

Project Name: Expansion of Services in the Chemistry Learning Center (CLC) and Physics Learning Center (PLC)

MIU Round: Round 1

Sponsor(s): College of Letters and Science

Coordinator(s): Tony Jacob (Chemistry) and Susan Nossal (Physics)

Partner(s): Department of Chemistry, Department of Physics

Report Date: Year 1, August 2010; Year 2, July 2011

Project Specific Goal and Measures

- Project Impact Measure(s)**
- Chemistry: Increase CLC staff support to cover all sections of Chemistry 103, 104 and 108. This will result in an increase in the number of students served.
 - Physics: Increase PLC staff support to Physics 103-104 and continue providing support to students in Physics 207-208. Support to students in 207 and 208 would have been cut without MIU funding.

- Project Impact Data Source(s)**
- Number of covered sections in Chemistry will be provided by Tony Jacob.
 - Number of students and courses served in AY 2009-10 and beyond will be provided by Susan Nossal.
 - Note: The operational definition of a “covered section” is that a staff member attends the course lecture, provides learning center support services to students identified as needing them (approx. 10% of students in course), and coordinates with the course instructor regarding course materials.

- Baseline Measure(s)**
- CLC: Number of covered sections in AY 2008-09 (9 of 15 sections, 252 students).
 - PLC: Number of students served in AY 2008-09 (4 courses, 268 students).

General MIU Goals and Measures (applicable to project)

- F Decreased achievement gaps
- One goal of this project is to reduce the gap in the rates of adverse outcomes (D, F, or drop) for underrepresented students including targeted minorities, returning adult students, students with disabilities, and transfer students.
 - Continue identifying peer tutors from diverse backgrounds.
- G Attention to diversity in new hires
- Physics: The hiring of a new teaching assistant in Physics was partially made on the basis of the staff member’s experience working with diverse students in the PEOPLE program and on her coursework in multicultural education.

- Chemistry: The Department states on all PVLs that staff are expected to participate in continued professional development and increase their competency in teaching diverse groups of students.

I Unintended Benefits

Physics: Increased staffing allowed the PLC to enhance the training of undergraduate students pursuing Physics Education (Secondary Education Certification). The School of Education students who were PLC peer mentor tutors gained valuable teaching experience and resources they could use in their own classrooms. These students also assisted in teaching the pre-college Physics courses for summer PEOPLE students.

Progress Reports

Year 1

- Physics: Increase staff member's appointment from 50% to 100%. Hired a 33% teaching assistant. With increased staffing the PLC was able to provide support for Physics 207 and 208 while maintaining support for Physics 103 and 104. Increased staffing allowed PLC staff to proactively reach out to students experiencing difficulties in supported courses.
- Chemistry: The focus in Spring 2010 was on recruiting, hiring, and training new staff members. At the end of the spring semester, CLC staff increased by .8 FTE (approximately 40% of the approved total increase).

Year 2

- Physics: Increased staffing in the PLC (TA position increased from 33% to 50% in the second year; an additional 100% FTE staff member was hired starting in Spring 2011; Susan Nossal increased her PLC appointment by 20% with MIU funds to a total of 70% FTE). Increased the number of students served in Physics 207, 208, 103, and 104 (from 251 in 2009-10 to 335 in 2010-11). Increased the number of Peer Mentor Tutors to 19 (and the number from targeted minority groups). Provided increased follow-up to students who were not attending class and pilot tested new interventions (for example, hired a graduate student to run additional sessions for the highest need students in Physics 208). Worked with the First Wave Program to increase the success of students taking Physics 109 (Physics and the Arts) by providing a stipend to a graduate student who met once per week with FW students for reinforcement of key concepts and for practice with problem-solving.
 - Chemistry: In 2010-11, staff in the CLC increased by 3.75 over the 2009 base. Increased the percentage of Chemistry 103, 104, and 108 lectures covered/supported to 100%. Expanded capacity (as measured by students enrolled in CLC services) by almost 100% (251 in base year to 479 in 2010-11). Maintained strongly positive students evaluations of the overall CLC services, self-assessment of increased knowledge of Chemistry, confidence that the CLC services would lead to a higher course grades than without the CLC services, and increased enjoyment of their Chemistry courses.
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