

Road safety education

Stage 4 – Exploring e-bikes in NSW

About this resource

Rationale

Students will critically analyse the regulations surrounding e-bikes in New South Wales, exploring the distinctions between power-assisted pedal cycles, electrically power-assisted cycles, and the prohibition of petrol-powered bicycles.

Additionally, students will engage in creative thinking to propose innovative solutions to potential challenges related to e-bike usage.

Alignment to School Excellence Framework

[School Excellence Framework](#)-

Learning domain: Curriculum, curriculum provisions

Teaching domain: Effective Classroom Practice, Explicit teaching.

Alignments to frameworks

[NSW PDHPE syllabus](#)

[Australian Professional Standards for Teachers \(2.1.2\)](#)

Further resources and professional learning opportunities:

- [Road Safety Education webpage](#)
- Road safety education [Professional learning opportunities](#)

Consulted with: Road Safety Education team, Transport for NSW and PDHPE curriculum team.

Suggested use and timeframe: This resource has been created to be used within a 60 min lesson with further time needed to complete the extension / creative thinking section.

Research base: [What works best in practice](#) – explicit teaching theme.

Feedback: Email feedback, questions and comments about this resource to the [Road Safety Education Team](#)

Reviewed by: Road Safety Education team.

Created/last updated: February 2024

Anticipated resource review date: February 2025

Contact: [Road Safety Education Team](#) for further support.

Stage 4 - Exploring e-bikes in NSW

Syllabus Outcomes

Outcome	Description
PD4-7	investigates health practices, behaviours and resources to promote health, safety, wellbeing and physically active communities
PD4-9	demonstrates self-management skills to effectively manage complex situations
PD4-10	applies and refines interpersonal skills to assist themselves and others to interact respectfully and promote inclusion in a variety of groups or contexts

Syllabus Content

Students will:
<ul style="list-style-type: none"> recognise potentially unsafe environments and describe strategies to promote their own and others' health, safety and wellbeing in a variety of real-life situations. <ul style="list-style-type: none"> devise a plan to assume responsibility for their own road safety and to support the road safety of others, eg as a pedestrian or passenger.
<ul style="list-style-type: none"> examine influences on peoples' behaviours, decisions and actions <ul style="list-style-type: none"> examine the relationship between protective factors, contextual factors, social media, laws and rules in determining decisions and behaviour in relation to road use and/or drug use.

Skills

Self-management skills	Interpersonal skills
<ul style="list-style-type: none"> Decision-making and problem-solving <ul style="list-style-type: none"> information-gathering finding solutions to problems 	<ul style="list-style-type: none"> Leadership and advocacy <ul style="list-style-type: none"> influencing and persuading

Resources

- Thinking placemat worksheet – Appendix #1
- PMI worksheet – Appendix #2
- Scenario worksheets – Appendix #3
- Internet access for research
- Transport for NSW advice:
 - [Bikes, e-bikes and e-scooters TfNSW pamphlet.](#)
 - [E-Bikes and petrol-powered bicycles](#)

Teaching and learning sequence:

Learning Intentions	Success Criteria
Students will: <ul style="list-style-type: none">• understand e-bike rules in NSW and apply this knowledge to real life scenarios.	Students will: <ul style="list-style-type: none">• apply knowledge gained from the analysis to identify potential risks and necessary skills in a scenario worksheet.• brainstorm and create innovative ideas in the group for promoting e-bike usage while keeping safety in mind.

Considerations:

The regulation for e-bikes in NSW needs to be monitored for any updates or changes that could affect this lesson.

It is important for teachers to understand that these regulations are state-based, and the teacher may need to be aware of corresponding regulations in other states.

1. Begin with a discussion on the growing popularity of e-bikes and their impact on transportation in NSW.

Teacher notes:

Questions to help guide discussion: Have you noticed e-bikes in your area? Have you or someone you know used an e-bike? Who have you seen using these bikes? How can they help/hinder transportation in your area?

2. Complete **Appendix #1 thinking placemat** on the focus question "What is an e-bike?"

- Distribute a thinking placemat template to each group.
- Instruct students to write their personal response to the question in one quadrant, considering their understanding of e-bikes.
- Facilitate a discussion where each student takes turns sharing their response with their group members.
- Encourage active listening and respectful dialogue as students discuss and compare their perspectives.
- Collaboratively summarise the group's collective response in the centre of the placemat.
- Designate a spokesperson from each group to report back to the class.

Teacher notes – Appendix #1 - What is an e- bike?

This scaffold encourages brainstorming and the process of generating ideas so that students can organise information. The Thinking Placemat encourages individual input along with collaboration and increases student accountability and involvement in the learning process.

3. Divide the class into small groups.

Provide each group with:

- internet access to the [Bikes, e-bikes and e-scooters TfNSW pamphlet](#).
- internet access to TfNSW advice - [E-Bikes and petrol-powered bicycles](#)

Students complete **Appendix #2 E-bike regulations** –to critically analyse the regulations, focusing on the safety considerations and reasons behind the restrictions on petrol-powered bicycles.

Once completed, each group chooses one point, from each section of the PMI to share with the class.

Teacher notes – Appendix #2 - E-bike regulations

A PMI chart is an effective reflection tool to allow students to look at the whole picture of a concept. It allows students to look at the positives, the minuses and what are some interesting factors.

Differentiation:

Use the PMI chart individually, with a partner, small groups or in whole class discussions. Students can use the read aloud function to access the information within the [Bikes, e-bikes and e-scooters TfNSW pamphlet](#). (instructions to use [read aloud function in Adobe pdf reader](#))

4. Students apply their knowledge gained from the PMI activity to explore the scenarios in **Appendix #3**.

With a partner, students choose a scenario and:

- analyse the potential risks.
- decide what they should do and
- identify the skills they'll need to overcome any challenges.

Teacher notes – Appendix #3 - Critical and creative thinking scenario cards

Focus of this activity is having students understand which skills they may need to develop to help them in the scenario and how they can apply them to real life scenarios.

Differentiation:

Teacher/students may wish to create their own scenarios to match local context.

Reduce the number of potential risks that need to be identified.

Class completes one scenario together, demonstrating and discussing the task expectations.

5. Conclude the lesson with students sharing their scenarios and final decisions.
Consider incorporating role-playing to apply the selected skills to their scenarios.
6. Review the lesson's learning intention and success criteria and have students complete a self-reflection of their own achievement.
7. **Assessment:** Assess students based on their participation in group discussions, the quality of their critical analysis through the PMI and scenario tasks.

Extension Opportunity – Promoting e-bike usage creatively

1. Challenge students to think creatively about how e-bike usage could be further promoted while maintaining safety standards.
2. As a class or in small groups, students brainstorm and create a list of innovative promotion ideas to address potential challenges, such as safety concerns or public perception.
3. Each group to choose one idea and develop a brief presentation outlining its benefits and potential impact.
 - emphasise the importance of considering the diverse needs of the community.
4. Provide students with **Appendix #4 Peer assessment rubric** and discuss the format and expectations.
5. Provide time for students to develop their presentations and review content against the Peer Assessment Rubric.
6. Each group presents their creative promotion idea to the class.
7. Using the rubric, students complete a peer assessment. Encourage students to reflect on the balance between innovation and safety in promoting sustainable transportation options.
8. **Assessment:**
Use the **Appendix #4 Peer assessment rubric** to assess students' creativity and feasibility of their proposed solutions during the presentation.

Teacher notes

Presentation modes should be tailored to meet students' skills, interests, and needs.

For example, PowerPoint, speech, role play, digital or a combination of.

Remind students to use reliable sources when researching.

Background Notes:

E-bikes and petrol-powered bicycles – information correct January 2024

What is an e-bike?

A key element of bicycles is that they are primarily propelled by the rider.

If you can ride a bike without pedalling, it is no longer a bicycle. You are therefore potentially subject to the laws of riding a motorcycle and the relevant fines.

Which e-bikes are legally allowed to be ridden in public?

There are two types of permitted e-bikes in NSW: power-assisted pedal cycles and electrically power-assisted cycles.

While e-bikes sold in Australia meet the legal requirements, there is currently no quality control over e-bikes purchased and shipped from overseas retailers.

What rules must e-bike riders follow?

E-bikes are subject to the same [rules as bicycles](#).

To be considered a bicycle the e-bike cannot be propelled exclusively by a motor.

E-bikes must not assist pedalling past the speed of 25km/h.

Support materials:

1. TfNSW pamphlet - Bikes, e-bikes and e-scooters.

Multiple copies can be ordered free of charge through [Transport for NSW website](#).

Appendix #1 – Thinking Placemat – Group Task – **What is an e-bike?**

Name: _____

Name: _____

Name: _____

Name: _____

Group Response

Topic: E-Bike regulations

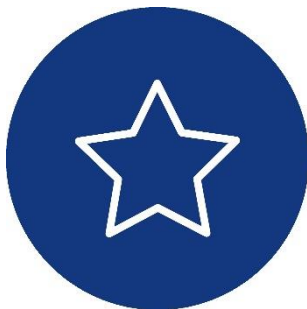
Plus



Minus



Interesting



Scenario
#1



Your best friend arrives at your house after school with his new [power assisted pedal cycle e-bike](#). The motor looks large and powerful. Your friend tells you that he has “improved it” with help from his dad and it now has 500 watts of power and can travel “really fast”. He suggests you “take it for a spin” around the block. What are the potential risks?

Potential risk

Potential risk

Potential risk

Potential risk

Potential risk

1. What would you do in this scenario?

•

2. Which skills will you need? – highlight the skills you think you'll need in this scenario on appendix 3a and 3b.

What do you do? Application of skills – Choose one or two of the skills you highlighted and explain how you would use it. Why is that skill important in this scenario?

Scenario
#2



You meet up with a friend to go for a ride. She arrives with her new [petrol powered bicycle](#).

You ask her if she's allowed to ride the bike on the road.

She tells you to stop worrying, it'll be all right as she is only going to be on footpaths and cycle ways, not the road. What are the potential risks?

Potential risk

Potential risk

Potential risk

Potential risk

Potential risk

1. What would you do in this scenario?

•

2. Which skills will you need? – highlight the skills you think you'll need in this scenario on appendix 3a and 3b.

What do you do? Application of skills – Choose one or two of the skills you highlighted and explain how you would use it. Why is that skill important in this scenario?

Scenario
#3



Your friend has bought an [electrically power-assisted cycle](#) and is showing it to you. When you have a ride on it, you notice the odometer shows you going over 30km/h but the motor is still running.

What are the potential risks?

Potential risk

Potential risk

Potential risk

Potential risk

Potential risk

1. What would you do in this scenario?

•

2. Which skills will you need? – highlight the skills you think you'll need in this scenario on appendix 3a and 3b.

What do you do? Application of skills – Choose one or two of the skills you highlighted and explain how you would use it. Why is that skill important in this scenario?

Expanding on the skills

Interpersonal skills	Examples of what the skills might look like in action
<p>Communication</p> <ul style="list-style-type: none"> • verbal and non-verbal communication • active listening • expressing feelings • giving and receiving feedback • negotiation • negotiation and conflict management • assertiveness • refusal 	<ul style="list-style-type: none"> • communicate clearly with others • share thoughts and emotions appropriate to the situation • listen to others • understand the needs and circumstances of others and express that understanding • propose alternatives when situations are not what is expected or what suits • apply strategies to avoid or negotiate conflict for positive outcomes • apply and assess strategies to prevent and resolve the conflict between others using mediation • assert own point of view • reflect their views through their behaviours and actions • respectfully state their needs, wants and feelings • say no and able to resist peer pressure
<p>Empathy Building</p> <ul style="list-style-type: none"> • understanding others' views • understanding of others' needs and circumstances 	<ul style="list-style-type: none"> • understand another's needs and circumstances • appreciate the rights of others • relate to the experiences and circumstances of others • show compassion
<p>Leadership and advocacy</p> <ul style="list-style-type: none"> • influencing and persuading • restorative practices • networking • motivation 	<ul style="list-style-type: none"> • encourage people to look out for themselves • put forward a convincing argument • challenge the negative attitudes and behaviours of others • encourage and guide others in a positive way
<p>Collaboration, inclusion and relationship-building</p> <ul style="list-style-type: none"> • expressing respect for others' contributions • fostering connectedness • recognising and using their own abilities and strengths and those of others • assessing their own abilities and contributing back to the group 	<ul style="list-style-type: none"> • listening to others without interruption and offering positive feedback on their ideas. • making an effort to include everyone in group activities • reflecting on personal strengths and areas for growth • identifying ways to contribute to the group by leveraging your strengths. • acknowledging and valuing diverse ideas

Appendix #3 – Skills and examples in action

Interpersonal skills	Examples of what the skills might look like in action
<p>Social awareness</p> <ul style="list-style-type: none"> • respecting difference and diversity • contributing to their community • perspective forming • perspective taking 	<ul style="list-style-type: none"> • being open to learning about and accepting people who are different from you, including those from different cultures or with different beliefs • finding ways to help out in your community or school, such as volunteering or participating in activities that make things better for others • attempting to see things from different points of view by listening to others and thinking about the reasons behind their thoughts or emotions • imagining what it's like to be in someone else's shoes, understanding how they might feel, and being kind and considerate towards them

Self-management skills	Examples of what the skills might look like in action
<p>Decision making and problem-solving</p> <ul style="list-style-type: none"> • information-gathering finding solutions to problems • analysis • time management • goal setting and tracking 	<ul style="list-style-type: none"> • locate relevant and reliable information and services • comprehend information from external sources such as family members, peers and the media • identify risks involved and positive outcomes • choose from a range of options with confidence • justify why a particular option has been chosen over others • assess outcomes of a decision • brainstorm ideas/solutions and develop a clear picture of the problem • explain the potential for harm • act to protect/support self and others, even if plans change
<p>Emotion and stress management</p> <ul style="list-style-type: none"> • recognising emotions • optimistic thinking • coping 	<ul style="list-style-type: none"> • communicate emotions calmly and clearly • share thoughts and feelings with others in an appropriate way • express concerns/needs clearly without hurting others or trying to influence or control them
<p>Help-Seeking</p> <ul style="list-style-type: none"> • recognising when help is needed • accessing support and support networks 	<ul style="list-style-type: none"> • assess information, situations, decisions, and actions to assess when help is needed • approach and respond to situations in a fair and supportive manner • access supports to gather information, about products or services that may be difficult to understand

Appendix #3 – Skills and examples in action

Self-management skills	Examples of what the skills might look like in action
<p>Self-Awareness</p> <ul style="list-style-type: none"> • self-monitoring thoughts, feelings and actions • developing greater control and responsibility for our actions, feelings and behaviours • awareness of rights and responsibilities, influences, values, attitudes, strengths and weaknesses • reflective practice 	<ul style="list-style-type: none"> • paying attention to how you think, feel and act in different situations, and noticing if there are any patterns or changes • taking ownership of your actions and emotions and making choices that reflect your values and goals • understanding what you have the right to do and what is expected of you • taking time to think about your experiences, what you've learned from them and how you can apply that knowledge to future situations • identify advantages and disadvantages of particular attitudes and actions • prepare and plan for future challenges by reflecting on past events
<p>Strengthening personal identity</p> <ul style="list-style-type: none"> • building self-concept • building self-confidence • building self-esteem • self-evaluation • cultivating resilience • adaptability • perseverance 	<ul style="list-style-type: none"> • stepping out of your comfort zone to acquire new skills and experiences • practicing self-compassion and positive self-talk • reflecting on past experiences and behaviours to identify patterns and areas for improvement • viewing challenges as opportunities for growth and learning • persevering through setbacks and obstacles with determination and resilience • adapting to change by staying flexible and open-minded

Appendix #4 - Peer assessment rubric

Group Presentation Rubric: Promoting E-Bike Usage Creatively

Criteria	Excellent (4)	Proficient (3)	Basic (2)	Limited (1)
Creativity and Innovation	The group demonstrates highly creative and original ideas, showcasing innovation in addressing challenges related to e-bike promotion.	The group presents creative ideas that effectively address challenges related to e-bike promotion.	The group provides some creative ideas, but they lack depth or originality in addressing challenges.	The group's ideas lack creativity and fail to effectively address challenges.
Safety Considerations	The presentation thoroughly considers and integrates safety standards into the proposed idea, demonstrating a strong commitment to safety.	The presentation acknowledges safety considerations and provides a reasonable integration into the proposed idea.	Safety considerations are mentioned, but their integration into the proposed idea is limited or unclear.	The presentation lacks a clear consideration of safety standards in the proposed idea.
Community Needs	The group demonstrates a comprehensive understanding of diverse community needs and effectively incorporates them into their proposed idea.	The group considers diverse community needs and incorporates them reasonably well into their proposed idea.	The group acknowledges community needs, but the integration into the proposed idea is superficial or incomplete.	The group overlooks or minimally addresses community needs in the proposed idea.
Presentation Quality	The presentation is well-structured, engaging, and effectively communicates the proposed idea, using appropriate visuals or aids.	The presentation is organized and effectively conveys the proposed idea, with some room for improvement in structure or engagement.	The presentation lacks organization and may struggle to convey the proposed idea clearly. Visual aids or engagement are limited.	The presentation is disorganized, lacks clarity, and struggles to effectively convey the proposed idea.
Collaboration and Teamwork	All group members actively contribute to the brainstorming and presentation, demonstrating strong teamwork and collaboration.	Most group members actively contribute to the brainstorming and presentation, with some room for improvement in teamwork.	Some group members contribute minimally, and there are challenges in teamwork and collaboration.	Limited collaboration is evident, with only one or a few members actively participating.
Overall Impact and Feasibility	The proposed idea has a significant potential impact on e-bike promotion, and its feasibility is well-supported.	The proposed idea has a notable potential impact on e-bike promotion, with reasonable support for its feasibility.	The proposed idea has limited potential impact, and its feasibility is questionable or insufficiently supported.	The proposed idea lacks a significant potential impact, and its feasibility is not adequately addressed.