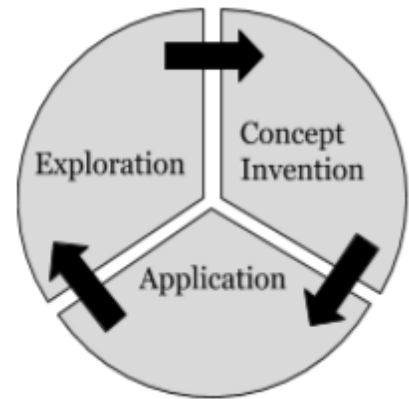


Meta Activities

Model 1 The Learning Cycle

POGIL activities typically form a Learning Cycle, which guides students through three phases, usually with several questions in each phase:

- **Exploration (E):** students collect information and examine data in the model; students answer directly from the information provided or from prior knowledge, without substantial analysis or synthesis.
- **Concept Invention / Term Introduction (I):** students find patterns in the data and converge on a concept by answering questions that analyze, compare, and contrast. Terms are introduced after concepts have been developed.
- **Application (A):** students test their understanding by applying concepts in new contexts.



Questions (15 min)

Start time: _____

1. Go back to “Activity 6: Recursion” and label each question with an **E** for Exploration, an **I** for Concept Invention / Term Introduction, or an **A** for Application. (Some questions may be assigned to more than one phase.)
2. Does the activity generally follow the Learning Cycle? Why or why not?
3. What are the pros and cons of having Concept Invention precede Term Introduction?
4. What is the value of including open-ended questions in a POGIL activity?

Model 2 Group vs Team

Throughout the course, you will need to examine and process information, ask and answer questions, construct your own understanding, and develop new problem-solving skills.



Questions (10 min)

Start time: _____

5. What are some advantages to working in groups/teams?

6. What are some disadvantages to working in groups/teams?

7. What is the difference between a group and a team? Come up with a precise answer.

8. How can working as a team help you accomplish the tasks described in the model? Give at least two specific examples.

Model 3 Team Disruptions

Common disruptions to learning in teams include: talking about topics that are off-task, teammates answering questions on their own, entire teams working alone, limited or no communication between teammates, arguing or being disrespectful, rushing to complete the activity, not being an active teammate, not coming to a consensus about an answer, writing incomplete answers or explanations, ignoring ideas from one or more teammates.

Questions (10 min)

Start time: _____

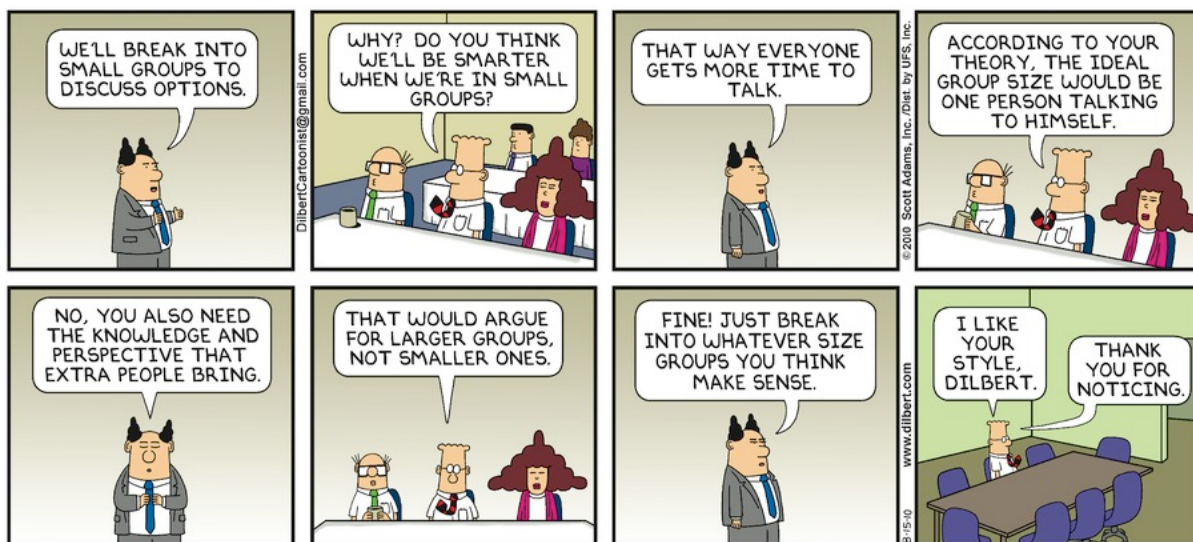
9. Pick four of the disruptions listed above. For each one, find something from the role cards that could help improve the team's success. Use a different role for each disruption.

a) Manager:

b) Presenter:

c) Recorder:

d) Reflector:



Model 4 Professional Skills

“What do employers look for when they are seeking new college graduates to take on jobs? According to NACE’s *Job Outlook 2016* survey, they are looking for leaders who can work as part of a team.” <http://www.naceweb.org/s11182015/employers-look-for-in-new-hires.aspx>

Attributes employers seek on a candidate’s resume

	Attribute	% of respondents
1.	Leadership	80.1%
2.	Ability to work in a team	78.9%
3.	Communication skills (written)	70.2%
4.	Problem-solving skills	70.2%
5.	Communication skills (verbal)	68.9%
6.	Strong work ethic	68.9%
7.	Initiative	65.8%
8.	Analytical/quantitative skills	62.7%
9.	Flexibility/adaptability	60.9%
10.	Technical skills	59.6%

Questions (10 min)

Start time: _____

10. What is the relationship between the top two attributes employers seek?
11. How is communication (written and verbal) related to problem-solving?
12. As a team, come up with a short description/example of each attribute.
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
 - 6.
 - 7.
 - 8.
 - 9.
 - 10.
13. Which of these skills do you expect to develop in this course? Why?