

## Example of a Completed CLIP Application Form

- 1. Describe the instructional issue that the faculty Community of Learning, Inquiry, and Practice (CLIP) plans to study.
  - The Mathematics, Engineering and Science Achievement (MESA) Center at Bakersfield College provides an environment to facilitate the success of underrepresented STEM (science, technology, engineering, mathematics) students. Although most MESA activities center around the Academic Excellence Workshops (AEW), tutoring and peer study play an important part in STEM majors success. Currently, there are formal and informal peer study groups established within the MESA program. We would like to collect information about the mechanisms and behavior of these peer study groups and assess the factors that make the study groups effective among the MESA population. It is our hope that we can use this information to facilitate/encourage more study groups in STEM classes.
- 2. What are one to three research questions that will likely guide the inquiry?
  - a) Does participation in a peer study group (formal or informal) improve student success? Do students perceive their participation in a peer study group to improve their success?
  - b) How prevalent are peer study groups among the MESA students vs. non-MESA students?
  - c) What are students' perceptions of success factors of peer study groups?
- 3. Why does the faculty group consider this to be an important issue to address?
  - STEM disciplines are challenging majors in which students perform better when collaborating with peers and mentors. In addition, most industry sectors desire majors from these fields who are familiar and comfortable with working in teams and other collaborative groups. A peer study group is just one opportunity for students to learn to work with others. In this CLIP proposal, it is our goal to better understand the peer study needs of MESA/STEM students, provide to the best of our ability the environment to support these needs, and to disseminate this information via the MESA website for students. Although we do not wish to intrude upon the informal study groups currently established, we would like to provide opportunities for all MESA/STEM students to participate in a peer study group.

- 4. What data do you currently have about student performance related to this issue?
  - The MESA Director regularly collects data on MESA students demographics, center usage, student contact frequency, activity participation, and grade point average per semester. In addition, we can obtain demographic & academic statistics on all STEM students enrolled at Bakersfield College from the Office of Institutional Research.
  - Currently, we also have results for about 21 MESA students who participated in Strengths Quest, an assessment tool required by statewide MESA to determine an individual's strengths in academics and career. We would like for all MESA/CLIP participants and all MESA students to complete the Strengths Quest assessment. It would be interesting to see the alignment of these strengths with the perceived success factors for peer study.
- 5. If you have ideas of sources of information to learn more about how others are addressing the instructional issue, please list them here (e.g., colleges you would like to visit, speakers/consultants you would like to have visit campus, written materials, conferences to attend).
  - We will need to purchase at least 60 Strengths Quest books/ID codes. There are several articles in the databases available at BC (Lexis/Nexis, Ebscohost, and Info Trac) and websites we can explore on the topic of peer study groups. Visit two other community college MESA centers in Southern California to compare the physical layout of the center and its effect on student collaboration.
- 6. What are your current thoughts about how the inquiry (research study) might be structured? What do you expect will be accomplished by the end of the fall 2005 semester? What do you expect will be accomplished by the end of the spring 2006 semester?
  - a) During the fall semester of 2005, CLIP members would complete the Strengths Quest assessment, research and discuss peer study groups, and collect information from their classes with STEM students. MESA students will also complete the Strengths Quest assessment and participate in data collection activities
  - b) During the spring semester of 2006, CLIP members will analyze the data using various statistical packages and other qualitative approaches. The CLIP will also develop a plan for encouraging and facilitating peer study groups among STEM classes. This will then be incorporated into the MESA website. Prior to a final report, members of the CLIP will visit the other community college MESA centers.

- In addition, as a result of this assessment activity, the CLIP will assist in developing at least one program outcome for the MESA program.
- 7. What research and planning techniques does your faculty CLIP particularly want to use in their study to learn more about the use of that technique (e.g., designing program outcomes, mapping courses to student learning outcomes, focus groups, appreciative inquiry, alternative methods of student assessment, analyzing qualitative data, etc.)?
  - a) Apart from the typical quantitative methods, data will also be collected from focus groups and questionnaires. We would like InSites to conduct the focus groups.
  - b) We will also be designing a program outcome and may have questions regarding this.
- 8. Who are the faculty who will be part of the CLIP)? Please provide names, emails, phone, and mail contacts that can be used between May 1 and August 20.
  - a) [names of CLIP members]
  - b)
  - c)
  - d)
  - e)
  - f)
  - g)
  - h)