Climate Change & Humanity: Conversations, Solutions, and Actions

The Environmental Health Sciences Research Center at the University of Iowa College of Public Health developed the **Iowa Climate Podcast and the accompanying curriculum** as a way to foster conversations and engagement around the science, activism, and solutions related to climate change.

These podcasts and materials can be used in a variety of ways by students and educators alike.

Activity Option #1 - each episode done by each student

Dive into Season One, episode by episode. Over the course of a unit, take time to listen to each podcast and use the accompanying curriculum to foster meaningful conversations after each one.

Activity Option #2 - each episode done by each group, but split up by group members

Place students into groups of four. Each student will be responsible for listening to a podcast and answering a few general questions about each podcast:

-Summarize the person's background and what they're actively engaged with

-What aspect of climate change is this person most related to?

-What obstacles were presented, and what solutions were offered?

-What would be a follow up question that you might have for this person? After each student has listened to their respective podcast and answered the questions, group them together and have each person recap their podcast to the rest of their group. *I would create an example document for this - I can do this, if wanted*

As a whole group, answer the following questions:

-What did these four people have in common?

-What are ways that any of these showed the intersection between information & action?

Activity Option #3 - Choose Your Adventure

Use the raw materials (include podcasts and accompanying materials) to create your own activities. Season One consists of 4 short podcasts (ranging from 11-27 minutes).

Link to Slides, Materials, etc.

In these podcasts are mention of the following standards:

NGSS Earth & Space Science Standards [link to NGSS Website]

HS-ESS 3-1 -- Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.

HS-ESS 3-2 -- Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios

HS-ESS 3-3 -- Create a computational simulation to illustrate the relationships among the management of natural resources, the sustainability of human populations, and biodiversity HS-ESS 3-4 -- Evaluate or refine a technological solution that reduces impacts of human activities on natural systems

HS-ESS3-5 -- Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate changes and associated future impacts to Earth's systems

HS-ESS 3-6 -- Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity

Science & Engineering Practices

Constructing Explanations & Designing Solutions Engaging in Argument from Evidence

Disciplinary Core Ideas

ESS2.D - Weather & Climate ESS3.A - Natural Resources ESS3.B - Natural Hazards ESS3.C - Human Impacts on Earth Systems ESS3.D - Global Climate Change ETS1.B - Developing Possible Solutions

Crosscutting Concepts

Cause & Effect Stability & Change Influence of Science, Engineering, and Technology on Society & the Natural World Science is a Human Endeavor Science Addresses Questions About the Natural & Material World

Iowa Climate Podcast Listening & Discovery Log

In a group of 4, divide up the podcasts so that each member of your group is responsible for listening to one.

→ First, determine who will listen to which episode:

Podcast	Group Member Name
Episode #1 - Tam Marcus	
Tam Marcus, Director of the Linn County Sustainability Office, discusses some of the initiatives of the sustainability office. She reflects on her city council race and the need to focus on issues of racial and environmental justice in the state of Iowa and beyond.	
Episode #2 - Dr. Craig Mosher	
Craig Mosher discusses his passion for environmental regeneration and his local Johnson County projects that are doing just that. The Prairie Hill Cohousing Community brings community living and climate conscious design together. He also works with the Johnson County Clean Energy District and the important work they do to advocate for renewable, clean energy.	
Episode #3 - Anna Kirchhoff & Emma Seward	
This episode highlights the work of a student organization at the University of Iowa. Anna & Emma are undergraduate students involved in the Climate Reality Campus Corps club.	
Episode #4 - Dr. Peter Thorne	
Dr. Peter Thorne discusses research, teaching, and lifestyle change.	

\rightarrow Next, visit either Soundcloud or Spotify to listen to your podcast. As you listen, please reflect & answer the following questions on the backside of this page:

Question #1: Summarize the person's background and what they're actively engaged with Question #2: What aspect of climate change is this person most related to? Question #3: What obstacles were presented, and what solutions were offered?

→ When everyone in your group is finished, each group member will recap their episode. After the rest of the group has had a chance to jot down information & reflection, the whole group should work together to create one question they might have for the speaker in the podcast & write that down.

Question #4: What would be a follow up question that you might have for this person?

 \rightarrow Finally, look at the bigger picture. Brainstorm with your group about a few characteristics that all of the podcast speakers share. Write it down in the center diamond.

