

# CONNECTIVITY PROJECT

*Examining the Ripple Effects of Our Actions  
in an Interconnected World*



## *STUDY GUIDE*

**A learning experience featuring beautiful and compelling films, accompanied by thought-provoking discussion questions, enriching exercises, and engaging projects.**

Topics include: Social Studies, Science, Health, Environmental science, Climate Change, Diversity, Equity, Human Rights, Humanities, Pollination, Activism, Social Emotional Learning, Anthropology and more.



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“I think about our current situation in our nation and around the world and how this pandemic revolves around “connectivity”. I have been able to use your curriculum and first video as a tool to help explain this historical moment in our world. I just wanted you to know that because of your project I have a tool to talk about these issues/situations with my students in a way that they can understand. It has opened up so many good discussions in a time when we need to have good, honest discussions.”

*-B. Criswell, 5th grade teacher, Iowa*

“Your curriculum is so relevant and should be shared with as many teachers as possible. It is an excellent resource for this time of online learning.”

*-Jennie Pardi, Education Coordinator, NatureBridge Outdoor School*

# HOW MANY TIMES HAVE YOU WONDERED IF WHAT YOU DO MAKES A DIFFERENCE IN THE WORLD?

***IF YOU HAVE THE POTENTIAL TO MAKE GREAT CHANGE?  
WOULD YOU ACT DIFFERENTLY IF YOU SAW THE WORLD DIFFERENTLY?  
THESE ARE COMPELLING QUESTIONS MANY OF US WONDER ABOUT.***

Connectivity Project offers a timely and relevant educational experience, guided by engaging short films and enriching materials, encouraging exploration of the interconnections at play in the world. And by seeing this, it helps us to understand our lives better, to instill a sense of belonging and awe, and ultimately responsibility, as we examine the ripple effects of our actions, and the impact we each have on the world. We are pleased to be bringing this right to your classroom. We explore how expanding awareness of these concepts can influence the way we treat each other, get involved in the world, spend our money, vote - essentially investigating how we each make a difference by our actions. We are living in interesting times with: the global pandemic, racial and social injustices, environmental degradation, climate change, distance learning, the list goes on... and with these, we are called to reframe and redesign many of our known entrenched ways of being.

Teachers and students have access to three short films, examining their connection to the world and the power each of us holds. Connectivity Project's stories feature scientists, activists, indigenous elders and students, deepening the viewer's understanding of the potential ripple effects of their actions. This curriculum can be taught over a series of days or weeks, as the concepts during each episode have a wide variety of applications. From specific topics to interdisciplinary uses, they can be tied to other subjects students are studying. This program is versatile and designed to work well for distance learning as well as in the classroom.

*Covid 19 and Equity for this time.* This material can be adapted easily towards our most current and pressing issues, or any others that are relevant to your teaching. Topics such as the global pandemic and the rising awareness of social and racial inequalities are timely, present day subjects in which we see how interconnected our lives are.

Thank you for sharing Connectivity Project with your students. The vital wisdom experienced in this work is key for this time we are living. We would appreciate hearing how this curriculum works in your school and with your student(s). Please share any feedback you feel is helpful. What did you like? How did you use it in your work? Would additional films, exercises, topics, be useful to further this message?

In Connection,

*Rose and the Connectivity Team*



# EPISODE 1: INTERCONNECTIONS

“Connectedness from my world view, and world view I believe of most indigenous wisdom keepers, elders, spiritual leaders, is a deep knowing from inside, and a deep sense of being profoundly connected to all that is.

Everything in creation.”

*-Illarion Mercurieff- Aleut Wisdom Keeper*

“You never know how a single thing you do will affect others in the grand scheme of things. It causes me to think more before I act.”

*- R Les- 10th grade student*

In this 15 min film, we examine how different cultures and faiths from around the world have a common, time-honored awareness of an interconnected way of being. By focusing on these shared connections, we explore why this perspective is more important now than ever before, as we realize that our actions and ways of being, impact much more than we can even measure.

Black text = specific to the episode. **Red = generic questions/activities.**

## **Topics addressed:**

Interconnections, Science, Social Emotional Learning, Chaos Theory, Systems Thinking, Climate Change, Equity, Comparative religions, Anthropology, Web of Life, Making a Difference, etc.

## **Focus:**

- Introduction to seeing interconnections in everything
- Seeing commonalities between cultures and spiritual traditions
- Realizing how one action can affect many things

# EPISODE 1: INTERCONNECTIONS

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## I. DISCUSSION QUESTIONS

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### *a) Before watching the episode:*

- In what way do you feel you can make a difference or have an impact?
- Describe a story/example of someone who has made a difference through their own actions – no matter how large or how small.
- What common ideas and beliefs can you think of across religions or cultural traditions?
- Can you describe ways that show how the world is interconnected? (ie: The air we breathe in is what plants breathe out; Photo synthesis is how plants grow, potentially becoming our food; Coronavirus, what happened in China, or Washington impacted us all)

### *b) After watching the episode:*

- How do you feel after seeing this film?
- What common ideas and beliefs did the episode identify that are shared across religions or cultural traditions?
- Choose from any of these questions posed in the film. Suggest either a writing exercise, or create a discussion around the questions
- What are the implications of our place in this world?
- “When we understand this interconnection, does it inform the importance of our actions?” Explain.
- If you saw your life through a lens of being interconnected to everyone and everything around you, how would that inform your choices?
- Do you already feel this way? Explain.
- Who in this group already works with and is practicing interconnectedness?
- What are you doing and how are your actions or practices enlarging your life? Enlarging the lives of other?
- If people view the world in a disconnected way, what impact might that have on their actions?
- A famine, such as the one in China, can have many causes and repercussions. What else besides the killing of the sparrows would have contributed to what led to the famine in China, costing the lives of up to 35 million people?

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## II. INTERACTIVE QUESTIONS/EXERCISES

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- Web of life exercise - Each student will represent a plant or animal living in a forest habitat. Sitting in a circle, toss a ball of string across the circle unraveling as it goes from person to person connecting themselves to each other, representing the ways each creature depends on one another. As they make connections, this string forms a visual web of life. When complete, have one person tug gently on the string. Notice who is being impacted by that. Pull a bit harder to see if the impact is felt in more ways. This is a useful lesson to see how one impact can influence many.
- Using a mind map or blank mandala, draw the different parts of life or world that you perceive such as (Nature, health, family). Describe or draw how these different aspects influence each other? (\*see appendix for diagram example)
- Using a mind map, or some kind of diagram, illustrate how understanding interconnectedness informs how the global pandemic has not only physical impacts, but social and economic impacts as well.
- Using a mind map, diagram or illustrate an understanding of the rising awareness of social and racial inequalities (and the Black Lives Matter movement) through a lens of interconnectedness - illustrating both how we got here and the effects of this.
- Exercises on disconnection – when we place items in silos, we don't see the impact/influence of our actions (for example building a factory on a river and not considering the impact on the environment). Describe, or map out, the impacts of looking at a situation through a lens of disconnection.

# EPISODE 1: INTERCONNECTIONS

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## III. PROJECTS

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Can be done individually or in a group-

- Review the topics addressed in the film and compare how different cultures and spiritual traditions view the concept of interconnectivity. Investigate some of this same awareness from your own background and heritage and write a report on your findings. See what other backgrounds you can research and do a comparison of differences and similarities.
- Research online or in books and compile examples of the ways the world functions in interdependent and interconnected ways. Use nature, social interactions, consumerism, recycling, food supply, as potential topics to address this (or whatever topics you find most applicable).

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## IV. SELF DIRECTED LEARNING/RESEARCH

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- Find a song, poem or picture that shows interconnectivity. Either write about this or bring to class and share how it highlights interconnectivity.
- Initiate a conversation with an elder person in your family or community and ask them: “How do you or your community have an understanding or belief about things being interconnected?” How does this influence what you or your community does or talks about? What difference does it make?
- OR take this same exercise and converse with someone different from yourself and ask these same questions.

### CALL TO ACTION: OUR ACTIONS MATTER, COMMUNITY SERVICE AND INVOLVEMENT

There are countless actions we can take that can make a difference in the lives around us. Some students may need help considering what matters to them the most. Here is a link that you can share with your students, offering some ideas to consider:

**100 ways to make a difference in your community- A helpful list to encourage simple and effective action:**

[https://static1.squarespace.com/static/54c685b3e4b0f8fbaf030c60/t/562e9846e4b05ee7fd98b010/1445894214785/100\\_Ways\\_to\\_Make\\_Difference.pdf](https://static1.squarespace.com/static/54c685b3e4b0f8fbaf030c60/t/562e9846e4b05ee7fd98b010/1445894214785/100_Ways_to_Make_Difference.pdf)

**This network matches inspired people with inspiring causes. It's how volunteers and nonprofits connect to achieve remarkable outcomes:**

<https://www.volunteermatch.org>

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## CONNECTIVITY PROJECT'S GOAL

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Our intention with Connectivity Project is to catalyze a sense of awe and curiosity, a sense of belonging and responsibility, as the viewer comes to understand how each of our actions matter. After experiencing the stories and concepts in the films and this curriculum, we invite you to go further, encouraging your students to do their own investigation into these topics. The resources provided here are just some of what we believe will enhance the journey you have begun with us. They are examples of how to go deeper and enhance this conversation and awareness of interconnectedness. Whether used by the teacher, or given directly to the student, this sampling of the work of inspiring individuals, articles, and organizations, can facilitate deep relationships and foster more profound connections.

We are grateful for all of the work that happens all around us, to make this knowledge available to us.

Please feel free to visit our website page “Get Involved” for more options:  
<http://www.connectivityproject.com/get-involved>

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## RESOURCES

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### **Butterfly Effect**

<https://www.americanscientist.org/article/understanding-the-butterfly-effect>

<https://www.technologyreview.com/2011/02/22/196987/when-the-butterfly-effect-took-flight/>

### **George Monbiot and Greta Thunberg/ What you do counts!!!**

[https://www.youtube.com/watch?v=-Q0xUXo2zEY&feature=youtu.be&fbclid=IwAR3Of2063unhNFh2OnSwHFgsb260tHXT6U36iqgyn1jQAZT33CBmp1\\_eE\\_8](https://www.youtube.com/watch?v=-Q0xUXo2zEY&feature=youtu.be&fbclid=IwAR3Of2063unhNFh2OnSwHFgsb260tHXT6U36iqgyn1jQAZT33CBmp1_eE_8)

### **How Wolves Change Rivers**

<https://www.youtube.com/watch?v=ysa5OBhXz-Q>

### **The Great Sparrow Campaign in China had many consequences teaching each of us, about the impacts of our actions.**

<http://www.smithsonianmag.com/science-nature/the-story-of-the-most-common-bird-in-the-world-113046500/?no-ist>

**In sharp contrast to this stark example, China has become a leader in many things. Here is one such story: China and India deployed over 60,000 so military personnel to reforest the land. The project will plant over 32,000 square miles of trees, an area the size of Ireland.**

<https://www.carbonbrief.org/one-third-worlds-new-vegetation-in-china-and-india-satellite-data-shows>

### **How Whales Poop Can Save The World**

<https://blueocean.net/whale-poop-can-save-world/>

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## RESOURCES (CONTINUED)

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### **Sahara Dust Feeds the Rainforest**

<https://www.nasa.gov/content/goddard/nasa-satellite-reveals-how-much-saharan-dust-feeds-amazon-s-plants>

### **Thanking Those We Take For Granted - by Seeing the Interconnectedness of Your Life**

<https://www.npr.org/2020/06/26/883328394/a-j-jacobs-how-can-we-thank-those-we-take-for-granted>

### **How Trees Talk to Each Other**

[https://www.ted.com/talks/suzanne\\_simard\\_how\\_trees\\_talk\\_to\\_each\\_other/transcript#t-709397](https://www.ted.com/talks/suzanne_simard_how_trees_talk_to_each_other/transcript#t-709397)

### **Story of Stuff**

<https://www.storyofstuff.org>

### **Understanding Our Interconnected World and Covid 19**

<https://blogs.ei.columbia.edu/2020/03/16/understanding-interconnected-world-covid-19/>

### **Indra's Net**

<https://www.learnreligions.com/indras-jewel-net-449827>

### **Braiding Sweetgrass by Robin Wall Kimmerer**

<https://milkweed.org/book/braiding-sweetgrass>

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## ORGANIZATIONS TO RESEARCH AND SUPPORT

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### **Biomimicry Institute**

<https://biomimicry.org>

### **Center for Non-violent Communication**

<https://www.cnvc.org>

### **Bioneers**

<https://bioneers.org>

### **(For Instance: Monica Gagliano - Plant Intelligence and the Importance of Imagination in Science**

[https://www.youtube.com/watch?v=90BUQoLu\\_Hg](https://www.youtube.com/watch?v=90BUQoLu_Hg))

### **Global Oneness Project**

<https://www.globalonenessproject.org/library>

### **Challenge Day**

[www.challengeday.org/](http://www.challengeday.org/)

### **Daily Acts**

<http://www.dailyacts.org/>

### **Six Degrees.org**

<http://www.sixdegrees.org/>

### **Project Nature Connect - Educating, Counseling and Healing With Nature (ECHN)**

<http://www.ecopsych.com/>





# EPISODE 2: PLANTS HAVE WINGS

“We have to make decisions that really make a difference. So that everything we do allows nature to thrive and grow, and then we will too.”

*- Jacqueline Freeman*

“I always knew that chemicals were bad but as someone who works in farming, I feel like I have a new perspective”

*- Cole C. College Sophomore*

This film short offers an alluring look at the pollination process, our reliance on the pollinators and the plants they visit, and in turn, their reliance on us. This episode features the story of an inspired bicyclist who is a champion of Monarch Butterflies. A real take home lesson from this film shows how we are a distinct part of the web of life that directly impacts the continued survival and success of pollinator species, plants and us.

Black text = specific to the episode. **Red = generic questions/activities.**

## **Topics addressed:**

Science, Social Studies, Social Emotional Learning, Pollination, Food Security, Action, Making a Difference, Web of Life, etc.

## **Focus:**

- Learning how plants communicate
- Investigating our reliance on the success of the pollination process.
- Analyzing how the success of the pollination process relies on us, and our actions
- Seeing how one person's actions can have far reaching impacts

# EPISODE 2: PLANTS HAVE WINGS

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## I. DISCUSSION QUESTIONS

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### *a) Before watching the episode:*

- What are some of the ways that bees impact our lives?
- What are some of the ways pollinators impact our lives?

### *b) Either before or after watching the episode:*

- Why is pollination important?
- What are ways in which plants communicate?
- What causes problems for pollinators?
- What can we/you do?
- Make a list of your favorite foods to eat? (This can be referred to again after watching the episode to link these foods to pollination.)

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## II. INTERACTIVE QUESTIONS/EXERCISES

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- How does seeing the world through this interconnected lens influence the way you think about the plant world? Pollinators? Other things?
- Discuss or write down what you had for lunch today. Describe which foods needed help from pollinators to grow. Or you can go another other way too, making a list of what plants you can eat that DON'T need help from pollinators (oats, wheat...).
- Bring menus from different restaurants or take out places and have students mark which menu items need pollinators and which ones don't.
- Take field trip to a store and make a list of all the things that they can eat in the produce section that need help from pollinators. Or a list of all the things in each aisle that need help from pollinators. Or the converse, who doesn't need help from pollinators.
- Make a matching game (or have the students create this) out of pictures of different native plants and flowers from your area and native pollinators from where you live. Have students research what kinds of pollinators are drawn to which particular traits of the flowers. Then have them link up the appropriate ones, pollinator to plant, or at least the best guess based on their research.

### *Steps to take individually or in small groups (can be used with other topics too)*

- Determine what issues inspire you and how you might be able to help or are already helping.
- Turn to your neighbor or form a small group and share your commitments. Or use a mingling exercise where they will share with new people with each new topic.
- Here are ideas you can do individually or collectively, or even the whole class or school.
- Generate a list of all the problems that are associated with an issue you want to solve.
- Describe the ripples that come from the problem. How does it impact other areas of life?
- Include all the ripples that could potentially arise if we don't do anything to address the problem.

# EPISODE 2: PLANTS HAVE WINGS

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## II. INTERACTIVE QUESTIONS/EXERCISES (CONTINUED)

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### *\*Ongoing action – to support pollinators and protect plants*

- Share ideas that could be done collectively.
- Make a list with the activity, and the organizer if there is one.
- Use as a signup sheet so others can sign up to make longer lasting connections.
- Share with the group one thing you commit to doing for pollinators.
- Consider this quote from the film: “Every act I do I have to think, how does it impact nature?”- Jacqueline Freeman. Invite the students to articulate what this means.
- Draw a mind map showing how small actions can have large affects you may not realize.

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## III. PROJECTS

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- Since talking about these issues helps educate others, have students design appropriate ways to discuss this issue and the solutions. Then to take this out of the classroom and into their lives, have them decide: who they will talk to: family, other students, community members... Then set up a way to share this in the classroom or in cohort groups.
- Design a garden for home/school/public with pollinators in mind. What ingredients are important?
- Create a seed ball rolling and distribution campaign for plants that are most beneficial to the pollinators of choice.

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## IV. SELF DIRECTED LEARNING, HOMEWORK, RESEARCH

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- Have kids go to the store and make a list of all the things that they can eat in the produce section that need help from pollinators. Or a list of all the things in each aisle that need pollinators. Or the converse, who doesn't need pollination? This exercise can be modified to look in their own cupboards, or school lunch.
- Encourage students to locate and talk to local beekeepers. And do a report on this.
- Drawing on examples in the film of people who have made a difference in protecting pollinators (such as Milkweed Matters, Strips Program for farmers):
  - 1) Have students research and write about one or more of the following issues:  
What actions are going on in your local area to support/protect pollinators?  
What actions are happening in your area that potentially harm pollinators?  
What's are things you can do to make a difference?
  - 2) Have students research people and programs anywhere in the world doing something to help pollinators and have them write a brief report or offer a presentation describing these efforts. Have them include a similar action that could be done locally. From who would they need help? What are the barriers?

# EPISODE 2: PLANTS HAVE WINGS

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## IV. SELF DIRECTED LEARNING, HOMEWORK, RESEARCH

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### *To go a step further, investigate steps to take in working with others*

- Is there something you would like to do to serve others in your community? Pollinators, plants, people?
- Learn about your local native plants and their pollinators.
- Tend a garden at home, at school, or in your community, offering a healthy habitat for pollinators.
- Identify who will do this with you? (On your own, with another person, family member, group, church, class, government, etc.)
- Notice that just being in a conversation about the issue is impactful.

## CALL TO ACTION: OUR ACTIONS MATTER, COMMUNITY SERVICE AND INVOLVEMENT

There are countless actions we can take that can make a difference in the lives around us. Some students may need help considering what matters to them the most. Here are some ideas you can share with your students.

### Some helpful hints on how you can support Pollinators:

- Learn about bees, and their amazing lives
- Plant pollinator friendly plants
- Plant early bloomers for early pollinators
- Plant late bloomers for late pollinators
- Garden and landscape organically
- Garden in swaths of color so the bees work less
- Let weeds grow, it is food for the bees
- Create habitat, water source, leave some material in garden, etc
- Leave areas of the yard/garden with ground exposed from ground nesters
- Consider becoming an urban beekeeper
- Support green construction standards
- Encourage planting trees
- Buy organic produce and products
- Buy local, support your small-scale farmers
- Eat at restaurants serving organic, local, what supports your beliefs
- Support local ordinances that allow urban beekeeping and wild habitat
- Donate money or host a fundraiser to contribute to bee preservation
- Talk about bees and these issues to spread the word
- Be on the alert for petitions and policies supporting pollinators

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## PLANTS HAVE WINGS ADDITIONAL RESOURCES

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**Xerces Society – an Organization on the Leading Edge of Research and Ideas, with a Treasure Chest of Helpful Information, and Actions to Take in Support of Pollinators.**

<https://xerces.org/pollinator-conservation/plant-lists/>  
<https://xerces.org/educational-resources/>

### **Strips Project**

<https://www.nrem.iastate.edu/research/STRIPS/>

### **The Bee is Considered the Most Important Being on the Planet**

[https://science-andinfo.blogspot.com/2019/07/the-bee-is-declared-most-important.html?fbclid=IwAR3MeXBiayk8m5q9k-a\\_MzHqBZA72BQL5UPFVYdpD5UoCKMY3X4b8hWV1vw](https://science-andinfo.blogspot.com/2019/07/the-bee-is-declared-most-important.html?fbclid=IwAR3MeXBiayk8m5q9k-a_MzHqBZA72BQL5UPFVYdpD5UoCKMY3X4b8hWV1vw)

### **Great TED Talk About Our Relationship with Bees**

<https://www.youtube.com/watch?v=j92LBGHtGIY&index=12&list=PLsRNoUx8w3rNXV9cKVVMP0oIYWVxmqqqW>

### **One Strange Rock with Will Smith - About Monarch Butterflies**

<https://vimeo.com/276871691>

### **See How Bees Sense a Flower's Electric Field**

<https://www.treehugger.com/see-how-bees-sense-flowers-electric-field-4867286>

### **Wings of Life by Louis Schwartzberg- Lessons About Pollination with Stunning Photography.**

[http://cdnvideo.dolimg.com/cdn\\_assets/5ef249067a1485b3e379c632fc076b017fe727fe.pdf](http://cdnvideo.dolimg.com/cdn_assets/5ef249067a1485b3e379c632fc076b017fe727fe.pdf)

### **Ron Finley Project - Igniting a Horticultural Revolution**

<http://ronfinley.com/the-ron-finley-project/>

### **How Trees Secretly Talk to Each Other**

[https://www.youtube.com/watch?v=yWOqeyPIVRo&feature=emb\\_logo](https://www.youtube.com/watch?v=yWOqeyPIVRo&feature=emb_logo)

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## ORGANIZATIONS TO INVESTIGATE AND SUPPORT

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**Center for Ecoliteracy - Dedicated to Cultivating Education for Sustainable Living.**

<https://www.ecoliteracy.org>

**Seed Savers - Preserving the World's Diverse but Endangered Garden Heritage for Future Generations, and Educating People About the Value of Genetic and Cultural Diversity.**

<https://www.seedsavers.org>

**Pollinator Partnership - Promoting the Health of Pollinators, Critical to Food and Ecosystems, Through Conservation, Education, and Research.**

<https://www.pollinator.org/pollinators>

**Center for Biological Diversity - Working to Secure a Future for All Species, Great and Small, for the Welfare of Human Beings is Deeply Linked to Nature.**

<https://www.biologicaldiversity.org>



# EPISODE 3: SPEAKING OUT!

“The butterfly effect, it’s a very powerful metaphor it’s also very beautiful and evocative metaphor. It’s a metaphor for the fact that very small causes may have very large effects.”

*- Fritjof Capra, Systems thinker and renowned author*

“If I want something changed, speaking up and bringing attention to it could change it. Taking risks and chances can start something big.”

*- Ellie M, 10th grade student*

In this short film, activism is combined with interconnectedness as Clarissa, an indigenous high school student is inspired by the actions of Lois Gibbs (grass roots activist organizer from Love Canal in the 1970’s). We follow Clarissa, and her journey to speak out and advocate for the rights for clean air - for her family, school, and community.

Black text = specific to the episode. **Red = generic questions/activities.**

## Topics addressed:

Science, Social studies, Social Emotional Learning, Communication, Equity, Air Quality, Human Rights, Diversity, Activism, etc.

## Focus:

- Influencing outcomes
- Seeing how one action can affect many things
- Being brave enough to come forward, speak out and even go up the power chain.
- Air quality

# EPISODE 3: SPEAKING OUT!

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## I. DISCUSSION QUESTIONS

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### *a) Before watching the episode:*

- What are some of the ways that air impacts our lives?
- If you could change one thing in the world what would it be?
- What problems in the world feels too big to tackle?

### *c) After watching the episode:*

- Based on what you learned from the episode, describe aspects of life that air and air quality are a part of?
- Think of another example where this interconnectivity between several aspects of life is apparent?
- Can you think of something that is isolated and has no connection to any other aspect of life?
- Are there topics you wish you could do something about?
- What would the first step look like?
- What do you already do, or want to do?
- Are there issues your class or your school are already working to defend? How can you support them?
- What happens when you breathe out? Who benefits? Does it stop there? Explain.
- What influenced Clarissa to be able to stand up and speak out about an issue that concerned her? List everything you can think of.
- What steps were involved in Clarissa being able to eventually get the outcome she desired (e.g. research the problem, asking people in her community, finding out about legislation and where you can add your voice).
- Describe a story/example of someone who has made a difference through their actions – no matter how small (You may need to give some examples).
- Knowing that Love Canal and Portland are just examples of many other places where there are issues like these, how do you feel knowing that such issues exist? (Please note to the students that these issues are dynamic and with good advocacy, their conditions can improve- such as Love Canal, and Portland).

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## II. INTERACTIVE QUESTIONS/EXERCISES

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- How does seeing the world through this interconnected lens influence the way you think about things?
- Now that you have watched the episode, what do you think about the problem/issue you identified? Describe all the aspects of life that your problem/issue impacts or is influenced by?
- How could the problem/issue be addressed? Using the worksheet (found in the appendix), what are some steps for you to try to address the problem/issue?
- Trace your influences: Think of a problem/issue you feel strongly about and/or may have tried to do something about (e.g. charity drive, political campaign, animal rescue, etc). In writing, trace why you became interested in this and how it became important to you – what or who influenced your thinking (friends, parents, television, seeing someone suffering from the consequences, etc...). Does it link to values in your family and/or community, such as religious or ethical ideas about how people, animals, or the earth should be treated?
- Role play: In pairs, pretend the other person you are talking to is a high-level official that can impact the problem/issue you are interested in. You have 3-5 minutes to convince them they should listen to you, that you have an important perspective – including how the issue has implications for a wide variety of aspects of life. Or everyone in the class could practice with the same 1-2 issues.

# EPISODE 3: SPEAKING OUT!

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## III. PROJECTS

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- As a class or in smaller groups use the following steps:
- Generate a list of all the problems that the group feels are important to address
- Use an exercise to prioritize topics and pick one for a project and then map out:
  - The ripples that come from the problem and by not addressing the problem
  - The ripples that could manifest if the problem is addressed
- Create a step-wise plan for addressing the problem that takes into account all the different aspects of life interconnected with it.
- Have students identify a topic they would be interested in influencing (eg: animal rescue, feeding the homeless...) and do a research paper about someone who worked on this topic in their own way and the actions they took.

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## IV. SELF DIRECTED LEARNING, HOMEWORK, RESEARCH

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- Find an example of someone who made a difference through their actions – no matter how small. Write down how their actions influenced different aspects of life and the world. For example, project using PTSD navy seals to restore Caribbean reefs.
- Ask 5 people outside of this class from 5 different perspectives (ethnicity, gender, profession, etc) how a particular problem/issue impacts them and their lives and what else it influences (e.g. community, environment, etc).

### CALL TO ACTION: OUR ACTIONS MATTER, COMMUNITY SERVICE AND INVOLVEMENT

There are countless actions we can take that can make a difference in the lives around us. Some students may need help considering what matters to them the most. Here is a link that you can share with your students, offering some ideas to consider:

10 things you can do to help save our planet  
<https://www.wwf.org.uk/thingsyoucando>

Are there Air Quality watch dog groups in your area? You can help support them by: Volunteering, donating money, ask what they need...



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## SPEAKING OUT! ADDITIONAL RESOURCES

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As we shared earlier on in this guide in Additional Resources for the previous episodes, we have compiled some useful resources here for you. Whether you use them as an instructor to augment your teaching, or share them with the students, we think these resources will add to the learning experience, and sense of belonging.

Please visit our website page “Get Involved” for more options  
[www.connectivityproject.com/get-involved](http://www.connectivityproject.com/get-involved)

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## RESOURCES

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### **David Suzuki -We Are the Air**

<https://www.youtube.com/watch?v=vtFBzZxKRKw>

### **The Smithsonian- The Great Dying**

<https://www.smithsonianmag.com/smart-news/how-did-great-dying-kill-96-percent-earths-ocean-dwelling-creatures-180970992/>

### **How Does Pollution Affect Humans**

<https://www.theworldcounts.com/stories/How-Does-Pollution-Affect-Humans>

### **The Climate Change Playbook - 22 Systems Thinking Games for More Effective Communication about Climate Change, By Dennis Meadows, Linda Booth Sweeney and Gillian Martin Mehers**

<http://www.lindaboothsweeney.com/childrens-books-by-linda-booth-sweeney/>

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## ACTIVISM

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### **A Fierce Green Fire - a Film Highlighting the Fight for Love Canal and Other Game Changing Acts of Activism to Protect Our People and our Planet**

<http://www.bullfrogfilms.com/catalog/fgf.html>

<https://www.youtube.com/watch?v=lhesdVrawgc>

### **For More on the Story of Love Canal, the work of Lois Gibbs , and the Goldman Prize**

<https://www.youtube.com/watch?v=TSPA3LADFnw>

### **Greta Thunberg Speaks to the UN Assemble**

<https://www.theguardian.com/environment/2019/sep/23/greta-thunberg-speech-un-2019-address>

### **Young Activists**

[https://i-d.vice.com/en\\_us/article/pa7zbb/greta-thunberg-isnt-the-only-young-climate-activist-you-need-to-know?utm\\_campaign=sharebutton&fbclid=IwAR3mdnyg9qUdhGSB6E7d5DiR-orslMx33h-Uw2id\\_hhbJZcP-jH8sG\\_bvtU](https://i-d.vice.com/en_us/article/pa7zbb/greta-thunberg-isnt-the-only-young-climate-activist-you-need-to-know?utm_campaign=sharebutton&fbclid=IwAR3mdnyg9qUdhGSB6E7d5DiR-orslMx33h-Uw2id_hhbJZcP-jH8sG_bvtU)

### **It's Kids vs. the World in a Landmark Climate Complaint**

<https://earther.gizmodo.com/its-kids-vs-the-world-in-a-landmark-new-climate-lawsui-1838343565t1w>

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## ORGANIZATIONS TO INVESTIGATE AND SUPPORT

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**Center for Health, Environment, and Justice - The organization of Lois Gibbs helping communities advocate for themselves**

<http://chej.org>

**Neighbors for Clean Air Website**

<https://www.whatsinourair.org/the-issue>

**Change.org**

<http://www.change.org/>

**What happens when our air gets worse**

<https://www.theatlantic.com/sponsored/siemens-2019/pollution-personal/3112/>

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## THANK YOU

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We are pleased that you are sharing this timely and relevant way of learning about the world with your students. And are grateful for all of the incredible resources available to enhance your learning experience, we have compiled just a few in this guide. We encourage you to be adventurous in seeking other articles, stories and examples of how we each can make a difference in the things we believe in the most. Please be in touch with us about your experiences with our films and materials, sign up for our mailing list, and keep coming back to our website to watch for the latest updates and resources.

**Be inspired, In Connection**

**From the Connectivity Team**

**Visit us at our website [www.connectivityproject.com](http://www.connectivityproject.com)**

Special thanks to all of the teachers, guiding your students along the path to knowing their connectedness with all things, and to those who helped make this study guide possible:

Content - Rose Madrone

Educational consulting- Marcy Rosenbaum, Crystal Wulff, Ann Amberg

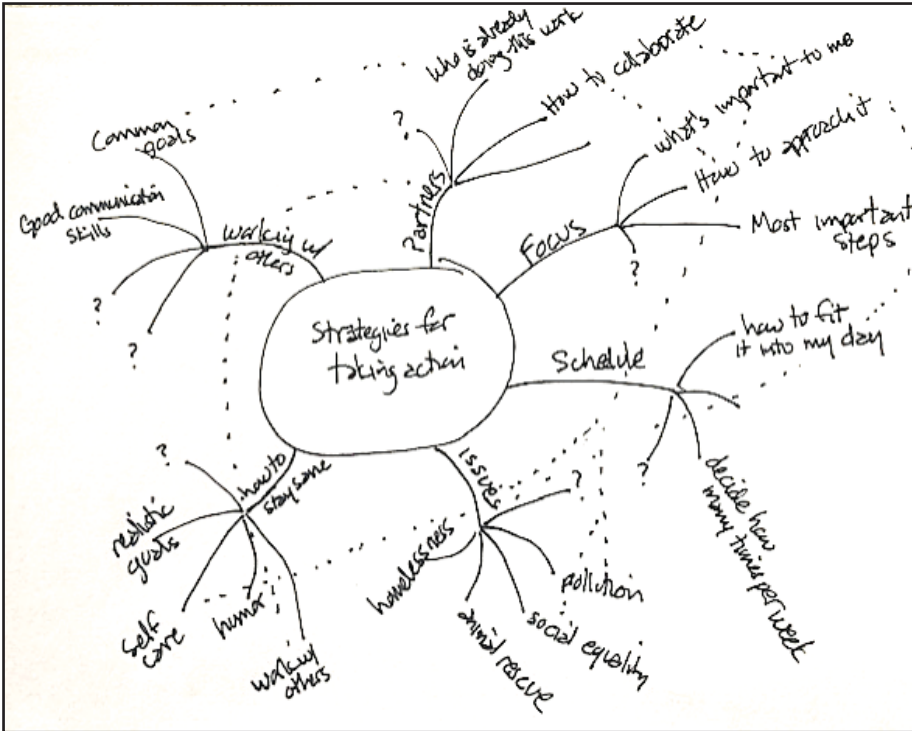
Layout design- Ellie Jones

# APPENDIX

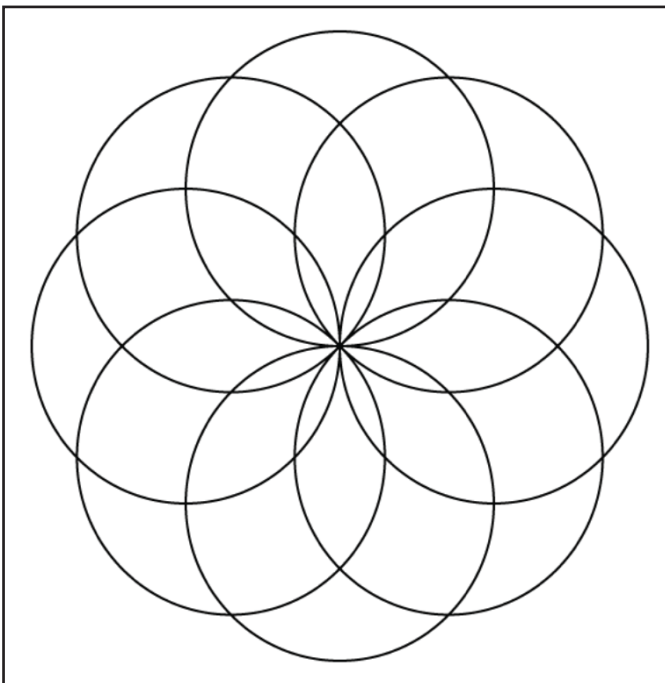
## EXAMPLES FOR EXERCISES & ADDITIONAL HANDOUTS

The following pages are printable handouts you can give to your students, with inspiration on how to take action - individually or as a group - to start their own ripple effect in the world.

Mindmap Example:



Mandala Example:



# START YOUR OWN RIPPLE EFFECT

How many times have you wondered  
'Does what I do make a difference in the  
world? Do I have the potential to accomplish  
great things?'

As we have examined through the Connectivity  
Project series, the answer is yes. We don't have to totally  
change our lives to begin making ripples of change in  
the world around us. In Fritjof Capra's wise words, "*The  
good news is that since everything is interconnected, it doesn't  
matter where you start. So if you ask 'what can I do?', I would  
say do what you're already doing, but do it differently. So  
it doesn't matter wherever you are, when you keep the  
interconnectedness of problems in mind.*"

Turn the page for a few ideas to jumpstart your  
own ripple effect, by making small changes  
in your everyday life.

**"DO WHAT YOU'RE  
ALREADY DOING,  
BUT DO IT  
DIFFERENTLY."**

## THE BUTTERFLY EFFECT

As we learned, the Butterfly Effect  
shows that as the impact of our actions  
progresses, it can spread in countless non-  
linear directions. There is no telling just where  
the effects of a single action will end up.

*"A butterfly beats its wings in China. A week after,  
a tornado forms in Texas"*

So if we act in a way that aligns with how we  
want to see the world, we have a much  
better chance of creating that world  
- even if we can't predict the  
results.

Learn more  
about the butterfly effect:  
[archive.boston.com/bostonglobe/ideas/  
articles/2008/06/08/the\\_meaning\\_of\\_the  
butterfly/?page=full](http://archive.boston.com/bostonglobe/ideas/articles/2008/06/08/the_meaning_of_the_butterfly/?page=full)  
and [wikipedia.org/wiki/Butterfly\\_effect](http://wikipedia.org/wiki/Butterfly_effect)

Find more ideas and inspiration on our site:  
[connectivityproject.com/directory.html](http://connectivityproject.com/directory.html)  
Connect with us on Facebook to share your  
own ideas. We'd love to hear about what  
you're doing to start a ripple effect.  
[facebook.com/ConnectivityProject](http://facebook.com/ConnectivityProject)

# WHAT WILL YOU DO DIFFERENTLY?

*Inspired to act? Maybe you know just what you want to do, or maybe you are seeking a few ideas to inspire you? The answer could be right in your backyard. Here are a few simple but effective changes you can make to start your own ripple effect.*

## SHOP DIFFERENTLY

- Buy less packaging: quit disposable coffee cups, bottled water, and plastic bags.
- Choose organic products when possible.
- Vote with your dollars: buy from small companies that share your values, or invest in socially responsible companies and projects.

## DO THE HOUSEWORK DIFFERENTLY

- Cut back on, or stop, eating meat. You could start with one meat-free day a week as a new family tradition.
- Garden with all plants and creatures in mind: avoid pesticides and toxic products.
- Donate what you no longer need, instead of adding it to the landfill, and consider buying lightly used items yourself.

## CONNECT TO YOUR COMMUNITY DIFFERENTLY

- Say something kind, complimentary, or helpful to someone.
- Call your local government rep about an issue that concerns you.
- Volunteer when you can - whether it be a homeless support group, helping a child to read, being company for an elderly person, or a local environmental group.
- What can one person can do? One answer is 'Don't be one person, find your people.'
- Identify your passions and you will find a tribe that will inspire you to get active.
- What organizations are associated with where your passions lie? Animal rights? Master Gardeners? Family support? Inventors with a cause?.... Start there.
- Vote for what you believe in.

*Why not take this opportunity to make a formal commitment to yourself? Pick one simple change you want to make, and put it into words. Then keep this page somewhere visible as a daily reminder.*

What I'm going to do differently, to start my own ripple effect: .....

.....

.....

Signed: ..... Date: .....

# HOW TO START A GROUP PROJECT

*“People acting together as a group can accomplish things which no individual acting alone could ever hope to bring about.” – Franklin D. Roosevelt*

Perhaps you and some inspired friends have decided to take action on an issue that’s important to you, to start a ripple effect in your own community. Here is a guideline on how to get started.

## 1. THE PROBLEM

The key to a good solution is a good understanding of the problem. Use everything at your disposal - talk to your local community, learn from existing organizations, and research online. Learn about the root causes of the problem, and what attempts have been made (successful or unsuccessful) to solve it in the past. Get specific, asking not just the ‘what’ of the problem but the ‘why, how, when and who’ questions. You might start out with a goal like ‘helping the homeless’, and find a much more concrete problem through your research, such as ‘homeless women in our area have no access to sanitary products’ or ‘not having the resources to dress appropriately for a job interview is a big barrier to returning to the workforce.’

## 2. THE TEAM

To solve a problem, you also need to know the scope of your ability. Who is your core team? Beyond a passion for solving the problem, what are their skills, abilities and availability? Who will be the key decision-maker when members disagree? What resources (meeting space, time, transport) do you have at your disposal? Are there any skills you know you’re missing, that might mean you need to recruit an additional team member?

## 3. THE IDEA

Now that you have a handle on the problem and your abilities, you can focus on the solution. Don’t stop at your first idea - as a team, brainstorm as many solutions as you can think of. When you’ve done your brainstorming, take a step back. Identify what will have the most impact with the resources available. Be brutally honest - for example, you might find that holding a fundraising event for an existing organization will be more effective than starting your own organization. Whatever the project, it should have a concrete, measurable goal, and a specific timeline.

## 4. THE PLAN

So you have a goal, and a team. Now it’s time to organize. Write down or mind map everything you’ll need to achieve the goal, and assign a team member to take charge of each aspect of the project. This might include volunteer coordination, publicity, finances, logistics, communicating with venue owners or local government, cleaning up, etc. Get advice from people who’ve been there before - ask questions like ‘what do you wish you’d planned for when you started your project?’ Decide on specific and realistic time commitments. Break the project down into smaller sub-goals so you can focus on one task at a time.

## 5. THE ACTION

Now it’s time for the rubber to hit the road. Remember to track your progress as thoroughly as you planned it. Hold regular team check-ins to reassess your goals, adapt to any changes in the plan, and celebrate your achievements as you go. If you’re having fun, seeing progress, giving each other support, and holding each other accountable, you’ve got the key to a successful and sustainable project.

