attending professional conferences, and visiting college and university campuses. They researched the issues of college admission and transfer via college websites and catalogues. They also did surveys of their peers at the Delano campus. They developed and administered a survey of students to find out what they were interested in knowing about other colleges. One student described the motivation for the work as "I was encouraged by my own experience of how I felt when I did not know where to go or what to do when I needed to do something in college."

As a final product of their CLIP, they created a web site that provides information to other students who are facing issues of transitioning to a four year institutions. The website also describes who they are and what they learned along this journey of discovery (www2.bakersfieldcollege.edu/jwtarjan/ TransitionsCLIP.htm).

The faculty members in the CLIP initially proposed the idea of a CLIP largely composed of students at the Delano campus because "there were many students who were successfully meeting their school requirements while also eager to contribute to their community. I felt that we had a strong group of students already in place in the form of the Future Teachers Club augmented by the group of student tutors at the Delano Center." One student's own experience motivated involvement in the CLIP: "[W]hen I started going to college, I had a lot of problems when trying to get all the information to get admitted. So based on my experience, I did not want other students [to] struggle like me and [I wanted to] make this process easier for them."

A faculty member observed, "The sense of belonging and the sense of community is strengthened by participation in the CLIP. Once students truly feel they belong, they are empowered to seek the help needed to be successful....They share strategies that have led them to success." One student participant said. "It has made me be more aware of others and more helpful to other students." Another said, "Diversity is what a system, club, meeting needs. Without diversity I don't believe that we would be able to generate ideas or concepts about the CLIP.

Everyone is different. Utilizing the different viewpoints can be a great advantage."

INTERESTED IN JOINING A CLIP?

Five CLIPs have begun their work for the 2006-07 school year while others are still being formed. A meeting of those interested in starting a CLIP yet this year will be held soon. Contact Bonnie Suderman, Bakersfield College Assessment Coordinator, at bsuderma@bakersfieldcollege.edu for more information.

BACKGROUND ON CLIPS

In 2004, Bakersfield College began participation in a research study of Communities of Learning, Inquiry, and Practice (CLIPs). CLIPs are designed to contribute to a culture of inquiry, feedback, and evidence-based teaching and learning within community colleges. This work complements the college's existing emphasis on student outcomes assessment. The research is being conducted by InSites, a nonprofit research organization, through its grant (#REC-0335581) from the National Science Foundation (NSF). In January 2006, the Bakersfield College Assessment Committee decided to continue the use of CLIPs on campus beyond the life of the grant. The 2006-07 school year is a time of transition from the NSF grant funding to full operation and support of the CLIPs within Bakersfield College. (CLIPs were formerly known as "Communities of Learning and Integrated Practice." The name has been changed to better reflect their work.)

For further information on the NSF research study, contact Beverly Parsons, InSites executive director at bevandpar@aol.com or visit the InSites website at www.insites.org.

Bakersfield College

WHAT ARE CLIPS?

Communities of Learning, Inquiry, and Practice (CLIPs) are informal and dynamic action research groups (largely faculty) who tackle questions about teaching and learning that participants want to investigate. CLIP members make inquiries into their chosen questions through a five-step "evaluative inquiry" process: (1) position the inquiry; (2) plan the inquiry; (3) collect data; (4) analyze and synthesize data; and (5) communicate/use the findings from the inquiry.

CLIP members build their skills and knowledge in conducting such inquiries while learning to work together to address sensitive issues and try out new approaches to teaching and learning. Faculty are the primary constituents of CLIPs, but administrators, staff, students, and community members also participate.

The work of the six CLIPs in operation during the 2005-06 school year is reported here. Quotes are from CLIP members.

Assessing Students' Oral Communication Skills

Communication CLIP Members:

Helen Acosta, Michele Bresso, A. Todd Jones, Michael Korcok, Mark Staller (facilitator)

Each CLIP prepares a final description of their work directed toward a particular audience. The Communication CLIP wrote their summary to their Bakersfield College colleagues. Here are excerpts from what they wrote:

In the 2005-06 academic year, five members of the Bakersfield College Communication department participated in a CLIP. We would like to share our experience as a CLIP with the entire Bakersfield College campus community because we feel that other staff and faculty may benefit from the work products of a CLIP group, or even through participating in a CLIP themselves.

Our department initially got involved in the CLIP program because we were stalled in our development and assessment of department-level studentlearning outcomes. When we realized that involvement in the CLIP grant project would provide us time to work together and financial





Spring 2006 cross-CLIP meeting

"I wanted to work with my colleagues to accomplish a big task that had been on the back burner for a while. The funding allowed us to make the task a top priority.'

resources to carry out some crucial research, we jumped at the chance to participate. Although we were a bit apprehensive about hammering out sensitive details concerning student-learning outcomes in a small-group setting, we were quickly sold on the benefits of a non-threatening, collaborative, small- group environment when the CLIP sessions got underway.



The CLIP logo is based on a design created by Gloria Bernschein as part of an assignment in the Graphic Design class taught by Adel Shafik at Bakersfield College.

Our department designed a research project that would allow us to research and pilot different assessment methods for oral presentations. Some of the initial groundwork we accomplished involved the development of our program-level student learning outcomes. Although some vocational and academic areas at our college were able to quickly develop program-level outcomes, the Communication department struggled to develop outcomes and a SLO [student learning outcomes] matrix that fit our courses. We do not offer our courses in a linear sequence; instead, we offer a variety of communication courses that students can take in almost any sequence: Public Speaking, Interpersonal Communication, Business Communication, Persuasion, Rhetoric and Argumentation, and Small Group Communication.

How Do CLIPs Operate?

Each CLIP consists of 3-15 people with one or two members as facilitators. Each CLIP determines its own schedule of meetings and produces a final product of their inquiry addressed to a group that can use the work it has accomplished. Members receive a stipend for participation and funds are available to support various CLIP activities.

CLIPs share a number of norms. They provide social support, excitement, and personal validation among members around a shared and purposeful inquiry. They create a safe, trusting environment where colleagues can address sensitive issues and try out new approaches in a culture that supports professional growth and creates a spirit of shared responsibility and innovation in the college. The learning is as much in the process as in the final results.

CLIP members often use interviews, questionnaires, and focus groups to gather data. Through gathering, analyzing, and synthesizing data, CLIP members develop new insights that they can apply to their regular practices. Once we arrived at some rough program-level student learning outcomes for our course, we were able to move forward with our research project. (These program-level SLOs have been refined throughout the year, and they will continue to be reworked and fine-tuned next year also.) We decided to explore two main methods of assessing oral presentations: student surveys and oral presentation rubrics. One of these methods [presentation rubrics] we found to work well, the other method [student surveys] was too time-consuming to be useful.

[We created] a rubric that can be filled out by the audience and/or instructor as a student is delivering an oral presentation. Several of us had designed decent rubrics for our individual class assignments, but we wanted to pilot a more general rubric that could be used by many different instructors across the campus. In order to promote "speaking across the curriculum," we thought a general oral communication rubric would be an attractive and useful evaluation tool. In the spring 2006 semester, a very general oral communication rubric was piloted in two Small Group courses, with good success. The students found the rubric easy to understand and an effective tool for providing feedback to each other.

[Two members of our Communication CLIP are leading another CLIP in school year 2006-07] to continue to improve and test both a general rubric for individual oral presentations and a general rubric for group presentations. At the end of the spring 2006 semester, they sent out a faculty survey to find out how many Bakersfield College faculty gave oral presentation assignments and how many faculty would be willing to test a rubric. They received a large number of responses, and over sixteen faculty members at Bakersfield College indicated that they would appreciate, and be willing to test, such a general rubric.

What is a Rubric?

A rubric is a set of scoring guidelines for giving scores to student work. A typical rubric: 1) contains a scale of different possible points to be assigned, often ranging from 0 or 1 to 4 or 6 as the top score; 2) states the different traits to be examined and assessed; and 3) provides key traits of a performance or product for finding the right place on the scoring scale to which a particular student result corresponds.

tions, the survey presented students with a list of methods of studying that fell into three main categories: study alone, with a group of students, and with a tutor. The survey asked students to identify the ways they studied for a class and which methods they found to be most effective.

Because the Fall questionnaire was administered anonymously, the CLIP could not correlate survey responses with performance data. So the CLIP administered a mid-semester, one-question survey to spring semester STEM classes asking students whether they participated in a peer study group (formal or informal). When they cross-tabulated grades with student's participation in a study group, they found that study groups improved student success. (See graph on page 6 which shows that more students receiving A's, B's, and C's participated in study groups.) As one participant said, "We can now report to students that study groups are helpful....Perhaps more of them will consider joining a study group."

"Getting to know some of the members of my CLIP was one of the most professionally rewarding experiences of the CLIP. I would jump at the chance to work with them again."

The CLIP followed up this survey with telephone surveys and focus groups of volunteer students. The responses indicated that students perceive that participation in a serious peer study group will improve their success.

Cross-CLIP Meetings

Although the major work of the CLIPs occurs in the individual groups, three cross-CLIP meetings are held each year. In August, participants refine the questions they will focus on and make a plan of inquiry. In January, they focus on data analysis and completion of the full inquiry process by the end of the second semester. Spring is a time for sharing their preliminary results, getting feedback from other CLIP members and celebrating the collective work of the CLIPs.

Gathering and Sharing Data to Help Students Make the Transition to Four-Year Colleges

Transitions CLIP Members:

Faculty: Janet Tarjan (facilitator), Mary Jo Anhalt Student members: David Aninion, Gurpreet Cheema, Claudia Fernandez, Blanca Garcia, Gabriela Garcia, Maria Heredia, Nubia Martinez, Alicia Miller, Adelaida Ramirez, Susanna Ramirez, Mary Jane Rarangol, Ursula Rios, José Rojas, Alexandra Ruiz, Rodolfo Salazar, José Viramontes, Vanessa Zamora

Diversity characterized the Transitions CLIP at the Delano campus. In describing this CLIP which included two math faculty and sixteen students, one student said, "We have different ethnic groups and different education levels, different ages, and experiences. Through the CLIP work we have all experienced major successes and success as a team."

CLIP members focused on the question "What can students learn about making successful transitions from a community college to a four year institution by attending professional conferences, visiting college campuses, surveying students, and studying college websites?" To answer this question, they met frequently, gathered data while



Members of Transitions CLIP at January 2006 meeting

Please contact the Math Department about the agreed-on content of the Developmental Mathematics courses. Knowing the core topics for a course can be helpful if it is a prerequisite for a course you teach.

Facilitating Peer Study Groups to Improve Student Performance in Science, Technology, Engineering, and Math (STEM) Courses

STEM CLIP Members:

of MESA

Science

6

Wayne Cooper, Consuelo Gonzalez (facilitator), David Guerrero, Rebecca Head, Liz Rozell, Joe Saldivar, Patrick Serpa

"I suppose, unknown to me, I have been doing evaluative inquiry most of my educational life," said one participant. "I continually evaluate what I am doing and try to improve whatever method(s) at hand. Being involved with the CLIP has provided an opportunity to work with others of similar interests.

The seven participants in this CLIP included five

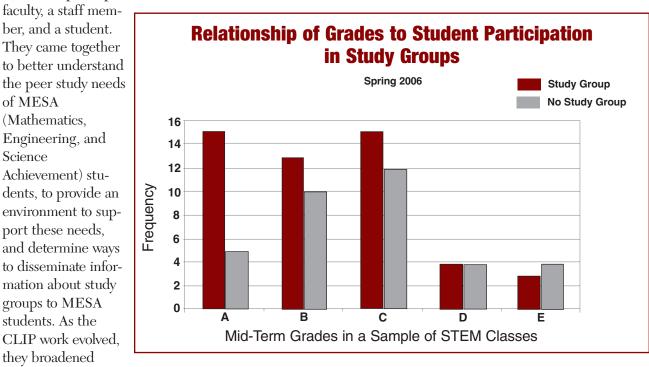
"One year was an insufficient time frame to make a definite conclusion."

their focus from MESA students in Science, Technology, Engineering, and Mathematics (STEM) to all students in STEM courses.

One member of the STEM CLIP had participated in the previous year's Physics CLIP, which considered whether participation in the discussion sessions held by instructors correlated with test scores and homework completion rates. After collecting and analyzing the data, the members of that CLIP learned that some students who were coming to the discussion sessions took the information from the session to their friends in informal study groups. In this way, the discussion sessions were actually having more of an impact than the faculty had expected.

The STEM CLIP decided to investigate how effective study groups might be encouraged among more students.

To determine how prevalent peer study groups are among students, the CLIP administered a survey to students in STEM and non-STEM classes at the end of the Fall semester. Among other ques-



Although we gained a lot of knowledge about the assessment of oral communication skills through our CLIP work, we also gained important knowledge about collaborating in a work group. Through our CLIP group, we were able to design an important project, stay motivated and on task, divide the work load among several people, share ideas and insights, and enjoy working together in a positive environment. We highly recommend your participation in a "community of learning" if the opportunity arises!

Improving Students' Success Rates through Letter Writing and Conferencing

Developmental Writing CLIP Members:

Brenda Freaney, Hillary Neumeister, Paula Parks (facilitator)

"Our project gave students the opportunity to reach out on a personal level to us as instructors and feel that they were real people to us, not just a name on a roll sheet," said one CLIP member in describing the Developmental Writing CLIP.

This CLIP studied the progress of students who had passed Academic Development (ACDV) 68 and were enrolled in English 60. As one CLIP member described it, "[In the past], it was assumed that these students would do well in English 60 [essay writing] because of their successful background in ACDV 68 [paragraph writing]. This, surprisingly, was not the case. Our goal was to find out why and to see if we could come up with strategies to help these at-risk students."

The CLIP decided to see if students in English 60 would perform better if they received personal attention from their composition instructor. The CLIP's study required students in eleven English 60 classes to submit letters to their instructor on assigned topics and to participate in conferences with the instructor. The topics were about issues of importance to the students.



Members of the Developmental Writing CLIP at January meeting

After implementing the letter writing and conferencing, they compared retention rates and pass rates in these classes with those in the other English 60 day classes. They found that former ACDV students in the classes that required letter writing and conferencing had high retention rates and equal pass rates compared with other English 60 classes. Also, according to a CLIP member, "It was clear that the majority of students wanted, benefited, and even enjoyed more frequent personal attention and interaction with their instructor."

This CLIP is preparing an article based on their work for submission to a journal in their field. They are working with Lisa Fitzgerald in the Bakersfield College Institutional Research office to analyze data from the Spring semester to see if the findings from the Fall are replicated.

Knowing that these data are preliminary, a CLIP member said, "I am eager to continue our project over several years so we will have enough data to make a comparison to past semesters."

"I had an ideal CLIP! I think our CLIP benefited from being in two different but related departments and we had a "swing" member who knew how both areas functioned."

Assessing the General Education Outcome for Critical Thinking

General Education Outcomes CLIP Members:

Denise Mitchell, Bonnie Suderman (facilitator), **Reggie Williams**

The General Education (GE) Outcomes CLIP explored methods of GE assessment used at other institutions to determined a method likely to be successful at Bakersfield College. The CLIP chose to pilot test a process that includes the collection of student work (e.g., a written paper) from multiple courses that meet the GE outcome. A pool of instructors from varying disciplines use a rubric to assess these samples of student work.

"This GE Outcomes process caused people to take a second look at what they have been doing for years and evaluate it. It opened people up to new ideas because it was non-threatening."

"I think that our highly structured assessment tool helps students from diverse backgrounds gain a sense of what we instructors want from them--i.e., of what we want them to get good at. And this helps them succeed. For you can't do something well without knowing what you're supposed to be doing."

> The CLIP pilot tested the method using the GE outcome for critical thinking. To do so, the CLIP wrote an optional assessment tool-a précis paragraph—for participating courses. A précis paragraph is a paragraph that a student is asked to write that has a specific set of characteristics. Prior to writing the paragraph, students need instruction in how to write such a paragraph. The instructors involved in the pilot study were given a detailed description of the process and directions for using the précis paragraph but they were not required to use it. Instead they could select a different sample of student work that demonstrated

critical thinking skills. The CLIP also developed a rubric to assess the student work.

Three courses participated in the pilot test, a course from Philosophy, one from English, and one from ESL. The CLIP gave the instructors the critical thinking rubric so they could select an appropriate sample of student work. The Philosophy professor chose to use the précis paragraph project while English and ESL chose to provide copies of the department's final essay exam that their students would already be taking.

What is a Précis Paragraph?

A précis paragraph is a paragraph that a student writes after reading a piece of written work. In the précis paragraph, the student answer a series of detailed questions designed to demonstrate his/her level of comprehension and critical thinking.

After copying the examples of student work, the CLIP members applied the rubric to the samples. They did several tests to determine the validity of the method.

In addition to concluding from the pilot test that this method of assessing GE outcomes is very promising, they identified cautions for users of this type of assessment. For example, the instructor who used the précis paragraph project found that students required several practice opportunities with feedback before they became proficient at the process. The ESL and English instructors found the essay samples didn't exhibit as many critical thinking skills as they had originally expected. They also found that it is tricky to establish the appropriate level of specificity within the rubric to assess critical thinking skills across different samples of student work.

The instructors plan to present the results to their respective departments in Fall 2006. The CLIP will present the results to the GE Outcomes Committee in Fall 2006 with a recommendation that pilot testing be continued with the remaining GE outcomes until a complete GE assessment program is in place.

Refining Teaching Objectives to Improve Student Learning in Developmental Math Courses

Math CLIP Members:

Arnie Andrasian (2005-06 only), Rick Brantley (co-facilitator, 2005-06), Christy Havcock, Bernie Scanlon, Carol Smith (2004-05 only), Donna Starr (co-facilitator, 2005-06), Janet Tarjan, Rachel Vickrey (facilitator, 2004-05 only

The overall goal of the two-year Math CLIP was to improve the Developmental Mathematics program at Bakersfield College. In the first year, the CLIP was interested in determining a list of topics that would serve students well in their subsequent courses and could be taught in Elementary Algebra in the 16-week calendar comfortably by the majority of faculty. Although their plan was multi-faceted (survey math faculty from other fourvear and two-vear schools in the state as well as faculty from other departments at BC) the main focus of their work ended up being within the Math department to determine what faculty were currently teaching in their own classrooms.

The CLIP developed the "Elementary Algebra Survey Seminar" and invited faculty to eat pizza and chat while filling out the survey that detailed typical problems on their exams and group assignments. The informal environment provided an opportunity to see the course content from a dif-

Example of Some Core Topics in Pre-Algebra (Math B50)

Students are expected to master this essential material, which will be covered in class and individually tested.

Whole Numbers	Fra
Solving Equations with Whole Numbers	Lea
Integers	Intr
Introduction to Integers	Add
Addition and Subtraction of Integers	Mul
Multiplication and Division of Integers	Sol
Solving Equations with Integers	Exp
The Order of Operations Agreement	0

ferent angle, and many of the old arguments no longer seemed relevant. The CLIP used the data from those surveys to come up with a list of teaching objectives (not outcomes) based on the Math department's new algebra text. (Objectives are more detailed than outcomes.)

"I was surprised at how long it takes to find things out, and how careful you have to be in making a survey."

The CLIP continued in the 2005-2006 school vear, with some new members and some veterans of the first CLIP. Based on the departmental surveys started in the previous year, the CLIP composed a list that divided the topics of the Developmental Mathematics courses (Modern College Arithmetic/Pre-Algebra, Elementary Algebra, and Intermediate Algebra) into three general categories: review, core, and preview. (See below for example of some core topics in one course.)

The CLIP presented a specific list for each course to the department in Spring 2006. One CLIP member observed, "[I]t was nice to say to everyone, 'These are the lists we have put together that reflect your opinions from all our previous surveys.' When people said, 'Why was this topic put in core?", we could reply, "Because eight out of ten thought that is where it belonged." With only one major exception, the department agreed with the lists and the CLIP revised the list accordingly.

ctions (includes signed fractions)

- ast Common Multiple and Greatest Common Factor oduction to Fractions
- dition and Subtraction of Fractions
- Itiplication and Division of Fractions
- ving Equations with Fractions
- conents, Complex Fractions, and the Order
- of Operations Agreement

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