Future of Aviation Project

This project is designed for use with the following episode:
• e² transport — Aviation: The Limited Sky

Objective: Determine the strategies that will be most effective in reducing the environmental effects of the growing aviation industry and create a proposal for the future of aviation.

TIMING: 1 – 3 class periods (not including episode discussions); students will have 2 – 3 weeks to complete the assignment

THE ASSIGNMENT:

1) Follow the teacher’s guide for discussion of e² transport episode “Aviation: The Limited Sky”.

2) Tell students that they will be creating proposals for the future of the aviation industry. The types of proposed changes can include, but are not limited to, new types of aircraft, government policy interventions, new economic structures, and alternative fuel supplies. Each group of students will present their proposal to the class. The future of aviation is quite literally up in the air, the sky is the limit, but remember your presentation must include:

   a. A proposal including at least two strategies (from the video or from your own research) with the following details:
      i. What industry challenge or challenges does each strategy address?
      ii. What are the benefits and drawbacks of each strategy (environmental, economic, social, etc.)?
      iii. Why are these strategies preferable to other options?
      iv. What is the timeline for when the results of these strategies will take effect?
      v. What is the effect on the consumer experience (cost, enjoyment, speed)?
      vi. What is the effect on the airline industry (costs, profits, public image)?
b. Visual aids. Be creative! Models, drawings, pictures, music, videos, PowerPoint presentations, sample advertisements, television commercials, brochures are all great ways to get your audience excited about your proposal.

c. A strong finish. The conclusion should highlight the strengths of the proposal and leave the audience excited about the future of aviation.

Questions to consider:

1) What is the timeline for your proposal? Is this what the industry will look like in ten years, forty years or a hundred years?
2) What types of government actions might have an effect on the industry? (i.e. incentives for reducing emissions, taxation for fossil fuel usage, subsidies for alternative fuel research.)
3) Will people travel for business more or less in the future? What effect will other types of communication and technology have on the need for business travel?
4) What effect will cost and time have on people’s pleasure travel in the future?
5) What environmental concerns may affect your choice of strategies?
6) What are the benefits or drawbacks to slower air travel?
7) Will your group propose big changes or small changes to the current aviation industry?
8) Is a combination of several strategies more effective or are two enough?

FOR THE TEACHER

This project is meant to be hypothetical, yet supported by valid research. There are several strategies mentioned in the video, so the research aspect can be minimal or more in depth depending on what you want from the students. You could limit it to only those strategies mentioned in the video or require them to find one that wasn’t included. The students should be given freedom to create their own timeline and choose the strategies that they would like as long as they can support their plan with existing research.

OPTIONAL INTERIM CLASS PERIODS (50 minutes each)

• Students can be given class time to work on their models, posters, videos or other presentation materials.

• Students can be given class time to do Internet research.