TOOLS FOR ENVIRONMENTAL ACTION

Education resource

Department of
Conservation
Te Papa Atawhai

Contents

Appendix

TOOLS FOR ENVIRONMENTAL ACTION

A Introduction

What is environmental action?

Environmental action is a learning process where students plan and implement a project to address an issue related to the environment and sustainability. Examples include: planting trees, pest control, reducing carbon emissions and habitat restoration for native species.

Why is environmental action important?

Without environmental action, the future of our New Zealand threatened species would be doubtful. The more New Zealanders doing something to contribute to conservation and protecting our unique plants and animals, the more resilient the natural environment will be for future generations. Informed, targeted action is a key component of education for a sustainable future.
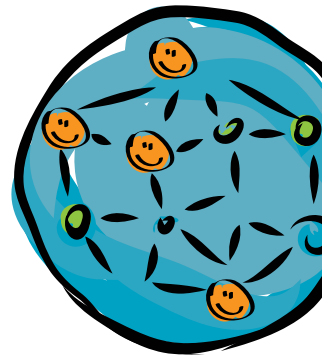
Why should students be involved in environmental action?

Taking informed action allows students to move from acquiring knowledge and experiencing nature, to actively participating in deep contextual learning, skill development and creating positive change in their environment.

After identifying a focus issue and learning about the current situation in their green space during their inquiry, it is important to enable students to follow through to act on their ideas, in order to make a real difference for our native plants and animals. Action develops the NZ Curriculum principles, vision, key competencies and learning objectives of multiple subject areas. It promotes the development of students into knowledgeable, actively involved, empowered future citizens.

The big picture

You are connected to birds, insects and other native animals in your local environment. All living things including native plants, animals and people are connected. Environmental actions restore the environment and the connections between living things. People are part of the natural world and our actions make a difference to our threatened species.

Setting up traps for stoats. Photo: DOC

TOOLS FOR ENVIRONMENTAL ACTION

Key concepts

Using this resource students can:

- Plan and carry out successful action to address an environmental issue alongside their community

- Monitor and review their action

- Begin to understand how their action has an impact on the wider ecosystem

Key vocabulary

• Action • attribute • brief • criteria • ecosystem • goal • issue

• vision

Action	An environmental action is a learning process where students plan and implement a project that will address an issue related to the environment/ conservation/sustainability. Examples include: planting trees, pest control, weeding and raising awareness about environmental issues in your community.
Attribute	A physical or functional outcome – what an outcome does (functional attribute- e.g., protects, provides food), or what an outcome looks/ feels like (physical attribute- e.g., strong, rough).
Brief	A brief (in the Technology subject area of the New Zealand Curriculum), is a document stating what is wanted and why and lists what the outcome must have to be acceptable (the specifications).
Criteria	Principles or standards which can be used to assess options and make decisions.
Ecosystem	An ecosystem is all of the plants, animals and other living and non-living things interacting with each other in a particular place.
Goal	A desired outcome which contributes to the vision.
Issue	An issue is something that needs to change in order to achieve a sustainable future where our biodiversity is protected and enhanced. It may be a problem for endemic/ native plants, animals or the environment.
Vision	The future the school community sees for itself and the environment.

Symbols used in this resource

This symbol represents New Zealand Curriculum links included in the resource.

This symbol represents hands-on, outdoor learning experiences. These experiences encourage student connection to a local natural environment.

This symbol represents student activities to plan for environmental action and reflect on their hands-on, outdoor learning experiences.

This symbol represents inquiry-based learning experiences.

This symbol represents learning experiences around Mātauranga Māori (Māori knowledge and perspectives).

Curriculum links

Technology

Technological practice

Planning for practice

L1: Outline a general plan to support the development of an outcome identifying appropriate steps and resources.

L3: Undertake planning to identify the key stages and resources required to develop an outcome. Revisit planning to include reviews of progress and identify implications for subsequent decision making.

Brief development

L1: Describe the outcome they are developing and identify the attributes it should have, taking account of the need or opportunity and the resources available.

L3: Describe the nature of an intended outcome, explaining how it addresses the need or opportunity. Describe key attributes that enable development and evaluation of an outcome.

Nature of technology

Characteristics of technology

L2: Understand that technology both reflects and changes society and the environment and increases people's capability.

Science

Nature of Science: Participating and contributing

L 1 and 2: Explore and act on issues and questions that link their science learning to their daily living.

L 3 and 4: Explore various aspects of an issue and make decisions about possible actions

Health

Healthy communities and environments

Community resources

L1 and 2 Identify and use local community resources and explain how these contribute to a healthy community.

L 3 and 4 Participate in community events and describe how such events enhance wellbeing of the community.

Rights, responsibilities and laws; People and the environment

L1: Take individual and collective action to contribute to environments that can be enjoyed by all.

L3: Plan and implement a programme to enhance an identified social or physical aspect of their environment.

B Suggested learning sequence

1. IDENTIFY A LOCAL GREEN SPACE in your school or community.
Explore the local green space using the **Exploring your local environment resource**

2. EXPERIENCE BIRDS IN YOUR GREEN SPACE
Explore and investigate birds living in your green space using the **Experiencing birds in your green space resource**

3. EXPERIENCE INVERTEBRATES IN YOUR GREEN SPACE
Explore and investigate invertebrates in your green space using the **Experiencing invertebrates in your green space resource**

4. EXPERIENCE NATIVE TREES IN YOUR GREEN SPACE
Explore and investigate plants and trees in your green space using the **Experiencing native trees in your green space resource**

5. INVESTIGATE ANIMAL PESTS IN YOUR GREEN SPACE
Explore and investigate animal pests in your green space using the **Investigating animal pests in your green space resource**

6. INVESTIGATE PLANT PESTS IN YOUR GREEN SPACE
Explore and investigate plant pests in your green space using the **Investigating plant pests in your green space resource**

7. ENHANCE BIODIVERSITY and come to conclusions about issues in your green space using the **Enhancing biodiversity in your green space resource**

8. FORM AN ACTION PLAN for your green space using this resource.
Plan and carry out successful environmental action to address the issue alongside your community
Students monitor and review their action and begin to understand how their action has an impact on the wider ecosystem

YOU ARE HERE

Action as part of the DOC conservation education resources

Students may have completed a DOC teaching and learning investigation/ experience before deciding to carry out an environmental action. These resources are experiential, student centred and inquiry based. Action is a logical next step after learning about native biodiversity and environmental issues.

DOC's integrated conservation education resources can be found at **doc.govt.nz/ education**

Kaitieke School students identifying insects in their green space using DOC's Invertebrates ID guide (**doc.govt.nz**). Photo: Marie McDonald

Action in other contexts

After learning about an aspect of NZ conservation, experiencing an iconic NZ place, or inquiring about a concerning issue in their environment, students are often inspired to take action and help make a difference to the aspect of conservation they have investigated.
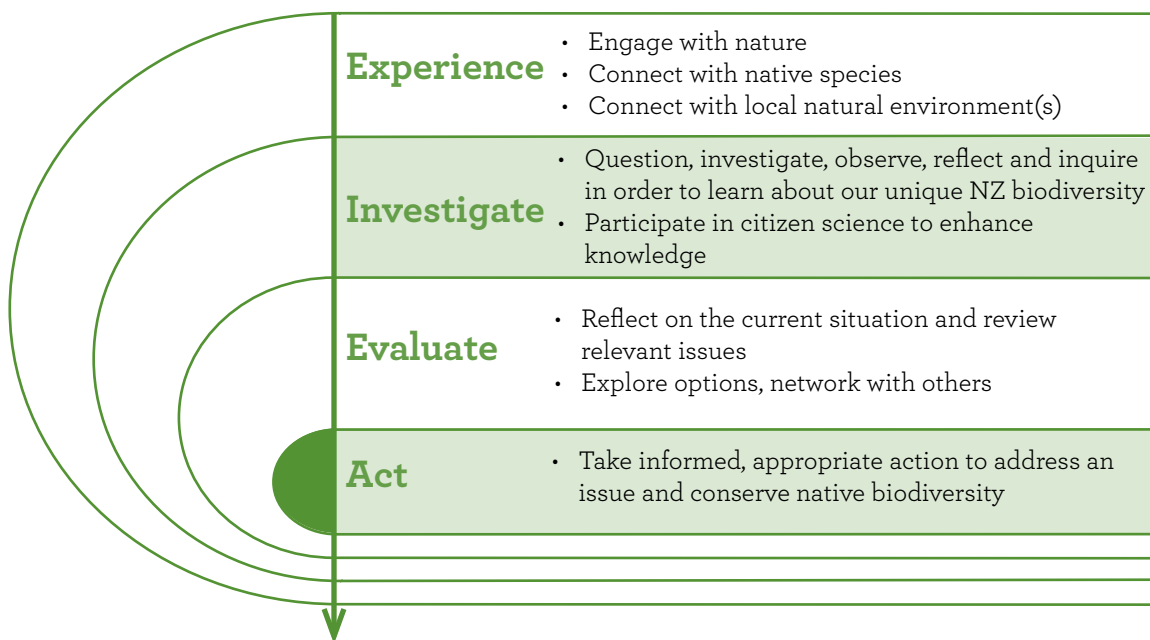
The process of taking action for the environment should not be conducted in isolation but should be a natural outcome of student's experiences, knowledge and reflection (see process on the next page).

Why participate in environmental action?

Student participation in environmental action is empowering and inspiring for students and encourages them to become informed, active participants in society. They should have a good understanding of underlying causes related to issues and be able to justify why carrying out action is important.

The action needs to have a meaningful, authentic, real-life purpose such as: enhancing biodiversity in your environment, creating habitat for native animals (e.g., birds, lizards, bats or invertebrates) or contributing to reducing the impact of climate change.

From learning experience to environmental action

Experience	• Engage with nature • Connect with native species • Connect with local natural environment(s)
Investigate	• Question, investigate, observe, reflect and inquire in order to learn about our unique NZ biodiversity • Participate in citizen science to enhance knowledge
Evaluate	• Reflect on the current situation and review relevant issues • Explore options, network with others
Act	• Take informed, appropriate action to address an issue and conserve native biodiversity

D A vision and goals to address an issue

Identifying an issue

In the previous resource (**Enhancing biodiversity in your green space**), students identified an issue present in their green space.

An issue is something that needs to change in order to achieve a sustainable future, where NZ biodiversity is protected and enhanced. An issue could be a challenge/ concern/ problem for endemic/native plants, animals or the environment.

Sometimes issues are large and can seem unsolvable (e.g., mass extinctions, plastics in the ocean or climate change). Breaking an issue down into smaller parts, making it particularly relevant for your local community can help to tackle it more effectively.

Teachers should take into account the prior knowledge of students and their current interests, enthusiasm and skills when making decisions about what issue to focus on. Also contemplate what students might learn from acting to solve an issue. Gaps in knowledge, skills and information should also be considered.
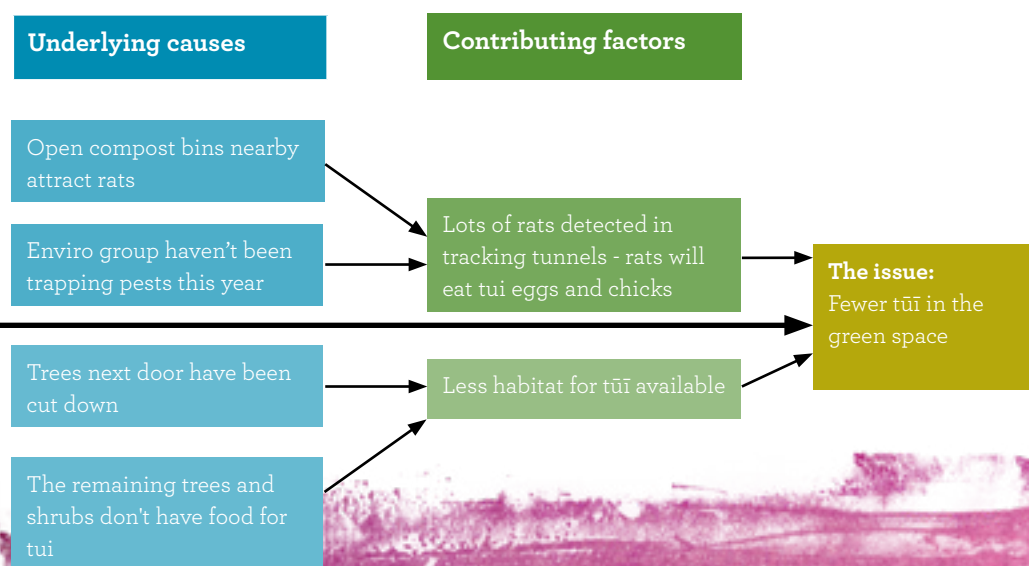
Finding underlying causes of an issue

With students, brainstorm the aspects of an issue. Look closely at these aspects and identify any possible underlying causes.

Use the **Fishbone diagram** to help organise students' thoughts about the underlying causes of an issue.

Research these causes to determine which is the most concerning. Ensure you are targeting the root causes or the issue in your action otherwise the issue could keep occuring (e.g. in example below if students only planted trees it might not make a difference if the other underlying problem/ cause of the issue (the rats) is not addressed.

Underlying causes	Contributing factors	
Open compost bins nearby attract rats		
Enviro group haven't been trapping pests this year	Lots of rats detected in tracking tunnels - rats will eat tui eggs and chicks	**The issue:** Fewer tūī in the green space
Trees next door have been cut down	Less habitat for tūī available	
The remaining trees and shrubs don't have food for tui		

Setting goals and having a common vision

Having a vision and achievable and measurable goal(s) for your action will ensure you stay on track to achieve what you set out to, avoid going off on tangents and continue to refine and review your progress. Goals are good motivators and can help to inspire and involve the wider community. They will also help you to define the extent of your action and set criteria.

Keeping in mind the issue you have identified- what is the goal you want to achieve?

Look back at the **Enhancing biodiversity in your green space** resource for other ideas about establishing a vision and goal/s for your action.

Taupō Primary School students sharing the vision for their green space (Photo: Kids Greening Taupō programme)

E Making decisions about action

Learning outcome

Students are learning to:

Research an environmental issue and its underlying causes based on their inquiry.

Make a decision about which action will achieve their vision and goals and identify criteria to help them plan and measure their progress.

Success criteria

Students can:

Make a decision about which action to undertake and describe how it will address an issue and its causes.

Reviewing your vision and goals

Look back at your Plan to enhance biodiversity in **green space.**

Enhancing biodiversity in your

Deciding on meaningful, effective action

Making a decision about which environmental action(s) to carry out can be complex and difficult. Defining the issue you are targeting and what you are trying to achieve (through your vision and goals) can help to make the decision easier (see pages 9-10) .

Environmental actions should be a natural progression from your students' inquiries. Your chosen action should make a difference to the focus issue that students are concerned about, as well as its underlying causes. The action needs to contribute to a positive future vision for your local green space/school/area.

Student led action

Sharing decision making with students will increase their enthusiasm and engagement. Considering time and resources available is crucial to successful action.

Students should examine their own values, attitudes, thinking and behaviour around an issue to determine how they and other people might contribute to it. To enable students to work to interests and strengths, identify a range of roles and tasks required to complete the action.

There may be some students who feel compelled to help carry out trapping of animal pests and others who would rather have a supporting role. Some might be more interested in communicating actions by:

writing stories

blog posts

taking photographs

verbal presentations

All students can contribute in ways that suit their strengths and interests.

Sustainable action

There should be positive changes in all aspects of sustainability (environmental, social/political, cultural and economic) for a successful, ongoing action.

Student considerations for possible environmental actions

Aspects of sustainability to consider:			
Environmental	**Social/ Political**	**Cultural**	**Economic**
How will the environment be enhanced by your action?	How will different groups of people be affected by this action?	How could different cultures from your school contribute to your action?	How can this action enhance local business?
Which animals and plants will benefit?	How can this action contribute to bringing people together?	What unique cultural aspects (e.g. Māori perspectives) can you include?	How can businesses and the wider community contribute?

- Which actions come to mind after reflecting on your inquiry?

- Which actions would contribute to your positive vision of the future?

- Check that the action will address the issue

- Find out what environmental restoration has already been done in your area. Is there a way you can contribute to what is already happening rather than start a new action project? How can you collaborate to make a bigger difference?

- Can you learn from past/ present contributions? (what has been achieved? who was involved, how do they know their action was successful?)
- Brainstorm and record ideas about possible actions. Make a list of possible environmental action ideas.

Tools to help make a decision about action options

Set criteria to assess the potential action ideas with. Criteria are principles or standards that will help to make your action successful. Examples of criteria are given in the table below.

Complete a decision making grid or **PMI** about each option for action to determine which is the most suitable choice (see example below).

Decision making grid example

For an editable version of this table, visit **doc.govt.nz**

Criteria:						
Options for action:	Will this action make a difference to the focus issue, its causes and help to achieve our goals?	Will this action idea motivate and excite us to keep it going?	Do we have most of the resources required for this action or can we get them easily?	Will this action involve our wider community and include local iwi?	Do we have some prior knowledge and relevant experience that will assist us?	Will we learn something new from choosing this option?
E.g. Planting food trees for kererū	Yes 10/10	Yes 10/10	Not really - 2/10	Yes 10/10	Yes 8/10	Yes 10/10

NB: Your options for action and criteria will vary according to your focus issue, vision and goals. A **consequence wheel** is another graphic organiser students could use to think refectively and creatively about possible consequences of an issue, event, or idea. Information gathered can be used to justify your chosen environmental action.

F Planning your environmental action

Science: Nature of science: Participating and contributing

Technology: Technological practice: Planning for practice

Nature of Technology: Characteristics of technological outcomes

Minor curriculum links: Health, English

Science capabilities: Engage with science

Learning outcome

Students are learning to:

Students are learning to:

Plan an action in detail with the help of others to achieve an environmental goal

Success criteria

Students can:

Work together to effectively plan and carry out an effective, informed environmental action

Teacher considerations before planning for action

Research your action and be aware of key stages of the project. Some initial research by the teacher to ensure feasibility can clear the way for students and avoid unnecessary setbacks.

Beginning to plan with students

Students should be actively involved in all stages and aspects of planning the action project. Empowered students will be much more motivated to carry out actions.

Avoid over-planning at the beginning of your project. Instead create living planning documents that can easily change and adapt as you learn more about your action possibilities and opportunities. Use your plans every day to inform task lists and set milestones.

Making a rough plan to start with can be helpful. Then, as the project progresses, being more organised and detailed can help to achieve an effective action that is easy to collaborate on.

See the TKI Technology website: **technology.tki.org.nz** for guidance and information about planning your project.

Action plans

Carefully plan to manage your available money, time, equipment, people and resources. Identify responsibilities, roles, skills needed, people affected by actions, and timeframes at each stage. Work backwards in your planning to reach your goal(s).

Allow students to use planning tools that suit their individual preferences.

Initial questions to pose to students:

- How can we use what we have learned to help our green space or local environment?

- How am I going to use what I have learned to make a difference to the issue?

Planning for action should be flexible, especially in the initial stages. Plans can change quickly according to time, people and resources available.

Brief for action

The environmental action we have chosen is:	How will this action help to solve the focus issue?

Key steps in your action project:
-
-
-
-

What is our goal for action	What attributes will it have? The action must include: - - - -

What makes our project special and how do we feel about it?

People who may be able to help:

How will we know we are successful?

How can we measure our success?

Action plan
[blank editable action plan]

Steps involved in the project

Step number	Details of step	Timing
1		
2		
3		
4		
5		

Resources

What we need	Where could we get it?	Cost
	Total cost	$

People

Who could help?	What could they help with?

TOOLS FOR ENVIRONMENTAL ACTION

Working with Tangata whenua in your area

Kaitiaki

Kaitiaki are Tangata whenua who have been given responsibility through ancestral connections to protect and look after an area's resources. They work with the living and non-living aspects of the environment to act as kaitiaki or protectors/ guardians. Kaitiaki help to restore ecosystems through a holistic approach, recognising that all things are interconnected. They look after the environment in order to help maintain the balance of everything within it, using their unique cultural, historical, spiritual and traditional knowledge and skills.

Becoming a kaitiaki is process that is handed down and managed through iwi members and kaumatua. The customs around Kaitiakitanga vary according to region and tribal teachings.

Supporting kaitiaki

Students can support kaitiaki in their roles, and work alongside them. Kaitiaki often need help from their communities in order to look after the environment.

Local councils can help you to find the appropriate iwi responsible for kaitiakitanga in your area (rohe).

Find your local iwi, marae and or hapū using this website: **www.maorimaps.com**

Contact your local iwi to ask how you can best support their work.

Example of working alongside tangata whenua to support kaitiakitanga

Te Kura Kaupapa Maori o te Rawhitiroa have been working collaboratively in their community to restore the Waitaua River. They have documented the journey through an interactive website: **tearaitakahia.teahoturoa.org.nz**

Working with the wider community

Help from experts and community members can enhance your project. Canvas your community through newsletters, emails and student contacts to reach out to interested people who may be able to assist with your project.

Use the skills and expertise available in your community. Often there are parents, grandparents or community members waiting in the wings who can help your project reach the next level. Contact staff from supporting organisations (e.g., councils and not for profit groups) to see how you could work together.

Local community environmental groups may also be able to lend support. Some community groups have educators, some have retired teachers and some conservation experts who are all very happy to support school initiatives. For a list of community groups throughout New Zealand, see: **doc.govt. nz** and   **www.naturespace.org.nz**

H Monitoring and reviewing action

Measuring and monitoring action

✎ Taking photos and documenting your project

Ensure you and your team keep a record of your journey from start to finish. This could be through photos, notes, apps, digital devices or written records. This could be photographing the growth of plantings over time, doing bird/ invertebrate surveys on a regular basis, or conducting ongoing pest monitoring or weed surveys.

Photos are particularly useful to show the overall impact of your project, as well as recording a starting point and progress as the project progresses. They can also be easily shared with an audience. Record any changes which have occurred as part of your project. Particular students could have a responsibility of recording the process and progress to share with community through assembly items, presentations, blogs or newsletter features.

Whataroa School student recording their observation. Photo: Murray Dawson.

View pest plant (weed) observations from Whataroa School on **iNaturalistNZ**

Why keep records about action projects?

Photos and records can be vital to securing support and funding opportunities. They are also excellent resources for keeping the school and wider community informed about your project and for monitoring and reflecting on action. They can be useful to refer back to when working on future projects. Keeping good records can make reviewing your project much easier.

- Questions for students about measuring and monitoring change

- Did any change happen because of your action?

- How could you measure this change?

- How will you maintain and monitor your action? (if necessary).

💭 Reviewing your action

Reviewing environmental actions can be helpful for learning and for informing future restoration efforts. When encountering setbacks, reviewing and monitoring can be especially beneficial, in order to identify next steps. It can be done at any stage of your project but is most helpful when carried out at regular steps along the way, throughout the project.

TOOLS FOR ENVIRONMENTAL ACTION

Student self reflection

Students can reflect on their action and learning by asking questions throughout the project, such as:

- Does our action address the issue we were targetting?

- Did we achieve what we wanted to?

- What did we enjoy? What did we not enjoy?

- What unexpected outcomes did the action achieve?

- What has challenged us along the way?

- Did it go well with the people you worked with? Why/ why not?

- How will you continue to involve whānau (families) and the community in your project/ action?

Learning reflection

- What did we learn from our action? Was there a learning gap? (Are there skills/ knowledge or information we don't have yet?)

- How can this learning help others?

Reviewing with your community

Involve a range of people in reflecting on and reviewing your action, including partcipants, leaders, community members, supporters and other groups.

Interview and survey these people to find out what they thought went well or what was not so successful about your action.

Questions for community members involved with your action:

- How has the action influenced you and your community?

- What aspects of the action went well in your opinion?

- What are some ideas for improvement?

- How could the school work more effectively with others in future?

People power

- **Empowered students** create lasting action. Student led projects that involve the whole school are the most sustainable, as momentum continues with less effort required. Students should be at the forefront of ideas, plans and efforts.

- **Designating roles** will ensure there are many hands, making light work! Example roles include: planners, journalists, builders, data collectors, networkers, accountants, health and safety advisors, photographers, researchers. Handing over responsibilities to other students, staff and community members can reduce the stress and workload on your team. Involve as many classes and groups as is manageable.

- **Utilise the strengths and interests of your team** Use the skills, experience and strengths of your community and team members to achieve the best results. Students can work in different interest groups and meet with leaders regularly for updates/ trouble shooting/ planning meetings.

- **Develop your networks** to keep your action on track. Keep in touch with other local schools, individuals and organisations who are doing similar work. They can lend a hand and some inspiration.

School children from Pongaroa planting trees on school grounds, Wairarapa. Photo: Sandra Burles

Avoid reinventing the wheel

- Do your research first. Look at what has been done around your area and in the wider world. Have in-depth knowledge of the issue, possible impacts of your action and people who may be affected. Identify potential obstacles and tackle them before you start your action planning.

- Contact community groups and relevant organisations and share information, finding out what has already been done about the issue. Sharing findings can lead to new opportunities for insight and may change your ideas about the direction of environmental action

Timing

- Keep up momentum. Planning ahead and having support ensures that your project keeps up its pace and students won't lose interest.

- Bring staff and school leaders on board early in your project. Clear the way for student ideas and ensure support from leaders before the project gets off the ground. This can avoid unnecessary disappointments and keep momentum flowing.

- Leave adequate time to complete your environmental action, given your other school commitments. Consider other factors like the weather, staffing and possible delays.

Leadership

- Establish a leader and have a clear plan for action that everyone has contributed to and agrees on. Ideally your leader will have experience with the context you are working in. Leadership for students, by students can work well, with input from the teacher and experts.

- A leader needs to lead by example, showing the work ethic and attitude expected from others working on the project.

- Manage the project effectively by working together to identify clear roles, responsibilities, timeframes and goals.

Planning and vision

- Set clear goals and criteria (see pages 9-10). Reflect on these regularly to ensure the action is on-track. If not, step back and re-evaluate before continuuing to the next stage.

- Use appropriate planning tools that are flexible and can change as your project progresses. Keep reflecting on progress in order to plan next steps.

- Do the best job you can: ensure that your action is aligned to the goals and vision you established in **Enhancing biodiversity in your green space**

- Keep good records and take photos of your journey to keep stakeholders informed, see progress, share information and report back to funding sources.

- Include a process for monitoring your action and measuring change to keep your action on track.

J Funding for your action

Funding for your environmental action could come from a variety of sources.

Some possible sources of funding could be:

- Fundraising through events in your community

- In-kind support from school community (e.g. expert/ specialist advice from caregivers)

- Sponsorship by a local business

- Funds or grants (see potential funding sources listed below)

National funding sources

The funds/ grants listed are known to be suitable for school environmental actions. Some fund small projects (e.g. costing $200), and others are for larger scale projects.

Most grants and funds involve an in-depth application process and sometimes require reporting back on completion of your action. Funds are regulated by a variety of organisations and each fund has specific requirements and criteria (see links to funds below for details and to see if they are relevant to your action idea).

Department of Conservation

Habitat Heroes
Annual competition from April-September (leading up to Conservation Week). Students can share their learning and experiences outdoors, and ideas for how to improve the health of a local environment to be into win cash prizes to contribute to their conservation action projects.

> **doc.govt.nz**

Ministry for the Environment (MfE) grants

Community Environment Fund
Supports large scale projects involving the wider community, resulting in strengthening partnerships, raising environmental awareness and encouraging participation in environmental initiatives by the community.   **mfe.govt.nz**

Waste Minimisation Fund
Aimed at projects that promote and/or achieve waste minimisation.

> **mfe.govt.nz**

TOOLS FOR ENVIRONMENTAL ACTION

Royal Society of New Zealand

Bayer Primary School Science Fund

Gives primary schools the opportunity to apply for funding to support and enhance an existing, or new, environmental science education and 'Nature of Science' teaching programme.

royalsociety.org.nz

Lottery grants

Lottery, environment and heritage committee- Te Tahua Taiao Nga Taonga.

A grant for environmental projects that will enhance, conserve or care for our natural, cultural and physical heritage, or allow us to better understand and access these resources.

communitymatters.govt.nz

WWF and the Tindall Foundation

Environmental Education Action Fund and Habitat Protection Fund

The Environmental Education Action Fund assists schools and communities to take conservation action.

The Habitat Protection Fund is targeted at local community conservation groups based and working in New Zealand engaged in hands-on ecological restoration or conservation.

wwf.org.nz

Air NZ

Air NZ Environment Trust

Funds restoration of the New Zealand environment for community.

airnzenvironmenttrust.org.nz

Kids Restore NZ

Provides grants for environmental projects which are being led by young people. These projects cover a wide range of activities.

kidsrestorenz.org.nz

Fonterra grassroots programme

Rural community fund for bringing communities together, making them safe and enhancing the environment.

fonterrafgrf.appserver.co.nz

O-I New Zealand Environmental Fund

This fund encourages schools to implement sustainability projects. Projects should benefit the environment.

recycleglass.co.nz

Weedbusters

Small scale initiatives fund for the control of weeds (plant pests).

>   **weedbusters.co.nz/get-involved/small-scale-initiatives-funding**

Weedbusters also run a **2-minute film challenge** where students can enter to win $1000 for their school.

>   **www.weedbusters.org.nz**

Mazda Foundation NZ grants

The Mazda Foundation supports projects that maintain and enhance the environment and promote education and community.

>   **mazdafoundation.org.nz/grant-guidelines**

>   **Treemendous School Makeovers**

Generosity New Zealand

Generosity NZ is an extensive database of over 1000 funding schemes. This website includes GiveUS- (Formerly FundView). You need to register and pay to access the website after a free sample search, however it is available to access for free at public libraries.

>   **generosity.org.nz**

Give a little - crowd funding website

Community members can donate or set up a fundraising website at no cost. The general public can donate to your cause.

>   **givealittle.co.nz**

Project Crimson

For funding for projects involving pohutukawa or rata restoration.

>   **projectcrimson.co.nz**

Regional funding opportunities

Local Councils

Contact your local council for information on grants and funding available to schools for environmental projects. Many local councils and boards offer funding opportunities for community projects.

Foundation North (Auckland/ Northland)

For projects in Northland/ Auckland see:

foundationnorth.org.nz

Auckland Zoo small grants programme:
aucklandzoo.co.nz

General NZ funding information

Predator Free NZ
Predator Free NZ have identified organisations and funds in New Zealand to help support your predator control efforts.

predatorfreenz.org

Community Net Aoteroa
An online hub of resources for the community, including funding opportunities for environmental restoration.

community.net.nz

Naturespace
Naturespace have compiled a list of other national funding opportunities.

naturespace.org.nz

Community Matters
A range of grants and fellowships are available to support local initiatives and community services.

communitymatters.govt.nz

K Action resource list

Websites

Comprehensive guide to planning for action by Taking IT Global (TIG)

tig.phpwebhosting.com

Education for sustainability TKI
nzcurriculum.tki.org.nz

DOC community project guidelines
doc.govt.nz

DOC restoration advice
doc.govt.nz

For resources to support with specific actions, see the list in the Enhancing biodiversity in your green space resource (page 26)

NatureSpace Resource Centre

naturespace.org.nz

Student Volunteer Army (SVA) Volunteer Kit for Schools

resources.schoolkit.co.nz

These kits make it super easy for students to design and deliver a volunteering project. The challenge is to think beyond picking up rubbish and come up with something unique and meaningful that will leave a lasting impression in your community.

Planting at Pahiatua School. Photo: Sandra Burles

Halo Whakatane

Trident High School students and staff (with the help of Bay of Plenty Regional Council) brought community groups, schools and business together to enhance local habitat for tieke/saddlebacks. Saddlebacks have special significance for local iwi.

Students completed an integrated technology unit around saddlebacks which resulted in them designing and building nesting boxes.

technology.tki.org.nz

Restoring a river

Te Kura Kaupapa Maori o te Rawhitiroa are working collaboratively in their community to restore the Waitaua River. They have documented the journey through an interactive website.

tearaitakahia.teahoturoa.org.nz

Te Kura Kaupapa Maori o te Rawhitiroa

Sharing the message about weeds

Eskdale School in Napier had a problem with blackberry weeds. Students from the orchard group created a video to educate the public about the nuisance blackberry can cause invading green spaces.

youtube.com

Habitat Heroes

Habitat Heroes is a competition for kindergartens, schools and community groups (e.g. scouts and guides) to encourage young people to explore a local natural environment and think about how they can make a difference.

See   **doc.govt.nz** for examples of innovative conservation action projects, including:

Stream Heroes

Lynmore Primary School, Rotorua – students are taking action to restore Waitawa Stream -   **Lynmore School Enviro Club habitat heroes presentation**

Green and Marine Heroes

Tairua School, Tairua – students have developed action plans to help save local native species such as the Archey's frog, gecko, fernbird, New Zealand dotterel and weta.

   youtube.com

Green and Stream Heroes

Katikati College, Western Bay of Plenty – Year 8 students ran a project to restore a gully which backs onto the school. Their aim was to bring more kereru and other native birds back to the gully and their school grounds. The students conducted investigations to uncover what species are found in their local environment. They cleared rubbish and weeds from the gully, and replanted it with native trees. Bring back the kereru presentation:

   docs.google.com

Katikati College's vision for their green space

TOOLS FOR ENVIRONMENTAL ACTION

Predator free NZ

See Predator Free NZ's website for some inspiring examples of schools who are tackling animal pest issues in their local environments.

predatorfreenz.org

CatchIT Schools

See the Forest Bridge Trust's website for examples of how empowered students are protecting their properties from pests and enhancing biodiversity.

theforestbridgetrust.org.nz

Pitopito Kōrero: Matauranga Ao Turoa

DOC's quarterly Conservation Education e-newsletter. Each edition includes inspiring case studies of kindergartens, schools and community groups involved in conservation action projects.

doc.govt.nz

Example brief for action from Hilltop School, Taupo

Encouraging student voice in sharing action successes [**Create your own brief for action**]

Who we are	Hilltop Primary School, Taupō - Team 5 Weed Busters Group (WBG)
Environmental action we are involved in	We are working to remove weeds from the Oruatua Conservation reserve.
	We work to clear weeds twice a term. We attack gorse, blackberry and broom with loppers, tree clippers, saws, and weed killing gel. We are making rodent traps (handmade by us), with the support of Tauhara College (Samuel Richardson)
	We plant new native saplings and then protect them with weed mats (Oujirou Kurimura)
	In technology class we have made tree protectors and weed mats out of a material called harakeke, AKA flax (Ivan Abele and Alex McNeill)
Issue we are targeting/ addressing Why we are doing this action	Stop the spread of weeds.
	The weed rate in NZ has grown exponentially and we really need to do something about it (Charlie Dodds)
Where we are working and why	We are working in Oruatua Conservation Reserve in Tauranga-Taupō, near Turangi (Central North Island)
	3 years ago when we first arrived in Oruatua, it was covered in weeds and crawling with pests like weasels, stoats, rabbits and heaps of rats. (Boston Christensen and Louis Wyatt)
What makes our project special and how we feel about it	We're like Superman, except for nature... we're nature HEROES!!!! (cue music) (Samuel Richardson)
	Anyone can be an audience but it takes more to be a Nature Hero and that's us!!!! (Oujirou Kurimura)
Who we work with	Tangata whenua: The reserve has recently been blessed by local Kaumatua- Jim Maniapoto from the Waitetoko Marae
	We have also had help from various specialists such as Didymo Dave (Environmentalist), DOC, and Miss Holdsworth (Technology teacher) to support us in our journey to rejuvenate the bush (Boston Christensen and Louis Wyatt)
How can we measure our action? (any facts and figures about what has been done	The Hilltop School WBG have now planted approximately 1500 native plants around the area (Boston Christensen and Louis Wyatt)
	We have made close to 20 rodent traps and have so far caught 17 rats, 5 mice and 2 weasels in 6 months (Charlie Dodds)
What difference are we making? What kind of future we can see for this issue?	We want to rebuild the once beautiful native bush from a weed dump to a breathtaking amount of native bush (Zoe Hanford and Daisiah Porteous)
	We can make a difference to New Zealand. Then if we make a difference the other countries will follow us in hope of a better tomorrow (Samuel Richardson

Photo: Hilltop School

Parents chipping in with the wood-chipper. Photo: Anna Elwarth

Weed clearing and planting equipment. Photo: Hilltop School

Hilltop School students clearning weeds. Photo: Anna Elwarth

With thanks to Hilltop School students for sharing their conservation action journey.

Hilltop School technology class. Photo: Hilltop School

TOOLS FOR ENVIRONMENTAL ACTION

M Sharing your action successes and next steps

Sharing success with your community

Celebrate the success that your action has accomplished with your community. Ensure you include everyone who was involved in your celebration. Thank people who have contributed to your success. We all like to be acknowledged. Gratitude can keep relationships strong and your helpers will be more inclined to help again in future.

Environmental actions can have amazing results, some of them unexpected! It is important to take a step back and examine what has been achieved over time. Use your records to add to the process.

Sharing success could be through your newsletter, emails, assembly item or a public event.

Communities enjoy partcipating in environmental successes. Hosting events is a great way to also gain more support for your project on an ongoing basis and educate the public about your learning and local biodiversity assets.

For a checklist to support with planning events, see **www.activenetwork.co.nz**

Next steps

Now that you have achieved a successful action it doesn't have to stop there. This could be the beginning of something big!

- How are students thinking and feeling about your results?

- What would you do differently next time?

- What is the next step for your environmental journey?

- How can you pass on the project to other students/ staff in the school in order to ensure it is sustainable? (if necessary due to changes in your team from year to year).

- Check out **enviroschools.org.nz** and/or contact your local council for information about how to become a whole school committed to sustainability.

- Contact the Department of Conservation (DOC)'s education team at conserved@doc.govt.nz for further support, and to share your environmental successes

Hilltop School Weedbusters. Photo: Anna Elwarth

TOOLS FOR ENVIRONMENTAL ACTION

Brief for action

Download an editable version of this table from **doc.govt.nz**

The environmental action we have chosen is:	How will this action help to solve the focus issue?

Key steps in our action project:

—

—

—

—

What is our goal for action?	What attributes will it have? The action must include: — — — —

What makes our project special and how do we feel about it?

People who may be able to help:

How will we know we are successful?

How can we measure our success?

Action plan

Download an editable version of this table from   **doc.govt.nz**

Steps involved in the project

Step number	Details of step	Timing
1		
2		
3		
4		
5		

Resources

What we need	Where could we get it?	Cost
	Total cost	$

People

Who could help?	What could they help with?

PMI (Plus, minus, interesting)

A PMI graphic organiser is a tool for thinking about positives, negatives and other variables of an idea or option. A table is drawn up of the pluses (P), the minuses (M) and the 'interesting' (I) factors (what could be interesting or is of interest).
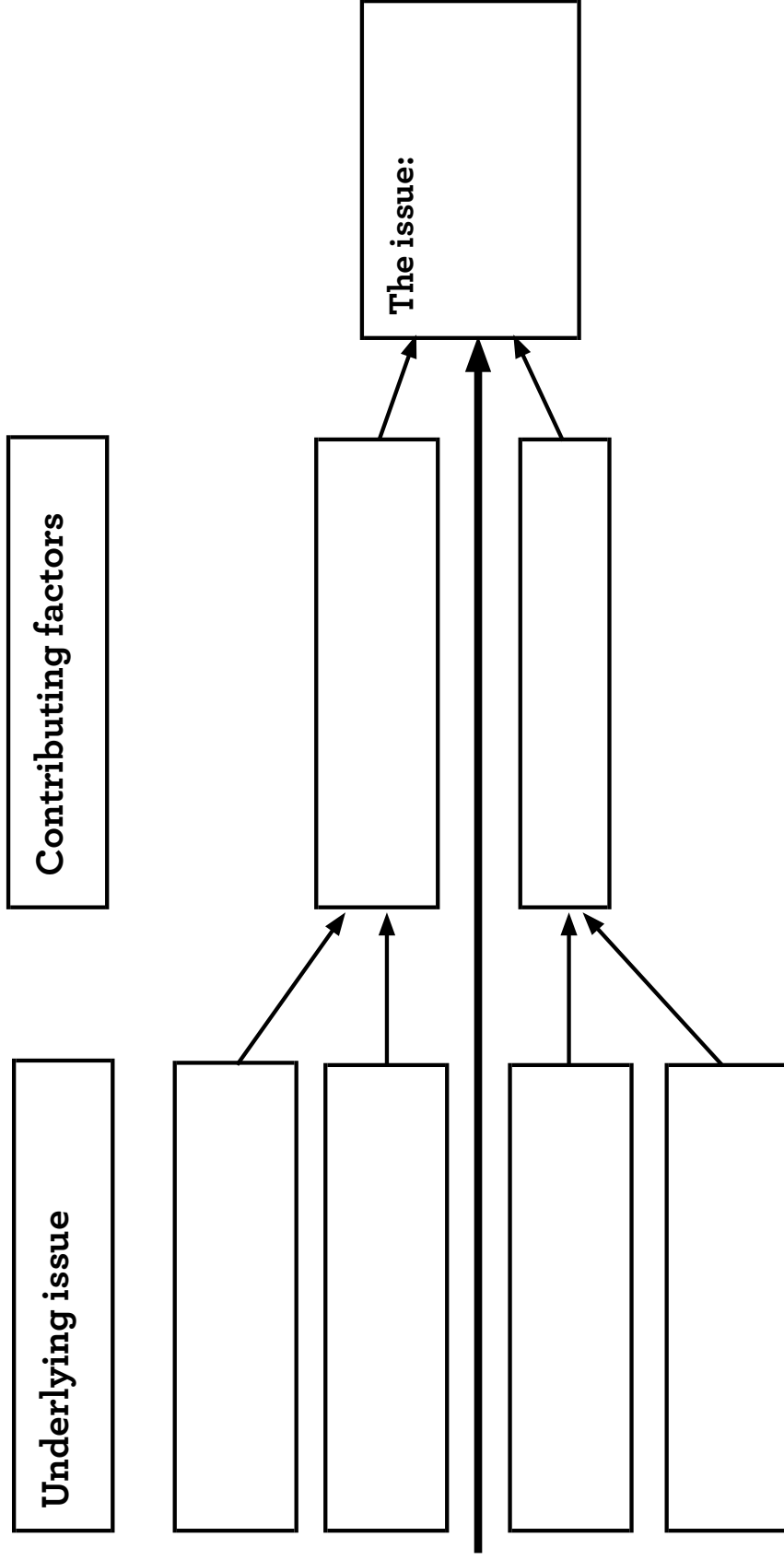
Download an editable version of this graphic organiser from   **doc.govt.nz**

Plus (P +)	Minus (M —)	Interesting (I)

So what? Next steps...

Fishbone diagram of issue

Download an editable version of this graphic organiser from **doc.govt.nz**

Contributing factors

Underlying issue

The issue:

Integrated inquiry cycle for working through the IN resources

1. Dive in
- Sharing experiences
- Introducing knowledge

Getting started: teaching in nature (Resource 1)

Reflecting and evaluating

2. Ask
- What are we wondering?
- Which questions will we investigate?

Developing an inquiry plan for your green space (Resource 1)

Reflecting and evaluating

3. Investigate (Resources 2-6)
- Finding out more information
- Sorting and organising information

Birds in our space

Invertebrates in our green space

Native trees in our green space

Animal pests in our green space

Plant pests in our green space

Reflecting and evaluating

4. Extending thinking
Research birds, invertebrates, trees and pests (Resources 2—6)

Results and conclusions about our green space (Resource 7)

- Do we need more information?

Reflecting and evaluating

5. Coming to conclusions
- What did we find out?
- Problem solving/creating new ideas

Results and conclusions about our green space (Resource 7)

Reflecting and evaluating

6. Sharing our findings
- Sharing knowledge and experiences through citizen science
- Sharing our new understandings

Resources 2—7

Reflecting and evaluating

7. Planning for Action
- What action will we take?
- Which issue will this address?
- Reflecting and evaluating

Planning to enhance biodiversity in our green space

Tools for environmental action

8. Implementing action
Tools for environmental action

9. Review and reflect
- How did it go?
- What are the next steps?

Reviewing your vision, goals and action (Resource 8)

rat trap inside take care

Select 'current page' in the print dialogue box

Department of Conservation
Te Papa Atawhai