



PROJECT DATA

Note: This form is for **APPROVED GRANTS** only! A Project Data form is a requirement for the grants. The information provided will be posted on the Learning College website.

Directions: Fill out the form and email it to anne.holte@montgomerycollege.edu.

Project Name: **Advancing Learning Centered Education in Mathematics**

Project Director: **Nancy Shaw**

Project Starting and Ending Date: **January 11, 2007 – May 11, 2007**

Brief description of the project:

This project has two primary purposes: to encourage mathematics faculty to undertake learning centered instruction (LCI) and to provide assistance as they develop plans to do so. Because there is a lot of evidence that professional development embedded with coaching is far more effective than workshops alone, this project will concentrate on individual coaching and small group seminars.

A secondary purpose of the project is to develop Montgomery College students into responsible and independent learners, who are active partners in their education.

Additionally, the project leader anticipates that the outcomes of several proposed activities will benefit the department and the college.

State fundamental need or concern addressed in this project.

- **Many students have been sedentary receivers of information for so long that they do not know how to take active responsibility for their own learning. They have become passive learners in their education. This seriously impacts their potential for learning.**
- **Faculty who have been introduced to learner-centered instruction (LCI) and are interested in putting it into practice often tackle this project alone. The promised benefits of this approach are neither immediate nor automatic. Given this combination, it is difficult to maintain enthusiasm long enough to discover its merits.**

- Full time mathematics faculty, particularly those who have been teaching for many years, are most familiar with traditional teacher-centered instruction (TCI). Its primary functions are lecturing, designing tests, and grading. When faced with the Montgomery College *Learning College* initiative, these faculty may feel awkward and/or reluctant to incorporate TCI in their courses.
- Forty-eight percent of the 52 developmental mathematics classes are taught by adjunct faculty, as are 71 % of the 49 transitional math classes. The personal schedules of these adjuncts do not allow them to attend many workshops and they rarely have the time, interest, and/or funds to attend professional conferences.
- There is a serious lack of material available on implementing SCI in mathematics classes. Most articles and books on SCI do not address this subject. SCI is often considered appropriate only for the “soft subjects”.
- Montgomery College has invested time and money developing Professor Shaw into a specialist in learning-centered teaching. She has participated in two CTL fellowships which explored active learning and learning-centered teaching. She has attended three On Course Workshops that examined the theme of promoting student responsibility for learning. She has presented on these topics at three national conferences. She has been seeking opportunities to share her expertise with her colleagues in the mathematics department.
- A project of this magnitude cannot be accomplished by a faculty member who is maintaining a regular workload. It simply will not happen without the Make It Happen Grant.

List the project's core goals and/or objectives.

- to promote dialog among faculty regarding LCI
- to encourage mathematics faculty to initiate learner-centered teaching
- to support mathematics instructors as they plan and prepare learning-centered instruction
- to compel instructors and students alike to focus on the process of learning
- to engage mathematics students in active learning
- to foster student growth toward becoming responsible independent learners

Who will benefit from this project?

- Students – deeper learning, confidence, engaged during class, convert from passive to active learners, irresponsible to responsible learners
- Faculty – students’ acceptance of their partnership in learning
- Faculty of mathematics – assistance with designing learning-focused activities
- Chairs of math courses –student input regarding textbook selection
- Math department – guidance with how to incorporate LCI into the math classroom
- National faculty – presentation at a national conference regarding focusing on learning