Working in Groups:
From Debates to Jigsaws

Goal: Familiarize you with three types of classroom activities that encourage group participation

Examples: debates, gallery walks, jigsaws

Debate: Basics

- Works with smaller class sizes and any class level. Try to limit debate teams to < 6 students
- Can be used as a lecture, lab, or field activity
- Requires > 30 mins of class time.

Debate: Structure

Structure of debate can vary according to class level, size, and topic. Here's one suggestion….

Before class…

- Choose debate questions (1-4 depending on class time available)
- Introduce structure and timing of the debate so students know what to expect
- Choose teams and determine which will go first
- Can provide time for students to prep their debate either before or during class

Debate: Structure

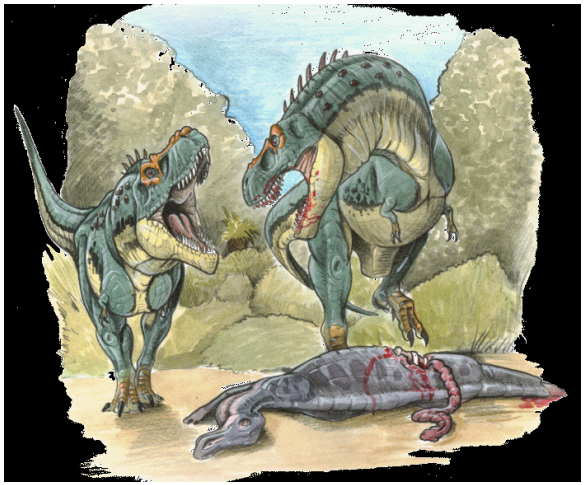
During class…

- 5 minute presentation (answering question posed) by each team
- 3 minute rebuttal by each team
- 5 minute Q&A session from the audience to both teams
- Audience & judge fill out ballots to decide winner for question
- Repeat procedure for other questions
- Announce winner of overall debate

Debate: Advantages

- Forces students to deal with complexity and “gray areas”
- Improves student’s oral communication skills, either spontaneous or prepared
- Rich in imbedded content
- Can make course material relevant to everyday

Debate: Example



T. rex– predator or scavenger (Age of Dinos, 30 students, 3 concurrent debates)

Before class….

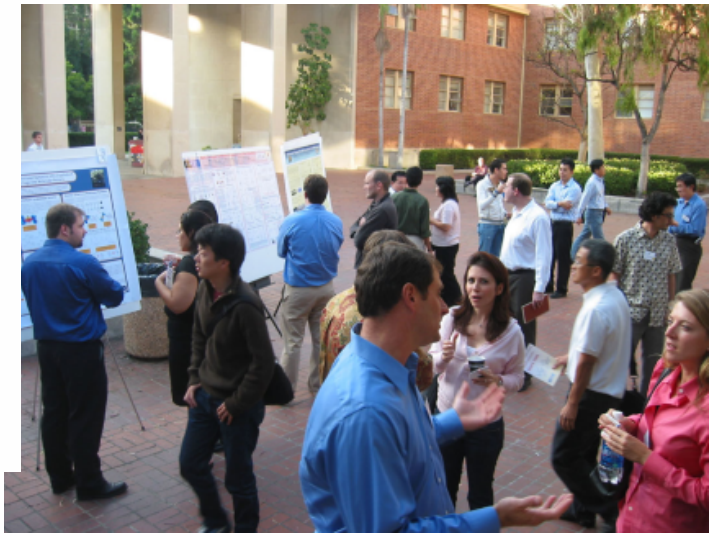
- Students divided into predator vs. scavenger teams (5 per team)
- Question: Was *T. rex* a predator or scavenger?
- Students assigned primary lit readings and complete questions

During class…

- Students meet in teams and complete second assignment to prep for debate.
- 10 minute presentation by each team
- 5 minute rebuttal by each team
- 10 minute Q&A session between teams
- Bring all three debates together for general discussion

Gallery Walk: Basics

- Works with any class size or level. Try to limit audience at each station to < 5 per time interval
- Can be used as a lecture or lab activity
- Requires > 15 mins of class time. Can be used for brief intro or week-long exploration of topic.



Gallery Walk: Structure

Before class…

- Prepare several discussion questions. Number of questions will depend on class size. Questions can gauge knowledge and comprehension or can tap higher order thinking skills involving analysis, synthesis, and evaluation.

Gallery Walk: Structure

During class…

- Intro class to goals and structure of gallery walk
- Divide students into teams(< 5 individuals per team)
- Post questions on different "stations" throughout classroom. Provide sufficient space for groups to congregate and discuss questions.
- At each station, each team reviews what previous teams have written and adds new content. After a short period of time, say "rotate." The teams then rotate to the next station. Rotation continues until all posted questions are addressed.
- When the group returns to the station where it started, the group synthesizes comments and makes an oral report.

Gallery Walk: Advantages

- students gain practice discussing, organizing, and writing rather than passively hearing ideas presented by the instructor
- promotes higher-order thinking
- provides opportunity to gauge prior knowledge and misconceptions
- promotes team-building, fosters debate, and encourages consensus as students work together
- acts as an ice breaker
- encourages movement around classroom, interrupting lethargy that results from being seated for long periods

Gallery Walk: Example

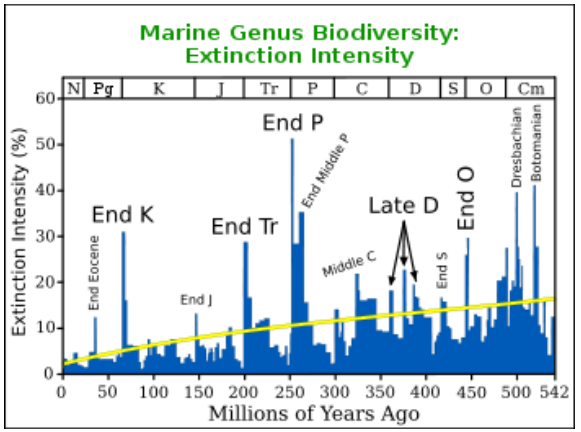
Sixth Mass Extinction? Frosh Seminar (16 students)

Before class….

- Assign general reading re. whether we are experiencing the 6th mass extinction
- Prep poster boards with questions: (1) What is a mass extinction? (2) Do you consider biological conservation a priority? Why or why not? (3) What could you do in your daily life to slow down modern extinction rates? (4) Are we currently experiencing the sixth great mass extinction? Why or why not?

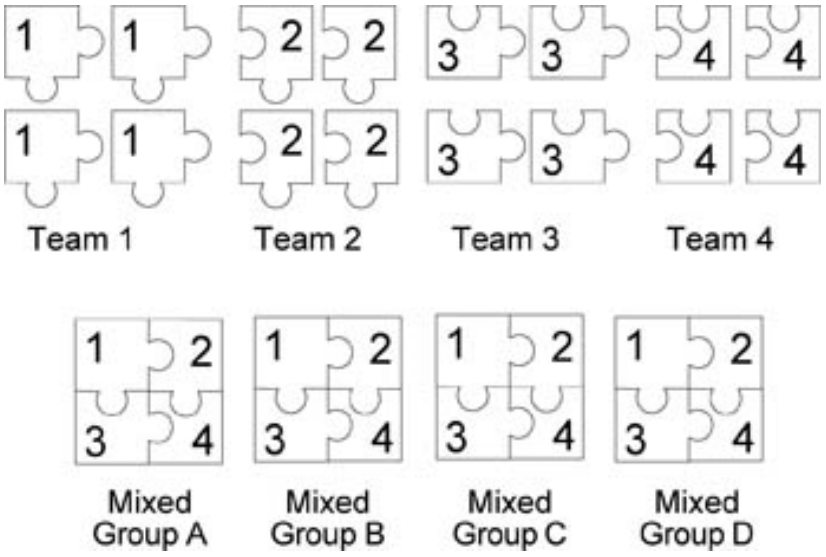
During class…

- Describe goals and structure of gallery walk.
- Divide students into four teams
- Allow 4-5 minutes at each station for discussion. Teams should return to original question to synthesize comments and present them to the the class.
- Transition into free-form discussion.



Jigsaw Activities: Basics

- Works with any class size or level. In general, the more introductory and larger the class, the simpler the jigsaw should be.
- Can be used as a lecture, lab, or field activity
- Requires > 15 minutes of class time
- Info can be synthesized from any source, including readings, samples, web, field, etc.



http://serc.carleton.edu/NAGTWorkshops/coursedesign/tutorial/jigsaw.html

Jigsaw Activities: Structure

Before class….

- Prep several different, related assignments—one for each team. Can divide students into groups before or during class

During class….

- Students complete group assignment and discuss within groups.
- Divide class into new groups– with one team member from each of the original teams in the new group. This team member is responsible for teaching the rest of the group what s/he has learned from the team assignment.
- The new group then completes a task by fitting all of the team pieces together.

Jigsaw: Advantages

- Students have opportunity to teach themselves and their peers, instead of having material presented to them.
- Each student develops an expertise and has something important to contribute to discussion.
- Amount of time devoted to topic is comparable to coverage in a traditional lecture format.

If planned well, the overall time commitment to using the jigsaw technique during class is comparable to lecturing about a topic.

Jigsaw: Example

Mother of Mass Extinctions (Upper-level paleo, 20 students)

Before class….

- Class divided into 3 groups, according to extinction mechanism: volcanism, bolide impact, oceanic overturn
- Each student reads primary lit paper related to their assigned mechanism.

During class…

- Each group develops basic description of mechanism: what is it, how does it work
- Groups mix such that each new group contains a rep from each mechanism
- New groups describe and discuss mechanisms. Then answer question: which mechanism caused the end-Permian mass extinction?