The Teaching Center

Structuring and Implementing In-class Group Work

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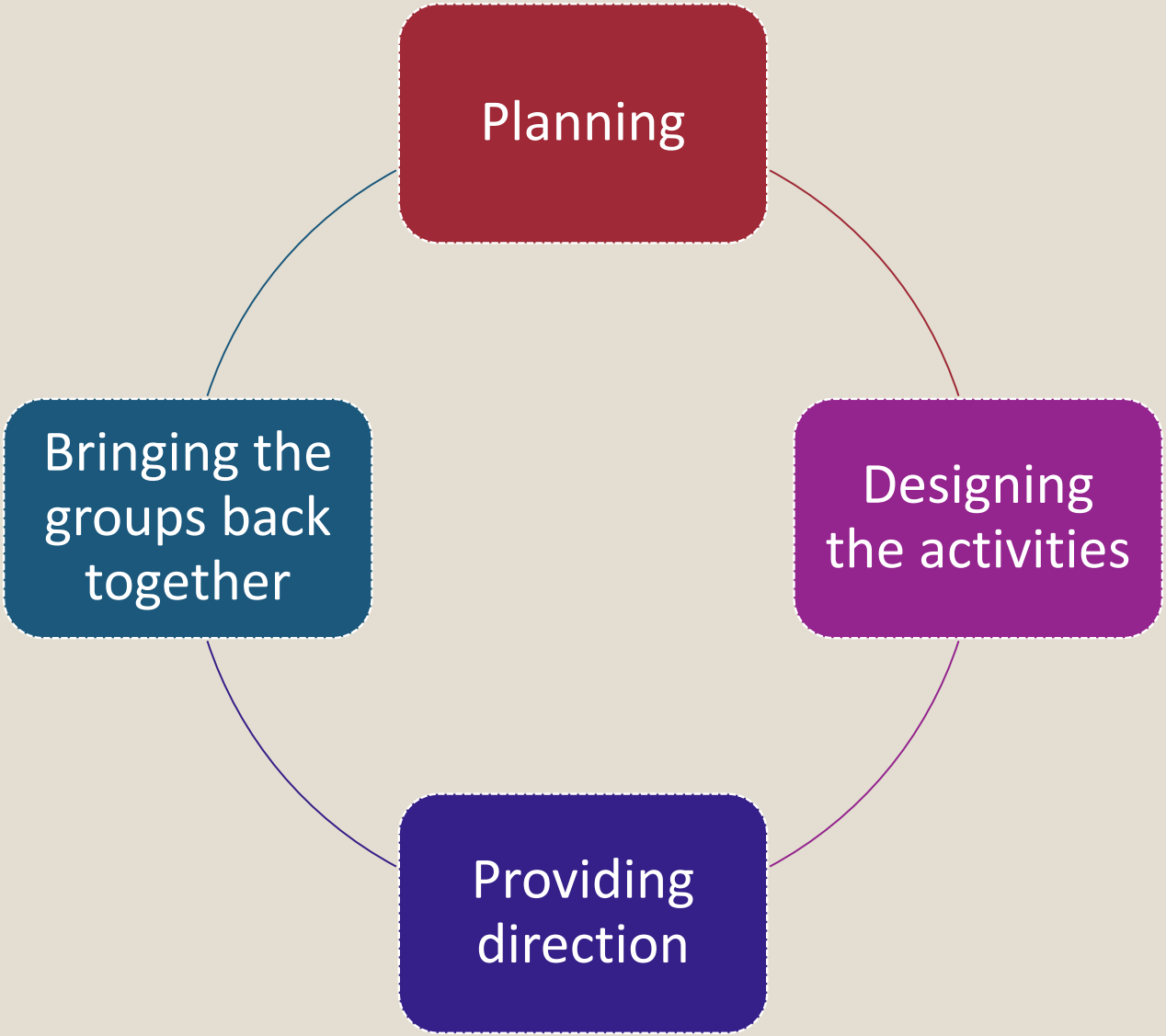
Effective In-class Group Work



Group Activity

Please give 3 reasons why you want to use in-class group work?

What are 3 issues or problems with in-class group work?

Planning – Before Course

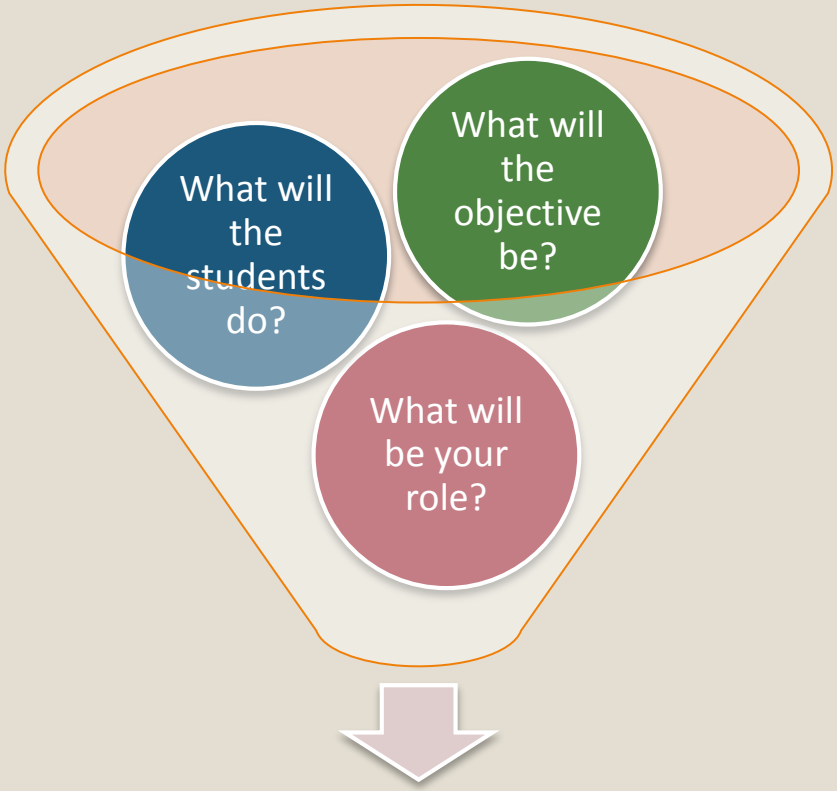
- Determine the objectives for the in-class group work
- Decide how much time will be spent in group work and modify curriculum appropriately
- Decide how the group work will fit into your class structure
- Decide if groups will remain together or change
- Think about the seating arrangements

Planning – First Day

- Let students know that group work is part of the course
  - Explain what you see as valuable about participation
- Explain the structure of the group work
- Set ground rules for cooperative environments
  - Create ownership of ground rules
- Perform a group activity on the first day

Provide Structure and Guidance

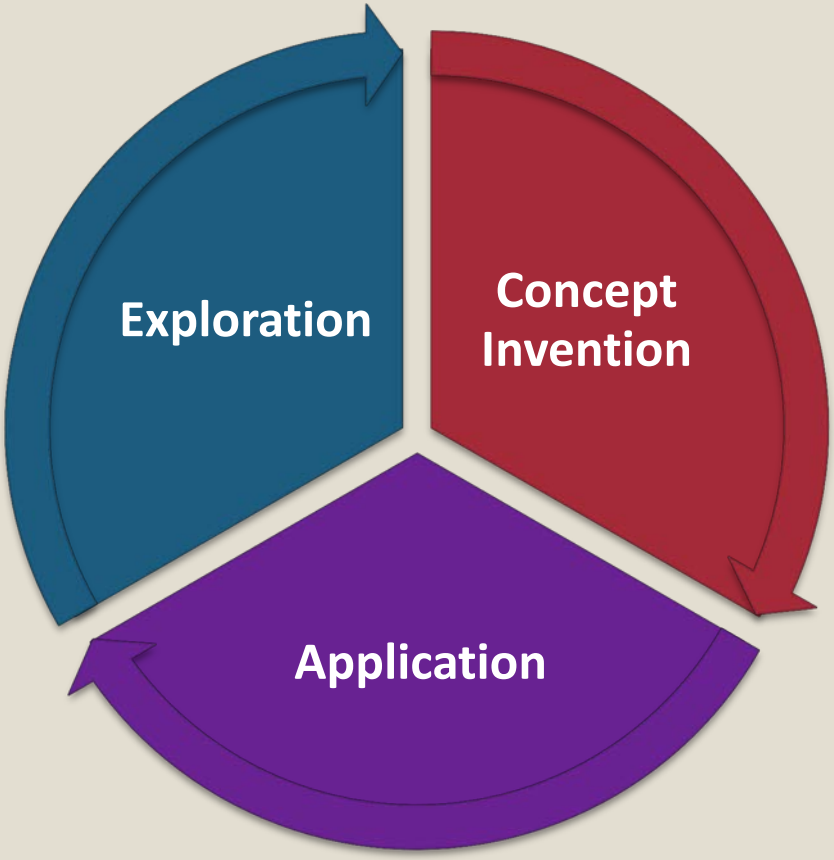
Plan activities carefully



Designing the Activity

- Activities need to fit the students' current level of skills and abilities
- Activities should generate discussion among students
  - For example, students can work in groups to…
    - Synthesize ideas from readings, assignments, or lectures
    - Draw conclusions about tables, graphs, or data
    - Solve multi-step or complex problems
- Most activities should be able to be performed in approximately 10 – 15 minutes
  - For some activities, the entire class period could be group work

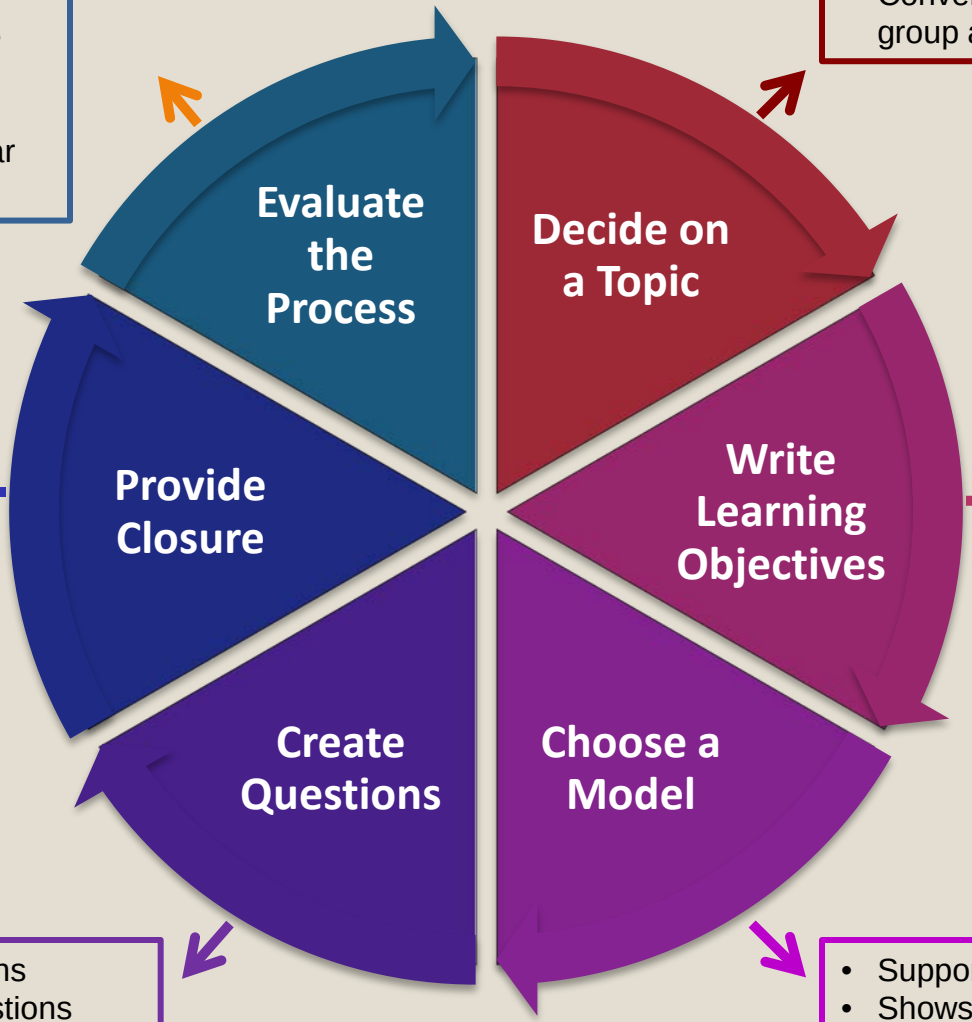
The Learning Cycle



- Exploration
  - Through a series of designed questions, students seek a pattern in information through a model.
- Concept invention
  - Guiding questions lead the student to develop a concept from the model.
- Application
  - The concept is reinforce and extended by using the new knowledge in exercises and challenging problems.

Methodology for Designing Collaborative Learning Materials

- Do the learning objectives support model?
- Do the questions help students engage with the model?
- Are there logical breaks?
- Have you developed clear instructions?



- Convert a lecture script into an group activity

- Student-centered
- Specific
- Measureable
- Action words

- Have students reflect on what they learned
- Make sure assessment is aligned with objectives

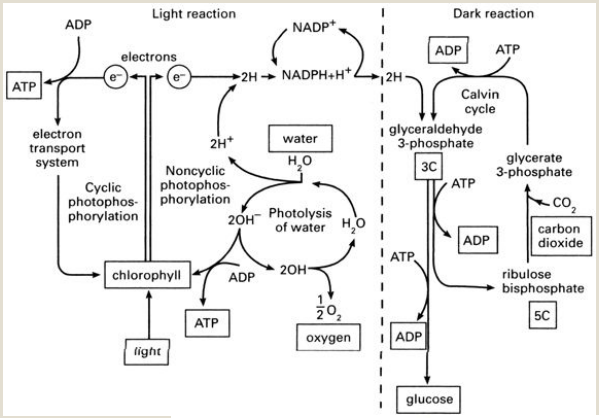
- Directed questions
- Convergent questions
- Divergent questions

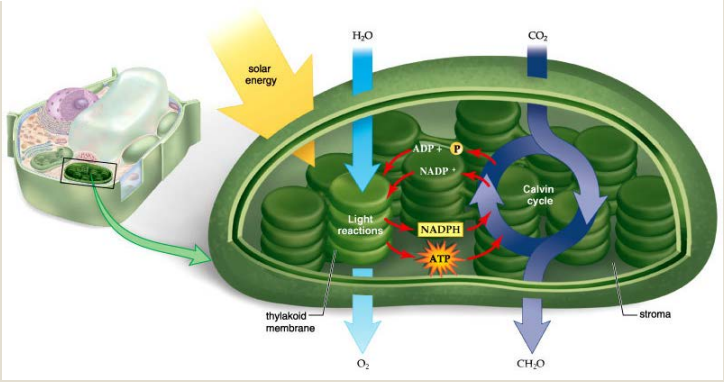
- Supports learning objective
- Shows relationships or processes
- Provides an obvious starting point

Choosing a model/data

- A model contains or represents the new knowledge or concepts
- Characteristics of a good model
  - In-line with the activity's learning objectives.
  - Provides an obvious starting point.
  - Provides data that the students can understand and use.
  - Shows relationships or processes.
  - Provides data that can be compared or contrasted.
  - Diagrams are clearly labeled.

- Students will be able to describe the overall process of photosynthesis.





Provide Structure and Guidance

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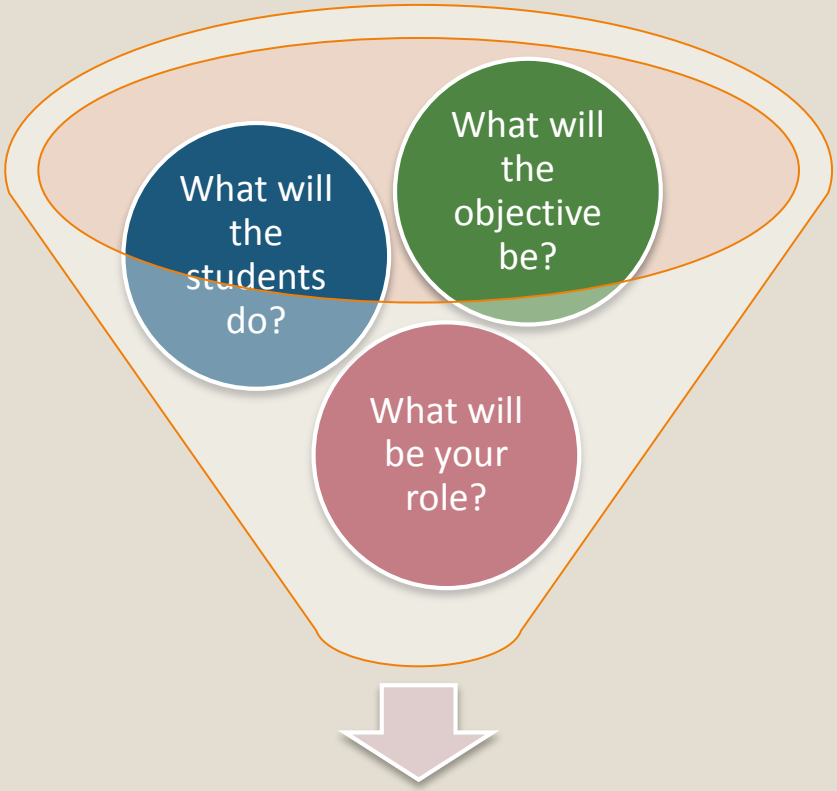


Providing Direction

Organizing the Groups

- Decide how the groups will be formed
  - Self-selected versus instructor-formed
- Select group size
  - Groups of 3-4 work best for in-class groups
  - Pairs also can work well
- Decide if groups will remain together or change with activity

Providing Direction

Starting the Group Work

- Give students explicit directions about the group process for the activity
- Limit the time for the group-work activity, and give the students the time limit at the beginning of the activity (or part of the activity)
- Give small-group roles and define the group roles
- Tell them when to get into the groups

Small-Group Roles

Role	Description
Facilitator	Provides leadership; Keeps the group focused on the activity and ensures that all members participate and understand.
Recorder	Keeps notes of what the group has done in consultation with the rest of the group members.
Spokesperson (or presenter)	Presents the group's work and discussion to the class, using the Recorder's notes.
Questioner/ checker	Collects the questions within the group to ask the instructor; Verifies that all members understand assumptions, the process, and conclusions.

Note. Small-group roles should change within a group

Providing Direction

During Group Work

- Check students
  - Ask students about what their “role” is in the group
- Be an “active listener”
  - Listen for “peaks” and “valleys” in the discussion
  - It is not necessary for ALL groups to completely finish the activity before bringing the groups back together
- Be a facilitator
  - Refrain from interfering or participating in the groups’ conversations
  - Give a 1-minute warning
  - Provide additional activities for groups that finish early
- Constantly monitoring without interfering

Group Activity

Group Activity

Form Groups of 3

Pick a recorder, a spokesperson, and a facilitator

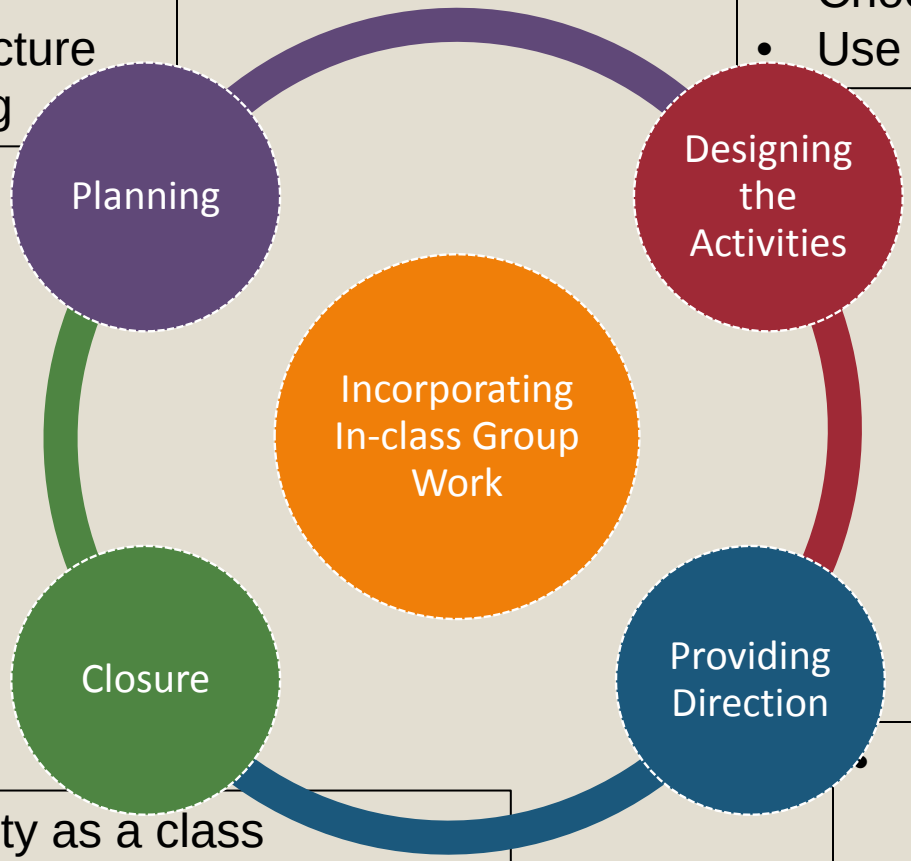
10 minutes in groups

Bringing the Groups Back Together

- Provide structure
  - e.g., 1 group provides 1 idea or piece of information
  - Write ideas on the board
- Ask the group to explain their reasoning
  - "Why does your group think that?"
- Promote participation and elaboration on ideas
  - "Would someone like to add on?"
- Use wait time
  - Let students have 3-5 seconds to think before they answer
- Call on a representative number of groups
  - Open up the floor to the entire class for remaining students to contribute ideas

- Determine in-class group-work objectives
- Decide amount of time for group work
- Modify class structure
- First-day planning

- Determine topics/learning objectives
- Use The Learning Cycle
- Choose a robust model
- Use a variety of questions



- Discuss the activity as a class
- Select a group and ask for one piece of information
- Ask the small group for explanation
- Ask students to respond

- Give instructions for group work
- Use small-group roles
- Facilitate the activity: constantly monitoring without interfering

Questions/Comments?

Evaluating Group Work

- Is the group work part of participation or part of an assignment?
- If part of an assignment, grade both individual performance and group performance.
- Who will apply the assessment?
  - Instructor, students, or both?
- What will be the assessment?
  - The group-work process, the group-work product, or both?