R·I·T

TEACHING ELEMENTS
BUILDING GROUP PROCESS SKILLS

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For the Process Oriented Guided Inquiry Learning (POGIL) structure to be effective, students must be given a framework to collaborate effectively in a group. By developing materials that support students in learning to collaborate in a group setting, and by providing an early opportunity for students to apply the POGIL structure, you will assist them in developing the kinds of group process skills essential for success in the course as well as in the workplace.

To effectively address the group process aspect of the POGIL structure, apply the following to your course design:

1. Assign students to small groups (of three of four).
   - If possible, balance the groups in terms of criteria like grasp of the course content, level of interpersonal skills, and ability to manage or to be managed in a group setting.
     o You may form temporary groups and then assign students to "permanent" teams after a few weeks when you are more familiar with their abilities.
   - Students remain in their assigned group for the entire course. This ensures that the groups become more efficient and productive over time.
2. Provide the students with the roles they must assume in their small groups, along with details about the responsibilities of each role. Students should regularly change roles to avoid boredom and to ensure they each develop a range of group process skills. The primary roles include:
   - **Manager**: ensures team members fulfill their roles, the team accomplishes the assigned tasks on time, all members of the team are participating in the activities and understanding the concepts, and interacts with the instructor
   - **Recorder**: documents the names and roles of team members at the beginning of each class, turns in a log indicating one item the team understood, and one item the team still has questions about, scribes the team's discussions and significant aspects of the team's observations, insights, and important concepts learned
   - **Presenter**: delivers oral reports to the class, based on the Recorder's notes

   Optional roles include:

- **Reflector**: monitors group dynamics/behavior and may be asked to report to the group or the entire class about how well the group operates and what needs improvement
- **Timekeeper**: monitors the group's use of time and works with the manager to ensure the group completes the tasks within the given timeframe

3. Provide students with the ground rules for group work. For example:
   - Each role is dependent on the other roles so students are accountable to their teammates for the role they play
   - Every member of the team has something valuable to contribute and so everyone should actively participate
   - Let the person in the manager do the managing
   - Share concerns with teammates first, before escalating to the manager and then the instructor

According to Myers, Monypenny & Trevathan (2012), starting the course with a fun exercise that demonstrates the advantages of shared information and collaborative learning is the most effective way to introduce students to the POGIL structure and the group process skills they must develop. In their information technology course, these professors (Myers, Monypenny & Trevathan, 2012) asked each student to work independently to draw a specific diagram. Students were then asked to indicate their confidence in their diagram's accuracy (which was low). Next, the professors introduced POGIL and its benefits, rules, and roles to the class. The students then formed groups for the first time and once the roles were set, the groups were asked to repeat the exercise. When the students were asked to assess their confidence in the accuracy of the group's diagram, the result was much higher than as individuals. This method of introducing POGIL showed students the benefits of shared knowledge and collaborative learning and was therefore effective in laying a foundation for the application of the technique to the remainder of the course.

A similar approach in a sociology class may begin with asking students to complete the statement "I am..." with as many as ten different answers. Then, students pair up, introducing themselves to one another, sharing their answers, and then introducing their partner to the class by sharing two pieces of information about that partner. The instructor creates two columns on the board, labeled "men" and "women." Using the information from the student introductions, the instructor writes information on the board under the appropriate gender. When sufficient information has been gathered (or students get restless), the introductions are ended. The instructor then asks students to work in small groups, with the POGIL roles assigned, to analyze the data, identifying any gendered differences or patterns that emerge. Lastly, the instructor guides a large group discussion of findings, emphasizing to students that they have completed core sociological tasks; they gathered data and analyzed it (Atkinson & Hunt, 2008).

References

Atkinson, M. P., & Hunt, A. N. (2008). Inquiry-guided learning in sociology. *Teaching Sociology, 36*(1), 1-7. Retrieved from http://search.proquest.com.ezproxy.rit.edu/docview/223512927?accountid=108

Myers, T., Monypenny, R. & Trevathan, J. (2012). Overcoming the glassy-eyed nod: An application of process-oriented guided inquiry learning techniques in information technology. *Journal of Learning Design, 5*(1), p. 12-22.