

Section 3

Action

Guides for Decision-Making, Action-Planning and Design



Action Guide:

- | | |
|------------------------------|-----|
| 1. Exploring Alternatives | 401 |
| 2. Taking Action | 402 |
| 3. Reflecting on the Changes | 404 |

Action Tools:

- | | |
|----------------------------------|-----|
| a) Action Planner | 405 |
| b) Action Statements | 407 |
| c) Design Planner | 408 |
| d) H Forms | 412 |
| e) Indicators | 413 |
| f) Nominal Group Technique | 415 |
| g) Ranking, Scoring and Matrices | 416 |
| h) Task Programmer | 417 |

Section 3

Action

Guides for Decision-Making, Action-Planning and Design

This section contains a guide and tools to help students evaluate their ideas for environmental change, make decisions and plan action. Whether conserving something precious, changing something that isn't working for the school vision, or creating something new, the emphasis is on students working together towards common environmental goals. Students are encouraged to be aware of the reasons for their choices, to recognise each other's complementary skills and different insights, and to develop their decision-making, leadership and co-operative working skills.

If there are projects you are ready to take action on, use this Action section after completing Section 1: Planning for a Sustainable School. Alternatively, use this Action section after you have explored a theme area in more detail using the Living Landscapes, Healthy Water, Ecological Buildings, Zero Waste or Precious Energy guides.

Return to this section whenever you need tools to help plan, design and make decisions.



Action Guide

1. Exploring Alternatives

If you have completed one of the Learning Guides, you will have already begun to look at things that you want to change or create. You may have come up with some alternatives that are good for nature and for people, now and in the future.

We often have ideas about what we want to change, but are limited by what we know and see around us. Find ways of stimulating new ideas. You could use a “visioning” exercise to imagine an ideal situation and what would need to change to create your vision. Or, you may choose to explore practical, on-the-ground examples where people are already doing things differently in your own community or area. The case studies in the Enviroschools Scrapbook and the resources in Continuing Learning and Action (Section 4 of this Kit) may also fire your imagination. Be creative and spread your net wide to generate ideas!

CONSIDER

- How else could it be?
- What would our ideal situation be?
- What would people be doing?
- What have others done?
- What are all the actions we could take?

Useful Methods
(see Section 1)

- Brainstorming
- Pūrākau



2. Taking Action

2.1 Making Decisions

Collect the main ideas that your class has for changing or creating something in your school. Keep your ideas general at this stage (e.g. “use less water” or “create more habitat for birds in the school”).

Critique the different alternatives by discussing positives and negatives about your ideas for change. Be open to people having different perspectives.

Develop some criteria to assess your ideas. Use the thoughts, feelings and information you recorded in your class **Pool of Knowledge** and Whole School Vision to help develop criteria.

When you’ve got a list of ideas and some criteria to assess them by, decide which ideas are the highest and which are the lowest priorities.

Write action statements or project titles, which you can check against your desired changes, to make sure they will produce the results you want.

CONSIDER

- What do we most want to change about the way things are now?
- What are our criteria for deciding on the changes we want?
- What qualities and values are we aiming for?
- What is the purpose and benefit for the environment?
- Which actions will bring about the changes we want?
- Which areas should we focus on first?
- What are our criteria for deciding on the changes we want?

Suggested Tools

(see end of this section)

- Nominal Group Technique
- H Forms
- Ranking, Scoring and Matrices
- Action Statements

Useful Methods

(see Section 1)

- Reflective Techniques

EVALUATE/REFLECT

- Will the actions in your action statements help to bring about the changes you want?
- Are there other actions you could take which would make more of a difference?
- Do you need to prioritise again to decide which actions are the most important?

2.2 Designing and Planning

Once you have clarified which actions will bring about the changes identified in your Whole School Vision, the Action Planner can help you to consider what will be needed and who else to involve.

If your project includes enhancing, creating or changing something physical in your school, like a garden, outdoor structure or a building, you will need to design it. Students can use the Design Planner to work through a process of creating designs that are harmonious with the school environment and community.

A Task Programmer then sets up the timeline in which actions need to be carried out and records who will be responsible for making those actions happen.

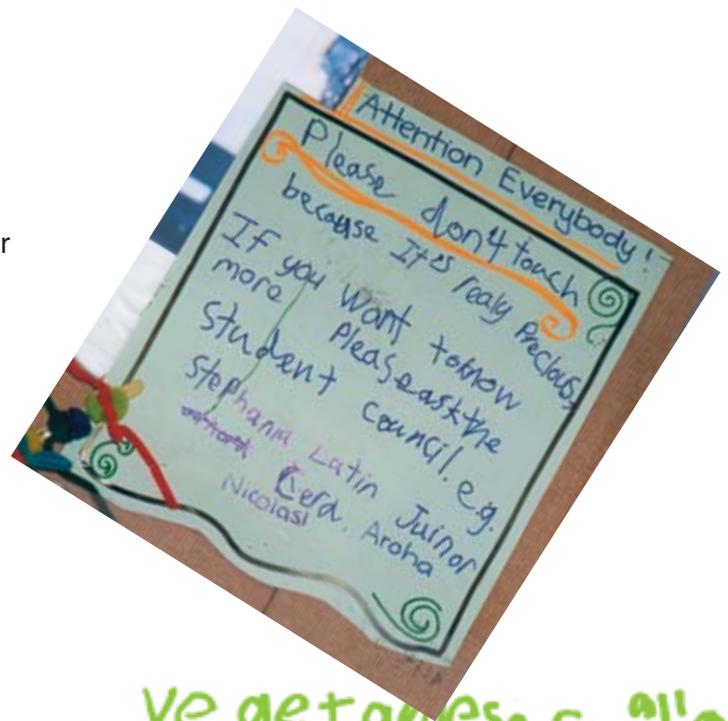
As you consider who else needs to be involved, you may need to publicise your ideas and use your Envirogroup and other community partners to make sure you get as much input as you can to help your project.

CONSIDER

- Which designs will work best?
- Who can help us?
- Who else do we need to involve or consider and how?

Suggested Tools
(see end of this section)

- Action Planner
- Design Planner
- Task Programmer



3. Reflecting on the Changes

Discussing what you did and how it went helps to crystallise what the lessons were, reinforce your achievements and confirm that you can make a difference.

By monitoring the changes, progress can be checked. Sometimes you don't get the results you plan for and sometimes there are unexpected achievements.

Find ways to keep the wider school community informed and you will be more likely to have their support for the changes you have made. Photos and videos can inspire others. Make the most of newsletters, noticeboards, presentations and exhibitions to share your projects.

Have a celebration! An opening, a blessing or a gathering is a great way to celebrate achievements and acknowledge the contributions of the many people who may have given their time, energy or resources to a project. It may be the first time that all of these people have been together and it is often an uplifting experience for people to meet and share their experiences. It also strengthens the networks between school and community.

Compile an Enviro-guidebook, or contribute a case study to the annual Enviroschools Scrapbook, so that future students and other schools can be inspired by your projects!

EVALUATE/REFLECT

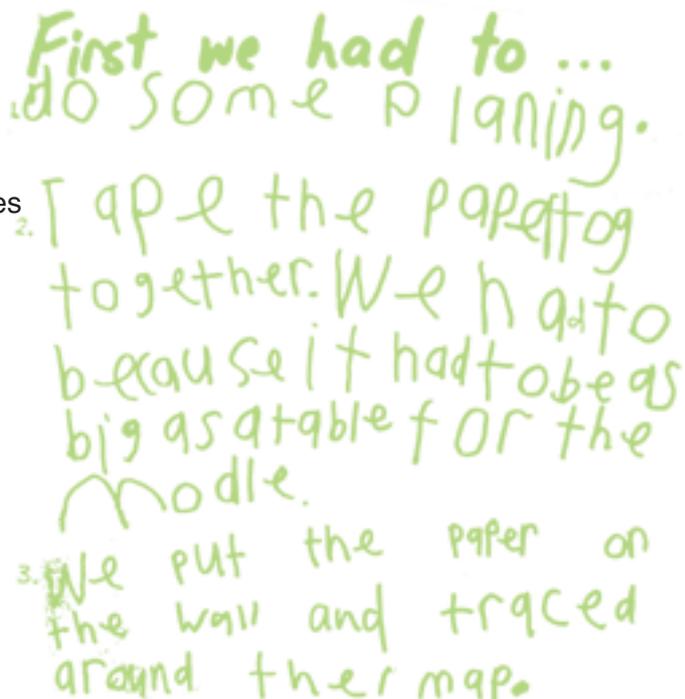
- What happened?
- How can we monitor and record the changes and tell others?
- How will the changes be developed in the future?
- How can we celebrate our achievements?
- Who are the people we want to thank and acknowledge?
- Where to from here?

Suggested Tools
(see end of this section)

Indicators

Useful Methods
(see Section 1)

Storyboards
Learning Log
Reflective Techniques



First we had to ...
do some planning.

2. Taple the Pareffog
together. We had to
because it had to be as
big as a table for the
model.

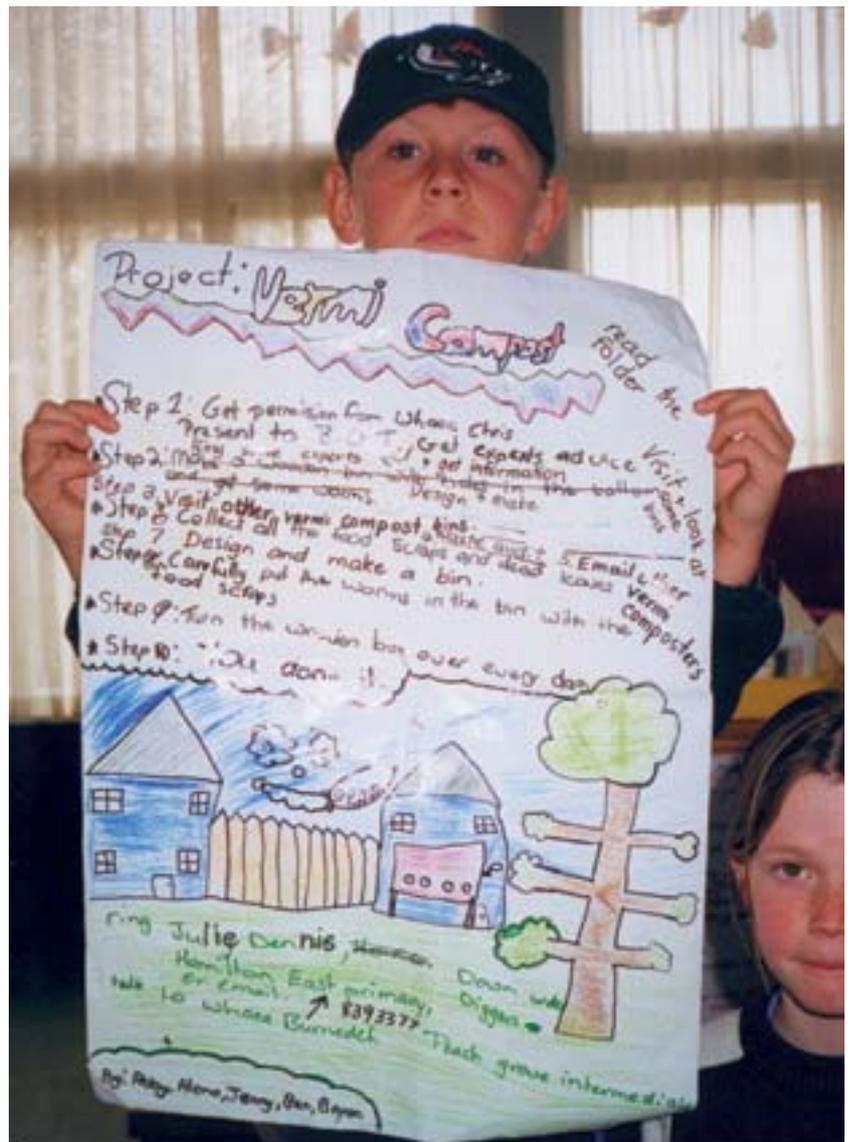
3. We put the paper on
the wall and traced
around the maps.

Section 3 Action Tools

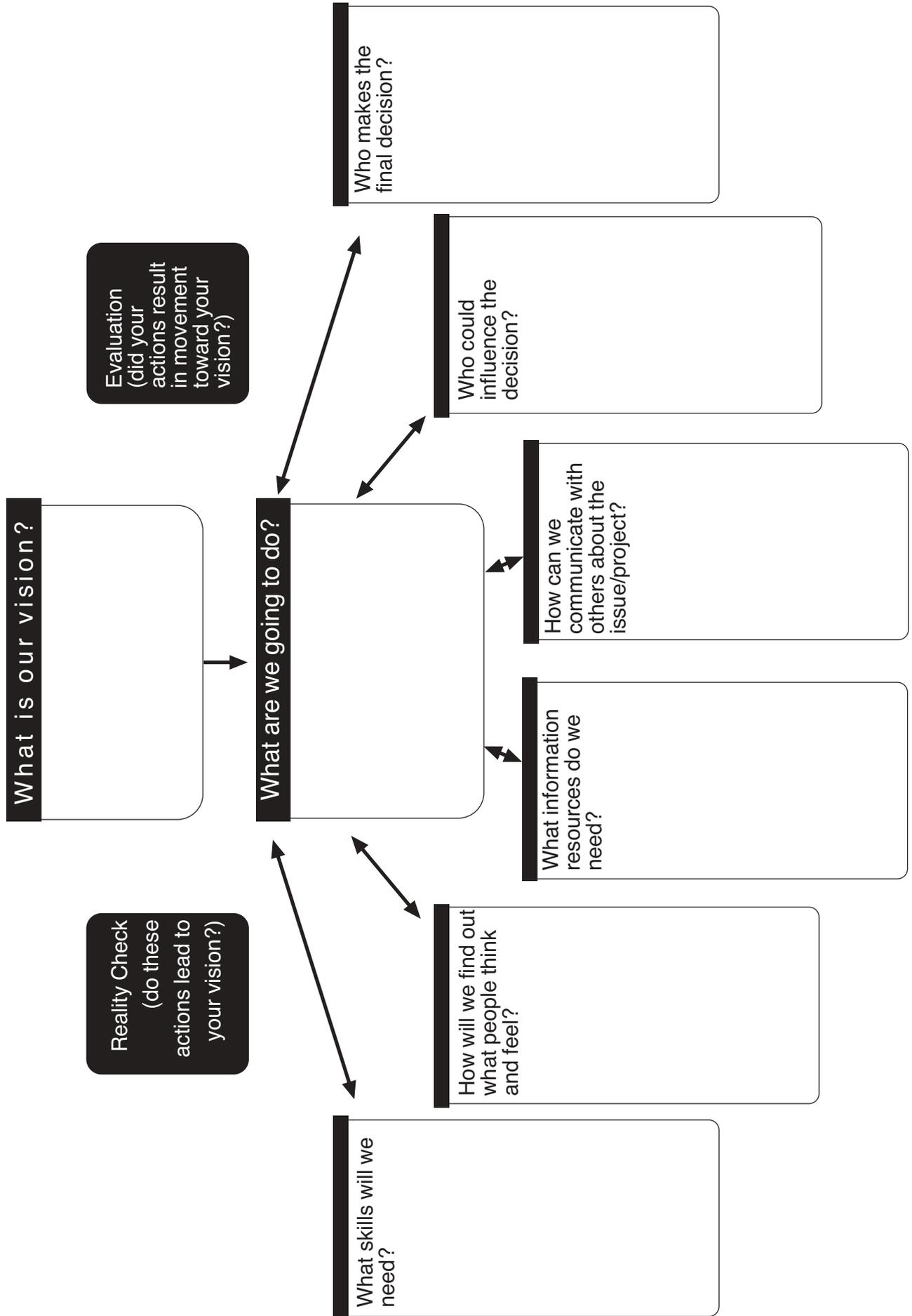
a) Action Planner

Use the Action Planner to organise your projects for achieving change and to anticipate any foreseeable issues that might arise.

Display the planner and fill in the questions as a class, working through each of your proposed actions. Use it to ensure that you have considered all the aspects of taking action. (Note, if some of your actions require you to design a space or structure you may use the Design Planner as well.)



Action Planner



b) Action Statements

Use this table to help you develop specific action statements or project titles.

Make sure the actions you identify will move you towards the changes you desire. Start thinking about how you will monitor changes. What results are you expecting from the actions? Record your action statements and expected results in a table like the one below. Have a column for the actual results too that you can fill in at the end of the project and use as a monitoring tool. You might be surprised at how many unexpected benefits come from one action!

Idea for Change	Action Statements	Expected Results	Actual Results
Save water.	Install water saving devices. Mulch gardens. Make awareness posters.	Water use reduced by 20%.	
Produce healthy food in school grounds.	Develop organic vegetable garden. Plant a food forest.		
Stop food waste going to landfill.	Construct worm farm. Shared lunches.	Waste to landfill reduced by 40%. Fertiliser produced for gardens.	

c) Design Planner

If you want to build a garden, structure or object, you will need to make decisions about how it is made and you will probably want to show it in drawings. You can use the Design Planner to help you think about the different aspects that will be incorporated into your design, what it will look like and how it will work. There are also some guidelines for evaluating your different designs and a template for developing your criteria.

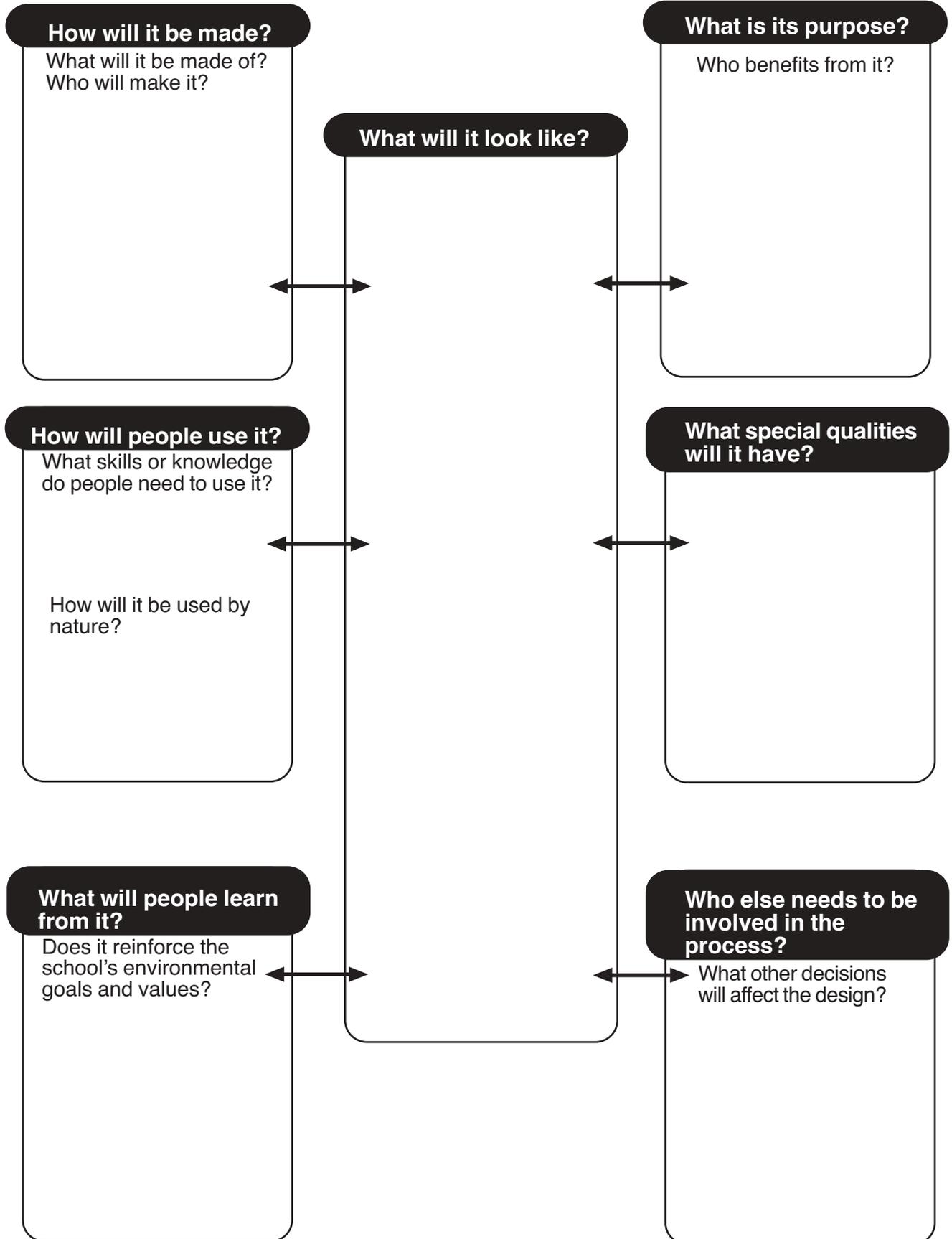
You may need to break the design task down. As a class, you could agree on some key aspects of the design and then explore how it will look individually or in groups. You could then share the different ideas to arrive at a design you agree on. Or, if it is a large space, you might agree on the overall purpose and qualities and then different people could design specific objects or aspects within it.

There is no set order to do things in. You could start by making some decisions and drawing what your object or place might look like, come up with some criteria to assess the design, and then refine the drawing as you investigate and work things out. Or, you might decide on your criteria before you begin designing. You probably won't foresee all of the issues before you start building and you probably won't draw every little detail.

Even after you have designed and drawn up your plans, be sensitive to changing circumstances, new information or fresh perspectives as you move into action. Keep consulting, designing and making decisions all the way through the building process if you need to.



Design Planner



Evaluating Sustainable Design

The table which follows is one example of a tool for evaluating how healthy and sustainable a design is.

Whether you are evaluating a building, an object or a space, it is important to consider its whole life cycle, not just the object or end result that you see. You might consider the following questions.

How can the design work better with natural cycles?
How can local people and resources be part of the design?
How will the design be good for nature and people?

Materials

Where do the materials come from?
How far are things transported?
How does extraction affect different habitats?
How healthy are the materials?

Manufacturing and Construction

How is it made?
What processes are used?
How much energy and water is used?
What kinds of waste are produced during the process?
Where does the waste go?

Life and Use of the Object

What resources (such as energy and water) are needed for you to use it?
What waste products are produced?
How much maintenance is required?
How durable is it?

End of Current Use or Life

Can it be reused or adapted?
How much of it can be recycled?
What happens to the bits that can't be recycled?

Developing Criteria: checking how healthy and sustainable your design is

How can the following qualities be incorporated into different aspects of the design?	Aspects to consider in the design			
	Materials	Manufacturing and Construction	Life and Use of the Object	End of Current Use or Life
Conserve energy and natural resources				
Celebrate and work with the cycles of nature				
Improve the quality of life for all living things				
Incorporate strengths and skills of students and local people				
Honour the heritage of the people and place				
Care for people's spiritual, mental and physical well-being				
Teach us about living a healthy, peaceful and sustainable life				

d) H Forms

This is a simple technique that can be used to evaluate ideas by ranking them and assessing their pros and cons.

1. Take a large piece of paper (e.g. flipchart paper if working with a group, or smaller if working with an individual). You also need enough markers so that everyone in the group has one each and about 12 sticky notes for each person in the group.
2. Fold the paper as follows: fold it in half length-wise, half again width-wise and half again width-wise. Now unfold the paper and with a marker draw a large H using the folds as your guide. (Don't draw a line down the centre vertical fold.)
3. Write a question or an idea to be discussed between the top uprights of the H. This question must be simple and focused. At the left end of the cross bar write 0 or not at all well or a sad face symbol. At the right end write 10 or extremely well or a happy face symbol.
4. Ask each person to place a mark on the cross bar that represents his or her score for the question/idea.
5. To the left of the uprights write down all the negatives relating to the question/idea. To the right list all the positives. Underneath the crossbar, having discussed all the positives and negatives, write down some solutions or actions.

e) Indicators

As you progress with taking action and putting designs and plans into practice, you also need some way of telling whether or not you're actually succeeding with your efforts. Is less waste being produced, are people participating in Enviroschools projects, is the school becoming more sustainable?

One way to find out is to use indicators that show the big picture by looking at small pieces of it. You can measure some things directly, like how much water is used in the school, how many students are involved in the organic garden or how much money has been saved through energy conservation. Other things, such as whether or not the school has become more harmonious, involve people's feelings and observations. These can be a little harder to measure but are just as important.

Indicators are like the dials on an instrument panel. By looking at them we can see what's going on and find out not only how successful we've been, but also what we'll need to do in the future to make things even better.

Choosing indicators

Choosing good indicators needs a bit of thought, so here are a few helpful hints:

Think about what would be good indicators of success (or otherwise) in relation to your action statements, desired changes and/or the overall sustainability of the school. Ask these questions about your suggested indicators and discuss:

- Is the indicator measurable? Will it actually show you if you've improved or deteriorated? Will the changes it shows be useful when you come to revise your plan?
- Is the indicator easy/affordable to collect?
- Is the indicator user-friendly? Will people understand it or will it cause confusion?
- Is the indicator constant over time? Will you be able to use the same methods to measure the indicator each time to get true comparisons?
- Can the indicator be influenced by your actions? Is it possible to do things that will move the indicator forwards?

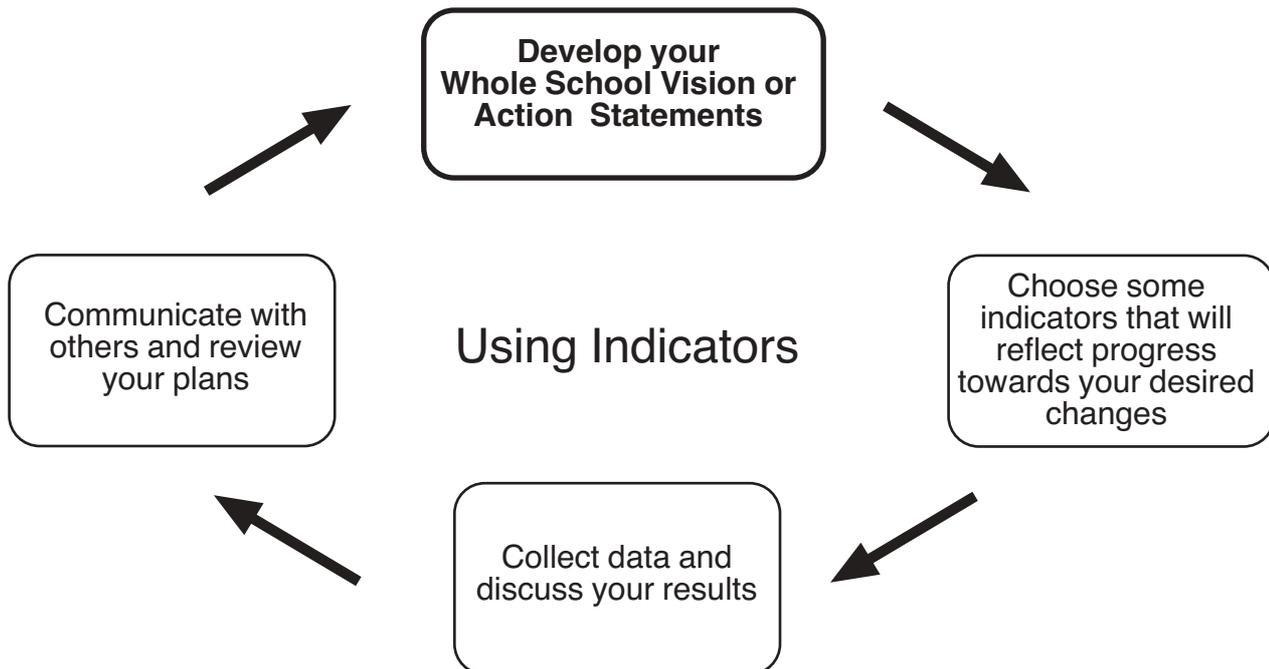
Using indicators

Once you've chosen your indicators, it's a good idea to put together a simple monitoring plan. This plan will help you to record data consistently and can form the basis of a progress report to the whole school. Here's an example of how the plan might look:

Theme	Indicator	Units	How was the data collected?	Who collected the data and when?	Source of data	Are we improving?
Energy	Total amount of energy used per month	KWh	Subtracting end of month meter reading from start of month reading	Class 4B (Lisa, Rangi and Ruth) 23/10/2002	School electric meter – behind main hall	

You can present your indicators in other ways, such as a graph showing trends, or taking before and after photos.

As the data for your indicators is gathered, you can use it to reflect on change and review your plans.



f) Nominal Group Technique

This process is a structured small group discussion that uses individual brainstorms to generate ideas for discussion and prioritisation. The process prevents the group being dominated by one person and allows the less vocal students to participate.

The steps are as follows:

1. If the class is large, divide into small groups. Each group should have a recorder to write down ideas on flip chart paper and present the ideas back to the class.
2. State the question or task e.g. How can we reduce the school's energy consumption?
3. Each person should then spend several minutes in silence, individually brainstorming all the possible ideas he or she can generate and jot these down.
4. The recorder/facilitator should then ask each member of the group in turn for one idea and keep going around the group until no new ideas are forthcoming. There should be no discussion of the ideas at this stage and definitely no criticism!
5. Once all the ideas have been recorded then there can be discussion about and clarification of them.

You could then use **H Forms** or **Ranking, Scoring and Matrices** to critique and prioritise if appropriate.

g) Ranking, Scoring and Matrices

Ranking, scoring and matrix exercises are used to discover an individual's or a group's priorities and preferences. They can also be used to look at constraints and opportunities.

Although there are several different types of ranking and scoring, we can group them together since they all involve a similar approach.

Ranking

The basic approach is ranking where elements are placed in order of preference/ importance by listing them or drawing them and then voting on them using some kind of valueless currency, for example beans.

Pair-wise Ranking

Pair-wise ranking allows us to compare the relative importance of items with each other in a table, two by two, until all combinations have been covered. At the end, it is possible to count the occurrence of each item and produce a ranking in this way. This simple example shows how some things we might want from our garden could be compared and ranked against each other for importance. For example, comparing shade with flowers, which is more important? In this example it is shade, so shade is written in the box. Shade wins twice against other criteria and so appears twice and has a score of two. This ranks shade second overall in terms of importance.

	Shade	Birds	Food	Flowers	Score	Rank
Shade		Birds	Shade	Shade	2	2
Birds			Birds	Birds	3	1
Food				Food	1	3
Flowers					0	4

Matrix Ranking

Matrix ranking involves listing all the elements down one side and all the criteria we are using to judge them across the top. Each element is then considered against each criterion. Ranking works best when there are less than seven criteria for each element. Once again, we can do this quickly by using beans or some other currency which students place in the boxes according to their preference/ importance.

h) Task Programmer

A Task Programmer breaks an action plan down into tasks and assigns responsibility for each task. This can be used to plan a sequence of events and check how you are going as you progress with your actions.

1. Using your Action Statements and Action Plan, identify the tasks necessary and draw a large class timeline showing when each task will need to be completed.
2. Transfer the tasks and key dates into a Task Programmer using the template provided.
3. List all the resources you will need for each task, such as people, materials, money etc.
4. Allocate responsibility and a date for making each task happen.

Task programme for class ... Our action is to...			
Task	Person Responsible	Key Dates	Resources, People and Budget Required

