Realizing the Potential of Class Discussions

Tech Bites, 9/10/19
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The Issues

- Students are unprepared
- Worried they’ll be embarrassed
- Incorrect, confusing or inappropriate responses
- Same few volunteers

5-8 students account for 75 to 95% of comments.
Set the Norms on Day 1

Establish Expectations:

- A discussion about the purpose of discussions
  - Previous experiences, good and bad
  - Provide research justification
- Get students working together:
  - Include an icebreaker
  - Use a group syllabus quiz
  - Generate discussion guidelines for civility, participation, roles
Strategy: Craft Good Questions

- Relevant to students' lives.
- Questions that elicit a range of answers & multiple perspectives
- Ask students to apply a theory or select the appropriate theory
- Provide an example of a topic/concept
- Ask about process, not content “what’s the first step?”, “how would you decide?”
- Analytical: Summarize or explain to your grandma....
- Critique an argument
Encourage Participation

- Distribute questions before class
- Students supply questions - muddiest point
- Small group before whole class
  - Use roles, and rotate
- Balance convergent and divergent questions

- Why, how, in what ways?
- Explain, state relationship, compare/contrast
- How could, imagine, what are some consequences
- Defend, judge, predict, if/then, devise
Help Introverts

Think/pair/share
1. One minute to think
2. Write notes
3. Share with a partner

Send a spy

Share out:
Whose partner had a great insight?
Who overheard a brilliant idea/comment?
Keep Things on Track

- Control the rhythm – who, how often, how long
  - Keep time tight
  - Collect tickets
  - Throw the ball
  - Revolving roles

- Ask 1 question at a time

- Follow up with 3-5 students, probing for evidence, implications, other ideas, strategies, etc.

- Summarize and highlight before moving on
What if they’re wrong or misguided?

- Affirm, then correct
- Be respectful – ask them to make the connection or explain
- Invite others to provide another explanation, viewpoint, evidence
Discussion Prompts for Application

Application - applying abstractions, concepts, principles, processes or procedures to specific concrete situations.

• Example: What would earth's seasons be like in specific regions with a different axis tilt?
• Start your questions/prompts with:
  • What might/would happen if...
  • Can you develop a set of instructions about....
  • How does .... apply to ...?
  • Under what conditions would you...?
  • Do you know another instance where...?
  • What facts would you select to show...?
  • Can you apply the method used to some experience of your own...?
  • Discuss the effects of...
  • How is ... an example of...?
  • How would you explain.....
  • Why is ... significant?
  • How would you use this information to.........
Prompts for Analysis

Analysis - Separating a complex idea into its constituent parts and understanding the organization and relationship between the parts. It also includes realizing the distinction between hypothesis and fact as well as between relevant and extraneous variables.

example: Why are the seasons reversed in the southern hemisphere?

- **Starters:**
  - Compare and contrast ... with ...
  - What are the parts or features of...?
  - What evidence do you have for...?
  - Create an outline/diagram....
  - How would you classify...
  - How would you categorize...?
Prompts for Problem Solving

**Starters:**

- What are the factors contributing to this issue or problem.... and how would you rank them in importance?
- Which do you think is better.... or ......, and why?
- What would you recommend in this situation.....?
- Can you propose an alternate solution to ....?
- How would you design a program to address this issue?
- How would you design an experiment to validate....?
Prompts for Synthesis and Evaluation

Synthesis - requires combining ideas
Evaluation - Requires making judgements

- Question starters
  - Evaluate the contribution of ... to .....?
  - Do you agree with....?  
  - What criteria would you use to assess...? 
  - What is the most important...? 
  - What was the value or importance of .....in ......? 
  - How would you convince someone that....? 
  - Defend (or critique) this statement (or idea)...
Resources

- The **K. Patricia Cross Academy** – teaching techniques; videos and guided notes
  - Think-Pair-Share
  - Analytic Teams
  - Support a Statement
  - Dyadic Interviews
  - Affinity Grouping

- **Team Roles and descriptions**

- **Rubric for Classroom Discussion, Texas Ed. Agency**

- **Rubric for Assessing Student Participation**, Eberly Center, Carnegie Mellon U.

- **The Participation Log**: Assessing Students’ Classroom Participation, Tony Docan-Morgan