Implementing curriculum: Example case study

This modelled example of a case study, using the example of waste disposal and recycling services, incorporates contemporary issues aligned with the Civics and Citizenship curriculum.

Levels 5 and 6: Waste disposal and recycling services case study

Curriculum links

Civics and Citizenship Levels 5 and 6 achievement standard extract:

* Students explain what it means to be an Australian citizen and how people can participate as global citizens. They analyse contemporary issues and use evidence to support a point of view about civics and citizenship issues. They identify possible solutions to an issue as part of a plan for action.

Civics and Citizenship Levels 5 and 6 achievement content descriptions:

 Strand: Citizenship, Diversity and Identity

* Identify different points of view on a contemporary issue relating to democracy and citizenship ([VCCCC015](https://victoriancurriculum.vcaa.vic.edu.au/Curriculum/ContentDescription/VCCCC015))
* Investigate how people with shared beliefs and values work together to achieve their goals and plan for action ([VCCCC016](https://victoriancurriculum.vcaa.vic.edu.au/Curriculum/ContentDescription/VCCCC016))
* Examine the concept of global citizenship ([VCCCC017](https://victoriancurriculum.vcaa.vic.edu.au/Curriculum/ContentDescription/VCCCC017))

Learning intentions

* Students understand how a contemporary issue affects communities.
* Students understand how citizens contribute to change in a democracy.
* Students use evidence to support a viewpoint about this issue.
* Students identify possible solutions to this issue as part of a plan for action by creating an article, an argumentative essay, a panel discussion or a debate about a contemporary issue.
* Students collaborate on a group task and provide feedback to peers.

The 5Es

**Engage**

* **Discuss** with the whole class how waste disposal and recycling services affect students at home, at school and in their local communities.

**Explore**

Activities

* **Collect** data about the type and amount of recyclable waste collected in your classrooms.
* **Observe** how much littering is occurring in the schoolyard.
* **Interview** other students about why they think littering is occurring, and possible solutions and actions that can be taken.
* **Consult** with the JSC/SRC and the school leaders at your school about what can/is being done to address this issue, such as recycling bins, kitchen gardens and compost.
* **Research** where recycled materials go. What do the different symbols and numbers on recyclable materials mean?
* **Watch** excerpts from the ABC series [War on Waste](https://iview.abc.net.au/show/war-on-waste) (on iView), such as the first 15 minutes of Series 1, Episode 1, or watch[Series 1 Extended Sneak Peek](https://www.youtube.com/watch?v=aCUdU6zRyZc&list=PLFut-SiwcTU5i7I2hpKNk2Fq5vNfRiVGE) (on YouTube).
* **Conduct an excursion** to a local council waste facility if this is available in your area. Some council waste facilities offer educational programs and excursions for schools.
* **Photograph** examples in your local community of this issue, such as rubbish ending up in local streets and waterways.
* **Interview or survey** family and neighbours about this issue and possible solutions.
* **Research** which level of government has responsibility for this issue.
* **Reflect** on how this issue is relevant to your life. Consider what would happen if each household and business had to manage this issue by themselves without government assistance.
* **Explore** the history of plastics through the [Melbourne Museum website](https://museumsvictoria.com.au/article/our-addiction-to-plastic/).

**Explain**

Local councils provide waste disposal and recycling services, and they also provide advice and education to assist and encourage people to dispose of their waste responsibly.

Role of the local government

Students research their local government area and its role in waste disposal and recycling services.

* Which local council area do you live in?

**Resource:** [Find your council](https://www.viccouncils.asn.au/find-your-council) (Vic Councils)

* What is the name of your local councillor?
* What other areas are local councils responsible for besides waste management?

**Resource:** [Council responsibilities](https://www.viccouncils.asn.au/what-councils-do/council-responsibilities) (Vic Councils)

* What is your council currently doing regarding waste management?
* Have there been any articles or controversies in the media about local governments and this issue?
* What changes have occurred over time regarding this issue?
* What questions would you ask your local councillor about this issue?

Activity

**Scenario:** A local council proposed collecting household rubbish fortnightly. However, after a backlash from some residents, the council has now reinstated weekly rubbish collection.

**Resource:** Council scraps fortnightly landfill collection (*The Age* 15 July 2021)

* Write a paragraph outlining the point of view of one of the key stakeholders in this issue, such as a resident, a business owner, a local councillor or a member of an environmental group. Include evidence to support your argument, as well as a reflection about the role of democracy in creating change in relation to this issue.

**Resource:** [Circle of Viewpoints](http://www.pz.harvard.edu/resources/circle-of-viewpoints) (Harvard Project Zero, Visible Thinking)

Role of the state government

Students research the role of the state government in recycling and waste management.

**Resources:** [Building Victoria’s circular economy](https://www.vic.gov.au/building-victorias-circular-economy) (Victorian Government) and [Inquiry into Recycling and Waste Management](https://www.parliament.vic.gov.au/epc-lc/article/4154)

* Which state electorate do you live in?

**Resource:** [Victorian Parliament Electorate map](https://www.parliament.vic.gov.au/findelectorate/) (Parliament of Victoria)

* Who is your state member of parliament (MP)?

**Resource:** [Member Search](https://www.parliament.vic.gov.au/about/people-in-parliament/members-search) (Parliament of Victoria)

* What questions would you ask your state MP about this issue?
* What areas are the responsibility of both local and state governments?

**Resource:** [The roles and responsibilities of the three levels of government](https://peo.gov.au/understand-our-parliament/how-parliament-works/three-levels-of-government/the-roles-and-responsibilities-of-the-three-levels-of-government/) (Parliamentary Education Office)

Role of the federal government

Students research the role of the federal government in recycling and waste management.

**Resource:** [National Waste Policy](https://www.awe.gov.au/environment/protection/waste/how-we-manage-waste/national-waste-policy) (Department of Climate Change, Energy, the Environment and Water, Australian Government)

* Which federal electorate do you live in?

**Resource:** [Maps and data of Victorian electoral divisions](https://www.aec.gov.au/electorates/redistributions/2021/vic/final-report/maps-data.htm) (Australian Electoral Commission)

* Who is your federal member of parliament (MP)?

**Resource:** [Senators and Members search](https://www.aph.gov.au/Senators_and_Members) (Parliament of Australia)

* What questions would you ask your federal MP about this issue?
* What areas are the responsibility of both state and federal governments?

**Resource:** [The roles and responsibilities of the three levels of government](https://peo.gov.au/understand-our-parliament/how-parliament-works/three-levels-of-government/the-roles-and-responsibilities-of-the-three-levels-of-government/) (Parliamentary Education Office)

Role of the international community

Students research the role of the international community in responding to the issue of waste management and recycling services.

* How do other countries manage this issue?

**Resource:** ['Germany recycles more than any other country'](https://www.weforum.org/agenda/2017/12/germany-recycles-more-than-any-other-country/) (World Economic Forum 18 December 2017)

* What is the role of non-government organisations (NGOs) in responding to waste disposal and recycling services?

**Resource:** ['This new installation pulled 20,000 pounds of plastic from the Great Pacific Garbage Patch'](https://www.smithsonianmag.com/smart-news/this-new-installation-just-pulled-20000-pounds-of-plastic-from-the-great-pacific-garbage-patch-180978895/) (Smithsonian Magazine 19 October 2021)

**Elaborate**

In groups, students brainstorm some possible actions to address waste disposal and recycling services as responsible, active and informed citizens. Students then use a SWOT chart to evaluate their proposed actions.

|  |  |
| --- | --- |
| Strengths | Weaknesses |
|  |  |
| **Opportunities**  | **Threats** |
|  |  |

Examples of action

* Volunteer for [Clean Up Australia Day](https://www.cleanup.org.au/cleanupaustraliaday).
* Explore previous examples of successful action, for example, [plastic bag ban](https://www.abc.net.au/btn/classroom/plastic-bag-ban/10522750).
* Connect with existing education programs, for example, [ResourceSmart Schools](https://www.sustainability.vic.gov.au/energy-efficiency-and-reducing-emissions/resourcesmart-schools).
* Research leaders in this field, for example, Veena Sahajwalla (see the ABC’s [*Australian Story* episode](https://www.abc.net.au/austory/the-tipping-point/13164736)).
* Advocate about this issue by contacting your local MP and asking them to visit your school.
* Write a letter to a newspaper about this issue.
* Create a [student action team](https://www.education.vic.gov.au/Documents/school/teachers/health/studactionman.pdf) at your school about this issue.
* Debate the issue at a school assembly.
* Role-play the various stakeholders involved in this issue through creating a podcast.
* Write an article for the school newspaper or newsletter explaining the issue and what actions have been taken to address it.
* Draw a cartoon that provides a point of view about this issue.
* Present a speech to an audience explaining the issue and what has been done to address it.
* Analyse a social media campaign about reducing waste by looking at environmental NGOs.
* Explore businesses that have committed to reducing the waste they produce.
* Interview consumers who have chosen to reduce their waste.
* Research the work done by an Australian environmental NGO about recycling.

**Evaluate**

Assessment task

The aim of the assessment task is to examine waste disposal and recycling services at the local, state, regional and global levels and evaluate how active and global citizenship can contribute to a democratic society through informed and responsible action that may contribute to change.

* In groups, students design a plan of action about waste disposal and recycling services, which they then present to the class.
* Students choose the form of their presentations, such as a poster, a role-play, a podcast, a song, a speech, a letter, a video, a poem, a cartoon, an artwork, a debate, an essay or a website.
* The presentations will be self-, peer- and teacher-assessed.
* An ‘action plan’ template has been provided below to help guide students’ group work.

The presentations should include:

* a clear explanation of the issue
* an engaging and persuasive message as part of a plan of action
* a clear target audience
* research and evidence to support an argument and point of view
* an explanation of the roles and responsibilities of the three levels of government in relation to the issue
* possible solutions and actions to address the issue
* identification of ways of taking action as responsible, active and informed citizens
* reflection on the role of democratic values in relation to this issue.

Action plan template

|  |  |
| --- | --- |
| Goal |  |
| **Tasks** |  |
| **Roles** |  |
| **Timing** |  |
| **Resources** |  |
| **Audience** |  |
| **Argument** |  |
| **Evidence** |  |
| **Possible solutions/actions** |  |
| **Links to democracy** |  |
| **Format** |  |

Assessment

The action plan presentation can be teacher-assessed, self-assessed and peer-assessed.

Teacher assessment – example of assessment rubric

In this example the teacher assessment is based on Victorian Curriculum Level 5 and 6 Civics and Citizenship achievement standard. This example uses a rubric aligned to achievement standard extracts and illustrates student accomplishment as a progression from left to right (1 to 5). Such rubrics should be developed as part of planning of the assessment activity. This type of developmental rubric has many advantages, including that it can support consistency between teachers and be used to provide feedback to students.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Achievement standard extracts** | **1** | **2** | **3** | **4** | **5** |
| **They describe the purpose of key institutions and levels of government in Australia’s democracy.**  | Recognise levels of government or key institutions | List different levels of government and key institutions | Describe governments and institutions | Describe the purpose of governments and institutions | Apply knowledge of the roles to an issue |
| **They identify various ways people can participate effectively in groups to achieve shared goals.** | **Identify various ways people can participate effectively in groups**  | Recognise groups | List groups | Describe groups | Explain what groups can do | Explain different ways people can take part in groups |
| **Identify how groups can achieve shared goals** | State a goal | State a shared goal | Describe how a group could achieve a goal | Explain how people working in groups can achieve shared goals | Explain what helps or gets in the way of groups achieving goals |
| **They analyse contemporary issues and use evidence to support a point of view about civics and citizenship issues.** | **Analyse contemporary issues** | Identify an issue | Describe an issue | Identify different perspectives on an issue | Analyse an issue | Evaluate how important an issue is |
| **Use evidence to support a point of view about an issue** | Recognise an issue | Describe a point of view about an issue | State information relevant to an issue | Use evidence to support point of view about an issue | Use evidence to evaluate an issue |
| **They identify possible solutions to an issue as part of a plan for action.** | Suggest solution | Suggest practical solution | Explain how solution would solve problem | Use evidence to support solution | Evaluate strengths and weaknesses of solution |

Teacher assessment – example of annotated assessment rubric

An assessment rubric can be annotated to include examples of what the criteria might look like. Again, this can help groups of teachers make consistent assessment judgments.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Achievement standard extracts** | **1** | **2** | **3** | **4** | **5** |
| **They describe the purpose of key institutions and levels of government in Australia’s democracy.** | **Recognise levels of government or key institutions**Which of these is a level of government?* Local Government Authority
* The Magistrates Court
* Federal Police
* A school
 | **List different levels of government and key institutions**There’s the local government, and the state government and the federal government. Institutions are things like courts. | **Describe governments and institutions**Local government focuses on local issues like community facilities, rubbish collection and footpaths. The state government handles education and healthcare. The federal government makes national laws. Another part of government are courts, which interpret and apply laws, and the criminal justice system, which enforces laws.  | **Describe the purpose of governments and institutions**Governments regulate modern life so that society runs more smoothly. They are allowed to make laws and enforce them so that everyone is kept safe. Governments also provide services and infrastructure, such as education and roads. This ensures that the community has the services that they need. Other institutions have their own purpose. Courts, for example, interpret and apply laws so that people’s rights and property are protected.  | **Apply knowledge of the roles to an issue**Local governments remove waste and recycling from households. State governments regulate the distribution of water, gas and electricity and this can impact how waste is managed. The federal government can give finance to waste management initiatives and can set national waste reduction goals. |
| **They identify various ways people can participate effectively in groups to achieve shared goals.** | **Identify various ways people can participate effectively in groups**  | **Recognise groups**Which of these is a group?* a child
* children
* a mother
* a teacher
 | **List groups**Children and teachers are groups. | **Describe groups**Children are a group that is made up of dependent people who are under the age of 18. | **Explain what groups can do**Children as a social group are usually dependent on adults (like their parents or guardians) to care for them. They spend most of their time in education or play. Some teenagers have part-time jobs.  | **Explain different ways people can take part in groups**Groups can be an opportunity for people to do what they are best at. For example, in a group of children there are some who are better at writing while others are better at speaking. In a group campaigning for better waste management those that are better at speaking could talk to community members while those who are better at writing could send letters to local government or a member of parliament. Groups create an opportunity for an individual to do what they do best and to help teach others how to do things. |
| **Identify how groups can achieve shared goals** | **State a goal**I should put my rubbish in the bin. | **State a shared goal**My school should make less rubbish. | **Describe how a group could achieve a goal**My school could make less rubbish by having more recycling bins, and students would put things in those bins. | **Explain how people working in groups can achieve shared goals**Environmentalists and children can work together to improve waste management. If environmentalists educate children about the importance of putting rubbish in the bin, those kids might learn a lesson for life, which will reduce littering in the future. | **Explain what helps or gets in the way of groups achieving goals**Good communication between groups is really important for them to be able to achieve things like reducing litter. Something that makes this kind of teamwork harder is when the groups don’t get much time to interact with each other. For example, old people and young people often don’t spend that much time together. |
| **They analyse contemporary issues and use evidence to support a point of view about civics and citizenship issues.** | **Analyse contemporary issues** | **Identify an issue**Littering is a problem. | **Describe an issue**Littering at our school is a problem because people drop rubbish on the ground and it either gets eaten by birds after school or blows into the creek that runs past the school and out to the sea. | **Identify different perspectives on an issue**Students might see littering as not a big deal, and they might find it annoying to have to find a bin, so they just throw litter on the ground. A person living next to the school might see littering as a big problem because rubbish from the school blows into their backyard.  | **Analyse an issue**There are many reasons people litter. Sometimes there are no rubbish bins close enough, sometimes people are just lazy and other times rubbish bins fill up and the wind blows the rubbish out of the top of the bin. | **Evaluate how important an issue is**Litter at school is a fairly big problem. It isn’t something that is life or death and might only have a local effect. But littering in school is still bad, because school kids could learn bad habits that stay with them for life. That might make them litter for their whole lives, which would be important in a bad way. |
| **Use evidence to support a point of view about an issue** | **Recognise an issue**Which of these is an issue?* littering
* school
* students
* lessons
 | **Describe a point of view about an issue**People who live near our school think littering is a problem because it blows from the school into their backyard. | **State information relevant to an issue**Locals have said they see about 10 pieces of rubbish a week blow onto their properties from the school. | **Use evidence to support point of view about an issue**Littering has been getting worse at our school. In 2018 the student survey said 30 per cent of students thought there was too much rubbish at school but in 2021 45 per cent of students said there was. | **Use evidence to evaluate an issue**Many groups see littering as a problem. Locals report 10 pieces of rubbish a week blowing from the school into their backyard. Students are more likely to say rubbish is a problem at the school than they did a few years ago. However, the local government hasn’t spent any extra money on littering, so they don’t think it is too much of a big deal. Overall though, groups directly involved, like locals and students, think littering is a problem. |
| **They identify possible solutions to an issue as part of a plan for action.** | **Suggest solution**There should be five times more rubbish bins. | **Suggest practical solution**There should be a class competition, where the class with the tidiest area wins a pizza party for lunch. | **Explain how solution would solve problem**The offer of a pizza party would work to stop litter because kids would want the pizza party so they would not litter so much. | **Use evidence to support solution**Last year, class 5A were promised a class pizza and soft drink party if they all came to class on time for two weeks. That is all they could talk about, and they were all on time for every class. This is why I think the pizza party idea would work. | **Evaluate strengths and weaknesses of solution**The pizza party idea is good because it will give kids a reason to not litter, because they want the free food. One problem is, though, will they still be clean when the offer of the pizza is gone? And will kids think they need a prize every time to do something good? |

Peer assessment template

Students can undertake peer assessment in a number of ways. Students could use the same rubric as the teacher. A simpler option would be for students to identify two positives and one area for improvement for each presentation.

|  |  |
| --- | --- |
| Positive 1 |  |
| **Positive 2** |  |
| **Area for improvement** |  |

Self-assessment template

Again, students could use the teacher rubric to undertake their self-assessment. This is a useful approach because the rubric identifies clear criteria and progressions and would enable a student to identify how they might improve their understanding of the topic. Alternatively, students could complete a brief self-assessment routine based on the example below, as they reflect on the work they have undertaken.

|  |  |
| --- | --- |
| How did I prepare for this task? |  |
| **What did I do well?** |  |
| **What could I improve for next time?** |  |
| **How well did my group work together?**  |  |
| **What could be improved for next time?** |  |