SI Report: Spring 2008

Summary of Responses: Faculty Questionnaire
N=9

SI allows for "real world" experiences and applications in ARE 2200. The SI leader plans field trips to local construction sites and gathers construction drawings of completed buildings from UW Facilities Management for use in class and in homework problems. These experiences shape the way we talk about theoretical concepts in class and bring more concrete examples. In addition, the SI leader invites guest speakers to class to help students get other perspectives.

PSYC 1000 is primary a lecture format and requires students to spend a great deal of time memorizing facts. The SI component helps students apply what they are learning to basic principles of human behavior in small group discussions and workshops. The SI leaders invite guest speakers from the Psychology Department to present on their areas of expertise; this exposes students to other professors and helps them gain a wider perspective of the field. The SI leaders will have the opportunity to attend departmental colloquia and facilitate contact between faculty, visiting psychologists, and students.

In GEOG 1010 there are three main goals for SI: (1) increased awareness of important concepts and terminology, (2) an introduction into the way natural systems function, and (3) an improved appreciation of the interrelationships between humans and their environment. The SI sessions give students a chance to interact with other students in a learning environment that is not structured around the lecture.

Students first contact with linear algebra in MATH 2250 is not always smooth and easy. I notice that many students find it very difficult to "turn on" the switch that allows them to think in more than three dimensions of our day-to-day experience. The SI leader helps the class to develop the *capacity for abstraction.* Indeed, it is much easier for a student who grasped such concepts not too long ago to realize the difficulties his peers may face than it is for us (as professors). In SI students bring in topics for discussion based largely on items they don't quite grasp in class. SI also offers 2-3 extra projects (for credit) that students work on in SI throughout the semester.

Sadly, Astronomy 1050 is often taught without any substantial opportunity for students to observe the sky and use telescopes! Labs are scheduled during daylight hours, so labs involve computers. The SI leader uses telescope observing and the planetarium—the observing is a fun hook to get (math-phobic) students interested. SI reaches students who are at risk for failing and the general population of Astronomy 1050 by providing a structured, regularly scheduled curriculum that incorporates telescope observing and a related mathematical activity. SI offers students a qualitative, kinesthetic appreciation for the nighttime sky.

In AAST/AIST 1030 SI helps guide service learning project hours and helps students write their papers (develop theses, teach them how to brainstorm their topic, etc.) and putting together their final presentations that are given to the Directors Council. They also do films and guided discussion. It has really helped students develop alternate routes to homework problems.

Although supplemental instruction has and always will be a stable part of General Microbiology, it is difficult for the instructor to be active in all aspects of the course at all times. Thus, the SI leader takes responsibility for leading the online critical thinking questions and discussions on supplemental readings. Students are able to ponder questions that are often asked by students during lecture to which either the instructor does not fully know the answer or for which the answer would take too long. It is not unusual to see hundreds of posts to these questions. The SI takes some pressure off the instructor and raises the quality of discussion. Students also do a supplemental reading, *The Omnivores Dilemma,* by Michael Pollan, through the SI sessions; students are able to look critically at applications of microbiology through their discussions.