



Facilitator Guide: Group Work Reflections

Process	Description	Your Plan
Transparency	This activity helps students to recognize that as they complete collaborative lab activities, they are working on improving their research skills as well as their collaboration skills. Both of these skills are equally important in science, and the research suggests that being explicit about our interactions can help us recognize and improve our approaches to group work. By engaging with students' reflections, you are better able to give them feedback about how they are working together and how they can continue to improve on this learning goal.	
sConnection	Share with students why you think that it's important that they support each other and work collaboratively in the lab, and why you value positive and collegial collaboration in your own work as a scientist. You might choose to share a particular approach to collaboration that you value or a time in your professional work when being explicit about the nature of the collaboration may have allowed it to progress more positively.	
Modeling	Using what is commonly referred to as a "think aloud" approach, you might demonstrate how you would approach an upcoming lab using the pre-work prompts. You could also, with student consent, share past students' reflections about how their lab partners helped them to succeed in the lab and how the student supported their lab	

	partner in their efforts.	
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Group Work Reflections Action Steps:

- Time Required: 5 minutes at the beginning of lab, 10 minutes during the lab write-up
- After getting into lab partnerships, ask students to remind each other of their names and preferred pronouns (if they choose) and to have a brief conversation about how they will work together to complete the goals of the lab:
 - What are the different lab roles or tasks that this lab requires (e.g., recording of measurements, preparation of materials, setup of equipment) and who will be the lead for each of these tasks?
 - How do you prefer to approach the work? Do you like to jump right in or do you prefer to create a plan before starting the work for the session?
 - How will we communicate to each other if we get confused or need to slow down/revisit a step in the process?
 - Are there any aspects of the lab we need to have a better understanding of before we start?
- As part of the lab report or other write-up structure that students complete after the lab is finished, ask students to reflect on their group processes that week:
 - What did I do this week that helped my lab partner succeed? How did I work to enhance their experience in the lab and/or their understanding of the material?
 - What did my lab partner do this week that helped me succeed? How did they work to enhance my experience in the lab and/or my understanding of the material?
 - What do I want to carry forward into my next lab partnership? What do I want to do differently?
- As you review these lab reflections, make note of the patterns that emerge. What are the behaviors that are allowing some lab groups to work successfully? What are the behaviors or dynamics that make lab work partnerships more challenging? Share these observations with the lab before the next lab session, and encourage them to think together about how they might maximize their collaborations this week.

References:

- Leopold, H., & Smith, A. (2020). Implementing Reflective Group Work Activities in a Large Chemistry Lab to Support Collaborative Learning. *Education Sciences*, 10. <http://ezproxy.amherst.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1241117&site=eds-live&scope=site>
- Scager, K., Boonstra, J., Peeters, T., Vulperhorst, J., & Wiegant, F. (2016). Collaborative Learning in Higher Education: Evoking Positive Interdependence. *CBE—Life Sciences Education*, 15(4), ar69. <https://doi.org/10.1187/cbe.16-07-0219>