The Goucher College Workshop Program requires attendance by all new workshop chemistry leaders for a two-and-a-half-day training session before the beginning of the semester. Also attending are experienced workshop leaders. Chemistry professors Esther Gibbs and Scott Sibley, with learning specialist Gretchen Marcus, have designed a program that covers several dimensions of peer-led team learning. Theory and practice are interwoven: a session of educational theory is followed by a simulation of a workshop in which leaders work through chemistry problems they would encounter with their students.

The curriculum uses the text Peer-Led Team Learning: A Handbook for Team Leaders by Vicki Roth, Ellen Goldstein, and Gretchen Marcus (2001, Prentice Hall), as well as the faculty’s suggestions about effective ways to help students process and understand chemistry concepts, students’ statements about how they learned introductory chemistry, and experienced workshop leaders’ input on the most effective way to facilitate a Workshop Chemistry group.

The program begins with a continental breakfast and an opportunity for the student leaders to catch up with one another following vacation breaks. New leaders begin the session by discussing their own experiences as students in workshops, including the most beneficial learning strategies used by their leaders. This discussion includes brainstorming ideas and techniques they would like to try in their own workshops. The group of new and experienced leaders, learning specialists, and faculty then discuss the role of the workshop leader, including the ethics of group leadership (e.g., confidentiality), the importance of building boundaries with students, and means of encouraging students to work cooperatively. We emphasize that the leader is not expected to know all the answers.

The next session is the simulation of a chemistry workshop, followed by lunch. The afternoon begins with a discussion of getting a group started and how to keep it going. Richard Felder’s Index of Learning Styles (http://www2.ncsu.edu/unity/lockers/users/f/felder/public/ILSpage.html) is introduced; new leaders will have completed the instrument prior to the training session and are thus able to look at their own learning styles. This aids in exploring the facilitation styles that work for them and how they might compensate for styles with which they are less comfortable. They can then relate this to the need for a variety of learning techniques within the workshop.

The second day starts with a discussion of stages in the ‘Perry Scheme.’ We emphasize the first three stages, the “modifying of dualism,” describing how first-year students tend to see the world as black
and white, not gray. Workshop leaders should be prepared for students who may expect to be given the “true answer” instead of being helped to construct knowledge for themselves.

Howard Gardner’s concept of ‘multiple intelligences’ is then presented and leaders discuss the characteristics of each of the eight intelligences, then work together to develop chemistry-related activities for each intelligence. This variety of activities allows students to relate to and experience chemistry in substantially varied ways.

The last morning’s session includes a discussion of how to handle difficult situations, e.g., how to assist the shy or domineering student, the student with personal problems, the student who is underprepared, etc. Experienced leaders share their tips for a successful workshop, which leads to a general discussion of study skills for the chemistry student. We are always proud of our experienced leaders for the excellent and insightful tips they give to new leaders.

An important thread running through our training is the collegiality between and among students, professors and the learning specialist. We most definitely learn from each other. We also show our leaders our care and support by providing breakfast, lunch, leader’s survival kits, and tee-shirts imprinted with the ‘Periodic Table of Elements.’

Although we do not yet offer a semester course for our workshop leaders, the strong, comprehensive training session allows them to work successfully as group leaders. Throughout the semester, professors are available to discuss problems related to the study of chemistry or to issues of group dynamics. We all meet to discuss the program at the end of semesters.

Perhaps the benefits of leader training are best expressed by Dr. Esther Gibbs, Professor of Chemistry: “Not only do I think it is important to work with campus learning specialists but I have found it to be essential to the workshop approach. I could not do all of the training myself, I don’t have the time, and there is the added benefit of my learning from some of the presentations given by our learning specialist. In addition, we each see the student in different environments. Our connection through the workshops has led to a more productive sharing of the perspective we each have about a student in difficulty. The learning specialist has also been an important advocate for the Workshop Program to the administration.”

Gretchen Marcus
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