

LEARNING FOR A
SUSTAINABLE
FUTURE

INQUIRY CHAPTER NINE

Youth Agency



EMPOWERING LEARNERS IN A WARMING WORLD

A Climate Change Inquiry Guide for 7-12 Educators

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Inquiry 9. Youth Agency

Climate change is a large-scale problem. Addressing the complexity of climate change requires all sectors of society to make radical changes including government, business, industry, and individuals.

Our individual actions to personally reduce our individual carbon footprint contribute to reducing greenhouse gas emissions. In addition, when we share what we are doing and why, our actions start to shift culture and practices.

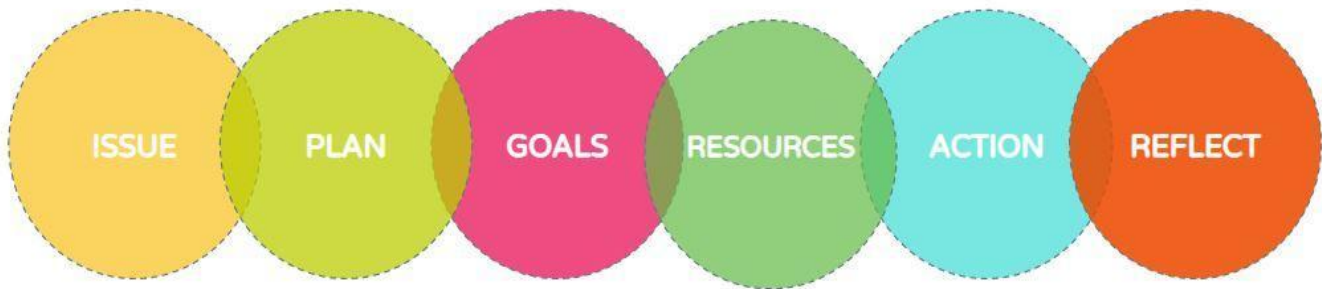
Taking action gives youth agency, promotes hope and addresses eco-anxiety and fear

We are at a critical point in our planet's history and there are many people working across sectors to make change happen. It is exciting and scary at the same time. In this inquiry, we draw on Learning for a Sustainable Future's [*Engaging Students in Sustainable Action Projects Facilitator's Guide*](#) (ESSAP) to provide a framework for developing an Action Project.



There are important steps that go into a classroom enacting change in the form of an Action Project. The ESSAP developed twelve steps to guide educators in planning, launching, and measuring the success of a student-led Action Project. These can be simplified to the following Six Steps to Taking on an Action Project: 1. Choose an Issue, 2. Make a Plan, 3. Identify your Goals, 4. Gather the necessary Resources, 5. Take Action, and 6. Reflect and celebrate.

A simplified visualization of the steps to taking on an Action Project:



Six Steps to Taking on an Action Project

STEP 1. Choose an ISSUE

Ideas to get students thinking about choosing an issue:

[Four things you can do about the climate crisis](#) [The Years Project]

[Surprising Solutions to the Climate Crisis](#) - Project Drawdown [The Years Project]

[The Solution to Climate Change is All Around Us](#) [The Years Project]

[How We Children Save the World](#) [Plant for the Planet]

Research is an essential step in the process to produce a meaningful action plan, students need to work to understand the complexity of the issue. Sample questions include: What has already been done on this issue? Are there people in your community taking action on this issue? Would they be a meaningful contact to make? Who is it impacting?

Based on your research, decide on an action that is a high-impact climate action.

Students may all have different ideas about what is important to them and what they want to take on in this project. By giving every student in the class a voice and choosing an issue in a democratic manner (vote, value line, ranking issues) the issue will be most representative and the likelihood of student engagement is much higher.

Activity: Value Line

Adapted from LSF's ESSAP Guide: Page 21

Give students examples of things that “bug” you and then ask the students to write down things that really bug them on a sticky note. For instance: “it really bugs me that students in the school do not know how to properly recycle, so even when I do the right thing it doesn’t make a difference.” In order to expand student’s ideas, you could start by asking students to reflect on something that bugs them at their home, then to their school, and finally in their community, and colour code these ideas on different coloured sticky notes.

All of the students’ ideas should be put into a central bin and move into an open space where there is room for students to move around. Let the class know that one side of the space represents “really really care” and one side represents “don’t care.” Ideas are chosen at random from the bin, and students choose a space on the line that represents how much they care about the issue. The results from each issue should be recorded visually to review afterwards and see which of the issues captures most students.

2. Make a PLAN

Action Projects have potential to be the most effective at making a real impact when they are strategic, so making a plan is essential.

To get started, students can brainstorm ideas of things/actions that they want to do to help reduce climate impacts based on the provocations.

To help students think through what actions are more effective than others, students can:

- Calculate their carbon footprint *
- Visit Project Drawdown to review which greenhouse gas emission reduction strategies are more effective than others (ranked from 1-100)
- Research the carbon footprint of an average person in your province/territory

Note: When it comes to carbon footprint calculators, there is variation in energy production systems from region to region which means that energy conservation actions in some provinces/territories are higher-impact climate actions than in others.

At this stage, we encourage students to think about people who might be involved in this issue, and identify any active stakeholders that may create barriers for students to accomplish their goals. On the other hand, it is important to consider existing supports as well. There are likely people or organizations that will be able to help support your class in some way. Encouraging students to use all available resources, inside and outside the school, is a useful skill to learn.

3. Identify your GOALS

There are many reasons why students want to take on an action project. The overarching goal is to make a positive change for the environment. In addition to the main goal, students should decide on specific, attainable outcomes and decide on what type of action best helps them to achieve their goals:

The ESSAP guide highlights eight different types of eco action that can help students achieve their goals:

1. Educate and Inform
2. Make Consumer Choices
3. Persuade Others to...
4. Raise Funds
5. Engage in Political Action
6. Initiate Legislative Action
7. Eco-Management Projects
8. Make Lifestyle Choices
9. Peaceful Dissent
10. Other...

4. Gather the necessary RESOURCES

At this stage, encourage students to think about people who might be involved in this issue, and identify any active stakeholders that may create barriers for students to accomplish their goals. On the other hand, it is important to consider existing supports as well. There are likely people or organizations that will be able to help support your class in some way. Encouraging students to use all available resources, inside and outside the school, is a useful skill to learn.

The type of resources required depends on specific projects. Most fall under the following categories:

People resources

- Who needs to be involved/informed?
- How can you recruit volunteers to help?

Monetary resources

- Community businesses are often willing to support student causes. Reach out to them.
- For fundraising and grant opportunities check [here](#)

Material resources

- Use newsletters or social media to ask your community for items you might need.

5. Take ACTION

Choose an Action: Project Planning Template

ESSAP Guide p. 41-48

This activity offers a thorough process for a class to determine the best action to target the issue that's been chosen. It starts off with a project planning workshop that encourages students to consider the root causes vs. symptoms of their issue and asks them to start thinking about remedies for both the symptoms and root causes.

Simple example:

ISSUE	SYMPTOM	SOLUTION	ROOT CAUSE	SOLUTION
You're sick	Runny nose, sore throat	<ul style="list-style-type: none">● A tissue● Soup	Bacteria	<ul style="list-style-type: none">● Antibiotics● Hand washing
Litter in the schoolyard	Garbage on the ground, overflowing cans	<ul style="list-style-type: none">● Litter pickup● More garbage cans	Too many packaged snacks brought to school	<ul style="list-style-type: none">● Litterless lunch campaign● Provide reusable options

The activity then refers to the examples of different types of action (mentioned in step 4) that could be taken to combat an issue. Students are asked to determine a set of criteria for landing on the best action. Students are asked to choose three potential actions and determine whether each does or does not address the specific criteria that they have come up with. A series of graphic organizers take a closer look at who or what is directly or indirectly affected by this issue (person, plant, group, place etc.) and whether any concerns arise in relation to these populations.

The final step is determining measurables for the success of the project. What evidence are you looking for that would signify progress? What tools can you use to measure this?

These plans and organizers can be a work in progress that can always be returned to and adjusted as the project progresses, or used to refer back to to stay on track. But they are a useful, succinct starting point for conceptualizing and planning a successful project. See full planning activity and template in Teacher Aids.

Take Action (Do it!)



Depending on the project that you have chosen to tackle, different skills may come in handy. Here are a few examples of skills, and activities that are described in [ESSAP](#) to use in your classroom to help students develop them:

- A. Developing Telephone Skills (p. 52)
- B. Lobbying (p. 55)
- C. Letter Writing (p. 58)

6. REFLECT and Celebrate!

Reflect on the positives, negatives, frustrations, accomplishments and challenges. Reflection can and should happen throughout the entire Action Project process. Taking stock of how the project is going, what can or should be changed, and how each member of the class is doing/feeling in relation to the project is important to staying on track, and ensuring the best results!

Share and Celebrate Success

Sharing your project is a critical and often-overlooked phase that is essential to creating widespread change. When we share what we are doing and why, we attract others to our cause and get them interested in following suit. This way we can multiply our efforts and start to shift culture and practices.

Schools are an excellent example of this. Each teacher influences dozens to hundreds of students per year (depending on class size & schedule). If students can spread messaging to their parents, peers, and other fellow Canadians, they can be a huge catalyst for creating large-scale and lasting change. This is a proven method! For example, anti-smoking, anti-impaired-driving, recycling and other major social and environmental campaigns have leveraged the education system to great effect in the past.

The more your Action Projects are shared with parents, your community, the media, etc. the greater your impact!

One way to share your project is on LSF's [Our Canada Project](#) sharing platform, where students across the country share their visions for a more sustainable Canada and the actions they are taking to achieve those visions. Add your Action Project to inspire other Canadians to follow your lead (and for the chance to [win great prizes!](#)).

Further Ideas for Taking Action:

It is important to keep in mind that not all actions listed below will have the same impact. Some actions have a much larger influence on climate change compared to others on the list. In order to make the list approachable for students we have chosen to include both large scale and small scale actions. Depending on where you are located, certain actions will matter more or less so it is important to keep this in mind as well. The following five actions are the most impactful choices and changes students can make, according to [Drawdown](#):

- 1. Reduce the amount of food waste you produce - food waste is responsible for approximately 8% of global greenhouse gas emissions.**
- 2. Try to eat a plant-rich diet (reduce meat consumption) - Western, meat rich diets account for 1/5 of global emissions.**
- 3. Take alternative transport: walk, ride your bike, take public transport or carpool to reduce your carbon dioxide emissions.**
- 4. Switch to LED lights wherever you can - they use 90% less energy than incandescent bulbs**
- 5. Buy less - Manufacturing and creating new items such as: toys, clothing, and electronics uses a huge amount of energy. If you make your existing things last longer, and buy second hand.**

Below are some specific ideas for Personal Actions, listed under seven main themes: food, transport, energy, in your yard, water, materials and general activism.

Theme 1. Food

Reduce the amount of meat that you consume (specifically beef). Raising livestock such as cows accounts for a large portion of Earth's heat-trapping gas emissions. Cutting beef from your diet is one of the quickest ways to lower your carbon footprint. According to the [World Resources Institute \(WRI\)](#), [producing a portion of beef emits 20 times more greenhouse gases](#) than producing an equal-size portion of plant-based protein, such as chickpeas or lentils.

If your community does not have a green bin program, encourage your parents to **buy or build a backyard composter or build a vermi-composter**.

Try to eat mostly **in season and locally grown** fruits and vegetables. This cuts down on the energy used to grow, transport and store food, which reduces the release of heat trapping gases. Flying, trucking, and shipping foods around the world use excessive amounts of oil.

Avoid drinking bottled water! Drink tap or filtered water & carry your drinking water in a reusable bottle. Plastic water bottles contribute to carbon dioxide per year. It is estimated that the carbon dioxide footprint of bottled water consumed globally is between 31 billion pounds of carbon dioxide per year (equivalent of 5 million cars per year) to 446 billion pounds of carbon dioxide per year (equivalent of 74 million cars per year).

Eat more fruits, grains, and vegetables - You may have heard people talking about switching to a plant-based diet. Not only are there health reasons to make this switch but you will also save carbon dioxide too. It takes a lot more energy to produce animal products (like meat and dairy) and processed foods (like fruit juice, soda, candy, and chips) than to grow fruits and vegetables.

Help **start a garden** at home, at school or in your community to grow some of your own food! Tending to a garden is not only great for the environment, but it gets you outside, enjoying and appreciating the natural environment you live in!

Ask your parents to buy **reusable grocery bags or advocate for plant-based plastics**. Help them to remember to get them out of the car and take them into the store.

Theme 2. Transport

Walk or ride your bike instead of taking a car everywhere. A 3 km car trip puts 2 pounds of carbon dioxide into the atmosphere! Biking or walking just one mile a day for a year could save 330 pounds of carbon dioxide—that's the same as planting four trees and letting them grow for 10 years!

Stay out of the drive thru! When you go to a fast-food place, ask your parents or guardian to park the car and let you walk inside, rather than sitting in a line of cars with the engine running and polluting.

If you must ride, **carpool** & consider driving an **electric vehicle**.

If you are in a car with family or friends, encourage **windows down** instead of air conditioning!

Holiday locally! Explore your own beautiful province during the holidays, so that an airplane flight with a large carbon footprint is not necessary.

Theme 3. Energy

Turn down the thermostat on the heating when it's cold. Try using sweaters, blankets, and socks to stay warm and use less heat!

Turn up the thermostat on the air conditioning when it's hot. If you are still too hot, fans are a good alternative to air conditioning because they use much less power.

Turn off lights, TVs, computers, when you do not need them.

Unplug! Any electronic gadget you can turn on with a remote (TV, DVD player, Nintendo, Xbox) uses power even when it is "off." Appliances with a digital clock (like a coffee maker) or a power adapter (like a laptop computer) also suck power like a sneaky vampire. Plug these kinds of things into a surge protector or power strip that has an on/off switch. Then you can shut off all the power without unplugging each gadget.

Switch to "Energy Star" products - from light bulbs to refrigerators, your family can look for products with an Energy Star label. It tells you how much energy an item uses and saves.

Theme 4. In your Yard

Plant trees! Roughly 15 billion trees in the world are cut down each year, so help offset that loss by planting a tree of your own. Trees are great for the environment in so many ways: they absorb carbon dioxide and release oxygen for people to breathe. They also provide shelter and food for

animals such as [squirrels](#) and [owls](#). Depending on where trees are planted, their shade can even reduce the need for air-conditioning in hotter months.

Tired of cutting the grass? Ask your parents to **replace grass with a perennial ground cover**. It doesn't need to be cut or watered!!

To avoid flooding in a basement, **remove leaves and garbage from the nearest storm drains and eaves troughs, extend the downspouts** so that the water discharges at least 2m from the house, make sure there are **covers on basement window wells**

Plant **native plants** for your garden that provide food and habitat for local birds, butterflies and bees. Native plants will thrive in your local soil, requiring little fertilization or care.

Change the way you do yard work - Leaf and snow blowers use gas or electricity. Raking and shoveling emit no carbon dioxide – they are the healthier alternative for you and the earth.

Theme 5. **Water**

Conserve water by turning off the faucet when you brush your teeth, and taking shorter showers. This could help conserve up to eight gallons of water per day, which means a reduction in the pumping and distribution of water and also a reduction of carbon dioxide emissions (for more information see Project Drawdown: [Water Distribution Efficiency](#)).

The cooler the water, the better for the environment - **turn down the temperature on the hot water tank** a few degrees. This will save energy and reduce carbon dioxide emissions.

Wash differently- try to only run dishwashers and washing machines when they are completely full. Wash clothes using cold or warm water instead of hot water, saving on water usage and energy, and reducing carbon dioxide emissions.

Theme 6. **Materials**

You can REFUSE items when they're offered to you. You can buy items made from RECYCLED materials. You can REFILL empties. You can REPURPOSE things. You can RECLAIM parts of things once they're no longer useful. You can RETURN or REGIFT things instead of throwing them out. You can REPAIR things when they break instead of buying new ones

Recycle properly! Make sure that your recyclables are cleaned properly (no food/liquids/other contents, before putting them in the recycling). For more information on the impact of recycling on carbon emissions go to Project Drawdown: [Recycling](#))

Buy less - Manufacturing and creating new items such as: toys, clothing, and electronics uses a huge amount of energy. If you make your existing things last longer and buy second hand - this would save a lot of energy over time!

Hang up your freshly washed clothes to dry. You'll be saving energy by not using the dryer.

Go paperless! - if something doesn't need to be printed out, read it on a screen or use GOOS (good on one side) paper.

Try **carrying a reusable bag** with you - so that you're prepared if you need to buy something.

Buy vintage! The textile industry's fast fashion messages encourage us to be a throw-away society. Go to your local thrift store to find your own fashion style.

Host a swap shop or re-gift it day at your school. Students can bring in their donations of gently worn or used items, and someone's cast offs can become someone's new treasure!

Theme 7. **General Activism**

Write a letter to the editor about climate change in your local or school newspaper. The more people talk about the issue, the better!

Not everyone understands climate change - even experts can know everything about climate change. For instance someone who studies ice cores may not understand food security. Be curious and **learn and then tell your friends and family about what you are learning. 47% of people in Canada learn about climate change through talking to friends and family (Field, Schwartzberg, Berger, 2019).** If everyone has an open mindedness to learn, we can work together to find solutions.

Send a letter, postcard, or drawing to your mayor, premier, government representative, or even the Prime Minister asking them to do something about climate change.

Fall in love with nature. Enjoy **spending time outdoors** as much as you possibly can! It is so important when doing climate activism to find ways to destress and being in nature can help you do this.

At school: encourage your classmates to take-action, start or join your school's eco-club. **Be a champion** - normalize and support classmates' efforts to be sustainable.

Use your social media platforms to educate and inform others on issues related to climate change and actions that people can take. Through this channel, many of you have access to a large number of other students and young people which gives your voice a platform to make a real difference.

What's Next?

Knowledge + Action = Hope

This resource was intended to help you spark an inquiry for your students, help them gather knowledge and encourage them to act and implement positive change.

Continue to ask your students: What do you control in your own life? What do you have influence over? What are ways that you can make a positive difference in the environment?

We hope that you continue to seek out transformative, active learning strategies and use them in many aspects of your teaching to help students develop 21st Century Learning skills such as problem solving and critical thinking. As educators, it is our role to give young people the tools they need to face the future.

"The moment we decide to fulfil something, we can do anything." *Greta Thunberg, Houses of Parliament, UK, 23 April 2019*