Manager

Make sure team starts quickly and remains focused during the activity.

- Assign tasks for collecting and distributing materials as needed.
- Assign roles like reader, technician or significant figure checker.
- "I think we have everything, are we ready to begin?"

Takes care of time management.

- Keep an eye on the clock.
- Keep team moving forward and communicate about discussion deadlines.
- "I think we need to focus on _____, so we complete this section on time."
- "We have _____ minutes before we need to discuss this. Let's get this done."

Make sure all voices in the team are heard.

- Address team members by name and ensure that everyone contributes.
- Encourage team members who are quiet or need more time to contribute.
- "(Name), what do you think about . . . ?"
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Quality Indicators for the POGIL Manager Role

- The group begins promptly.
- The group stays on task and progresses through the activity in a timely fashion.
- All members of the group are participating.

Process Skills

Oral and Written Communication

Exchanging information and understanding through speaking, listening, and non-verbal behaviors. Conveying information and understanding to group members during activity. Contributing to group discussion, rephrasing concepts in own words, and using scientifically correct language.

Teamwork

Interacting with others and building on others' individual strengths and skills. Working toward a common goal, building consensus, compromising/ cooperating and sharing ideas. Respecting everyone's opinions.

Problem Solving

Identifying, planning and executing a strategy that goes beyond routine action to find a solution to a situation or question.

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Assessment (Self-assessment and metacognition)

Gathering information and reflecting on experiences to improve subsequent learning and performance or thinking/reflecting about one's thinking and how one learns, and being aware of one's knowledge.

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Presenter

Communicates team questions and clarifications with the teacher or other teams. (This is the only team member designated to do so.)

- "Our team is confused about how _____ relates to _____."
- "Our team reached consensus that the answer to number _____ was _____."

Ensures all team members have had a chance to respond before asking outside sources.

- "Does anyone in our team know the answer to _____?"
- "Before we ask the teacher, could someone clarify the answer to...."

Ensures that everyone in the team agrees on what to ask if an outside source is needed.

• "Does everyone agree we need to find out . . . ?"

Presents conclusions of the team to the class, as requested.

• "The reasoning we used to answer number _____ was . . ."



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- Articulates questions and responses well.

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Reflector

Guides consensus-building process; team must agree on responses to questions.

- "Would you all agree that ______ is a good answer for question number _____?"
- "Could you please rephrase what you just said?"
- "Is your answer completely supported by your explanation?"
- "Would that response make sense to someone from another team?"

Observes team dynamics and behavior with respect to the learning process.

- Is everyone in the team participating?
- Are team members listening carefully to each other?
- Are team members being patient and respectful of each other?

Reports to the team periodically during the activity on how the team performs.

- "Let's stop for a minute. I have a couple comments on what we are doing well and a suggestion on how we could be more productive."
- "Let's wait for (name) to catch up before we move on."

Be ready to report to the entire class about how well the team is operating.



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Quality Indicators for the POGIL **Reflector Role**

- Regularly checks that group members' answers are consistent (not necessarily identical).
- Encourages team members to make sure answers are thorough.
- Observes and comments on team dynamics to the group and to the class as a whole.

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Recorder

Records the names and roles of the group members at the beginning of each activity.

Records the important aspects of group discussions, observations, insights, etc.

- "This seems like an important conclusion. Let's stop for a minute so I can get this into our report."
- "That was a great insight. Do you mind (name) if I quote you in our group's report?"

The recorder's report is a log of the important concepts that the group has learned.



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