Reduce, Reuse & Recycle

LifeTree

LEARNING SYSTEMS

21st Century Teaching Tools

Month: Apr. Week #: 32

Environmental Debates

Day: M - F Time: 10 min. per Life Tree Learning Systems ©

Objectives/Aims

The students will: use critical thinking skills to analyze various

environmental issues.

Materials

see 'Computer Generated: Full

Page: Text'

Illustration

Olivia is arguing that fluorescent light bulbs are better then incandescent light bulbs. I wonder if she is right?

Background

Learning to think critically about environmental issues is an extremely important skill for students to acquire. Finally, our society as a whole, along with the world at large, is realizing that these environmental issues are not just some a situation, but actually affect our quality of life and may ultimately determine our very survival on this planet.

While some of these issues are on going, such as water or air quality, other issues have been resolved, as

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By the time you buy multiple incandescent bulbs, it will cost the same. In addition, less stuff will go in the trash."



evidenced by the return of the bald eagle and the American bison. There are other issues, however, that have only recently been acknowledged by the majority of the population as being problematic, such as global warming. And who knows what continued scientific research will uncover for the future. This is why the critical thinking skills that are taught through the debating process are just as important as the content of the debates. It is vital that we prepare our students to face these potentially daunting, but as yet unknown, challenges of the future.

Debate Format

The format for the debate has purposefully been kept simple so that more time can be spent dealing with the issue at hand instead of learning all the intricacies of debate. The debates can, however, still give the students a real sense of what debating is all about. The format of point / counterpoint will be used for these debates. This is where each side takes turns either making an argument for their position (point) or refuting the argument of the opposition (counterpoint). The teacher acts as a mediator, physically positioning him or herself between the two opposing sides. When necessary, the mediator clarifies a side's position by paraphrasing, keeps the debate on the agreed upon topic, and prevents personal attacks or rudeness / incivility.

Group Activity

1. Say, "Raise your hand if you want to live on a clean, healthy planet where plants and animals thrive and where people have enough nutritious food to eat, clean water to drink and a decent roof over their heads. To create such a world we need to make good choices that meet our needs, other's needs and the needs of the natural environment that surrounds us. At times, making the

Group Activity (continued)

right choice can be obvious, at other times it's really hard to decide on the right course of action. To make the right choice we need to put on our 'thinking caps' to discover what the truth is. Debates can help us discover the truth because we get to listen to both sides of the issue. Debaters should only present facts as proven by science. But as you will soon find out, there can be conflicting facts."

- 2. Say, "I'd like to model a debate for you so you'll better understand how it works." Select four students to debate the topic 'fluorescent light bulbs vs. incandescent light bulbs.' Of the four selected, choose two to argue for one side (fluorescent) and the other two to argue for the other side (incandescent). Give each side a copy of the script located in the 'Computer Generated' section of this data base. Present the debate in front of the class and ask if there are any questions about the format of the debate.
- 2. Read the possible environmental debate topics listed below. Select students who are interested in a particular topic. Teams can be formed by pairing friends or by pairing experienced with less experienced students. Two or three debates can be accomplished per day with the first debates occurring on the following day. Debate teams will need time to research facts, prepare arguments and practice their presentation.

Environmental Debate Topics:

- a. big cars (vans, SUVs with truck frames) vs. compact cars
- b. reusable cloth diapers vs. disposable diapers
- c. cheap plastic toys vs. durable toys
- d. wind/solar generated electricity vs. coal/fossil fuel generated electricity
- e. 'greedy' green vs. 'simple' green (The idea that it's okay to consume lots of energy and natural resources as long as it's done in an environmentally friendly way versus the idea of living a less consumptive life style.)
- f. organic produce vs. inorganic produce
- g. high density housing vs. suburban tracts
- h. public transit vs. private cars
- i. blue grass lawns vs. xeriscape (This is a topic for semiarid to arid climates.)
- j. products made out of virgin materials vs. products made out of recycled materials
- k. hunting vs. non-hunting

The next day:

3. Say, "Today we are going to begin our environmental debates." Review how the debate will be conducted. Refer to the procedures listed under 'Debate Format' listed above. "After the debate we'll vote to see which side won. When you vote, you are not voting for the debaters, but for the side they were arguing for. You might even decide to vote for both sides because you feel there is some truth in both of their positions. This means that the debaters shouldn't take it personally if you win or lose because this debate isn't about you, but about making good environmental choices."

Variations

1. After each debate, the audience can ask questions of the debaters before voting.

Conclusion

Say, "Doing right by the environment is also doing right by yourself and others. If we mistreat and misuse the environment we will not only be harming the plants and animals that live there, but also ourselves and our neighbors. Doing right by the environment means making good choices which involve critical thinking. I hope these debates helped you think more clearly about the issues facing the world we all live in. I hope we all can learn to make better choices."

Fluorescent Light Bulbs vs. Incandescent Light Bulbs Script

Fluorescent Light Bulbs (go first)

- Fluorescent light bulbs last far longer than incandescent.
- By the time you buy multiple incandescent bulbs, it will cost the same. In addition, less stuff will go in the trash
- Fluorescent bulbs are getting smaller, lighter and can be used in almost any fixture a incandescent bulb can be used. Now they can even be dimmed, showing how technology is constantly making them better.
- Incandescent bulbs give off heat because they are inefficient in how they use energy. Fluorescent bulbs use far less energy which means they are cheaper to operate, produce far less pollution and green house gases. The heat incandescent bulbs give off also increases air conditioning costs in summer.

Incandescent Light Bulbs

- Fluorescent bulbs cost a lot more, by comparison incandescent bulbs are cheap to replace.
- Incandescent bulbs are small, lightweight, can be dimmed and can be used in all sorts of light fixtures.
- Fluorescent bulbs give off heat which can keep you warm in winter.

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