Teaching Controversial Issues

1: Climate & Energy
2: Evolution of Life & Earth

Don Duggan-Haas, Rob Ross  Museum of the Earth
Glenn Dolphin  Univ. of Calgary
Scott Mandia  Suffolk County Community College
Laura Guertin  Penn State Brandywine

Teaching Controversial Issues

What is a controversial issue?

Controversy is a state of prolonged public dispute or debate, usually concerning a matter of conflicting opinion or point of view. (Wikipedia)

“A scientific controversy is a sustained, public debate among the broader scientific community in which arguments are based on evidence.” (McMullin, 1987)

“A controversy in science often creates progress because it spurs new research and therefore is an essential part of the process of science.” (Egger & Carpi)
119. CONTROVERSIAL ISSUES

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1. Purpose

1. The center of the democratic process is found in the exercise of intelligence in the solution of problems. Citizens identify and define problems, examine data, offer solutions, and make decisions. The free exchange of facts and opinions is essential for the survival of our nation.

2. Definition

1. Controversial issues are important policies or proposals on which conflicting views are held by large numbers of people in schools, community and nation.

2. The American heritage of civil rights and our established traditions of respect for the individual are not controversial. Most of the curriculum is composed of established truths and accepted values but it also includes many controversial issues which are appropriately studied to the degree that student maturity and available resources permit. Through the study of such issues, students develop decision making skills necessary for citizenship in our democracy.

3. The schools do not teach controversial issues; they provide for their study under competent guidance. At all grade levels the schools should provide opportunities for students, according to their maturity, to analyze current problems, gather and organize pertinent facts, discriminate between fact and opinion, detect propaganda, identify prejudice, draw sound conclusions, respect the opinions of others and accept the principles of majority rule and the rights of minorities.
You think you’ve got it all planned out

But then… you are working with students

- Strong beliefs
- Have not been challenged in the past
- Have not been allowed to explore
- Narrow vs. global perspectives
- Background/diversity of students
- A classroom can be a room full of strangers
What you’ll see right away…

- It’s not going to go as you plan
  - It will be messy
  - It might get ugly

- It is hard to keep the personal/emotional side out
  - For the students
  - For you, the instructor

- The loud will get louder, the quiet will get quieter
So why not avoid controversy?

- Teaching science controversy gets to so many overarching goals we have for students
  - We need to teach the process of science
  - Critical thinking! (it’s probably in your campus mission/vision statements and/or strategic plan!)
  - And civic engagement!

Bloom’s Taxonomy
Strategies

- Set a tone/rule of respect in the classroom, break the ice
- Find topics already published
  - National Center for Case Study Teaching in Science
  - SERC examples
- Pre/post survey of students
  - Likert or not to Likert?
  - One-page reflection paper
Structure, structure, structure (see SERC)

Structured Academic Controversy

This material is replicated on a number of sites as part of the SERC Pedagogic Service Project

Developed by Claudia Khourey-Bowers, Kent State University

What is Structured Academic Controversy?
A Structured Academic Controversy (SAC) is a type of cooperative learning strategy in which small teams of students learn about a controversial issue from multiple perspectives. The structured academic controversy technique is designed to engage students in controversy and then guide them to seek consensus.

Why Teach with Structured Academic Controversy?
Students learn to apply decision-making and problem-solving skills when discussing topics of importance to them. Unlike debates, which typically force a decision between two ideas that may or may not be mutually exclusive, SACs encourage students to think about the complexities and ambiguities that often characterize controversial issues. SACs can help students change their perspectives and enhance content knowledge.

How to Teach with Structured Academic Controversy
SACs can be used to address issues that strike sensitivities among your students and within the discipline. The actual format of the SAC should depend on the time you want to spend, the motivation of your students, and your instructional goals. Depending on the selected format, students are assigned one or two specific positions to research.
Strategies

- Select an issue, keeping your students in mind
  - Relevance to students, to society
  - Maturity of the students
  - Quantitative skills

- Prepare the students
  - Science content
    - Activities along the way
  - Discussion techniques
  - Reflective writing
Strategies

Stay on target
- Manage/moderate emotions
- But complete the activity (forget the syllabus)

Be inclusive
- Student backgrounds/cultures
- Give everyone a task
Random suggestions

➤ Use your school librarians
➤ Keep it in the classroom (for the students)
➤ Don’t have students blog/use social media
  ➤ Keep online discussions in course management systems
➤ Allow students to struggle
➤ Make sure you know YOUR position on an issue

➤ *Audience suggestions?*