow basic instructions, which are provided only in English. Therefore, it's important for instructors to understand and be sensitive to cultural and language differences and communicate clearly.
- Instructors may need some knowledge of disabilities and emotional/ behavioural problems as they may be instructing students who face these challenges.
- Instructors need to be sensitive to the needs of students of all ages, since not all new riders are young.
- Our province's geographic diversity presents challenges for instructors because they may need to teach rural and urban riding practices, even when they don't have access to both urban and rural areas.
- B.C.'s weather conditions present constantly changing road conditions that can be hazardous. Instructors need flexible programs to meet these challenges.

Mapping a safe course: motorcycles is designed to be flexible enough to help instructors meet individual learner needs, while adhering to high standards of achievement.

### Teaching values and attitudes

Values and attitudes are integrated into every aspect of this curriculum. Instructors often feel that this is the most difficult aspect of teaching rider education. Trying to change a lifetime of beliefs in a few hours can be a daunting task. While teaching values and attitudes is indeed challenging, sound education can set forces of change in motion. Change may be immediate and easy to see in a student, or change may take much longer, making it less likely that instructors see the long-term results of their efforts. What's important is that instructors explore ways to initiate change.

One of the ways to help students examine their beliefs and values is through activities that are tailored to suit the individual. Helping students examine beliefs and values is largely a process of creating opportunities for students to inquire privately into their feelings, motives and values around riding. In this case, the instructor isn't a teacher: he or she's a facilitator.

Values, attitudes and motives are best observed through the behaviour of a student, not through what they talk about. A new rider who drives with caution and courtesy and who consistently tries to use proper riding techniques has a responsible attitude. See the *Instructor resource kit* for more suggestions.

# assessing and recording

What are some effective assessment techniques?

- careful and consistent instructor observation
- using real-life situations to test performance levels
- setting performance tasks that require students to perform several behaviours at one time
- asking students to perform riding behaviours in more than one situation
- providing immediate feedback.

Competencies — the measurable behaviours or performances of learning outcomes. Measurement can happen during and at the end of a learning experience.

Student progress toward achievement of curriculum goals should be assessed frequently throughout the riding course. Examples of assessment are quizzes and debriefings following road practice. By sharing assessment results with students, qualified supervising adults and/or parents, instructors can help their students make the best use of informal practice sessions.

Good assessment is part of the learning loop known as "acquire-practice-feedback." Giving feedback to new riders about their progress is useful for continuous learning. While students need to acquire new knowledge about riding and need to apply that knowledge to riding performance, ongoing feedback helps students integrate new understandings with what they already know.

One of the essential aspects of the learning-outcomes approach is that students must be able to perform the behaviours described in the learning outcomes before they can be considered successful. These behaviours can be stated as competencies. By measuring a student's behaviour, instructors can assess whether the student has achieved each outcome. For example, Learning Outcome 3.4 is: The student will demonstrate appropriate communication with other road users. As a competency, Learning Outcome 3.4 becomes The student can consistently demonstrate appropriate communications with other road users. If an instructor observes that a student consistently uses eye-to-eye contact when driving, then the student will have moved toward achievement of this competency.

The competency checklist included in this document is a list of all the learning outcomes stated as competencies. Instructors must use this checklist to assess or test student competencies before new riders can be signed off as having completed the course. The statements of expected performance levels are organized according to the learning outcomes and the stage at which each should be tested. The competency checklist states the general performance level that is expected of students for each of the outcomes.

#### A closer look at competency statements

Competency 1.2 reads: The student can identify factors that influence risk-taking behaviour. This is a general statement, and it may seem difficult to determine how to test this particular outcome since it is not readily visible and it involves attitude. Instructors will need to think about what kinds of behaviours demonstrate an awareness of risk taking. Ask yourself, "What would tell me whether this student has this knowledge and can integrate it into his or her riding?" Here are three suggestions:

#### The student can ...

- 1. Correctly identify risk situations and responses in his or her own riding.
- 2. Interpret pictures demonstrating situations in which outside influences are creating risk for riders.
- 3. Explain how media presentations of driving and riding influence the behaviour of new riders.
- 4. Help a fellow student identify types of riding risk.

If a student doesn't achieve competence in the learning outcomes, he or she will need further help and instruction. This may mean using a different instructional technique or teaching the topic again. Students can often tell an instructor why they have not learned a concept successfully and can advise instructors how the instructional situation could be altered to help them learn.

# competency checklist

The chart on the following pages is a competency checklist of rider competencies. It has three purposes:

- 1. A student must achieve most of these competencies before an instructor can issue a *Declaration of Completion* to show that the student has successfully completed the requirements of the course. The student will present this *Declaration of Completion* at a driver licensing office to apply for a reduction of the learner stage.
- 2. Instructors must assess students two times during a riding course, using the competency checklist.
- 3. If a student has to interrupt instruction and move to another school, this checklist can be used to record what the student has or hasn't accomplished.

Information on how to use this checklist is included in the Instructor resource kit.

### Completion standards

There are 42 competencies. Eighty-six per cent of the competencies (36 of the 42) must be performed by the student satisfactorily in order to successfully complete the ICBC-approved course. These competencies are divided into two parts: first semester and second semester.

- 81 per cent (22 out of 27) of the first semester competencies must be satisfactorily completed before a student can be issued a *Declaration of Completion*.
- 93 per cent (14 out of 15) of the second semester competencies must be satisfactorily completed before a student can be issued a *Declaration of Completion*.

# Marking key

IP = In progress

S = Satisfactory

# First semester competencies

(Complete 22/27 satisfactorily)

Outcome			
No.	The student can	IP	S
1.1	Identify typical riding hazards and explain how each can affect one's riding behaviour.		
1.2	Explain factors that influence risk-taking behaviours.		
1.3	Explain the relationship between personal factors and one's ability to perceive risk.		
1.4	Identify three sources of impairment and describe how each of these influences riding behaviour.		
1.5	Analyze the possible costs (to oneself and to society) of taking riding risks.		
1.6	Determine one's risk tolerance through analysis of personal tendencies to engage in risky behaviours.		
2.1	Define his or her personal values, beliefs and motives related to riding and explain how each of these might affect his or her riding behaviours.		
2.2	Explain how one's riding may be influenced negatively or positively by at least four social factors.		
3.1	Describe why riders need to continue improving their riding behaviours throughout their lives.		
3.3	Describe ways of sharing the road.		
3.5	Describe ways to show leadership regarding safe-riding practices.		
3.6	Identify environmental concerns in the use of motorcycles.		
4.1	Identify key steps to take when involved in a crash or when arriving at the scene of a crash.		
4.2	Explain the meaning of all traffic control devices, signs, signals and markings.		
4.3	Explain the rationale for riding laws using several examples.		
4.4	Explain the rules of the road concerned with traffic control persons, pedestrians, bicyclists, cars and emergency vehicles.		
4.5	Explain key legal requirements and responsibilities when riding.		

Outcome No.	The student can	IP	S
5.1	Define the three steps of safe driving and explain the reasons for these steps (see-think-do).		
5.5	Consistently use safety devices correctly (helmet, eye protection and clothing).		
6.1	Explain the forces of physics, such as friction, and how they impact motorcycle performance.		
6.2	Identify factors that often contribute to collision situations.		
6.3	Describe the role of traction in motorcycle control.		
6.4	Explain the role of friction in hazardous riding conditions.		
7.1	Conduct pre-trip inspection.		
7.a	Consistently demonstrate proper riding techniques on a closed circuit:      starting     accelerating     decelerating     braking     steering     lane tracking     maintaining a consistent track     gear (transmission) selection     bicycle steering and gyroscopic steering.		
7.b	Consistently demonstrate proper basic operation of a motorcycle on a closed circuit, including:  • balance and braking  • starting, moving off and stopping  • straight-line riding  • slow-speed manoeuvres  • gear change  • shoulder checks  • hand and electric signals  • basic traffic signs and lines  • road position  • higher-speed operation (including cornering, changing lanes, accelerating and braking).		
7.c	Demonstrate proper hazard avoidance techniques on a closed circuit, including:  • steering  • accelerating  • braking  • decision-making.		

# Second semester competencies

(Complete 14/15 satisfactorily)

Outcome No.	The student can	IP	S
1.7	Consistently demonstrate realistic risk perception in riding behaviours.		
2.3	Consistently exhibit riding behaviours that are safe and courteous.		
3.2	Demonstrate an understanding of the complexity of the riding task by using self-correcting activities while riding.		
3.4	Consistently demonstrate appropriate communications with other road users.		
5.2	Consistently demonstrate correct observation skills.		
5.3	Consistently interpret the riding situation appropriately.		
5.4	Consistently take appropriate riding actions to minimize risk.		
6.5	Consistently demonstrate the ability to alter one's riding to accommodate hazardous riding conditions.		
7.2	Consistently demonstrate proper riding techniques in traffic:  starting  accelerating  decelerating  braking  steering  lane tracking  maintaining a consistent track  gear (transmission) selection  bicycle steering and gyroscopic steering.		
7.3	Consistently demonstrate proper vehicle control while changing direction:  • yielding  • crossing intersection  • merging  • changing lanes and passing  • maintaining correct lane tracking.		

Outcome No.	The student can	IP	5
7.4	Consistently demonstrate proper right-of-way manoeuvres:      stop signs     two- and four-way stops     traffic circles     yield signs     controlled and uncontrolled intersections     T-intersections     malfunctioning traffic control devices     emergency vehicles.		
7.5	Consistently demonstrate proper turns: <ul><li>left turns</li><li>right turns</li><li>U-turns.</li></ul>		
7.6	<ul> <li>Consistently demonstrate proper parking techniques:</li> <li>stall parking (forward and reverse)</li> <li>hill parking (up and down)</li> <li>angle parking</li> <li>shoulder parking.</li> </ul>		
7.7	Demonstrate proper techniques on highways:      entering     curves     shoulders     grade of road     passing     lane-changing     nighttime riding     exiting.		
7.8	Demonstrate proper techniques on freeways:      entering     curves     grade of road     passing     lane-changing     nighttime riding     parking on shoulders     exiting     emergency conditions.		