



UNIT OVERVIEW

Unit 4: Riding independently

Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



SUGGESTED STAGE

While this Unit is designed for **Years 7 and 8** (age range 12-15 years), you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

The unit is designed to be delivered in nine lessons. Each lesson has a suggested duration of 45 minutes, including two group rides outside of the school grounds (the second being of a longer duration, such as 90 minutes). **Suggested total unit teaching time is 7.5 hours.**



APPROACH TO USING THE LESSON PLANS

The lessons should be delivered in order, as content builds upon previously gained skills and knowledge. The lessons can be scheduled in a flexible way that suits your school. For example, you could conduct one lesson per week, over the course of a term or in a more concentrated schedule over a week or two, culminating in a final community ride. Bike Ed has been designed to be flexibly incorporated into your school calendar. For example, if you choose to do more than one lesson in a row you could skip the helmet and bike check for the second lesson.



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CURRICULUM LINKS

The Bike Ed program is designed to support all students by emphasizing the importance of safety and promoting independent travel skills. The Bike Ed program caters for all students and recognizes the need to teach safety and independent travel for all. Acknowledging the diverse needs of learners, we are committed to providing tailored assessment materials for students working at levels below the Foundation stage (A-D curriculum). For more information please email bikeed@transport.vic.gov.au.

CONTENT DESCRIPTORS (Geography)

VC2HG8S02 collect, organise and process information and data from primary and secondary sources, including fieldwork, and using geospatial technologies and digital tools as appropriate.

VC2HG8S03 represent and describe information and data using a range of formats, including maps constructed with geospatial technologies.

(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

VC2HP8M02 design and demonstrate how movement strategies can be manipulated to improve movement outcomes.

VC2HP8M03 demonstrate and explain how movement concepts related to effort, space, time, objects and people can be manipulated to improve movement outcomes.

VC2HP8M04 adapt and perform movement sequences in a variety of contexts, demonstrating how the movement elements of time, effort, space, people and objects can enhance performance.

ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students can identify safety issues in their own and others' bikes, clothing, and equipment, and suggest practical solutions to improve safety.	Students can undertake some of the basics of bike maintenance: <ul style="list-style-type: none">· change a flat tyre· check tyre pressure· adjust seat height to fit individual· clean and oil the chain· fix a punctured tube	Students can undertake all of the basics of bike maintenance: <ul style="list-style-type: none">· change a flat tyre· check tyre pressure· adjust seat height to fit individual· clean and oil the chain· fix a punctured tube
Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).	Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands) and are beginning to take the lead or serve as role models for others.	Students demonstrate and can lead successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).

Continued overleaf.



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LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).	Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs) and are beginning to take the lead or serve as role models for others.	Students lead others in adherence to all road safety rules, instructions and norms whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).
Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).	Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths) and serve as role models for others.	Students lead others in obeying all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).
Students can identify and mitigate hazards in a community setting with assistance. Students can plan a safe travel route using a range of technologies and information (with teacher oversight)	Students can plan a safe travel route using various geospatial technologies and information (with teacher oversight) based on current conditions, hazards and the environment.	Students can plan several safe travel routes alternatives using various geospatial technologies and information (with teacher oversight), choosing the best and safest route based on current conditions, hazards and the environment.



THIS UNIT INCLUDES TWO GROUP RIDES OUTSIDE OF THE SCHOOL GROUNDS

You will need to have at least two teachers for the first 20 students and one teacher per 10 students thereafter. At least one teacher must be an accredited Bike Ed instructor. <https://www2.education.vic.gov.au/pal/excursions/guidance/adventure-activities>. Permission forms to allow students to participate in outside bike rides must be returned prior to the ride and a risk assessment must be undertaken and approved.

The importance of inclusion in group ride activities outside of school grounds for all students regardless of ability cannot be underestimated.

Statistics show that road incidents involving children on bikes often occur while the rider is entering the roadway, or at intersections. As such, real-world education and guided experience with these scenarios are crucial to ensuring safety of children riding a bicycle and interacting with other road and path users.

The out-of-school group ride helps students develop confident, independent bike riders, ultimately encouraging the use of a bicycles for active transport, promoting physical activity and reducing car use. As the end-point of a program, the group ride provides a realistic and relevant goal and reward for students,



allowing for application and consolidation of riding skills developed throughout the Bike Ed program. Many students find this activity the most empowering and exciting component of the program.

If you would like additional resources and support for including all students in a group ride regardless of ability, please email bikeed@transport.vic.gov.au.

1 Lesson 1: Setting out Bike Ed and riding stations (part 1)

LEARNING INTENTIONS

- For students to revisit and revise the skills needed for safe participation in Bike Ed.

SUCCESS CRITERIA

- Demonstrate how to change gears.
- Apply brakes smoothly with balance and control.
- Keep a safe distance (at least 2 bike lengths) when riding.

ACTIVITIES (note: lesson plans include differentiation ideas)

Tuning in activity. Brain storming bikes and benefits. What do we know about bikes? Pathway to community ride outside school. Revision of important bike related road rules.

Safety checks. Helmets, clothing, ABCD check, attitude check.

Activity 1. Riding stations. Set up and walkthrough the seven riding stations. Separate students into 7 different groups. Each group will rotate through five of the riding stations in Lesson 1 and the remaining two in lesson 2 (7 station rotations in total). Five minutes at each station. Use the riding station activities for lesson 1 and 3 guide.

Reflection & closure. Questioning on what worked well and what was most challenging in the riding stations. Thumbs up/down/sideways for enthusiasm for Bike Ed.

2 Lesson 2: Riding stations (part 2) and pre-intersections

LEARNING INTENTIONS

- For students to identify and explain basic road rules that relate to cycling.
- For students to analyse and demonstrate ways to safely navigate simple intersections (in a simulated school setting).

SUCCESS CRITERIA

- Identify behaviour at Stop, give way, no entry, traffic lights.
- Recall road rule in relation to riding on a footpath and helmet use.
- Use safe distance and use safe speed at intersections.

ACTIVITIES (note: lesson plans include differentiation ideas)

Tuning in activity. Brainstorming key bike skills. Students reflect on the riding stations they completed in lesson 1, and think/pair/share the key bike skills they did well and those they need to work on. Share some of them with the class.

Safety checks. Helmet & clothing check. ABCD check.

Activity 1. Hot Spot game. Revising bike control skills

Activity 2. Riding Stations. Quick reminder walkthrough of each station (7 in total). Find your bike buddy and self assessment sheets. Five minutes at each station. Complete the two remaining stations this lesson. Use the riding station activities for lesson 1 and 3 guide.

Activity 3. Sharing the road. Brief discussion about basic road rules and the concept of giving way to others.

Activity 4. Venn Ride-agram. Revisits “give way to the right” rules, and begins to incorporate group riding skills of communication and signalling.

Reflection & closure. Revisit concepts of priority. Self-reflection on bike skills. Thumbs up/down/sideways: How confident do you feel about your understanding of the road rules and priority?



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3 Lesson 3: Intersections

LEARNING INTENTIONS

- For students to analyse and demonstrate ways to safely navigate more complex intersections (in a simulated school setting).

SUCCESS CRITERIA

- Use safe distance and use safe speed at intersections.
- Ride on left side of the road, giving way to the right and obeying road signs.

ACTIVITIES (note: lesson plans include differentiation ideas)

Tuning in activity. Sharing the road. Students revise basic road rules, and think/pair/share what they remember from last lesson.

Safety checks. Helmet & clothing check. ABCD check.

Activity 1. Sharing the Road. Quick revision of basic road rules and the concept of giving way to others.

Activity 2. Figure 8 riding. Revision of giving way and riding with others.

Activity 3. T-intersections. Walkthrough and practice.

Activity 4. Cross-intersections. Walkthrough and practice.

Optional. Intersection course. Extension of cross-intersections.

Reflection & closure. Reflection on challenges with intersection activities. Thumbs up/down/sideways: Do you understand the requirements at each intersection covered?

4 Lesson 4: Intersections and road skills

LEARNING INTENTIONS

- For students to analyse and apply ways to safely navigate complex intersections (in a simulated school setting).

SUCCESS CRITERIA

- Use safe distance and use safe speed at intersections.
- Ride on left side of the road, giving way to the right and obeying road signs.
- Demonstrate safe waiting times in complex situations.

ACTIVITIES (note: lesson plans include differentiation ideas)

Tuning in activity. Local intersections. Students think of a local busy intersection which they feel would be challenging on a bike and locate it on Google Maps, and share findings with the class.

Safety checks. Helmet & clothing check. ABCD check.

Activity 1. Intersection theory. Explanation and discussion of roundabouts and hook turns.

Activity 2. On road safety. Option of class discussion or practical activity, or combination of both; depending on school surroundings. Including: car dooring, safely entering the road, and merging into traffic lane from bike lane that ends or is obstructed.

Activity 3. Move On Over. Learning to merge from bike lane into traffic lane using "scan, signal, scan". Picking safe gaps, decision making.

Activity 4. Unsigned intersection. Walk through a setup intersection, explaining where to stop and who gives way. Students will walk or ride slowly through this intersection, giving way where required.

Reflection & closure. What did you learn from watching traffic? What are some of the major road safety issues we learned how to manage today? Thumbs up/down/sideways: How confident do you feel about navigating roundabouts and turning right at intersections?



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5 Lesson 5: Riding stations (part 3)

LEARNING INTENTIONS

- For students to complete all activities with control.

SUCCESS CRITERIA

- Demonstrate how to change gears in a variety of situations.
- Apply brakes smoothly with balance and control under pressure situations.
- Keep a safe distance (at least 2 bike lengths) when riding.

ACTIVITIES (note: lesson plans include differentiation ideas)

Tuning in activity. Brainstorming key bike skills. Students recall the riding stations in lesson 1, and think/pair/share the key bike skills they did well and those they need to work on. Share some of them with the class.

Safety checks. Helmet & clothing check. ABCD check.

Activity 1. Hot Spot game. Developing bike control.

Activity 2. Riding stations. Quick walkthrough of each station (five in total). Find your bike buddy and self assessment sheets. Five minutes at each station. Complete five stations this lesson.

Reflection & closure. Reflection on what worked well and what were the challenges in doing the riding stations. Thumbs up/down/sideways: How much do you think you have improved your bike control skills by completing the riding stations?

6 Lesson 6: Maintenance and group riding skills

LEARNING INTENTIONS

- For students to perform basic bike maintenance.
- For students to ride safely in a group of bike riders (in a school setting).

SUCCESS CRITERIA

- Students can safely:
 - Check tyre pressure
 - Adjust seat height to fit individual
 - Clean and oil the chain
 - Change a flat tyre
 - Fix a punctured tube
- Safely ride in single file or two abreast, maintaining safe distances and communicating effectively.

ACTIVITIES (note: lesson plans include differentiation ideas)

Tuning in activity. Bike maintenance videos. In small groups, students search for bike maintenance videos on the topics to be covered in this lesson, and share with the class.

Activity 1. Bike maintenance. In groups led by teacher (or older students). Topics include: cleaning the bike, cleaning and lubricating the chain, adjusting the seat height, checking tyre pressure.

Safety checks. Helmet & clothing check. ABCD check.

Activity 2. Signaling and voice commands. Practicing skills as a group.

Activity 3. Moving into pairs and single file. Walk through switching between single file and pairs. Follow the leader group practice.

Optional. Tortoise game. Practicing slow riding skills.

Optional. Changing the tyre. Extension to maintenance skills to learn how to replace and/or repair a punctured inner tube.

Reflection & closure. What are the keys to riding in a group? What are the key steps to replacing a bike tyre? Thumbs up/down/sideways: How comfortable are you riding in a group?

Administration for next lesson: Distribute a route map for the group rides to students. Ensure permission forms are returned. Risk assessment to be completed and approved by the school.



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7 Lesson 7: Group ride 1

LEARNING INTENTIONS

- For students to safely participate in a group ride in the community (low traffic environment).

SUCCESS CRITERIA

- Follow instructions, road rules and work as a group during the community ride.
- Exhibit bike control skills (safe distancing, safe speed) during the community ride.
- Use hand signals, head checks, scanning and voice commands at all times during the ride.

ACTIVITIES (note: lesson plans include differentiation ideas)

Tuning in activity. Brainstorming group riding. Students think/pair/share the key elements to riding safely in a group. Share some of them with the class.

Safety checks. Helmet & clothing check. ABCD check.

Activity 1. Venn Ride-agram. Revision on giving way, group riding skills, communication and signalling.

Activity 2. Group Ride. Pre-ride briefing and group ride (outside school).

Reflection & closure. What surprised you and what was interesting? What hazards were there and how did you deal with them? Thumbs up/down/sideways: How confident do you feel about completing the next community ride later in the Bike Ed program?

8 Lesson 8: Planning to avoid hazards

LEARNING INTENTIONS

- For students to use a variety of technologies and other information (with teacher oversight) to plan several routes for lesson 9, identifying and minimising the hazards and planning alternatives.

SUCCESS CRITERIA

- Map several alternative safe routes using technologies and other information (such as local knowledge).
- Identify and minimise hazards through planning on the routes.
- Choose the safest route for the group ride, justifying the reason.
- Retell the planned route with others.

ACTIVITIES (note: lesson plans include differentiation ideas)

Tuning in activity. Observations from on-road ride. Students think/pair/share the hazards they saw in the last ride and where they saw them. Share some of them with the class.

Activity 1. Virtual Ride. Take a 'virtual ride' of the community ride route (using the route for Lesson 9, Group Ride 2) on Google Street View by following the map.

Activity 2. Road hazards story worksheet. Students complete a worksheet to identify hazards and creating a story for a hypothetical ride using the community ride route presented in Activity 1.

Activity 3. Route Planning. In small groups, use mapping tools to map a route to a chosen destination. Present to the class using Google Maps and Street View to explain the route choices made and discuss the most hazardous parts of the ride (intersections etc.).

Optional. Follow the leader. Practicing communication, signalling and group riding skills.

Reflection & closure. Students to reflect on key points covered including common hazards and route planning. Thumbs up/down/sideways for confidence knowing how to plan a safe route.



9 Lesson 9: Long group ride (90 minutes)

LEARNING INTENTIONS

- For students to safely participate in a group ride in the community (more complex traffic environment).

SUCCESS CRITERIA

- Follows instructions and works as a group during the community ride.
- Exhibits bike control skills (safe distancing, safe speed) during the community ride.
- Adheres to road rules during the community ride.
- Uses hand signals, head checks, scanning and voice commands at all times during the ride.
- Reflect on their own safe experiences and learning from Bike Ed.

ACTIVITIES (note: lesson plans include differentiation ideas)

Tuning in activity. Brainstorming hazards. Students think/pair/share the hazards and other challenges they expect they will encounter on the road ride. Share some of them with the class.

Safety checks. Helmet check. ABCD check.

Activity 1. Move On Over. Revision on how to merge from bike lane into traffic lane

Activity 2. Pre-ride briefing. Rules of the ride, and reminders about hazards.

Activity 3. Group ride. Outside of school grounds.

Activity 4. Post-ride debrief. Written reflection. What did you learn from the ride?

Reflection & closure. Present certificates of achievement. Student reflection on challenges they have overcome, what they are most proud of, and whether they feel they have become a better bike rider. Thumbs up/down/sideways for overall effort and achievements in Bike Ed Unit 4.

