Creating a Climate for Change - Woolly Thinking


In this powerful activity students are assigned a topic connected to the increased amounts of CO₂ in the atmosphere and potential impacts of climate change in British Columbia. They will then seek to find connections between their group topic and others’ using coloured skeins of wool, creating a spider’s web that shows the interconnectedness that exists within and between the natural world and our human society.

**Time needed**
60 minutes

**Materials**
- Ten signs and markers
- Ten chairs (can be attached to desks)
- Ten balls of different-coloured wool

Note: if the number of signs vary from ten, so will the number of chairs and balls of wool required!

**Instructions for the Teacher**
1. To begin create signs that say:
   - Aquatic Ecosystems & Biodiversity
   - Natural Hazards
   - Weather & Air Quality
   - Economy & Jobs
   - Health & Social Safety Net
   - Energy Production & Consumption
   - Cities, Buildings & Infrastructure
   - Food Production & Security
   - Terrestrial Ecosystems & Biodiversity
   - Population & Politics.

   Or you could choose other topics like air pollution, water pollution, biological diversity, climate change, global economy, arms trade, human rights, trade agreements, democracy. Add any additional topics that you have studies with your class.

2. Put the chairs in a circle (as large as possible). Place signs and markers at the foot of the chair. Put a ball of wool on each chair.
3. Divide students into groups of three, and ask them to look at the signs, choose a topic that they’d like to learn more about, and stand beside that chair. Have the students research and brainstorm that topic (specifically connected to the increased amounts of CO₂ in the atmosphere and potential impacts of climate change in British Columbia).

4. Each team member will have a job: the “Wool Manager” will manage the ball of wool (this may be a good role for an ESL student struggling with the language), the “Negotiator” will move around the room with the Wool Manager, trying to make connections with other teams and the “Keeper” will stay at the home station to talk to Negotiators from other teams. Go over these names and jobs until everyone understands.

5. Tell students that, in this activity, their challenge is to establish a connection between their chair, or topic, and all other chairs in the room. To do this one student (Keeper) will remain at the chair, while the other two (Wool Manager and Negotiator) carry the ball of wool and become a negotiating team who visit other chairs, try to agree on a relationship between their topic and the ‘hosts’ topic (remind students that their rationale for agreement will be examined by the group!). Once agreement is reached the wool is looped over that chair and then carried back to the ‘home chair’ before the two set out to establish another connection with another host chair.

6. Model what you want the students to do in this activity. Ask students to examine all the signs, and to consider the signs that say ‘aquatic ecosystems and biodiversity’ and ‘energy production.’ Ask students if they can describe a way in which aquatic ecosystems and biodiversity can be affected by energy production (someone should be able to point out that hydroelectric development may make at least some plants and animals become extinct or alter local ecosystems which are already under adaptive stress from climate change). Ask the students at the aquatic ecosystems and biodiversity chair if they agree with this. Then carry the ball of wool from the energy production chair to the aquatic ecosystems and biodiversity chair, hook it around the keeper of the chair, and carry it back to the energy production chair. Next, ask students if they can describe a way in which energy production can be affected by aquatic ecosystems and biodiversity (this is tougher, but someone might point out that there may be a reduced snowpack with climate change and therefore stream flow may be reduced which adversely affects energy production). Ask the students at the energy production chair if they agree with this. Then carry the ball of wool from the aquatic ecosystems and biodiversity chair to the energy production chair and back, as you did before. This demonstrates that the relationship works both ways.

7. When all of the teams are ready, give the signal for the Negotiators and Wool Managers to start visiting other teams. The Keeper holds a firm “home connection” to the ball of yarn in one hand and then allows the wool manager to take the yarn to other groups.
When visiting another team, the Negotiator discusses the two topics with the Keeper of that team and they agree on a connection between their two topics (for example, the “food” team meets the “health” team and states that good food is necessary for good health). The Negotiator records the agreed link (in brief) on the paper and the visiting Wool Manager hooks the wool around an arm of the “Keeper” for that topic and returns the ball of yarn to their own “home keeper”, leaving a taut line between their home station and the station just visited. They then move on to another station, making another woolly link when they find a connection, etc., continuing until the teacher ends the game or they have finished making links all of the other teams.

8. Within ten or fifteen minutes all chairs should be fully connected to all others. While this is going on, trouble-shoot any problems that arise. You may wish to assist students with some of the less obvious connections.

9. Once the activity is completed, have students stand behind their chairs. Ask the students if they had difficulty making any connections. If any connections are not yet made, use the group wisdom to brainstorm any possible connections. (And if no-one can think of any, accept this - although this is a rare occurrence!) You may wish to choose one or two connecting links and examine the arguments used to justify these links.

Discussion

10. Go around the room asking the Keepers to report on one or two of the most interesting connections they made, or to share any difficulties they had making connections.

11. Invite the group to admire the web and share their interpretations of what it represents. Ask students if this complex web is more or less complex than the network of global interdependence in which they currently live (it is much less complex).

12. Discuss how difficult it was to move around because of all of the woolly connections. Explain the difficulty many adults have in solving environmental problems like climate change because it is really complicated and people don’t know where to start.

13. Invite the students to share their ideas about how people should tackle environmental problems.

14. Have each Wool Manager backtrack and rewind their ball of wool. Explain that the process of disentangling the web is a metaphor for solving problems and that if the students can do it then it is possible to do the same in real life.