

TEACHING ELEMENTS DESIGNING POGIL MATERIALS

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The POGIL material you develop for student groups to collaborate on is a key element of your course design.

1. The starting place for your design is to determine the content for which you wish to apply the POGIL structure. Instructors who have successfully adopted this structure indicate that most courses can accommodate three to five POGIL sessions each week and that the POGIL sessions should be scheduled to coincide with the points where student attention typically wanes (Myers, Monypenny, & Trevathan, 2012).
 - You should consider starting with one POGIL session in a given week, until you and the students are comfortable with the process and you can assess the amount of time it takes for you and the students.
2. After deciding on the content you want to cover using the POGIL structure, define an objective which describes what the students should be able to do by the end of the class period, or the task to which they will apply the POGIL model.
 - For example, in a foreign language class, the objective may be, “After completing this activity students will be able to describe the accusative case and apply its grammar structure to a variety of terms/sentences” (Johnson, 2011).
 - In a sociology class, the objective may be, “Analyze the role of toys and children's clothing in training us to be gender differentiated individuals while also considering the effects of gender socialization on our lives” (Atkinson & Hunt, 2008).
3. Based on that objective, identify the material you can provide to the student groups to assist them in reaching the objective.
 - For example, in the foreign language class example, you may provide a dialog, written story, series of pictures, sentences, or any combination of these items. The instructor can also act as the model, performing and describing, in the foreign language, a series of actions for students to consider (Johnson, 2011).
 - In the sociology class example, you may provide summaries of key theories and/or articles that provide the same type of analysis on other topics. Students may be provided access to computers so they can visit store websites, and view marketing materials.
4. Create a series of questions that focuses the students' attention on the model. The POGIL task assigned to student groups should include directed, and then convergent, or divergent questions. Directed questions can be

answered directly from the information provided and serve to help students comprehend the model and content. Convergent questions require groups to reach a consensus of the solution and serve to help students learn to use the model and content. Divergent questions can have a range of possible responses, which may all be correct, and serve to help students engage with the content on a deeper, more complex level (Moog & Spencer, 2008).

- For example, in a foreign language class using the POGIL structure for a grammar exercise for example, the questions may include (Johnson, 2011):

What differences do you notice when...

What rule can you come up with to describe...

- In the sociology course example, you may ask students (Atkinson & Hunt, 2008):

What patterns emerged?

What is the saliency of these patterns?

What are the lessons that children learn from gendered clothes/toys?

- It is important to design questions that guide students, not lead them easily to the answers. An example of a question that is too specific is, "If the noun ends in 'in,' do you use 'der' or 'die'?" A more effective question would be, "Based on the model, how do you know when to use 'der' or 'die'?" (Johnson, 2011).
 - Consider include a question such as, "Why do you think this/these question(s) were asked?" This questions will help students engage with the content on an even deeper level.
5. Consider designing a follow-up exercise that will allow the group to apply what they have just learned, or engage with the knowledge they've gained on a deeper level.
- For example, in a foreign language class, the instructor can have the groups compose original sentences using the concept they have just learned (Johnson, 2011).
 - In a sociology class, for example, after students have finished identifying patterns that emerged in their small group analysis, they are asked to craft a brief report on whether the lessons that children learn from gendered clothes/toys carry over into adulthood (Atkinson & Hunt, 2008).

References

- Johnson, C. (2011). Activities using process-oriented guided inquiry learning (POGIL) in the foreign language classroom. *Die Unterrichtspraxis* 44(1), 30-IV. Retrieved from <http://search.proquest.com.ezproxy.rit.edu/docview/878895308?accountid=108>
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