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ABSTRACT

This collaborative action research project investigated community college teaching, institutional efforts in support of teaching, and effective teacher development practices. Central to this investigation were the perceptions and practices of teachers who produce high student outcomes, interventions that the institutions can provide to support teachers, and the establishment of effective teacher development measures to bring about real change in the teaching practices of newly appointed community college teachers. The research project was guided by three questions: (1) What are the characteristics and teaching practices of faculty that lead to high student outcomes; (2) How do community colleges effectively support the efforts of faculty who are successful in producing high student outcomes, and (3) how can this knowledge be incorporated into an effective program of teacher development in support of newly appointed community college teachers. The author examined the perceptions of faculty members with high student outcomes to identify effective institutional processes of supporting teaching efforts. Data collection included interviews, questionnaires, observations, and document analysis. The research findings were used to generate a model for the examination and continuous improvement of the effort to support first-year community college teachers. Appended are sample questionnaires, student data, and interview protocols. (Contains 96 references.) (RC)

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***Community College Teaching:
Institutional Support for High Student
Outcomes***

Arlana Dee Bedard
2002

Dissertation Submitted to UCLA for Ed.D.

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UNIVERSITY OF CALIFORNIA

Los Angeles

**Community College Teaching:
Institutional Support for High Student Outcomes**

**A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Education**

by

Arlana Dee Bedard

2002

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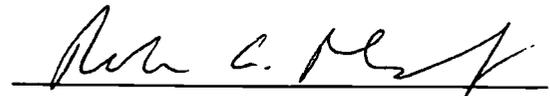
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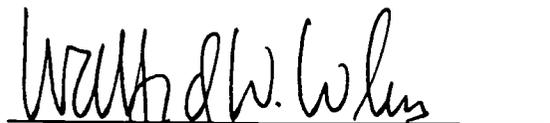
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DEDICATION

I dedicate this effort to my parents, Frank Peers Bedard and Darlene Frances Bedard.

I regret that you are not here with me to celebrate this accomplishment, but I know that, wherever you are, you are pleased that I am living my life on my own terms.

Thank you for your love, support, and encouragement. I miss you both.

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- Bedard, Arlana D. (2002 March). Critical Friends: Examining Student Work. Association for Supervision and Curriculum Development Annual Conference, San Antonio, TX.
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ABSTRACT OF THE DISSERTATION

Community College Teaching: Institutional Support for High Student Outcomes

by

Arlana Dee Bedard

Doctor of Education

University of California, Los Angeles, 2002

Professor Wellford W. Wilms, Chair

By any measure, course completion rates in community college developmental math and English courses remain unacceptably low. Because these courses form a foundation for student success, an investigation of developmental courses is both timely and worthwhile.

This action research¹ project investigated community college teaching, institutional efforts in support of that teaching, and effective teacher development practices. Central to this investigation were the perceptions and practices of teachers

¹ Action research (Stringer, 1999) is a dynamic systems improvement process that incorporates the real life experiences and perspectives of participants as critical components of the improvement effort.

who produce high student outcomes, interventions that the institutions can provide to support teachers, and the establishment of effective teacher development measures to bring about real change in the teaching practices of newly appointed community college teachers. The significant individual strands of this project were guided by the following questions:

1. What are the characteristics and teaching practices of faculty that lead to high student outcomes?
2. How do community colleges effectively support the efforts of faculty who are successful in producing high student outcomes?
3. How can this knowledge be incorporated into an effective program of teacher development in support of newly appointed community college teachers?

Christian conducted the investigation of teacher practices and characteristics. She examined developmental² English and mathematics faculty at two community colleges. She utilized three measures to identify high student outcomes: student retention, student success, and student success in subsequent courses³.

Bedard examined the perceptions of faculty members with high student outcomes to identify effective institutional processes of supporting teaching efforts.

² Developmental courses are defined by the community colleges as pre-collegiate level courses. Students cannot receive baccalaureate credit for basic skills courses.

³ Student retention refers to the number of students who remain in a course to receive a letter grade. Student success refers to the number of students who receive a letter grade of C or better.

She relied on interviews, questionnaires, observations, and the analysis of documents to provide the data for this examination.

Simpson collaborated with the staff development committee chairs at one of the subject colleges to develop and implement a more responsive and more effective new teacher development process, the Teaching and Learning Institute. He utilized Bedard and Christian's investigations as the backbone of new teacher development efforts at the subject college. This collaboration established a previously non-existent model for the examination and continuous improvement of the effort to support first year community college teachers. This result is the heart of action research.

CHAPTER ONE: PROBLEM STATEMENT

Low student retention rates¹ and low student success rates have plagued the community colleges for decades. The interventions developed to mitigate these problems have focused on student service programs such as tutoring, counseling, financial aid, etc. However, research² (Grubb, 1999; The Little Hoover Commission, 2000³) has shown that the quality of interaction in the classroom between teachers and students is a key factor in student performance.

This project sought to increase student success in developmental math and English courses⁴ by focusing upon critical components of teaching, institutional support, and teacher development. The project consisted of three interrelated parts:

- Identifying the characteristics and practices of faculty who have high student outcomes⁵ (Christian),
- Understanding the institutional support for teaching and learning that are linked with high student outcomes (Bedard), and

¹ Student retention in this context refers to course completion rather than college persistence.

² For example, Linda Darling-Hammond for the K-12 system, and the Little Hoover Commission for the community college system.

³ The Little Hoover Commission is a non-partisan California governmental oversight body. It provides important information for the public and for politicians on the performance of governmental agencies.

⁴ Math and English were chosen because they are considered the “gatekeeper courses” with success rates of 53.3% and 65.6% respectively in Fall 1994. (State Chancellor’s Office, Management Information System.)

⁵ Student outcomes in this study include three criteria: retention in a course, success in a course and success in a subsequent course in a sequence.

- Participating in the creation, evaluation, and revision of first year community college teacher development activities (Simpson).

The Community College System

The California Community College system is the largest single system of higher education in the world. It serves a critical function in our society by virtue of the sheer volume of enrolled students. In 1998, the system served over 2.2 million students. Those students represent seven out of ten public college students in California, and one out of ten public college students in the United States (The Little Hoover Commission, 2000).

Our efforts to help these students realize their goals are formidable given their extraordinary numbers and diversity. The number of 18 year olds is projected to rise to 4 million by 2004 (Cohen & Brawer, 1996). Their diversity varies as never before--by ethnicity, age, socio-economic status, circumstances, and goals. Educating such a large and diverse group presents a daunting task.

The Little Hoover Commission states that for many of these students, the community college represents their “greatest opportunity for achieving economic and social well-being” (p. 1). Cohen and Brawer (1996) articulate a starker situation when they say that “the choice is not between the community college and a senior residential institution; it is between the community college and nothing” (p. 55).

Demands on the community colleges

The community colleges face tremendous obstacles when attempting to serve students using “egalitarian” or “open-access” models (Cross, 1971 in Cohen and Brawer, 1996). Cohen and Brawer (1996) state that the large number of students, their diversity, and the eclectic goals that they have poses a severe challenge to the community colleges: “Two words sum up the students: number and variety” (p. 39). The diversity of community college student profiles works in combination with the ease of enrolling, dropping out, and re-enrolling to make retention and success significant community college issues.

To further complicate matters, California’s community colleges are required to manage multiple missions. They offer academic programs in support of each of the following: transfer to four-year colleges and universities, vocational education, continuing education, remedial education, and community service (Cohen & Brawer, 1996). These missions require different resources, different personnel, and different support strategies.

A well-defined mission leads directly to well-defined goals. The community colleges struggle with goal setting and attainment. The poorly focused and multi-faceted mission of the community colleges, and the ever-changing profile of their base of clients exacerbate this struggle. In the process of dealing with an ever-changing environment, the community college’s commitment to teaching seems to have diminished (The Little Hoover Commission, 2000, p. 4). Indeed, the first

finding of The Little Hoover Commission Report states, “While the fundamental mission of community colleges should be to help millions of Californians become lifelong learners, this opportunity is often lost because insufficient attention is given to the quality of teaching” (p. 25). This lack of attention is made clear by examining student outcomes.

Student outcomes

The National Center for Public Policy and Higher Education recently released a study that indicates that student success in community colleges is a national problem⁶. Data from this study shows it to be a particular problem of California’s community colleges. In this study, California was rated the worst in the nation with respect to student outcomes. (See Appendix I for comparative data.)

⁶ <http://measuringup2000.highereducation.org/Introduction.cfm>

Table 1.1 is derived from data contained in that report.

Table 1.1: California Outcomes Report Card

Category	California
Preparation ⁷	C-
Participation ⁸	B+
Completion ⁹	C
Affordability ¹⁰	A

The data indicate that students leaving California’s high schools are not well prepared for college (C- in preparation). The “C” grade in completion indicates that California community college students are not persisting, are not attaining degrees or certificates, and are not transferring to four year colleges and universities. California community college students attained a 48% completion rate compared to 64% for the rest of the United States. (See Appendix II.) The table above shows that although higher education in California is accessible and affordable, access is not enough because student completion rates are unacceptably low.

⁷ **Preparation:** 18 to 24-year olds with high school credentials.

⁸ **Participation:** Measured by percentage of high-school freshmen who enroll in college in any state within four years; percentage of 18-to-24-year-olds enrolled in college in the state; and percentage of 25-to-44-year-olds enrolled part time in some type of postsecondary education.

⁹ **Completion:** Measured by the percentage of first-year students who return for their second year; percentage of first-time, full-time students completing a bachelor's degree within five years; and the number of certificates, degrees, and diplomas awarded at all colleges per 100 undergraduate students.

¹⁰ **Affordability:** Measured by the percentage of a family's income needed to pay for college expenses minus financial aid at both two-and four-year colleges; percentage of state grants awarded to low-income families compared with federal Pell grants given to low-income families in the state; share of income that poorest families need to pay for tuition at lowest-priced colleges in the state; and average loan amount that students borrow each year.

The low level of student success in California community colleges is confirmed by data from the Chancellor's Office for the California Community Colleges. In 1995, out of the 1.4 million enrolled students, only 53,000 earned degrees, and only 24,000 earned certificates. The total number of degrees and certificates (77,000) is less than six percent of the number of enrolled students. Although some community college students are attending for personal enrichment, job improvement, or other non-academic goals, these students represent only a small percentage of students attending community colleges. The overwhelming majority of students indicate that transfer to a four-year college or university is their ultimate goal. The numbers suggest that the community colleges are not serving the needs of these transfer students. It is also fair to note that the community colleges have a responsibility to improve student persistence rates, course completion rates, and course success rates for all students, regardless of the reasons for taking courses.

Additional data from the Chancellor's Office (*The Effectiveness of California Community Colleges*, 1999) shows that of the total number of enrolled students who were retained¹¹, only 66.8% successfully¹² completed courses.

Table 1.2 contains a compilation of data on retention and success of community college students in individual classes in the fall of 1995. This table

¹¹ The retention rate is defined as the percentage of students who remain in the class and receive a grade out of the total number of students who were enrolled in the class.

¹² A "successful" student is one who completes the course with a grade of A, B or C.

shows that out of the 3,032,903 students who attempted credit¹³ classes, only 2,024,817 (66.7%) successfully completed those classes. (State Chancellor's Office MIS, 1999. See Appendix III.)

Table 1.2: Retention and Success in California Community Colleges by Discipline

Discipline	Fall 1994			Fall 1995		
	Successful	Attempted	% Successful	Successful	Attempted	% Successful
Agri./Natural Resources	15,855	21,165	74.9	17,661	23,235	76.0
Architect	6,017	8,493	70.8	4,144	6,074	68.2
Biological Sciences	64,475	100,531	64.1	62,408	96,463	64.7
Business & Mgmt.	160,698	248,054	64.8	146,782	225,904	65.0
Commercial Services	13,053	17,098	76.3	9,379	11,777	79.6
Communications	14,273	20,715	68.9	17,202	24,739	69.5
Computer & Info. Svcs.	74,660	116,134	64.3	79,717	123,361	64.6
Cons. Ed. & Home Eco.	53,502	75,095	71.2	80,586	111,589	72.2
Education	210,658	288,920	72.9	205,679	280,752	73.3
Eng. & Related Tech.	82,592	116,577	70.8	81,824	112,510	72.7
Fine and Applied Arts	166,763	235,288	70.9	162,777	228,610	71.2
Foreign Language	57,391	85,707	67.0	56,060	82,922	67.6
Health	67,287	81,339	82.7	65,672	79,971	82.1
Humanities (Letters)	270,216	411,621	65.6	260,998	397,535	65.7
Interdisciplinary Studies	178,671	266,342	67.1	174,769	262,346	66.6
Mathematics	142,167	266,946	53.3	140,371	263,792	53.2
Physical Sciences	76,233	116,431	65.5	73,791	113,378	65.1
Psychology	74,819	119,508	62.6	74,160	118,679	62.5
Public Affairs & Svcs.	103,224	137,926	74.9	82,363	107,240	76.8
Social Sciences	222,837	355,268	62.7	216,799	345,451	62.8
Other	12,969	18,208	71.2	11,675	16,575	70.4
Total	2,068,360	3,107,366	66.6	2,024,817	3,032,903	66.7

Table 1.2 also indicates that the lowest percentage of successful students occurs in mathematics. The low success rate of these students was the motivating factor behind the inclusion of mathematics as one of the focuses of this study.

Additionally, the table points to low student success in developmental English courses (Humanities). In the fall of 1995, the success rate in Humanities was 65.7%. In comparison, the success rate for all discipline courses was 66.7%.

¹³ Credit classes are those classes that a student takes and receives college credit for completing.

This data confirms that far too many community college students are unsuccessful in their attempts to pass their courses, making the phrase “revolving door” particularly apt (Tinto, 1994).

Unacceptably high student failure rates within California’s community colleges have been attacked by a myriad of strategies. However, system-wide reform efforts directed at improving student success rates have had little or no effect on those rates. The most recent California Community College initiative, Partnership for Excellence¹⁴, has injected hundreds of millions of additional dollars into California community college budgets over the last three years. The stated objective was to improve student performance. Data from the California Community College Chancellor’s Office (1999) indicates that three years of Partnership for Excellence funding has resulted in virtually no improvement in student performance outcomes. The California Community College system, therefore, faces a challenge in balancing student access (open door policy) with student success.

Importance of the teacher

The Little Hoover Commission (2000) discusses the case of a hypothetical student, Billy, with the following:

¹⁴ Partnership for Excellence is a mutual commitment by the State of California and the California Community Colleges system to significantly expand the contribution of the community colleges to the social and economic success of California. It is structured in phases, with substantial financial investment by the State in exchange for a credible commitment from the System to specific student and performance outcomes. (Partnership for Excellence Concept paper)

Billy says he learns very well when his teachers can help him connect with new materials, but does poorly when they cannot or do not. He is testimony to the significance that faculty play in student learning and success. The quality of community college teachers determines whether he, and millions of other community college students, learn new skills. (Little Hoover Commission, 2000, p.25)

Teachers are often the only link between students and their community college. Student contact with other college personnel is minimal relative to the time that they spend with teachers. Therefore, teachers are the primary vehicles through which the institution can positively impact the student. If teachers are not successful in reaching students, it is highly unlikely that other college representatives can fill the void.

Despite the importance of teaching, evidence suggests that it is not sufficiently supported at any level. The lack of appropriate and ongoing teacher training reinforces the notion that community colleges do not focus upon the quality of instruction. In the quote below, The Little Hoover Commission (2000) chides the California community college system for not helping to develop in its faculty the teaching skills that are essential to success.

The state needs our community colleges to develop lifelong learners, yet teaching quality has too often taken a backseat. Fostering lifelong learners will require a more explicit commitment to developing quality teachers throughout our community college system. The Board of Governors of the California Community Colleges recognized in 1991 that few faculty members come to our colleges prepared as skilled teachers, and few colleges devote resources to improve their faculty's teaching skills. Nearly 10 years later, University of California researchers assert that little has been done to remedy this critical problem. (p.ii)

Most college teacher training is the result of a haphazard trial and error process (Little Hoover Commission, 2000). While trial and error is a part of most meaningful learning, it can be dangerously selective when it is the sole method of learning. It limits the information novice teachers use to inform their practices and it may restrict their desire for more information, encouraging them to remain within their comfort zone.

Though the stated purpose of the teacher evaluation process is to improve instruction, evaluations have little impact in practice. Rather than providing the forum for meaningful discussions about teaching and improvement, current evaluation practices seem to discourage self-reflection and change. In general, even minimal evidence of classroom performance or student achievement satisfies evaluators (Cohen & Brawer, 1996).

Community college policy that is driven by concerns about access, but not by similar concerns for course completion or success (Grubb, 1999, p. 338), indicates a lack of focus upon the improvement of instruction at both the federal and state levels. Grubb underscores the concern that the community colleges have not accepted appropriate institutional responsibility for the improvement of instruction. The implication is that the community colleges are not sufficiently teaching-oriented.

The teaching and learning process is affected by numerous variables, including state support for education, student family background and support, quality

of curriculum, and institutional focus upon student support mechanisms. However, the quality of the classroom interaction between teachers and students must be our primary focus. Understanding and identifying the qualities of teachers who have high student outcomes will make a significant contribution to improving student outcomes overall.

Institutional support

Because of the paramount importance of teaching, support for quality teaching should be infused throughout the community college system, explicitly and symbolically. G. Norton Grubb (1999) of the University of California, Berkeley, echoes this concern, stating that teaching has never been afforded the pre-eminent status it deserves. While a number of activities have been instituted to support teaching efforts at community colleges (professional development, evaluation, formation of academic senates), the impact of these activities on teaching practices is not well understood. Not only does the teaching process need to be explored, its context needs to be investigated as well because its impact on teaching.

Literature indicates that the institution significantly impacts a faculty member's teaching effectiveness (Bolender, 1997; Cohen, 1996). Grubb (1999) advocates a greater look into community college teaching, stating that looking at institutional practices to improve the quality of teaching "can help reconcile the conflicting demands on community colleges" (p. 554).

The need for community college teacher development

The Little Hoover Commission (March 2000) calls attention to the lack of teacher development as a primary shortcoming of the community college system. Without a statutory requirement for teachers to participate in teacher training of any kind prior to employment, the responsibility for the professional development of newly hired teachers falls to the individual colleges. There is little evidence that the programs developed have had any effect upon improving instruction or student outcomes.

The state budget for community colleges includes a specific category for staff development. Typically, each community college charges a committee with responsibility for overseeing professional development activities and the expenditure of staff development funds. This oversight includes the development of activities for first year teachers.

A review of staff development programs at the community colleges reveals a focus upon logistic concerns, such as parking accommodations, copy machine privileges, and internal processes and procedures, rather than classroom interaction between teachers and students. Few of the community colleges have developed programs directed toward teaching and the improvement of instruction. To the extent that they have developed such programs, none have incorporated research of teachers with high student outcomes or institutional support for teaching.

Cross (1986), Grubb (1999), and others have asked how newly appointed teachers can be expected to improve without a commitment to the support and improvement of teaching at the community colleges. In the absence of a formal teacher-training requirement, and without institutional commitments to the ongoing support of teacher development, teachers are left to their own devices as they struggle to improve. The development of a teaching and learning improvement process, grounded in research and presented by practitioners, holds the promise of significantly improving the way that we support teacher development.

Focus of the Teaching and Learning Improvement Project

In order to address the problem of low student success, this project focused upon three components: teaching practices, institutional support for teaching and learning, and teacher development in the context of a Teaching and Learning Institute for new faculty as a key component of staff development activities.

Addressing the problem: Teaching practices

In the first component of the study, Christian established a methodology for measuring high student outcomes, and investigated teaching practices linked with those outcomes. She identifies the observable and reported behaviors and characteristics in teachers that lead to high student outcomes (high student retention rates, high student success rates, and success in subsequent courses) in sequential developmental mathematics and English writing classes.

Table 1.3: Retention and Success in Project Colleges—Fall 2000

Retention and Success--Fall 2000					
		College A		College B	
		Retention	Success	Retention	Success
Math	Prealgebra	80%	59.90%	82%	61%
	Elementary Algebra	75.50%	54.60%	78%	58%
	Intermediate Algebra	70.10%	50.40%	70%	55%
English	Basic Writing Skills	88%	70%	80%	58%
	Introductory Composition	85%	75%	80%	60%

Christian's investigation addressed the following questions:

1. What are the common observable characteristics of faculty who have high student outcomes (retention in a course, success in a course, success in a subsequent course in the sequence)?
2. What is the training and background of faculty who have high student outcomes?
3. What do faculty with high student outcomes report as being the activities outside the classroom that promote student success?

Addressing the problem: Institutional support

In the second component of the project, Bedard explored the perceptions of those teachers to uncover how they were supported by their colleges, and how they navigated institutional obstacles, while remaining effective teachers. This

perspective was an integral part of the project because it is so often left out of discussions about the improvement of teaching.

Bedard's investigation focused on the following questions:

1. How do teachers with high student outcomes perceive the support of their college?
2. How does faculty evaluations support teaching?
3. How does professional development support teaching?
4. How does the academic senate support teaching?

Bedard examined the three mechanisms explicitly designed to support and enhance teaching at community colleges: faculty evaluation, faculty development, and academic senate support of teaching. By doing so, we can better understand the impact that these processes have on the improvement of teaching, and the ways that these processes enhance teaching efforts and improve student outcomes.

Addressing the problem: An institute for teacher development

In the third component of the project, Simpson addressed the following questions:

1. What are the perceptions of newly appointed faculty members regarding the value and effectiveness of orientation activities?
2. What are the perceptions of newly appointed faculty members regarding teaching improvement staff development activities?

3. How can the project investigations of faculty with high student outcomes and institutional support be utilized to improve new faculty development efforts?
4. How can this information be used to drive the ongoing and continuous improvement of staff development efforts aimed at teaching and learning?

Simpson investigated effective staff development principles and collaborated with staff development committee chairs to establish activities for first year teachers based upon research findings. In addition, staff development planning and scheduling processes were examined to determine their impact on faculty participation.

By engaging in this research, we can begin to understand the factors that determine both participation and effectiveness of the program of events established for first year teachers. First year teachers, staff development personnel, and project team members were all part of the effort to establish and maintain an effective teaching and learning improvement process.

Teaching and Learning Improvement Project Products

The findings from this action research project will benefit the following:

1. Faculty members will benefit, especially those participating in this study, by learning about effective teaching practices and how to garner institutional support for their efforts.

2. Administrators will benefit by learning how to encourage and support effective teaching practices, and how to implement and assess teacher-training efforts.
3. Most importantly, students will benefit from the study because community college faculty members will have an enhanced understanding of effective means of improving student success through the improvement of instruction.

CHAPTER TWO: CONCEPTUAL CONTEXT

This chapter discusses the conceptual contexts of the Teaching and Learning Improvement Project's component studies: Teaching practices, Institutional support and the Teaching and Learning Institute.

Teaching Practices Component

The teaching practices component has been organized under three themes:

- ~~✎~~ Student Retention, persistence and success
- ~~✎~~ Measurement of student outcomes
- ~~✎~~ The quality and effectiveness of instruction

The goal of the study is to increase student retention and success; hence, existing research and findings related to student retention in college, particularly the community college, are discussed first and are then followed up with a definition of student outcomes. Finally, the discussion will show that the teacher is a key factor in student success and will thus lay the foundation for the deliberations on institutional support and establishing a Teaching and Learning Institute, which appear later in the chapter.

Student retention, persistence and success

Student retention and success in community colleges has been an ongoing source of concern for scholars and practitioners. The two major works on student retention and persistence in college come from Alexander Astin's (1984) theory of student involvement and Vincent Tinto's (1975, 1993) interactional theory of social

and academic integration.¹ Astin posits that a student's involvement (actual student behavior and not mental thoughts and feelings) in college life contributes to persistence, and noninvolvement to departure. Tinto concludes that the more students are integrated with their peers (social integration) and with faculty (academic integration), the greater the chance that the students will persist in their education. Therefore, both scholars identify involvement and integration as central to college student success.

Furthermore, Pascarella and Chapman (1983) suggest that social integration and academic integration have different impacts: social integration has a stronger impact on student persistence in four year residential schools, while academic integration has the strongest impact in two year commuter schools. In a four-year residential school, most students are straight out of high school and because they live on campus, their lives mainly revolve around the courses that they take and the other extracurricular and social activities that involve peers. Most of these residential students do not have much social interaction beyond the walls of the institution; therefore, it is important that these students are connected socially.

However, the community college story differs. A large percentage of the student population has other commitments, whether off-campus work or family caretaking. Students often attend school part time and have full time jobs to which they must rush after classes. Data from the state chancellor's office (Appendix II)

¹ It should be noted that most of Astin and Tinto's work focuses on the four-year school rather than the community college.

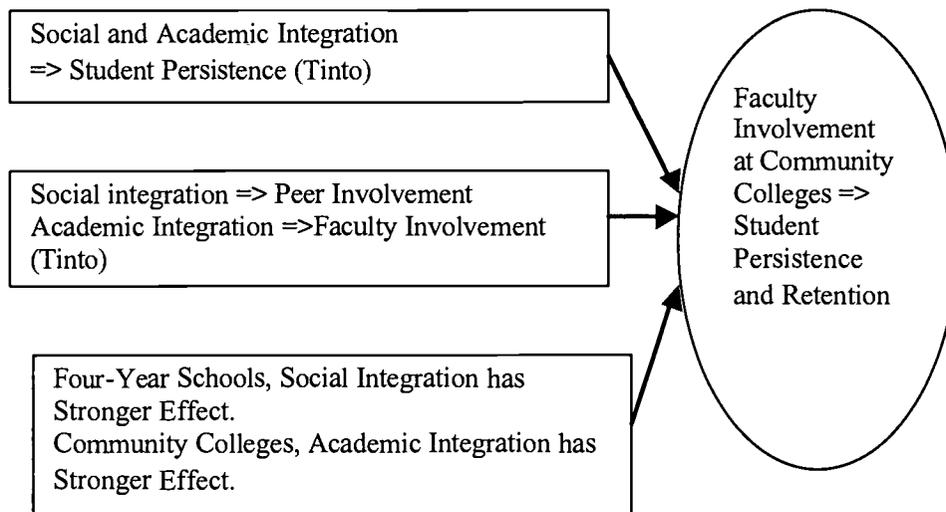
confirms that 45.8 percent of community college students are enrolled in less than six units (2000). For these reasons, community college students do not have an incentive to stay on campus beyond the classes they take. Further, they do not rely on the campus for opportunities to socialize with peers, as do their counterparts in four-year residential schools. They simply have other commitments and priorities. Therefore, the one factor that clearly links community college students to the campus is the class or classes that they take. This implies that the classroom interaction between faculty and students has profound implications for the retention and persistence of community college students. Student retention is determined, in large part, by the student's connection to the faculty member and the classroom.

Richard Halpin (1991) confirms Pascarella and Chapman's argument by demonstrating that academic integration has a greater influence on community college students than social integration. Halpin applied the Tinto Model that had been discussed earlier, and which has been shown to have predictive validity for student persistence at four-year residential schools, to an "open-door, non residential, comprehensive community college." Halpin conducted a survey of 381 full-time freshman enrolled in academic degree programs in a community college in rural New York and concluded that:

In this study, the factors that made the greatest contribution...were Faculty Concern for Teaching and Student Development, Academic and Intellectual Development, and Interaction with Faculty...The academic and faculty themes in these results suggest primary importance of the academic integration construct when applied to this population. (p. 30)

The diagram given below summarizes the argument that faculty involvement with students is a critical factor in student persistence at the community college level.

Figure 2.1: Faculty Involvement and Student Persistence



Since the purpose of this study is to increase student retention and success in a community college, it should naturally focus on the academic integration of students. A key factor that influences academic integration is the faculty.

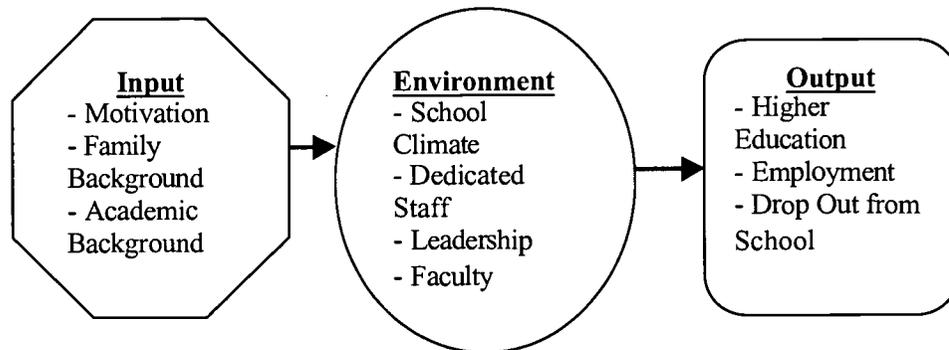
Measuring student outcomes

In order to discuss teaching impact, we need to look at models for measuring student success. The Input-Environment-Output/Outcome (IEO) model has been used as a conceptual framework for many decades to study student development.

Input refers to the characteristics of the student at the time of initial entry to the institution; *environment* refers to the various programs, policies, faculty, peers, and educational experiences to which the student is exposed; and *outcomes* refers to the student's characteristics after exposure to the environment...The basic purpose of the model is to assess the impact of various environmental experiences by determining whether students grow or change differently under varying environmental conditions. (Astin, 1993, p. 7)

The diagram given below gives a schematic representation of the IEO model.

Figure 2.2: Input-Environment-Output (IEO) Model



Normally, when students are high achievers in high school and come from a long history of family members who have been successful in college, it is reasonable to expect those students to succeed in college. In other words, the output/outcome of the student largely depends on the input. The question then is to delineate the effects that the institution (environment) has on the students from the qualities and attributes that the students bring with them on entry. This institutional effect is termed impact, i.e. the environment (institution) produces an outcome that could not have been predicted by the input. Community colleges have the potential of having a higher impact on students than four-year institutions primarily because the four-year

schools start with a strong input. A strong output should therefore be expected from students emerging from a community college environment.

The profile of the incoming students at the community college (input) is hard to capture mainly because of the high level of diversity among the students. The incoming freshman at the community college can be as diverse as a traditional student right out of high school who is highly motivated and a high achiever, to a single-mom with three children returning to school after twenty years. As opposed to the four-year institution where the input or profile of students is similar, the community college has students of all ages, with different levels of academic preparation, different ethnic and social backgrounds, etc. Further, community colleges have a diverse and ever expanding mission:

- preparing students to transfer to four-year schools
- preparing for the workforce
- providing remedial education.

This diversity in students and diversity in the mission² of the community college makes it challenging for the institution as a whole, and for faculty in

² By law, the California community colleges shall admit any California resident and may admit anyone who is over 18 years of age and who is capable of profiting from the instruction offered. The colleges may also admit any nonresident, possessing a high school diploma or the equivalent thereof.

Primary missions of the colleges are to offer academic and vocational education at the lower division level for both younger and older students, including those persons returning to school. Another primary mission is to advance California's economic growth and global competitiveness through education, training, and services that contribute to continuous work force improvement. Essential and important functions of the Colleges include: remedial instruction for those in need of it and in conjunction with the school districts, instruction in English as a second language, adult noncredit instruction, and support services which help students succeed at the postsecondary level. Community

particular, to be effective. The unpredictability of the input—student—into the classroom makes it challenging for the researchers to isolate the impact that faculty have on outcome based on retention and success.

Even though the discussion so far has focused on retention, it is important to keep in mind Astin's argument in his article, "College Retention Rates are Often Misleading" (1993). The final outcome in terms of retention rates is not by itself an accurate indicator of the performance of the institution. Using the input-output model, Astin argues that the outcome (student retention) is often dependent upon the academic preparation of the incoming student (input). He argues therefore, that retention rates could be more of a predictor of the characteristics of the incoming freshman than it is the quality of the institution. He then proceeds to develop a formula to compute the expected retention rates of an institution, which is different from the actual retention rate. The difference between the two values is a better predictor of the effectiveness of the institution. This argument of Astin's must be taken into consideration for a future study.

Quality and effectiveness of instruction

Most of the literature on the quality of instruction in higher education focuses on teaching styles and pedagogies, but does not link the styles and pedagogies to student outcomes. Vincent Tinto has shared some empirical evidence about effective

Services is designated as an authorized function. To the extent that funding is provided, the colleges may conduct institutional research concerning student learning and retention as needed to facilitate their educational missions.

[<http://www.cccco.edu/mission.htm>]

teaching in remedial classes in his work on learning communities. A learning community groups students in a variety of ways with the intent that the group or cohort of students will benefit from *shared knowledge*³ and *shared knowing*⁴ (Tinto and Riemer, 1998). The New Student House program study done by Tinto, Goodsell and Russo, 1994, at LaGuardia Community College examines the effectiveness of the learning community model on developmental education (Tinto & Riemer, 1998). The New Student House program includes six courses with any student in the cohort taking four of the six courses depending on the level of their developmental needs. The study found that:

- Participation in the learning community enabled students to develop a network of supportive peers that helped students make the transition to college and integrate them into a community of peers that helped students make the transition to college and integrate them into a community of peers.
- The shared learning experience of learning communities did more than simple cement new friendships; it served to bridge the academic-social divide that typically plagues student life.

³ Shared knowledge: By organizing the shared courses around a theme or single large subject, learning communities seek to construct a coherent first year educational experience that is not just an unconnected array of courses in, say, composition, calculus, modern history, Spanish, geology. In this was, students come to share, as a community of learners, a body of knowledge that is itself connected. (Tinto & Riemer, 1998, p. 4)

⁴ Shared knowing: By enrolling in several classes together, students come not only to know each other quickly and fairly intimately in a way that is part and parcel of their academic experience, but also come to share the experience of trying to know or learn the material of the shared courses. (Tinto & Riemer, 1998, p. 4)

- The students in the New Student House had higher peer and learning activity scores and they also persisted at a higher rate than did comparison group students.

While Tinto talks about the effectiveness of teaching through learning communities, Norton Grubb (1999) looks at teaching at the community colleges by extensively interviewing faculty and administrators and observing classes. However, his work mostly evaluates teaching as being effective or not effective based on the observed engagement of students in the classes and from interviews with teachers about standards and student achievement.

Grubb also notes that it is common to find instructors who speak the “language of good teaching,” but do not demonstrate it in practice (Grubb, 1999, p. 9). He points out that over the last ten to fifteen years, there has been a shift among faculty to support the student-centered approach to teaching and to declare that the traditional lecture method is inadequate. Although they talk about the student-centered approach, faculty continue to practice the traditional lecture style of teaching in their classrooms. Although Grubb does not attempt to look at teaching effectiveness from a student outcomes perspective, he makes a compelling argument about what makes an effective teacher within each of the three pedagogical styles (teacher-centered⁵, student-centered⁶, student support⁷) that he uses to group the

⁵ Teacher centered: The first and most common approach, now and in the past goes by different labels—behaviorist, passive, teacher-centered, didactic, or simply “the conventional wisdom”. (Grubb, 1999, p. 28)

majority of the faculty he observed and interviewed. The only argument he makes to link teacher quality to outcomes is that mediocre teaching increases student dropout rate.⁸

Although Grubb (1999) points out that most of the data available at the community colleges are related to enrollment and not to outcomes, there is a growing recognition and trend within the system to gather data related to outcomes. The accreditation commission, Western Association of Schools and Colleges for Junior Colleges (WASCJC), revised the standards for evaluating and accrediting institutions to include a new standard on institutional effectiveness⁹. This standard basically makes student and institutional outcomes the centerpiece in all institutional planning and budgeting. With the accreditation commission heavily emphasizing outcomes and society calling for accountability, it appears timely to define student outcomes,

⁶ Student centered: This approach has also been called “progressive,” “constructivist,” “student-centered,” or “andragogy” (for adults, in contrast to “pedagogy,” for children), or “learning” (contrasted with teaching). Other have labeled it “holistic” because of its whole-to-part practices, or simply the alternative to conventional wisdom. (Grubb, 1999, p. 31)

⁷ Student support: those providing advice to teachers have sometimes mentioned a third approach to pedagogy, and a few instructors emphasize this kind of teaching. The approach we label “student support” assumes that if students are given enough encouragement, they will develop into autonomous individuals (“empowered,” in the current jargon. (Grubb, 1999, p. 35)

⁸ He correctly argues that the community colleges have extensive data on enrollments but they do not have sufficient data on outcomes

⁹ Standard Three: Institutional Effectiveness--The institution, appropriate to its mission and purposes as a higher education institution, develops and implements a broad-based and integrated system of research, evaluation, and planning to assess institutional effectiveness and uses the results for institutional improvement. The institution identifies institutional outcomes, which can be validated by objective evidence. [<http://www.accjc.org/Standard.htm>]

and to link the outcomes to teacher qualities/characteristics and behaviors that lead to high student outcomes, looking at outcomes from an empirical perspective.

In summary:

~~✍~~ Student retention and success in a community college depend on the faculty in the classroom because often faculty members provide the only link between the student and the institution. Therefore, attention and emphasis must be placed on the practices of the faculty.

~~✍~~ There is little empirical evidence in the literature on what teaching practices or teacher characteristics produce high student outcomes. Therefore, this component of the study will fill that void in the literature, and will link teaching practices to student outcomes.

Institutional Support Component

Any effort to improve teaching and learning must center on the teacher. This section will illustrate the importance of considering the institutional context as well. It examines the literature on the three mechanisms designed to support teaching efforts at the community college: evaluation, faculty development, and academic senate.

Identifying effective teachers and garnering their practices is not enough for long-term, systematic improvement of instruction. The environment of the community college and the ways it helps or hinders the teaching-learning process needs to be examined as well. Boyd (1992) suggests that each school environment possesses four dimensions: *ecology* (physical, material objects); *milieu* (social dimension created by character of groups/persons); *culture* (social dimension created by beliefs, values, cognitive structures, meaning), and *social systems* (social dimensions created by relationships). All of these profoundly shape faculty and their behavior (Bolender, 1997; Cohen & Brawer, 1996). Because of the interdependent nature of schools, instructional improvement demands the participation and commitment of everyone in the institution.

An institution's administrative functions vary, including recruiting, physical plant issues, and student services to mention a few. Colleges must maintain explicit procedures in order to organize, coordinate, and communicate these kinds of activities (Blau, 1994). And while these functions may be necessary, they often

create the feeling of a factory assembly line (Cohen & Brawer, 1996), creating friction with faculty because “teaching and scholarship are in important respects akin to art and literature than to the responsibilities of most other kinds of work organizations. They need freedom to explore, do not lend themselves to routinization, and cannot easily be regulated by administrative procedures” (Blau, 1994). As a result, mistrust often lurks beneath the surface of faculty/administrative interactions because of the inherent conflict between these two styles (Wilms & Zell, 2000).

Indeed, studies about faculty attitudes toward the administration confirm this conflict by revealing the kinds of issues that lead to faculty dissatisfaction (Cohen & Brawer, 1972, 1996):

- ~~✎~~ The administration does not support the efforts of its faculty.
- ~~✎~~ Faculty has to contend with too much red tape in order to get things done.
- ~~✎~~ When faculty members were asked what they like least about their job, they cited high workloads and the unavailability of aid.
- ~~✎~~ London (1978) found that, when looking at one community college, faculty members did not have a voice in determining policy about the admission of marginally qualified students; they questioned the open-door policies; and their morale was affected negatively by having to teach poorly prepared students.

~~Seidman~~ Seidman (1985) found the same dismay with institutional policies when sampling a broader sample of faculty.

Other factors that have been mentioned as adversely affecting teaching practices include: mechanical and impersonal approaches to teaching, bureaucratic structures that are inflexible, and a simplistic managerial conception of education as an output that can be produced more efficiently by increasing students per paid man-hour (Cohen & Brawer, 1972, 1996).

This portrait of faculty and administration interaction suggests that the institution may not be as focused on teaching as it should be, at least through the faculty's eyes. This component of the Teaching and Learning Improvement Project will explore the perspective of teachers with high student outcomes and their insights for improving institutional supports. In order to do this, the study will focus on three primary mechanisms in place at community colleges to support teaching: evaluation policies and practices, faculty development efforts, and the academic senate.¹⁰ Ideally, these three elements would work in unison to create better learning environments, a teaching-learning culture. The literature, however, points to a paradoxical portrait, one in which these mechanisms have been established and accepted, sometimes enthusiastically, yet seem to fall short in producing significant evidence of improved student learning.

¹⁰ These three elements are identified throughout the literature as being critical to the improvement of teaching (Grubb, 1999; Cohen and Brawer, 1972, 1996; Roueche, 1993).

Evaluation policies and procedures and their impact on teaching

Because “the teacher is the key...to the outcome of the teaching and learning experience” (Roueche & Roueche, 1993, p. 101), it makes sense to place emphasis on policies and procedures to make sure that instructors are fulfilling their mission. Along with faculty development and the academic senate body, evaluation practices are instituted to help ensure that student learning objectives are being met. While most evaluation guidelines are the result of collective bargaining agreements (McGee, 1995) and are limited in scope, they have the potential to affect teaching profoundly. They can enhance faculty teaching efforts and improve school communication when they are used to direct faculty teaching practices and improve instruction (Cohen & Brawer, 1972). Evaluation policies also serve intuitively sound purposes including: helping faculty teach effectively, evaluating what is going on within the confines of the classroom, assessing what is working and why, assisting teachers in understanding how to make better decisions, and aiding them with juggling the many concerns of teaching (Darling-Hammond, 1994). Additionally, when evaluation is coupled with remedial action and professional development, it can be particularly effective at improving instruction (Nolte, Legate, & Schaus, 1997).

Before determining the effectiveness of current evaluation practices, an examination of the kinds of evaluation presently used at community colleges would be helpful. Evaluation falls into two general categories, depending on its particular

purpose. Summative evaluation is generally conducted to make personnel decisions. For example, a faculty member new to a college may be evaluated at the end of each year, until he/she is granted tenure. At that point, summative evaluation procedures usually occur every three or four years as a procedural process. Formative evaluation, on the other hand, is meant to provide feedback specifically to inform teaching practices and determine faculty development offerings. While some feel that summative and formative processes are contradictory in nature and should not be used together because of their conflicting goals, others feel that they must be used jointly and that they only enhance each other when conducted effectively and fairly (Centra, 1993; Cohen & Brawer, 1996; Grubb, 1999; Licata & Andrews, 1990). Indeed, proponents of combining the elements see formative practices as guiding the faculty, and summative elements ensuring that change occurs. Centra (1993) posits that evaluation will only be effective when the teachers is provided new information, valuable feedback, how to change, along with motivation for changing. Only when all four elements are supported by policies will a school see maximum change.

Generally, there are four kinds of feedback used with either system: student evaluation, self-evaluation, colleague evaluation, and administrative evaluation (Cohen & Brawer, 1972). Each has something to offer, but as the following research will show, none has demonstrated improved student learning.

Evaluations by students

Cohen (1980) conducted a meta-analysis on the effectiveness of student ratings as a feedback mechanism and discovered that they were generally accurate and effective at providing useful feedback for teaching improvement. When the student feedback was coupled with faculty consultation with a colleague, that feedback was even more effective (Brinko, 1991). Centra (1993) found that student feedback is reliable: student ratings are similar within a class and they also tend to agree over time. However, Menges (1991) sees three problems with student feedback: faculty have a difficulty in understanding responses and their implications for their teaching; faculty often discard results because they have little or no input into the questions or procedures; and faculty ignore them because of the judgmental nature of evaluations. Additionally, faculty members are often pessimistic about student evaluations because they wonder how qualified students are to judge good teaching from bad teaching (Sacks, 1996). While faculty may or may not want student feedback, no one has proven whether student evaluations are indications of learning (Cohen, 1998).

Self-evaluations

Some consider the reflective nature of self-evaluations to be the most critical for teaching improvement (*Faculty development policy guidelines*, 1990; *Towards a model four year tenure process*, 1990). Yet, Centra (1993) found that most faculty overestimate their teaching abilities, making self-evaluation procedures

congratulatory in nature, rather than reflective. He feels that self-evaluation practices are not meaningful, lack validity and objectivity, and can become a justification for not improving (Centra, 1993).

Evaluations by administrators

Evaluations by administrators are probably the least-respected by faculty for a number of reasons. The faculty often views the administration with a suspicious eye, making an evaluation suspect if it is critical. Additionally, administrator evaluations are judged to be unreliable and uninformative because faculty feel that administrators do not have a sense of what good teaching looks like (Grubb, 1999).

Evaluations by colleagues

Researchers hold colleague evaluation in the highest regard, claiming it is critical for faculty growth (Centra, 1993; *Faculty development: A senate issue*, 2000). In addition to providing valuable feedback to the faculty member, it promotes collegiality at the work site (*Faculty development policy guidelines*, 1990). The varieties of colleague evaluation processes can meet the varying needs of instructors, with mentoring, master faculty meetings, and one-on-one interviews (Centra, 1993). However, Redmon (1999) found that even when these approaches are conducted jointly, they often fail to improve teaching because of their procedural nature. Instead, evaluation practices ought to proceed from a developmental perspective. Having teachers maintain portfolios and tracking their growth over time would be more personal, and thus more meaningful to the faculty member.

The research studies suggest that the evaluation policies and procedures found at community colleges may not improve and support teaching significantly for a number of reasons:

1. They do not seem to focus sharply on the student and his/her learning. Instead, the practices rely on the perceptions of the faculty and administration. Cohen and Brawer (1972) found that “the teacher’s performance, not his effect, is assessed” (p. 186). In fact, the only evaluation program that included student outcome data as part of the evaluation process was one Brock, Chrestman, and Armstrong (1998) described, in which the faculty maintained portfolios. Part of the faculty member’s portfolio (10% of the “score”) included student retention data. In order for faculty to get the maximum of 10 points for that part of the portfolio, they had to supply the data that showed their current year’s student retention numbers were greater than the average of the previous three years. Not meeting that goal resulted in a lower point allocation. Along those same lines, Tell (2000) reported the efforts of William L. Sanders from the University of Tennessee, who was developing a rating system based on student outcomes—how student scores changed over time. This approach emphasizes the value-added effect—how much is the school improving student test scores.
2. Evaluation practices do not seem to encourage faculty involvement. Even if the school attempts to provide student learning data to the instructor, it is

often ignored because “few instructors will accept data about their students from anyone else” (Cohen & Brawer, 1996, p. 384). Also, some faculty members simply do not want to participate in conversations about teaching. For example, one former community college member decried efforts to focus on “arcane issues of educational pedagogy ... since I don’t consider myself an ‘educator’ by training or by sentiment.” (Sacks, 1996, pp. 68-69). Indeed, instructors have been provided with information on the limited effectiveness of lectures, yet most still use them as their primary mode of instruction (Centra, 1993). Veteran teachers are least likely to participate in faculty development opportunities, in part because the current tenure system does not endorse faculty development efforts. The tenure system, as it exists today, “assumes that once an individual has been deemed fit for teaching, he or she will stay that way” (Grubb, 1999, p. 291).

3. The information generated from evaluation practices does not seem to provide useful feedback for improvement. Because most evaluation practices tend to consist of “amorphous, sporadic monitoring ... by department chairs, deans, accreditation teams, and peers,” they are “of little consequence” (Cohen & Brawer, 1996, p. 325). Cross (1986) found that teachers do not find ratings very helpful for improving assessment. Findings are rarely stated specifically enough or evaluated soon enough to permit useful feedback about changes in students (standardized forms) (Bangura, 1994; Menges,

1991; Wilms & Zell, 2000). In sum, “failure to understand how to change is probably what most frequently prevents significant improvement” (Centra, 1993, p. 11).

Clearly, while improved student outcomes are the stated objective of the community college and its evaluation system, they are not being addressed. Even if instructors are provided with the data on student outcomes, they have a difficult time discerning why students are not learning (Murray, 1997). Current evaluation practices seem to offer minimal benefit to faculty (little quality feedback) or to the institution (little impact on the quality of instruction).

Faculty development and its impact on teaching

For some teachers, the evaluative and reflective nature of teaching comes naturally; they seek out opportunities to strengthen their teaching. The institution has a responsibility to continue to nurture that growth with its policies and practices, and to provide opportunities for those who may not value traditional professional development offerings. Professional development programs can take many forms: discipline-based institutes, release time, sabbatical leaves, and tuition reimbursement for instructors to spend time in a university-based program, as well as short courses for workshops on pedagogy sponsored by single institutions or by institution consortia (Cohen & Brawer, 1996). Because these efforts emerge from the community college’s mission (*Faculty development policy guidelines*, 1990), they should strive to support teaching excellence. Ideally, the focus of these efforts would

flow from evaluation findings to help a faculty member reach his/her potential as a teacher and as a member of the institution. Discovering whether they do or not is a goal of this review of the literature.

When Grubb (1999) asked community college administrators how their institution supports good teaching, they responded that the identity of the institution as a teaching center was the most profound influence on teaching, with staff development efforts as the second most important way community colleges support teaching. Like evaluation, administrators and faculty see professional development as an important part of the institutional environment.

Gullatt's research (1997) suggests that quality faculty development should meet the following eight criteria:

1. It should be driven by student outcomes;
2. It should involve faculty in identifying what they need to learn;
3. It should be school-based and integral to institutional operations;
4. It should enhance individual learning, but include collaborative problem-solving;
5. It should be continuous and ongoing;
6. It should encourage faculty to systematically evaluate themselves using multiple sources;
7. It should help teachers develop a theoretical understanding of the knowledge and skills that need to be learned;

8. It should be integrated with the school's change process.

Unfortunately, the faculty development efforts seen at community colleges do not fit this picture. Several factors seem to be missing:

1. Efforts may not center on student learning. In fact, Grubb (1999) states that they seldom focus on teaching Faculty development efforts do not aim for outcomes based objectives because too many uncontrollable variables may act to diminish results and failure to achieve the objective may generate untoward criticism (Cohen & Brawer, 1996).
2. Efforts may not be continuous. Gullatt (1997) mailed questionnaires to the directors of institutional research at 225 randomly selected private and public higher education institutions, with a 52% response rate. These responses indicated that most of the professional development efforts at these colleges involved guest speakers and brown bag lunch endeavors. Confirming that finding, Grubb (1999) identifies most faculty development endeavors as one-shot efforts, conducted by outsiders. They do nothing to generate a culture within the institution to support teaching. Instead, they provide instant inspiration with no lasting effort
3. Efforts may suffer from vague goals. In November 1999, the California Academic Senate surveyed local senate presidents to gather information about current practices involving faculty development. While only 20% responded, the responses revealed that administrators felt that the senate was

not very involved with faculty development and the presidents were unclear of their role with faculty development. In addition, respondents indicated that the staff development committee structures were problematic and had little information about funding (*Faculty development: A senate issue*, 2000).

4. Efforts may not encourage significant faculty involvement. The same study of the local senate presidents revealed that the faculty were not involved in designing programs, and efforts suffered as a result (*Faculty development: A senate issue*, 2000). Faculty members are made the objects of activities largely initiated and conducted by others: lectures and demonstrations, award ceremonies, workshops and seminars, consultations, observations, and structured conversations (Hargreaves, 1994). In short, faculty members are likely to be acted upon, rather than serve as actors, creating an atmosphere of apathy about professional development efforts. Additionally, most faculty think others need the help (Maxwell & Kazlauskas, 1992). With a questionnaire survey of 296 community college teachers, Maxwell and Kazlauskas discovered that 92% considered their teaching to be above average. Studies reveal that, even if instructors thought their teaching needed improvement, veteran teachers often feel that it is better to continue using the “tried and true,” than risking failure with something new (Guskey, 1988).

Grubb (1999) characterizes the current state of faculty development programs at community colleges as “formulaic, contrived, and often not focused on teaching”

(p. 285). Like evaluation efforts, the situation with faculty development represents a situation where people support a process in theory, yet the approach remains relatively ineffective, impacting those needing it the most marginally (Maxwell & Kazlauskas, 1992).

The academic senate and its impact on teaching

When looking at the support mechanisms at community colleges, the academic senate must be examined as well because it is composed of faculty, those who have the most contact with the student. These faculty leaders are in a position to know what teachers need, and are part of a structure that can respond to those needs. The senate's connection with evaluation and faculty development is an inescapable one because it is the body overseeing faculty development and portions of the evaluation process. The academic senate idea is an important one because the "involvement of teachers in educational change is vital to its success, especially if the change is complex and is to affect many settings over long periods of time" (Hargreaves, 1994, p. 11). Therefore, the researcher wanted to investigate the history and effectiveness of this evolving body.

The modern-day academic senate was born with Assembly Concurrent Resolution #48 (introduced by California Assemblyman Charles Garrigus) in 1963. This resolution gave senates legal recognition and a specific jurisdiction, academic and professional matters (Conn, 1997). Later, in the 1980's, California legislators wanted to give the academic senate more voice; in doing so, they hoped to create a

more professional body. The legislature stated that “it would be an unsound and wasteful policy to expend moneys to professionalize faculty without first making the program changes necessary to enable that faculty to have a more effective role in the educational process” (Mira Costa, 1990, 23). In 1988, this move resulted in Assembly Bill 1275, which shifted governance from a shared structure to one more participatory in nature (Alfred, 1998). In other words, faculty members were no longer merely kept abreast of situations, but were to have an active role in making decisions. Strengthened with the passage of AB1275, the Academic Senate’s primary commitment remained teaching. Its resulting academic and professional responsibilities include:

1. The improvement of teaching.
2. The maintenance of current academic and technical knowledge and skills.
3. In-service training for vocational education and employment preparation programs
4. The retraining of faculty to meet changing student needs.
5. Intersegmental exchange programs.
6. The development of innovations in instructional and administrative techniques and program effectiveness.
7. Computer and technological proficiency programs.
8. Courses and training implementing affirmative action and upward mobility programs.

9. Other activities determined to be related to educational and professional development (AB1725 Article 5).

As a result of AB1725, the faculty was given responsibilities and voice with areas they had experience with. Yet the academic senate, like evaluation and faculty development, fell short of reaching its goals, despite the best of intentions. The problems are similar and include:

1. A system in which a governing body is given latitude for making policy, but is not held responsible for the results of that policy. The senate is not held accountable when it runs inefficiently and does not respond to the campus climate issues (Guffey & Rampp, 1997). Indeed, Grubb (1999) finds no evidence that ANY collectives of faculty, including senates and unions, have had any influence on teaching. Fearing that academic senates were not fulfilling their promise as agents of change, California legislators pushed “to foster the creation, implementation, and phase-in of a comprehensive community college accountability system which describes the performance of community colleges meeting the postsecondary educational needs of students” (Sec. 11.5 Section 71020.5 of CA Education Code). This has yet to be devised.
2. The academic senates may not be operating with clear directives. A study conducted by the State of California Academic Senate found that the senate was not as involved on campus as originally hoped and the senate president

was unclear about the role the senate should take (*Faculty development: A senate issue*, 2000). Instead, researchers have noted, the focus of senates tends to be on the protection of staff rights, satisfaction, and welfare, appearing as another labor organization on many campuses (Cohen & Brawer, 1996). Hargreaves (1994) sees the academic senate as another contrived way of securing effective implementation of a piece of externally introduced change.

3. Relationships between senate members, as well as relationships with other groups and persons on campus, may interfere with senate endeavors (Boyd, 1992). Faculty and administration have historically mistrusted each other (Wilms & Zell, 2000) and those mental models can serve as obstacles to effective communication (Boyd, 1992). As a result, the norm of interaction outside of the senate is merely replicated within the senate (Boyd, 1992). People divide into factions, “Balkanizing” the school, instead of uniting it around a common goal—improved student outcomes (Flanigan, 1994; Hargreaves, 1994).

Apparently, the senate structures in community colleges may not be as effective as originally conceived. This is supported by Flanigan’s research (1994) which revealed that when the CEO’s and academic senate presidents were asked about the progress of the senate on their respective campuses, they overwhelmingly

felt that not much had changed on campus since AB1725. To add to that, Cohen and Brawer (1996) suggest that what has changed is that decision-making has slowed.

This review of the literature illustrates a compromised system, one in which intuitively sound notions have fallen short of their stated objectives (evaluation, faculty development, and the academic senate). Consequently, the system is not fully able to support teaching efforts. Designing and implementing any initiative to improve teaching and learning must take into account the enormous influence of the institution and its policies. The Teaching and Learning Improvement Project does that by incorporating the attitudes and practices of the teachers who have successfully navigated the system. This feedback will offer possibilities for revising that system so more teachers and students can benefit from it.

Teaching and Learning Institute Component

The need to provide the opportunity for newly appointed teachers to learn the skills necessary for success has been fully demonstrated. This section will show that collaboration between institutional components has been lacking in past efforts to improve student performance, and that a project based upon the principles of action research can be the key to improving that performance. The discussion will begin with an exploration of teaching effectiveness and its importance at the community college. Then, Simpson will look at the state of community college teaching today. He will then examine research mechanisms for improving teaching by exploring professional development and adult learning. Finally, he will discuss the new faculty effort at Beckman College and its revision based on an action research project incorporating feedback from researchers, presenters, and participants (newly appointed teachers). This effort may very well hold the promise of realizing actual, measurable improvement in student outcomes.

Student success and the central role of effective teaching

The teacher plays a significant role in the success of students. "The instructor's task is to interact with students in ways that enable them to acquire new information, practice new skills, and recognize and expand upon what they already know" (Davis, 1993, p. xix.) The clear implication is that by engaging in appropriate classroom activities, teachers impact the student's ability to learn.

Davis argues that teacher effectiveness is enhanced if teachers:

- ~~☞~~ Organize and explain material in ways appropriate to student abilities.
- ~~☞~~ Create an environment for learning.
- ~~☞~~ Help students become autonomous, self-regulated learners.
- ~~☞~~ Reflect upon and evaluate their teaching.
- ~~☞~~ Use a variety of teaching techniques throughout the semester.
- ~~☞~~ Solicit student feedback about classroom teaching.

Ken Gregory (1996) of Goldsmiths College, London, establishes four attributes defining teacher effectiveness. Teachers must be academically and pedagogically competent. They must reflect upon their practice and their profession. They seek out and embrace innovation in the classroom. Finally, they conduct ongoing research on pedagogy.

In the journal article *Promoting Excellent Teachers at Oxford Brookes University* (1993), Graham Gibbs discusses the following criteria for teacher excellence:

- ~~☞~~ Expertise in the discipline
- ~~☞~~ Communication skills
- ~~☞~~ Enthusiasm and ability to motivate
- ~~☞~~ Student oriented
- ~~☞~~ Organizational skills
- ~~☞~~ High quality student assessment

✍ Open to reflection and change

The focus is upon teacher practice and behavior, but interestingly, practice and behavior that are divorced from quantitative student performance. Assessment of teacher performance would presumably consist of a list of items such as those described above and categories of teacher performance from outstanding to unsatisfactory in each category. Ratings that indicate no serious deficiencies allow the teacher to continue in the established mode, regardless of student performance

John J. Stewart, from the Office of Research at the College of San Mateo, lists seventeen factors contributing to poor student performance (California Statewide Survey of Pre-Transfer Level Math Coursework, February 2001). Among those factors are the following: inadequate study skills, inadequate motivation, fear of failure, lack of effort, and lack of student commitment to education. One can infer that student attributes and activities will affect their performance, either positively or negatively. Is it not reasonable to conclude that teacher attributes and activities produce similar results? Is it conceivable that teacher performance can only help, but never hurt student performance?

The approaches advanced in the foregoing articles are for teachers to engage in the development of behaviors and attitudes check listed, or to solicit student satisfaction through various instructional quality student feedback devices. Davis (1993), for example, proposes a reflective process for the improvement of student perceptions of the teaching experience. We concur that excellence in education

requires reflection upon practice. However, if this reflection is not coupled with an objective evaluation of concrete measures of student performance, we question how improvement in student outcomes can occur.

A glaring shortcoming in the checklist approach included in the cited articles is the quantitative performance of students in the classrooms of the teachers who engage in the check listed practices. The explicit road to teacher excellence indicated in this collection of literature is for teachers to embrace the articulated criteria. There is an implied assumption that teachers who develop the indicated attributes will improve in their performance. However, we are left with an unaddressed question: Through what mechanism does the incorporation of check listed criteria translate to improved student learning outcomes?

Dai Hounsell, from the University of Edinburgh, Scotland (1993), identifies three critical criteria of excellence in teaching:

- ~~✎~~ Ability to have an impact on the quality of students' learning
- ~~✎~~ Ability to impact the quality of courses taught
- ~~✎~~ Strives to enhance the teaching-learning environment

Here, at least, we find references to the teacher's impact upon student learning. However, no objective measurement or validation of that learning is proposed or suggested.

Teacher characteristics and attitudes, both positive and negative, recur throughout the literature. Faced with the reality that newly appointed community

college teachers typically lack the knowledge or skill base to bring to bear upon the improvement of their own performance (as measured by the performance of their students), the crisis we face in the community colleges should come as no surprise. In order to improve teacher practice in a manner that translates to improved student achievement (as opposed to simply improving student feelings), the researchers believe that both qualitative and quantitative assessments of student performance must be used.

How do teachers in higher education learn to be successful?

Lewis Elton asks how we can expect that newly appointed teachers in higher education would be excellent, let alone competent. “As long as we have no pre-service teacher training, the only time that teachers in higher education can become excellent is after they have been appointed” (in Aylett and Gregory, 1996, p. 36). We concur with that assessment, especially as it applies to community colleges. With no statutory requirement for teacher training, that training is *de facto* on the job. The implication is that newly appointed community college instructors will be utilizing students as research subjects in their effort to discover how to become effective.

In the article *A Proposal to Improve Teaching* (1986), Cross identifies the issue of community college teacher training as problematic. She argues effectively that many college teachers really don’t know how to teach very well. As indicated previously, they have no training in pedagogy. Few have any skills for finding our

what students are learning in their classrooms. She proposes that classroom research and assessment conducted by the teacher can be the vehicle for improvement of student performance. She believes that the most important decision that an institution can make is to give teachers the necessary training and tools to assess what students are learning from them in the classroom.

Echoing sentiments repeated in the literature regarding teacher performance is the following passage contained in the Little Hoover Commission report (2000, p. 26) regarding the quality of teachers in California's community colleges.

Nationwide, 98 percent of faculty members identify being a good teacher as a very important or essential personal goal. And the California community colleges have faculty who demonstrate excellence in the classroom. Their skills allow them to recognize learning styles, identify students who are struggling and respond appropriately.

These faculty are the exception. The Board of Governors, in its 1991 Basic Agenda, recognized that most faculty have little teaching experience or teaching skills when they are hired and few colleges offer teacher education programs. In this void, trial and error has emerged as the dominant way most faculty learn to teach. Traditionally, tenure reviews allow colleges and universities to establish performance standards and motivate faculty toward distinguished service. In the community colleges, however, tenure does not effectively promote quality teaching.

It is imperative that we utilize the data that every community college maintains on student performance to better inform the development of effective community college teaching improvement efforts.

Components of an effective Teaching and Learning Institute

Having identified a problem of critical significance to the community colleges, it is reasonable to explore recent and current efforts toward resolution. It is fair to ask if this proposal's Teaching and Learning Institute has been attempted or is being attempted elsewhere. If so, what have been the outcomes? If there has been no such effort, why not? Teacher quality is a theme in the literature on education, and has been recognized within the literature on California's community college system as a key concern. It seems as if the concerns expressed have not translated into institutional efforts toward improving teacher performance.

The Board of Governors of the California Community Colleges identifies the linkage between student performance and teaching performance in the New Basic Agenda (February, 1996). This report underscores the diversity of student learning styles and the need for community college teachers to be responsive to changes in student needs. The report indicates that community colleges must address the learning environment, the academic preparation of their students, and the resources that are brought to bear upon student success. The Board of Governors points out that student-centered initiatives should be at the heart of community college efforts.

It is the expressed responsibility of the Board of Governors to provide leadership, to coordinate, to provide technical assistance and to ensure the accountability of the community colleges. However, what one discovers in the New Basic Agenda is an expression of desired outcomes that are dependent upon teacher

performance with no indication of the mechanism for teachers to acquire the skills and knowledge to produce the desired outcomes. The Board of Governors effectively articulates desired system changes, but they do not indicate how the community colleges might achieve those changes. One can only speculate that the political nature of advocacy on the part of the Board of Governors is a disincentive to their providing specific recommendations related to improving teaching skills.

The Academic Senate for California Community Colleges is another institutional body charged with significant oversight responsibilities for the quality of community college teaching and the instructional programs. The Academic Senate report *Faculty Development: A Senate* (April, 2000) discusses Senate frustrations with the status of faculty development efforts. Rather than offering a vision and a plan for effective faculty development, in this report the Academic Senate argues for increased funding, greater faculty involvement in planning, and additional faculty reassigned time at the local community colleges. The findings of the authors are summarized as follows: "...local academic senates need to regain a central role in faculty development to assure that faculty are able to have the "vibrant and rich intellectual life" that AB 1725 envisioned and that their primary commitment to teaching makes imperative" (p. 1). Once again, a reluctance to commit to the standard of student performance as a controlling (or even relevant) issue to be addressed through faculty development mechanisms is evident. The

Academic Senate is explicit that their responsibility is to assure faculty a vibrant and rich intellectual life. What about students?

Recognizing the faculty development leadership void that exists at the statewide level, the researcher next explored local community college district initiatives to improve student performance. Specifically, he investigated the nature of existing new faculty orientation and development programs, and measures of effectiveness of those programs.

The most common form of new faculty orientation consists of a bare bones logistic orientation. The focus of this type of orientation is initial processing, and faculty administrative and clerical responsibilities. Long Beach City College and Santa Rosa Junior College offer representative programs of this type (Appendix IV).

This type of orientation offers recurring topics. Among those are the following:

- ~~☞~~ Administrative processing: Room keys, copy machine access, parking permits, seniority determination, etc.
- ~~☞~~ Introduction of new faculty to significant college and district administrators, e.g., College President, Vice President of Instruction, Dean of Student Affairs, Dean of Counseling, Human Resources representatives, etc.
- ~~☞~~ Introduction of new faculty to significant faculty representatives, e.g., academic senate president, faculty union representative, staff development coordinator, etc.
- ~~☞~~ Campus tour.

Such an orientation typically lasts one or two days, and includes social activities such as continental breakfast and lunch with administrators. No significant feedback or evaluation processes at any of the community colleges offering this common form of orientation was found.

~~✍~~ The most complete new faculty orientation programs focus upon both logistic and pedagogical issues. Among the colleges with more in-depth programs are Cerritos College, Mt. San Antonio College, and Pasadena City College. Similarities were found with all of these programs. The standard logistic orientation described above is augmented with ongoing faculty development opportunities that include the following:

~~✍~~ Teaching Methodology, Including Traditional and Non-Traditional Modes of Instruction.

~~✍~~ Technology in the Classroom.

~~✍~~ Student Learning Styles.

~~✍~~ Classroom Assessment Measures.

These orientation programs are delivered in a one semester or one-year block of time. In each case, program efficacy is evaluated based upon participant satisfaction surveys.

The researcher has not found any faculty orientation or faculty development programs or presentations based upon the principles of action research or the practices of community college teachers with high student outcomes. In no case has

he found program effectiveness evaluations based upon the performance of the students of program participants.

Each of the foregoing teacher-development programs omits distinct, objective connections between teacher performance and student performance. The truly unique aspect of this proposal is the establishment of that connection and the incorporation of participant feedback in the effort to continuously improve performance.

Principles of effective teacher development practices

Joyce and Showers (1980) define five components necessary for the realization of effective teacher development. The first is the presentation of an idea, skill, practice or behavior that is deemed desirable for the audience. Next is the modeling of the new practice or skill. Initial practice in a protected environment constitutes the third component, followed by prompt and structured feedback on the performance of the practice or skill. Ongoing coaching and/or mentoring to help with the in-class implementation of the practice or skill is the final, and most critical, component.

The typical mode of delivery for the first component is a one-way presentation made to a passive audience. Unfortunately, most staff development activities at all levels end with this component, with the expectation that the audience will embrace and incorporate the desired skill or practice. However, research

indicates that only 10% of participants in staff development activities that included only this component could transfer the skill to the classroom (Bush, 1984).

Adding each of the next three Joyce and Showers model components to staff development activities increases the number of individuals able to incorporate the desired skill or practice by 2-3%. Surprisingly, when coaching was also included as the fifth component of staff development strategies, up to 95% of the participants transferred the skill into classroom practice.

McKenzie (April 1998) supports the foregoing premise, stating that help lines, coaches, partners, study groups, and time are essential elements of effective staff development activities. Furthermore, McKenzie states, “The old approach of after school technology training sessions does not work. Such sessions demonstrate the features of software applications but rarely show how to use them in classrooms” (p. 1).

Additionally, McKenzie recognizes staff development for teachers as an activity fundamentally by and for adult learners. These learners “make choices from a rich and varied menu of learning experiences and possibilities” (p. 3). They take responsibility for “planning, acting and growing” (p. 3). If we are to support the professional growth of these adult learners, McKenzie believes that we must present professional development “as a personal journey of growth and discovery [that] engages the learner on a daily and perhaps hourly basis” (p. 3).

This section has dealt with the need to more effectively address the concerns expressed by community college researchers, the California Community College Chancellors Office, and the Little Hoover Commission regarding student success. The mechanism of teacher evaluations has proven ineffective at leveraging change. Institutional efforts at orienting new faculty amount to little more than logistic exercises with a smattering of teaching and learning theory thrown in. There are no institutions using feedback learning loops in the development of effective teacher training programs. There are no institutions using the practices of teachers with high student outcomes as the basis for nurturing effectiveness within the ranks of newly appointed teachers. This section demonstrates the great need for such an effort.

Teaching and Learning Improvement Project

The division of this chapter into three components reflected the collaborative, three part effort that the researchers engaged in to improve student performance at the community colleges. The findings of each researcher was used by each of the others to improve upon both our understanding of teaching as it is practiced at the community colleges, and our ability to bring about an effective change in the approach taken to improving student performance.

The central role of teachers in helping students to succeed is clearly demonstrated. Without a caring, qualified and knowledgeable teacher, students cannot reach their full potential. By uncovering the practices of those who are able to nurture success in their students, we provide a knowledge base to build upon. The

illumination of the practices of teachers with high student outcomes is key if we are to provide opportunities for our newest faculty members to learn the tools of success.

The role that institutions play in supporting (or hindering) teachers as they engage their students is critical. Without institutional support, efforts at improving student outcomes are isolated and individualistic, dependent on the efforts of teachers working alone, separated from his/her colleagues. By providing a forum for the dissemination of components of institutional support, the Teaching and Learning Institute encouraged teachers to be members of a learning community and to explore the meaning of student outcomes and ways to improve them for their classes and the school.

The third piece of this project is the Teaching and Learning Institute, where the researchers brought together teaching practices linked to high student outcomes, institutional support for those practices, newly appointed teachers, and the mechanism (action research) for continuous improvement. The third component, the Teaching and Learning Institute, is dependent upon the first two. The pieces of the puzzle uncovered in the first two components form the backbone of the third.

Working in collaboration, providing input and feedback, the researchers conducted a study designed to improve student performance by impacting teacher and institution performance. Ultimately, the measure of our success will be the success of our students.

CHAPTER THREE: DESIGN AND METHODS

The goal of the Community College Teaching and Learning Improvement Project is to increase student outcomes in developmental math and English classes by revising and evaluating a Teaching and Learning Institute that incorporates the teaching practices of faculty that are linked to high student outcomes, as well as the institutional mechanisms that support those practices. Embedded in this project are three distinct but interrelated components: teaching practices, institutional support, and the Teaching and Learning Institute. Each of the components constitutes a self-standing contribution to the improvement of community college student performance. In combination, the components form a powerful research-based application of effective teaching practices and sound institutional support processes. The project design and methodologies are explained in this chapter, and are organized in the following format:

~~///~~ Project Design: Site, Sample, Access, Confidentiality, and Trustworthiness.

~~///~~ Project Methods:

- Teaching Practices & Institutional Support
 - Quantitative Data Collection and Analysis
 - Qualitative Data Collection and Analysis for Component I
 - Qualitative Data Collection and Analysis for Component II
- Teaching and Learning Institute: Data Collection and Analysis

~~///~~ Overall Evaluation of Teaching and Learning Improvement Project.

The findings from Christian (teaching practices) and Bedard (institutional support) significantly contribute to the revision of a Teaching and Learning Institute at Beckman College. In the true spirit of action research, the participants in this project (math and English faculty, administrators, institutional researchers) from the two research sites have driven the project by being the main sources of data and by providing regular feedback to the project researchers. Along these lines, Stringer (1999) explains:

.....knowledge inherent in people's everyday, taken-for-granted lives has as much validity and utility as knowledge linked to the concepts and theories of the academic disciplines or bureaucratic policies and procedures. The intent is to concede the limitations of expert knowledge and to acknowledge the competence, experience, understanding, and wisdom of ordinary people (p. 162).

While moving through the *look-think-act* cycle of action research, the team paid special attention to the “well-being” of the participants while serving a “catalyst” to assist participants in problem solving. In his book, Stringer (1999) points out the distinction between the traditional researcher who remains aloof and objectively studies his subjects and the action researcher who tries to bring about change within the setting being studied while simultaneously ensuring the emotional well being of the research participants.

Working from this perspective, the researchers will attempt to answer the following research questions:

1. How can student outcomes in community colleges be conceptualized and measured?
2. What are the characteristics and teaching practices of faculty that lead to high student outcomes?
3. How do community colleges support the efforts of faculty with high student outcomes?
4. How can this knowledge be utilized to develop an effective program of teacher training in support of newly appointed community college teachers?

Project Design

Site description

For this action research project, the researchers worked with two colleges, referred to as Anderson College and Beckman College. From the table below, we see that both colleges have comparable ratios of full-time to part-time students. While the percentage of students who indicated that *Transfer* to a four-year institution as their goal is comparable, more students in Beckman College than in Anderson College indicated *Vocational* training as their goal.

Table 3.1: Profile of Anderson College and Beckman College

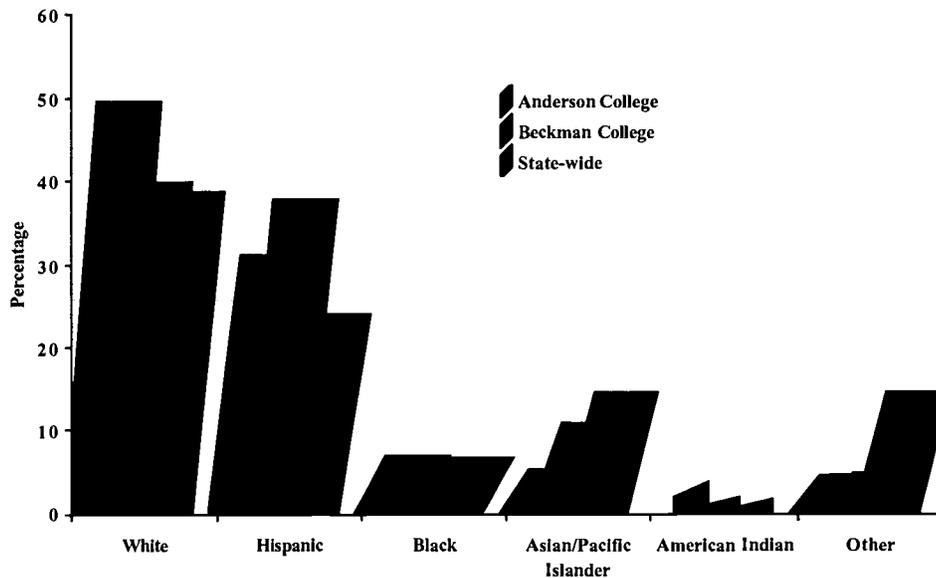
	Anderson College	Beckman College
SETTING	Rural, agricultural	Suburban
Percentage of students: full time and part time	FT: 4,707 (31.9%) PT: 10,048 (68.1%) Total: 14,755	FT: 6554 (33%) PT: 13,308 (67%) Total: 19,862
Average age of students	19 or less: 4,403 (29.8%) 20-29: 5,875 (39.7%) 30-39: 2,291 (15.5%) 40-49: 1,493 (10.1%) 50 - >50: 703 (4.8%)	Students enrolled in day classes: 24.56 Students enrolled in evening classes: 31.44
Student goals	Transfer: 59.9% Vocational: 16.7% Undecided/unknown: 14.6% Other: 8.8%	Transfer: 55% Vocational: 35% Other: 20%
Student ethnicity	White: 48.1% Hispanic: 32.9% Black: 6.9% Asian: 5.4% American Indian: 1.8% Other/Unknown: 4.9%	White: 42.56% Hispanic: 29.2% Asian: 17.5% African American: 3.07% American Indian: 0.76% Other/Unknown: 6.91%

*Fall 2000 MIS data

While the two colleges are different with respect to location (central California & southern California) and environment (rural and suburban), they are similar in a crucial respect. They share comparable demographics that mirror those of the average of the 108 community colleges in California, as illustrated by the following graph on ethnicity of students. The ethnic breakdown of the student population at both colleges included in the graph below reflects those of the statewide average.

BEST COPY AVAILABLE

Figure 3.1: Ethnic Composition—Anderson College, Beckman College, Statewide



Access

Each site extended an invitation to the team of researchers for this study to investigate the teaching enterprise at their school. The researchers made presentations to the different constituent groups on campus in order to introduce them to the study and seek their support. These presentations included information about the project, its goals and activities, and the products that resulted from the study. The researchers also described the time commitment and details of activities that participants would be engaged in if they volunteered for the project.

The constituent groups included:

- ✎ Math and English faculty at the two institutions;
- ✎ The President, Vice President, instructional deans, and other staff;
- ✎ Institutional researchers at both schools.

The inclusion of all constituent groups helped the members of the institution see the issues from all perspectives, promoted buy-in to solutions that might arise, and ensured that all groups benefited from the outcome. The researchers emphasized that the products of the project, including the model that would be developed to define student outcomes, would be given to the institutions and the faculty for future use and perhaps for the purpose of institutionalization.

As the study progressed, the researchers continued to share the findings with participants at both sites in order to keep them informed and to solicit their feedback. At the end of the study, the project participants from the different constituent groups evaluated the impact and usefulness of the information and discussed strategies for implementation.

Sample selection

This research study focused on instructors affiliated with the academic departments of math and English for four critical reasons.

1. Both disciplines are foundational and are often the starting points for most students. Hence, they are often the focus for quality of instruction efforts.
2. Both disciplines suffer from low success rates, with math having the lowest successful course completion among disciplines within the community college system. The data below is for Fall 2000 obtained from the CCCCO's website that shows the comparison of retention and success rates for the two colleges as compared to the state average.

Table 3.2: Retention Rate and Success Rate
Anderson College, Beckman College, and Statewide

Discipline	Institution	Retention Rate	Success Rate
Math	Anderson College	74.59%	50.25%
	Beckman College	69.91%	55.12%
	Statewide	73.70%	52.54%
Humanities	Anderson College	82.92%	65.29%
	Beckman College	76.18%	62.68%
	Statewide	80.90%	52.54%

Data Source: CCCCO. See Appendix VI for details.

3. Both departments offer classes in sequence, a critical component for this study because teachers with high student outcomes have been defined as

those teachers whose students do well in not only in their own class but also in subsequent classes. The perceptions and attitudes of these teachers is the focus of this study.

4. Both departments offer an adequate number of faculty (at least 30 per site) to choose from for the purpose of interviewing.

Although student outcomes information was calculated for the entire math and English faculty at both colleges, the study focused on only the faculty who volunteered to participate.

Table 3.3: Sample of core faculty participants

	Math	English	Total Faculty
Anderson College	6 faculty	6 faculty	12 faculty
Beckman College	6 faculty	6 faculty	12 faculty
Both Colleges	12 faculty	12 faculty	24 faculty

Confidentiality

In addition to participation being voluntary, all participants were also guaranteed confidentiality and are identified in the research by pseudonyms. An independent researcher, not affiliated with this project, maintained a database of volunteer faculty members, their student outcomes information, and their questionnaire responses for each site. Further, classroom observations were conducted prior to the computation of the student outcomes information for each of the individual faculty, which ensured that the researchers were not biased while observing or interviewing the subjects.

When the findings were shared during the final presentations at the sites, confidentiality continued to be maintained. The colleges were always referred to as Anderson College and Beckman College and the participants were identified with pseudonyms in order to continue to maintain anonymity. During the study, questionnaires and field notes were coded and stored with the independent researcher. At the conclusion of the study, questionnaires and field notes were stored with the project researchers. This data will continue to be used by the researchers when writing papers that may result from this project.

Trustworthiness Measures

This project incorporated a number of measures to ensure trustworthiness. Combined, they helped ensure that the findings are valid and offer some degree of generalizability.

1. The researchers triangulated the data collection methods, by collecting data from a diverse range of individuals and settings (interviews with faculty administrators and staff, classroom and meeting observations, analysis of document analysis and questionnaires), using a variety of methods. In doing so, they were able to draw from a broad pool of data to validate findings and identify inconsistencies. This variety of data helped ensure that the data was internally and externally valid (Merriam, 1992).
2. The researchers also regularly shared their ongoing analysis of the data with each other. This helped to verify coding procedures by coding

random pieces of the survey's open-ended questions and the interviews. These complementary perspectives helped ensure that bias did not interfere with the interpretation of the findings.

3. The researchers regularly conducted member checks to ensure that the findings were accurate and representative. These checks also helped to identify key informant bias (Maxwell, 1996). Site and key informant feedback about the findings also helped with the revision of Beckman College's Teaching and Learning Institute.
4. A fourth researcher, not affiliated with this investigation, maintained the database and the key linking faculty names to their codes.
5. Because of the variety of data collection methods and the ongoing analysis of that data, this project has an extensive trail of evidence that can be readily verified by colleagues or another party.
6. The ongoing data analysis component helped clarify assumptions and theoretical orientations from the beginning. Doing so helped the researchers avoid inaccuracy and incompleteness (Maxwell, 1996).

Project Methods

Data Collection

This study utilized both quantitative and qualitative data collection methods because their use:

- a) complimented each other with kinds of information they provided;

- b) triangulated the data—helping to confirm or reject hypotheses; and
- c) informed each other because of their sequential order (Creswell, 1994).

This section reviews the data collection and analysis for the quantitative components and then covers the qualitative aspect for the two components separately.

Quantitative Component

There were two quantitative components to this research project. The overall project design was guided by student outcomes data, which included data of students enrolled in classes for four consecutive semesters for developmental math and English, including the grade received at the end of the semester. These data were used to calculate the student outcomes measures. Additionally, part of the data collected was an online questionnaire that was completed by math and English faculty who taught developmental courses.

Student outcomes data

The purpose of the study is to improve student outcomes in developmental math and English courses in community colleges by identifying and linking faculty behaviors and characteristics that lead to high student outcomes. According to the Accreditation Commission, outcomes are defined at three levels: course level, program level, and the institutional level. This study focused on student outcomes at the course level. The California Community College Chancellor's Office defines student outcomes using measures of retention in a course and successful course completion. (See Appendix VI for student outcomes for Anderson College and

Beckman College for Fall 2000 and note the two measures being used.) This study expanded the definition of student outcomes to include successful completion of the subsequent course. The researchers hoped to influence both participating institutions to adopt this new indicator of student outcomes. Further, the researchers hoped to influence the definition for the California Community College system as well.

Teaching and learning is multifaceted and complex, making the measurement of student outcomes a difficult task. Nevertheless, the latest draft of the accreditation standards for community colleges focuses on student learning outcomes assessment. At the same time, capturing the qualities of an effective teacher is also complex and multifaceted. After struggling with the vastness of these two components, the researchers felt it best to define student outcomes narrowly and precisely, while exploring the characteristics and perceptions of faculty. This narrow definition served several purposes:

- It bound the study, making it possible to complete this project in a reasonable amount of time. The researchers recognize that expanding the definition of outcomes to include more variables will enhance this study and could be the basis of future studies.
- It made access to retention and success numbers relatively easy because community colleges already have these data and make it available to the staff.
- It matched with the State Chancellor's office's (Partnership for Excellence) funding criteria for successful course completion.

- It took into account the importance of the California community college system vocational programs' need to track the students after completion of a course or program in order to measure the success of the course/program. This was one of the driving factors for the inclusion of success in a subsequent course as an indicator of student outcomes.

Within such a restricted framework in this study, student outcomes in a sequence of developmental math and writing classes will include three measures: retention of students in individual classes, successful course completion, and successful completion of subsequent courses.

1. Retention of students in individual classes:

Retaining students in a class, even if they do not pass the class at the very end, is an important measure because it is an indicator of student persistence. Once a student drops a class, the institution has lost the potential of positively influencing the student. Therefore, it is important for the institution to try to retain the student even if the student is not successful the first time around. This measure differentiates students who persist in the class, even if they are not passing, from students who drop out and receive a grade of W (withdrawal) for the course. Therefore, the measure of retention is an important factor in student outcomes at the community college.

Students are designated as successful in a class if they receive a grade of A, B, or C. Consequently, if a student is retained in a class but ends up with a D or an

F, then that student is not successful in that particular class, but has persisted and is retained in the class. Therefore, the retention percentage is calculated as the ratio of students who receive a grade of A, B, C, D, F (retained) to students who receive A, B, C, D, F, W. The formula used in the study will be:

$$\text{Retention} = \frac{\text{students who receive a grade of A, B, C, D, F}}{\text{students who receive a grade of A, B, C, D, F, W}}$$

For example, consider a math class that starts with 40 students. If 20 students are retained in the class at the end of the semester and 20 drop the class, then the retention percentage is $20/40 = 50$ percent.

2. Successful course completion:

Again, students who are successful are those who receive a passing grade of A, B or C. The success percentage or successful course completion is calculated as the ratio of students who receive a grade of A, B, C to students who receive A, B, C, D, F, W.

The general formula is:

$$\text{Success} = \frac{\text{students who receive a grade of A, B, C}}{\text{students who receive a grade of A, B, C, D, F, W}}$$

In the same math class mentioned above, if ten students out of the twenty retained get a grade of A, B or C, then the success percentage will be calculated as $10/40 = 25$ percent.

In summary, for the above example, although 50 percent of the students were retained, only 25 percent were successful.

3. Successful completion of subsequent courses.

The successful course completion rate of students in the subsequent course, after they have successfully completed the prerequisite (base) course, will be calculated.

$$\text{Subsequent Success Rate ?} = \frac{\text{\# successful in subsequent course}}{\text{\# enrolled in subsequent course after being successful in base course}}$$

The course sequence is listed in Table 3.4.

Table 3.4: Sequence of Developmental Courses—Math and English

	Math	English
Anderson College	Prealgebra, Elementary Algebra, Intermediate Algebra.	Basic Writing Skills, Introductory Composition
Beckman College	Prealgebra, Elementary Algebra, Intermediate Algebra	Basic Writing, Developmental Writing, Preparation for College Writing.

Student grades in a series of math and English classes for a series of four semesters were collected from each of the two campuses from the Management Information Systems (MIS) and were used to calculate the indicators for student outcomes as defined above.

Questionnaire

The primary purpose of the online questionnaire was to create generalizations. In other words, the data from the online questionnaire suggested patterns Christian and Bedard explored in the latter half of the study. While these generalizations were helpful to understand the relationships between variables, they offered limited information about the process of teaching and its support. The second

phase of the study, resting on qualitative methods, helped describe and understand those processes in order to improve them.

The online questionnaire for faculty consisted of 71 questions; 31 questions dealt with the background of faculty and their teaching practices, and the remaining 40 focused on institutional support issues, particularly the academic senate, staff development, and faculty evaluation. The questionnaire was linked to a database so that the data from the completed questionnaire were automatically stored in a database. The questionnaire included both closed and open-ended questions (Appendix V), with the open-ended portion designed to capture a variety of perspectives. The areas investigated with this tool included teaching practices and institutional support. The questionnaires used for the surveys were modeled using the Likert scale of 1-5 (Likert, 1932). This resulted in a numeric value for each of the behaviors and characteristics of the faculty as well as the institutional support components. This numeric assignment lent itself to using quantitative techniques of correlation and regression to determine relationships between behaviors and high student outcomes. Additionally, the researchers included a variety of questions in order to further ensure a range of perspectives, increasing the reliability of the responses (Rea & Parker, 1992).

Component I: Teaching Practices: Qualitative Data Collection and Analysis

While Christian and Bedard shared quantitative data, the qualitative components of their studies differed in focus. Therefore, the qualitative portions of both studies are explained separately, even though they occurred concurrently: Christian's exploration of teaching practices and Bedard's investigation of institutional support. Both these components focused on teachers with high student outcomes.

Christian's study attempted to answer the following research question: What are the characteristics of faculty that lead to high student outcomes? This question was answered when the following three sub-questions were answered:

1. What are the common observable in-class behaviors of faculty who have high student outcomes?
2. What is the training and background of faculty who have high student outcomes?
3. According to faculty with high student outcomes, what are the activities outside the classroom that could promote student success?

The unit of analysis for this study was the characteristics/behaviors of a teacher that lead to high student outcomes in developmental math and English classes in California community colleges.

Data Collection

In order to answer Question 1 (What are the common observable in-class behaviors of faculty who have high student outcomes?) the following data collection mechanisms were used:

~~☞~~ Faculty questionnaire: The faculty involved in the study performed a self-assessment by completing the online questionnaire.

~~☞~~ Classroom observation: The researcher conducted classroom observations of the faculty participating in the study.

The information collected in the two ways mentioned above helped the researcher identify the behaviors of the faculty in the classroom. The researchers had intended to include peer observations as an additional source of data to capture classroom behaviors. However, after discussing this with the participants, the researchers decided that it was too much of a burden on participant's time. Stringer (1999) captures this clearly when he writes:

The best of intentions, however, often run up against the cold, hard realities of daily life. Participants in the research process reenter family, work, and community contexts, where responsibilities and crises crowd out new activities. (p. 124)

The researchers recommend that the scope of this part of the project be expanded in future studies to include student evaluations and peer evaluations. The various sources of information will lend trustworthiness to the data collected.

Data collected from the focused interviews were used to answer Question 2. (What is the training and background of faculty who have high student outcomes?)

For future studies, faculty résumés and transcripts can be used to triangulate the information.

Finally, in order to answer Question 3 (According to faculty with high student outcomes, what are the activities outside the classroom that could promote student success?), data from the focused interviews and online questionnaire were used.

Table 3.5: Protocol for Data Collection—Teaching Practices

Research Questions	Data Collection	Units of Observation
1. What are the common observable in-class behaviors of faculty who have high student outcomes?	Observations in the classroom. Online survey of participating faculty.	<ul style="list-style-type: none"> ///Style of teaching. Is it all lecture or lecture discussion? ///Kinds of questions that the teacher asks to elicit student participation. ///Kinds of questions the students ask. ///Students' comfort level with the teacher. ///Students' interaction among themselves. ///Self perception of teaching style. ///Self perception of interaction with students in the classroom. ///Self perception of preparation for classes.
2. What is the training and background of faculty who have high student outcomes?	Interview with the faculty	The same units of observation as above. This will primarily be used to triangulate the information gathered from the other two sources as well as to get rich, in-depth information.
3. According to faculty with high student outcomes, what are the activities outside the classroom that could promote student success?	Interview with faculty	<ul style="list-style-type: none"> ///Amount of time spent preparing for classes. ///Amount of time spent in readings related to the discipline ///Amount of time spent discussing teaching strategies with colleagues. ///Amount of time spent with students outside the class. ///Amount of time spent on committees

Data Analysis

Faculty behaviors/characteristics in the classroom:

Data collected by Christian using a faculty questionnaire, focused interviews, and classroom observations of faculty were analyzed in order to identify common faculty behaviors/characteristics in the classroom that lead to high student outcomes. The multiple sources of data collection helped triangulate the findings, which increased their reliability.

The questionnaire responses were analyzed using descriptive statistics to identify trends in classroom behaviors of faculty with high student outcomes. This was followed by merging the online questionnaire results with the student outcomes data for each faculty in order to do a correlation analysis to determine relationships among the above-mentioned factors. In two cases (faculty participation in workshops and conferences), the researchers performed an Analysis of Variance (ANOVA) to see if there was a significant difference in the mean student success rates of faculty who did not attend conferences and workshops and the mean students success rates of those who attended conferences and workshops.

Finally the analysis of the interviews with the faculty and classroom observations provided a rich, in-depth understanding of these issues, enhancing the quantitative analysis component. For example, when a faculty member indicated on the questionnaire that they frequently attend conferences by marking a number on

the Likert scale, that number did not capture the enthusiasm and excitement of that faculty member's description of their positive experiences during a conference.

Faculty training/background:

Background experiences of the faculty were identified by interviewing the faculty. This information was compiled and analyzed to identify common themes in background and training of faculty who had high student outcomes.

Faculty activities outside the classroom:

The activities that the faculty are involved with outside of the classroom were identified by analyzing (a) the in-depth interviews with the participating faculty, and (b) the online questionnaire. Also, analyzing documents of the institution (committee structures and compositions) helped triangulate some of the information about campus-wide activities. These institutional documents contained names of faculty who participated in the various committees and projects, which provided additional information on the level of faculty involvement both on-campus as well as outside of classroom. Finally, Bedard's component (2002), which focused on institutional support of faculty sheds some light on this aspect of the study.

In short, this component of the study used the following data analysis techniques:

~~✎~~ Transcribing interview tapes and notes. This helped the researcher keep track of the data collected so that when analyzing, the researchers were already familiar with the information.

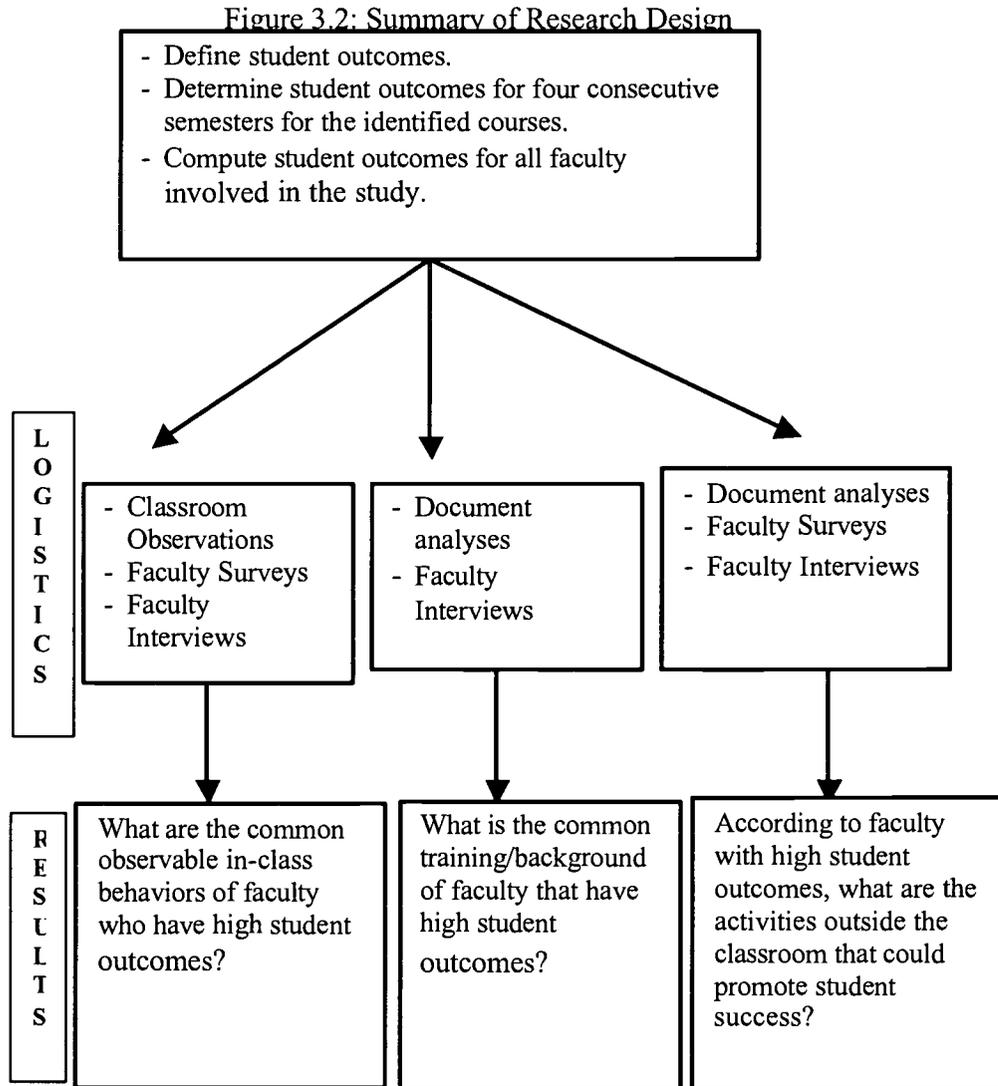
~~etc~~ Reading and re-reading the transcripts. Thinking about and reflecting on the information gathered.

~~etc~~ Preparing charts and graphs and concept maps to brainstorm connections and links. This was an iterative process. When connections started taking shape, the researcher worked to articulate them.

~~etc~~ Identifying commonalities in categories and themes (contexts).

~~etc~~ Looking for other evidence (triangulation) that supported or refuted it.

The schematic given below summarizes research design that leads to answering the three questions mentioned above:



Component II: Institutional Support: Qualitative Data Collection and Analysis

This component explored the ways community colleges support teachers. Because little is known about institutional support for community college teaching, this study's qualitative approach begins to draw a picture of the processes in place, and offers suggestions for their development and improvement. The focus on teachers with high student outcomes is another unique feature of this study. While other studies may be based on interviews of random samples of teachers for their perceptions of institutional support, this study focuses on faculty who successfully work within the system to improve student outcomes, thereby making the system work for them and their students. Additionally, this study juxtaposes the findings about teachers with high student outcomes with the data about the rest of the departmental faculty. Doing so further strengthens the findings and conclusions. The investigation into the system components that support faculty members will inform other teachers and colleges about creating a school that really does center its efforts on teaching and student outcomes. In addition to providing the findings to the participating sites, the findings have led to the revision of the Teaching and Learning Institute for new community college teachers at Beckman College.

The institutional support component explored the following questions:

- ~~Q1~~ How do teachers with high student outcomes perceive the support of their college?
- ~~Q2~~ How do faculty evaluations support teaching?

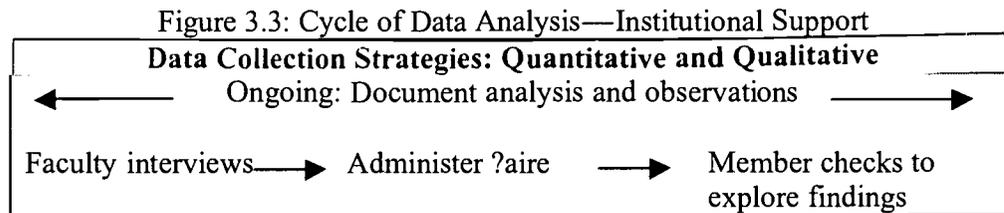
✎ How does professional development support teaching?

✎ How does the academic senate support teaching?

The unit of analysis for this research project was the attitudes and perceptions of both the faculty and the administration toward the institution and its effectiveness at supporting teaching efforts. Bedard examined these attitudes and perceptions in a range of ways, from the analysis of student outcome data to the conducting of in-depth interviews with faculty and other staff members.

Data Collection

As mentioned earlier, this component of the study relied on both quantitative and qualitative data. While the online questionnaires offered glimpses into the effectiveness of the support mechanisms, they provided limited specific data for their improvement. The qualitative component of this project gave suggestions and insights into the processes involved.



As the above figure indicates, the qualitative components (interviews, document analysis, observation) guided efforts throughout the rest of the design, helping to develop a rich database on institutional support. Throughout the project, follow-up

interviews were frequently conducted with participants in order to explore new avenues and to check the accuracy of the findings.

The qualitative components of this study enabled the researcher to fully examine the institutional processes involved in teaching at the community college. With these methods, the researcher was able to garner a vivid picture about how teachers and administrators feel about the mechanisms in place, their notions about improvement, and how they compensate when the mechanisms in place are not meeting their objectives (Maxwell, 1996). This focus on participant perspective and the acknowledgement of the importance of context strengthens the validity of the findings (Maxwell, 1996). The deliberate variation in samples (site, faculty and administrator participation) provided multiple perspectives, enabling the researcher to gather a complete picture. Ultimately, all of the techniques employed in this study allowed the researcher to gain insight into the impact of institutional context on teaching practices.

The qualitative methods employed in this study included:

~~22~~ In-depth interviewing. The interviews with 24 teachers and 24 administrators/staff helped Bedard uncover and describe participants' perspectives on events and learn how events are interpreted (Merriam, 1992). While each interview was guided by protocol questions, the researcher did not follow a highly structured format for interviews in order to encourage a spontaneous exchange that resulted in authentic and revealing responses. (See

Appendix VII for the faculty interview protocol and Appendix VIII for the administrator interview protocol.)

~~✎~~ Direct observation of meetings. The meeting observations (about 20) helped the researcher understand the context of the setting. These observations were recorded using a protocol and then coded. (See Appendix IX for the meeting observation protocol.) Meetings included department meetings, senate meetings, and staff development workshops/conferences. These observations helped the researcher understand the school culture better and to check information provided to the researcher through the interviews.

~~✎~~ Document analysis. The document analysis of institutional documents allowed the researcher to begin to understand the organizational culture and norms at each school. The content analysis of these artifacts followed a protocol procedure. (See Appendix X for the document analysis table.) Some documents included: Council of Instruction minutes, Academic Senate minutes, accreditation documents, and various internal documents.

The data collection guiding questions are included in Table 3.6:

Table 3.6: Data Collection Protocol—Institutional Support

To learn:	Data that was collected:
In what ways does the administration/institution successfully support its faculty?	in -depth interviews with identified faculty. in -depth interviews with administrators. Document analysis: meeting minutes, internal memos. Questionnaires for volunteer faculty.
In what ways does the institution/administration inhibit teaching efforts?	in -depth interviews with identified faculty. in -depth interviews with administrators. Document analysis: meeting minutes, internal memos. Questionnaires for volunteer faculty.
What is the level of faculty commitment to the institution?	in -depth interviews with identified faculty. in -depth interviews with administrators. Questionnaires for volunteer faculty.
Historically, what efforts have been made to improve teaching at the institution?	in -depth interviews with identified faculty. in -depth interviews with administrators. Document analysis: Internal memos and documents.
What are the obstacles to improving faculty effectiveness at the community college?	in -depth interviews with identified faculty. in -depth interviews with administrators.
How are decisions made with respect to teaching at the institution?	in -depth interviews with identified faculty. in -depth interviews with administrators. Questionnaires for volunteer faculty. Document analysis: meeting minutes, internal memos. Observations of administrative meetings, Academic Senate meetings, Council of Instruction meetings, school board meetings.
How effective are the faculty development efforts, evaluation policies, and the academic senate at supporting teaching efforts?	in -depth interviews with identified faculty. in -depth interviews with administrators. Questionnaires for volunteer faculty.
How are faculty evaluated?	in -depth interviews with identified faculty. in -depth interviews with administrators. Observation of tenure committee meetings. Document analysis: faculty evaluations (administration, student). Questionnaires for volunteer faculty.
How is the tenure decision made?	in -depth interviews with identified faculty. in -depth interviews with administrators. Questionnaires for volunteer faculty.
What are the institution's faculty development efforts?	in -depth interviews with identified faculty. in -depth interviews with administrators. Document analysis: Internal memos and documents. Questionnaires for volunteer faculty.

What role does the Academic Senate play with teaching efforts?	in -depth interviews with identified faculty. in -depth interviews with administrators. Q uestionnaires for volunteer faculty. O bservations of Academic Senate meetings. D ocument analysis: Academic Senate meeting minutes.
What is the nature of faculty relationships within departments?	in -depth interviews with identified faculty. in -depth interviews with administrators. Q uestionnaires for volunteer faculty. O bservations of department meetings. D ocument analysis: department meeting minutes.
What is the nature of faculty relationships between departments?	in -depth interviews with identified faculty. in -depth interviews with administrators. Q uestionnaires for volunteer faculty. O bservations of meetings. D ocument analysis: internal documents.
How do the perceptions of the identified faculty compare with the rest of the faculty and the administration at the institution?	Q uestionnaires for volunteer faculty. I nterviews with identified faculty. I nterviews with volunteer faculty.

Data analysis

The researcher transcribed the faculty interviews and wrote summary analytic memos throughout the data collection and analysis process in order to note patterns and themes (Miles and Huberman, 1994). Additionally, the researcher maintained a log of people interviewed, along with notes of issues/themes to explore in further interviews or in the literature. When the interviewing process was completed, Bedard read through all of the transcripts, noting themes and issues mentioned by participants. These readings led to a themes chart, which was then shared with the Teaching and Learning Institute participants at Beckman College. The feedback from that presentation was then used to direct data collection follow-up efforts and to further refine the data analysis process. At that point, the researcher began developing codes to begin organizing the data. The codes were checked by the other

researchers to add internal consistency. Those codes were then used to develop content analytic summary tables to continue the process of exploring and describing the data. (See Appendix XI for a template of the summary form and Appendix XII for the summary table.) With feedback from the other researchers, Bedard wrote summary memos for each faculty interview, highlighting important themes and implications. The process of developing the tables, along with the codes used, was then shared with the participating faculty and staff at Beckman College's second Teaching and Learning Institute meeting. At that meeting, participants were asked about their conclusions based on the data. They were also asked to think about the relevance of this data for their professional lives and whether they agreed or disagreed with the faculty interview findings.

Coding the data with pseudonyms, the researcher then merged the interview data with the student outcomes data. Following the merging, the interview data was ranked by student outcomes. The researcher further refined the analytic categories and developed cross-case analysis matrices in order to compare: faculty with high student outcomes and the rest of the faculty, faculty at the two institutions, faculty within the two disciplines (Miles and Huberman, 1994). At this point, the researcher moved more fully into the explanation stage of data analysis, looking for patterns and connections between data sets, as well as anomalies (Miles and Huberman, 1994). The researcher also continually returned to the original transcripts in order to add the detail necessary to clarify the emerging explanations.

When the results of the questionnaire had been analyzed with descriptive statistics, the questionnaire data was then merged with the interview findings to develop a more complete picture of the perceptions of faculty with high student outcomes.

Throughout the research process, the researcher sought to triangulate the data by interviewing administrators and other staff, observing meetings, and analyzing documents. The administrative interview transcripts were analyzed in the same fashion as the faculty interviews. The meeting observation notes were transcribed, coded, and summarized. The researcher conducted follow-up interviews to validate interpretations. This data was enhanced nicely with information gathered from various institutional documents. All of these components helped in the development of portraits of both colleges.

In sum, the research questions guided the data analysis process. Through the use of data reduction (coding) strategies and data displays, including the constant comparative method analysis developed by Glaser and Strauss (1967), conclusions were drawn which were then verified by returning to the data. Emergent hypotheses were tested and alternative explanations were sought. Not only was the data analyzed by the researchers, but by the Teaching and Learning Institute participants as well. The institute's participants were central to the refinement of the data analysis procedures with this component of the study, as well as for the refinement of the institute itself as described in the next section.

Component III: The Teaching and Learning Institute: Research Design

The final piece of this tripartite project was the assessment and refinement of Teaching and Learning Institute activities within the Beckman College's district. The Teaching and Learning Institute will be modified as a result of the researcher's efforts. This collaboration represents an effort grounded in action research principles to bring about continuous improvement in the process of orienting and supporting new teachers.

Though staff development activities have been an integral part of Beckman College staff support in the past, that support has been generic and intended for all employee groups. Only in the 2001-2002 academic year has there been a directed institutional effort to bring energy to bear upon the issue of teaching and learning improvement specifically. Staff Development Committee personnel at Beckman College developed an Teaching and Learning Institute for first year faculty members that was subsequently implemented beginning in the fall of 2001. This institute offered activities focused on logistic and generic information pertinent to community college teaching. The agenda included presentations on the following:

- ~~✍~~ New faculty orientation.
- ~~✍~~ Introduction to Student Services.
- ~~✍~~ Dealing with difficult and disruptive students.
- ~~✍~~ Teaching and learning styles.
- ~~✍~~ Effective questioning techniques.

~~2/2~~ Technology in the classroom.

~~2/2~~ Classroom assessment techniques (Davis and Cross models).

The researchers worked with the staff developers on the Teaching and Learning Institute to include efforts focused upon student success, teachers, and the teaching practice. The researchers worked with the staff developers in a number of ways. Activities included:

1. A forum to introduce the research project to first year faculty members. Twelve of the thirty-one first year faculty members at Beckman College attended the initial seminar. These faculty members completed teacher profiles and an assessment of their educational background, experiences, and beliefs of teaching. In addition, faculty members indicated their personal learning preferences, and they provided suggestions for future activities that they believed would be of value.
2. The researchers conducted two forums for first year faculty volunteers where preliminary findings of the investigations of teachers with high student outcomes and of institutional support for teaching. At each of these forums, first year faculty volunteers discussed the information presented with researchers, engaged in a focus group activity to obtain their perspectives on the information presented, and completed questionnaires related to the topics presented.
3. Assessment of Anderson College and district efforts to support first year teachers at Beckman College. In order to assess the efforts at Beckman College to

support first year teachers, Simpson interviewed the district's Staff Development Committee chairs. In addition, first year faculty members who were able to participate in teacher development and/or Teaching and Learning Institute activities participated in interviews to uncover their perceptions and obtain their feedback for the improvement of activities for future first year teachers. As a counter balance to those who participated in first year teacher development activities, interviews were conducted with first year faculty volunteers who were unable to, or chose not to, participate in Teaching and Learning Institute activities.

4. Presentation of project findings and conclusions at Beckman College. Collaborating with the staff development committee chairs, results of the assessment of first year teachers, both participants and non-participants, were shared with the Staff Development Committee. Additional information regarding significant research findings, conclusions and recommendations was also provided.
5. Assessment of first year faculty volunteers regarding actual changes in practice due to Teaching and Learning Institute activities. Utilizing a questionnaire and interviews, volunteer first year teachers who participated in all of the Teaching and Learning Institute activities were asked to assess both short term and long term effects, if any, of those activities upon their teaching practice.

6. Development, in collaboration with first year teachers and the Staff Development Committee at Beckman College, of an agenda of Teaching and Learning Institute activities for the 2002-2003 academic year. Teacher development activities will be structured for the 2002-2003 academic year utilizing the feedback and assessments provided by first year faculty members, both participants and non-participants, staff development personnel, and the information discovered as a result of this research.

Data Collection and Analysis

Assessment of the value and effectiveness of staff development activities for new faculty occurred at the conclusion of each activity. The protocol was the same for each activity. The assessment instrument was developed and administered by staff development representatives. Participants were asked to complete a two-part survey; the questions asked for an assessment of the presentation and for suggestions for improvement. The Staff Development Committee at Beckman College will use the results of this assessment to modify future activities and presentations.

Assessment of Teaching and Learning Institute activities involved multiple qualitative measures. The inclusion of multiple measures was utilized in order to triangulate the data collected. These measures included written questionnaires, focus group activities and discussions, and interviews. The purpose was to identify the backgrounds of participants, and the beliefs, perceptions, and insights of research subjects that could be utilized to improve future staff development and Institute

efforts. Feedback was obtained prior to, during, and at the conclusion of each researcher presentation. Information was solicited from representatives of all constituent groups who were able to provide meaningful feedback on staff development and Institute activities. These constituent groups included new faculty cohorts and staff development committee representatives.

As an additional triangulation measure, interviews were conducted with first year faculty volunteers who did not participate in the Teaching and Learning Institute activities. The purpose of these interviews was to obtain the perspectives of this cohort regarding the limitations and the value of the Teaching and Learning Institute activities, and to gain insight into the barriers to participation as perceived by this group. The purpose was to contrast non-participant responses with first year faculty who did participate.

The data collected was transcribed, categorized and cross-referenced. Analysis indicated trends, common perceptions, and patterns. Equally of value was the identification of differences in perception between research participants. The comparison of data obtained from participants vs. non-participants was of particular interest.

Bearing in mind that the goal of the research project was to realize measurable improvement in student outcomes, the researchers recognize that improvement in student outcomes will not be immediately observable. Meaningful comparative data must be collected on an annual basis over a significant period of

time in order to establish the effect upon student performance of faculty members who will have participated in the Teaching and Learning Institute activities. Only through the incorporation of longitudinal studies beyond the scope of this project can such improvement be validated.

In the second and subsequent years of Institute efforts, quantitative measures of student success will be available and will be utilized in order to establish that the Teaching and Learning Institute efforts can be linked with improvement in student outcomes. Ultimately, these figures will be the determinant of project success.

Student outcome data for the 2001-2002 academic year will not be available until the fall of 2002. When this data becomes available, it will be analyzed according to the criteria the researchers have established: course completion rates, student passing rates, and passing rates in subsequent courses. Student performance data for cohort members will be compared to overall college data collected over the same period of time. The researchers expect to see steady improvement for the college in overall course completion and course success rates as the number of newly appointed teachers completing the Teaching and Learning training increases. The researchers believe that measurable improvement in student performance over time is the most appropriate way to evaluate the effectiveness of the institute's approach.

Overall Project Evaluation

As previously indicated, this action research project, its findings and impact, will be evaluated in a variety of ways. The evaluation of the Teaching and Learning

Institute will serve as one assessment tool for this collaborative effort because it is the culmination of the research efforts (quality practices of teachers and institutional support). Additionally, all three members will participate in presentations to the participating institutions, as well as to the various constituent groups. However, the ultimate measure of the effectiveness of this effort to improve student performance will be its effect upon teachers, with the hope of realizing quantifiable improvement in the success of community college students. The validation of the project's success will be in the support of teachers, and the realization of measurable improvement in student course completion rates, student success rates, and student success in subsequent courses over time.

CHAPTER FOUR: FINDINGS

This project seeks to increase student success in developmental math and English courses by focusing upon critical aspects of teaching practices, institutional support, and teacher development. The project consists of three distinct but interrelated parts:

- ✎ Identifying the characteristics and practices of faculty who have high student outcomes;
- ✎ Understanding institutional support for teaching and learning that are linked with high student outcomes; and
- ✎ Participating in the evaluation and revision of first year community college teacher development activities.

Each piece constitutes a self-standing contribution to the improvement of community college student performance. In combination, the three pieces form a powerful research-based application of effective teaching practices and sound institutional support processes. The project findings and the analysis that led to the findings are presented in this chapter.

Teaching practices

This section discusses the development of a new student outcomes measure, the Composite Success Rate, and the common teaching practices of faculty with high student outcomes who teach developmental classes. The composite success rate is being adopted at the two participating institutions as a measure of student

performance in developmental math and English classes. The findings on faculty practices are being incorporated into the Teaching and Learning Institute for new faculty at one of the institutions.

Institutional support for teaching

This component of the study began with an exploration of faculty perceptions about the effectiveness of structures¹ designed to support teaching efforts. As the study progressed however, the teachers revealed that while the structural mechanisms may be necessary, they are only effective if they support and encourage relationships with other faculty members and with the school environment. The results from this study indicate that the teachers with high student outcomes, for the most part, felt that their institution supported their efforts as teachers. Furthermore, faculty members identified the following as having the greatest impact on their teaching:

1. A collaborative, collegial network.
2. Meaningful feedback.
3. A focus on teaching and learning.
4. Opportunities and support to develop professionally.

The findings suggest that schools should consider the processes in place and how they can be refined to encourage authentic participation, not just compliance.

¹ Staff development, evaluation, and the academic senate.

Teaching and Learning Institute

This piece discusses the evaluation and refinement of a new faculty training institute that was developed in collaboration with the Staff Development Committee, the new faculty and the researchers of this project. Using the principles of action research, the researchers shared their findings from the teaching practices and institutional support components of the project with the new faculty and then used their feedback to modify the curriculum and the activities scheduled for next year's new faculty orientation.

Teaching Practices

The Teaching and Learning Improvement Project focuses on developmental math and English classes, which are considered gateway courses to the success of community college students. In these courses, what are the characteristics and practices of faculty who have high student outcomes? In order to answer this question, the researcher first defines a new measure for student outcomes and then uses this measure to identify faculty with high student outcomes and capture their common characteristics and practices.

This section is organized under three headings: Summary of Findings, Discussion of Findings, and the researcher's biases and surprises. There are in total nine significant findings and a tenth, which is a compilation of three noteworthy results that must be discussed.

Summary of findings

Finding 1: Subsequent Success Rate Measure

A third² measure of student outcomes, success in a subsequent class, is needed to assess student performance in a sequence of courses in developmental math and English.

² Subsequent Success rate the third measure was developed by the researchers to capture the student outcomes through the entire sequence of developmental classes. Currently the California Community College system uses two measures of student outcomes: Retention Rate and Success Rate, which measures student outcomes in an individual course.

Finding 2: Composite Success Rate Measure

The true picture of student performance is captured by a new measure of student outcomes that reflects success in a base course and success in a subsequent course. This measure, called the composite success rate, is the product of the success rate in a base course and the success rate in a subsequent course.

Composite Success Rate = Success Rate x Subsequent Success Rate

Finding 3: Student interaction within the classroom

Math and English faculty members, during the interviews described themselves as supporting classroom discussion in order to achieve high student outcomes. While this occurred in most of the English classes observed, it was minimal in math classes.

Finding 4: Social Interaction with students

Faculty who reported that they did not socially interact with students had higher student outcomes than faculty who reported that they interact with students socially.

Finding 5: Common practices of math faculty

Math faculty used a similar format of organizing the class session. First they responded to questions raised by students from their previous assignment, followed by a didactic style of covering a new topic which included working out samples problems. Finally the faculty had students work individually on problems similar to the examples worked out by the instructor.

Finding 6: Common practices of English faculty

Most English faculty who participated in the study emphasized the importance of the writing process in the context of achieving high student outcomes.

Finding 7: The practices of math and English faculty with high student outcomes

Math faculty with high student outcomes provided a structured classroom environment, which kept students on task during the class session and on track for the whole semester. English faculty with high student outcomes had students regularly practice on writing during class session and assigned writing assignments outside of class.

Finding 8: Faculty with high student outcomes supported students academically

All math and English faculty members indicated that supporting students emotionally and academically was critical when working with developmental students. However, when dealing with the challenges of underprepared developmental students with low study skills, the faculty with high student outcomes stayed focused on what they could do to make the student successful in the course. On the other hand, faculty members with lower student outcomes felt the fact that the reasons behind poor student performance were beyond their realm of influence.

Finding 9: Participation in workshops/conferences

Faculty with high student outcomes were less involved with workshops and conferences than those with lower student outcomes.

Finding 10: Miscellaneous—Colleagues, Assessment, Challenges

~~✎~~ Faculty members value interaction with their colleagues.

~~✎~~ Math faculty use tests, quizzes and exams as their assessment tools and English faculty use quizzes and essays as their primary assessment instruments.

~~✎~~ Math faculty indicated that motivating developmental students was the biggest challenge and English faculty indicated finding time to complete grading as the biggest challenge.

Discussion of findings

Finding 1: Subsequent Success Rate Measure

A third measure of student outcomes, success in a subsequent class, is needed to assess student performance in a sequence of courses in developmental math and English.

In chapter 3 we discussed that Retention³ and Success⁴ are the two measures of student outcomes used by the California Community College Office of the Chancellor. However, these two measures do not present the whole picture of student performance in the sequence of developmental math and English classes.

³ Retention ? $\frac{\text{students who receive a grade of A, B, C, D, F}}{\text{students who receive a grade of A, B, C, D, F, W}}$

⁴ Success? $\frac{\text{students who receive a grade of A, B, C}}{\text{students who receive a grade of A, B, C, D, F, W}}$

What happens to the student who is successful in course? Did that student enroll in a subsequent course and if so, was the student successful?

Faculty members also raised these questions during the interviews. Most math and English faculty felt that a student was successful if the student was able to retain the knowledge base and do well in the subsequent class. For instance, Neil Ferguson said:

Probably the most basic definition is if they can pass my class; but I think more so if they are able to use that information and apply it at the next level and be successful in the next level.

The emphasis on what happens at the next level expressed by several math faculty members further validated the additional measure of success in subsequent course that the researchers have developed in this study. In fact, when the emerging themes were presented to a group of new faculty member in Beckman College, the new faculty members were most excited about the concept of success in a subsequent class. They expressed interest in having these data made available to their departments on a regular basis which would help the department not only in determining course prerequisites, but would also give individual faculty critical information regarding what happens to their students when they pass their classes.

English faculty members defined student success in two ways:

1. Students being able to earn a passing grade in the class and
2. Students making any kind of incremental progress.

This is captured by a comment from faculty member Eric Plumlee:

I used to define it [success] by grades until I actually started teaching. And then I realized that any small....a measure of success doesn't have to be big. It can be if they walk in not knowing how to write a complete sentence and by the end of the semester they can write a complete sentence, but they still can't write an essay, they've been successful. So there are these small increments of improvement, which to me is a success.

Therefore, including the subsequent success rate as a measure of student outcomes, leads to three measures of student outcomes: Retention Rate, Success Rate, and Subsequent Success Rate⁵. Which of these three measures should be used to rank the faculty based on student outcomes? Is one measure by itself a better predictor of student performance than the other two? Should there be a new measure that captures the situation of students moving through a sequence of classes? These questions are answered in Finding 2.

Finding 2: Composite Success Rate Measure

The true picture of student performance is captured by a new measure of student outcomes that reflects the success in a base course and success in a subsequent course. This measure, called the Composite Success Rate, is the product of the success rate in a base course and the success rate in a subsequent course.

⁵ The retention rate, success rate and subsequent success rate were calculated for all participating faculty in Anderson College and Beckman College. See Appendix XVII.

$$\text{Composite Success Rate} = \text{Success Rate} \times \text{Subsequent Success Rate}$$

All three measures of student outcomes are important, and one measure by itself does not give the complete picture. Retention and success rates do not provide any idea on the number of students who successfully complete the base course and advance to successfully complete the subsequent course. If the number of students being successful in the base course is small then even if the subsequent course percentage is high, the outcome is a high percentage of a small number. One interpretation of this scenario is that the faculty member is very rigorous and, therefore, students are not successful. The few, who make it through the tough course requirements, are the cream of the crop and, therefore, have no problem in being successful in the subsequent class.

On the other hand, if the success rate in the base course is high and the subsequent success rate is low, then a small percentage of a large number could suggest that the faculty member is very lenient with the standards and, hence, large numbers of students pass the class even if they are not ready for the next class. While the scenarios discussed here might be extreme, it reinforces the argument that all three measures are important to give the departments and the institution the complete picture of student performance in an entire program.

Let us review a specific example. Figure 4.1 illustrates a comparison of the student outcome measure (retention, success, success in a subsequent course) for two faculty members (faculty member X and faculty member Y) at Anderson College.

Faculty member X's students have a higher success rate than faculty member Y's students, 83% as compared to 51%; however, faculty member X's students have a lower subsequent success rate than faculty member Y's students, 56% as compared to 66%.

Figure 4.1: Student outcomes of faculty members X and Y

Comparison of Student Outcomes between two faculty in College A

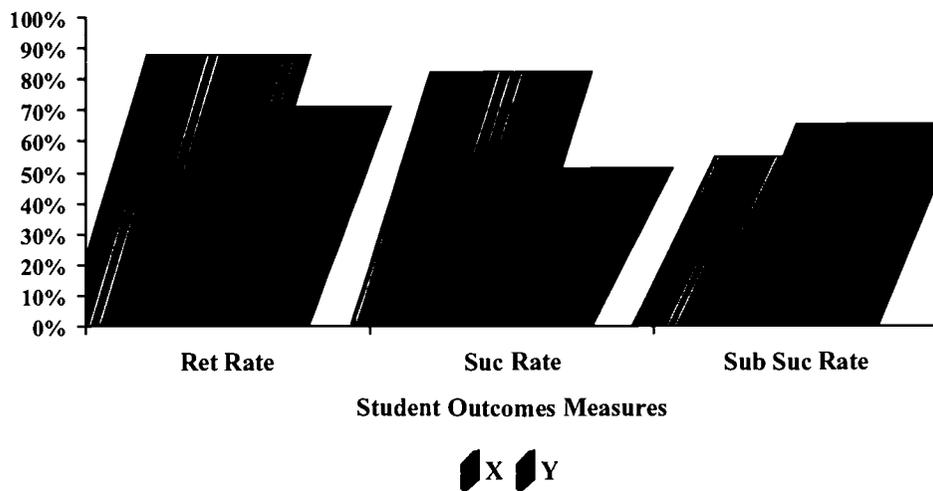


Table 4.1 represents a hypothetical case where faculty member X and faculty member Y teach a base course with 100 students each. We further assume that all the successful students progressed to a subsequent course. Thus, 47 of faculty member X's original 100 students are successful in the subsequent course. On the other hand, only one-third of faculty member Y's original 100 students are successful in the subsequent course. Therefore for every 100 students that progress through the sequence 46 students of faculty member X are successful in the

subsequent course, compared to only 34 of faculty member Y—a difference of 12 students.

Table 4.1: Hypothetical Scenario—Two Math Faculty

Name	# in Base Course	# Successful in Base Course	Assuming all students move to subsequent course	# Enrolled in Subsequent Course	# Successful in Subsequent Course
X	100	83% of 100 = 83	→	83	56% of 83 = 46.48
Y	100	51% of 100 = 51		51	66% of 51 = 33.66

The above analysis was the basis of developing a composite measure of student outcomes. This captures accurately, with a mathematical formula, the idea that subsequent success rate can be applied only to those students who have initially been successful in the base course.

$$\text{Composite Success Rate} = (\text{Success Rate in Base Course}) \times (\text{Success Rate in Subsequent Course})$$

The student success rate, subsequent success rate, and the composite success rate for faculty member X and faculty member Y are summarized in Table 4.2.

Table 4.2: Composite Success Rate—Two Math Faculty

Name	Success Rate in Base Course	Subsequent Success Rate	Composite Success Rate
X	83.00%	56.00%	46.48%
Y	51.00%	66.00%	33.66%

Having defined a better measure of student outcomes, we now move to the findings related to faculty practices within the classroom.

Finding 3: Student interaction within the classroom

Math and English faculty members, during the interviews, described themselves as supporting classroom discussion. However, while this occurred in most of the English classes observed, discussion was minimal in math classes.

Most faculty (97%) who completed the online questionnaire indicated that they welcome questions from students in class, and that they encourage class discussions and differences of opinion in the classroom. However, when the researchers conducted classroom observations they found that most students in math classes did not spontaneously ask questions and interact with the faculty member or other students during the lecture. Instead the questions were restricted to the time provided by the faculty to ask questions from the homework.

In many of the math classes, faculty members prompted students with questions such as “So what do you do next?” while working through a problem. However, students mostly remained quiet, often treating the question as a rhetorical question. After the instructor asked a question, there was typically no response. The few responses were always from the same students who routinely responded to these

questions, while the rest of the class remained quiet. The faculty then progressed to the next step.

In summary, the researchers hypothesized that in math classes an environment of class discussion and exchange was not created at the beginning of the semester and students, therefore, developed the habit of being passive during the course of the lecture. However, the faculty's self-assessment from the online questionnaire indicates that they encourage class discussion. Grubb (1999) discusses this disconnect between a faculty member's self perception of practice and the real practice that occurs in the classroom, in his book *Honored but Invisible*:

Instructors clarify that they are trying to use discussion to move away from lecture and to involve students, but they rarely mention how to create a lively discussion. The flow of discussion is often attributed to whether students have done the reading, but rarely is it treated as the instructor's responsibility, or the result of the way instructors pose questions or prepare students for interaction.
(p. 247)

English faculty with high student outcomes involved their students in classroom discussion. These faculty members also had the students do most of the work during the class session rather than the students observing the faculty as in the *sage on the stage* practice. Math faculty members with high student outcomes on the other hand, did not have much classroom discussion. However, like their English counterparts, they too had students engaged in work most of the time rather than them predominantly working out the problems on the board.

The next finding also deals with faculty interaction with students, but outside of the classroom.

Finding 4: Social interaction with students

Faculty who reported that they did not socially interact with students had higher student outcomes than faculty who reported that they interact with students socially.

Faculty member responses to the question on the online questionnaire of whether they socially interact with the students were varied as indicated by Table 4.3.

Table 4.3: Social Interaction with Students

Agree	Mildly Agree	Neutral	Mildly Disagree	Disagree
26%	13%	32%	10%	19%
(8)	(4)	(10)	(3)	(6)

To determine if there was a relation between student outcomes of a faculty member and their response to whether they interact socially with their students, a correlation analysis was done on the data set of 24 faculty. A statistically significant ($R = 0.4081$, $p < 0.05$) but weak correlation was found between success rate in a subsequent class and social interaction of faculty with students. The positive value for R indicates that faculty whose students had high success rate in subsequent classes reported that they do not interact socially with students compared to faculty with lower student success rates. Due to the weak correlation, the researchers also conducted an Analysis of Variance (ANOVA) and obtained a significant difference ($p = 0.027938$) in the mean success rates in subsequent classes for faculty who

reported that they did not socially interact with students to those reported that they socially interacted with students. $df(3,20) = 3.733737, p < 0.05$. (See ANOVA output in Appendix XIII.) That is, the mean success rate in subsequent classes for faculty members who reported that they did not socially interact with students was higher than those who reported that they socially interacted with students.

During the interviews, most math faculty members indicated that they did not socialize with students outside the college. Many of them did work closely with students during their office hours. Faculty member Mathew Eutsey, who had the highest student outcomes in math, indicated that being available for students all the time in office was important. Faculty member Neil Furguson talked about how it was important to take the extra time to talk to students when you run into them outside the college, like the grocery store. Faculty member Neil Furguson commented, “If you have a little bit of knowledge about what they're about, that helps.”

Most English faculty, like their math colleagues indicated that almost all of the interaction with students occurred in class or during their office hours. Although the interaction during office hours was primarily related to students’ writing assignments, conversations often touched on career discussions and other co-curricular activities that the students were involved with. Faculty member Armenae Reglan commented, “If they [students] think I'm invested in parts of their lives outside of the classroom, sometimes they invest more in the classroom. So, it's a

win-win.” Compared to their math colleagues, more English faculty member indicated that they socialized with students outside of class and office hours.

The wide variance in responses to social interaction with students was not reflected in the classroom practices. There seemed to be standard discipline norms that most faculty members Darryl adhered to during the class session. These common practices are discussed in the next two sections.

Finding 5: Common practices of math faculty

Math faculty used a similar format of organizing the class session. First they responded to questions raised by students from their previous assignment, followed by a didactic style of covering a new topic which included working out samples problems. Finally the faculty had students work individually on problems similar to the examples worked out by the instructor.

Although the student outcomes of the math faculty members participating in the study were varied⁶, their classroom behaviors were very similar. Math faculty during classroom observations, mostly used a lecture style of teaching mathematics, followed by demonstrating problem solving by working out a problem in detail. Finally, the students were required to individually to repeat the demonstrated process on similar problems.

⁶ The variance in student outcomes was the following: six of the twelve math faculty members had student outcomes above the departmental averages and half of them were below. The departmental averages included all full time and part-time faculty who taught developmental mathematics.

A 50-minute class usually followed this pattern:

~~✍~~ The faculty member asked students if they had questions from the homework assigned during the previous class period. Students usually were responsive to this request and asked questions. The faculty member then addressed each question by going over the solution step-by-step. Most math faculty were extremely patient and took the time to answer each and every question that was raised. This usually took about 10 to 15 minutes.

~~✍~~ After about 10 minutes, the faculty member usually started a new topic. This included a didactic style of delivering information while students mostly observed the process and wrote down notes. Most of the time students did not ask questions or interact with the faculty member or with each other. After presenting the new topic, the faculty member usually worked out one or two sample problems. This was done in a very thorough way by trying to prompt the students to come up with the next step of the solution by asking leading questions. Usually the same group of students in the class responded to questions while the remaining students continued to observe and take notes. This usually took about 20 to 25 minutes.

~~✍~~ Finally, the faculty member usually assigned similar problems for student to try out on their own. During this time, the faculty member

might walk around and help individual students. After the students were done working out a problem, the faculty member would then work it out on the board.

A few deviations from this set pattern also had interesting differences in student outcomes:

Deviation 1: One math faculty, Jessie Feola, had a structured group activity during every class period. The group activity consisted of students forming groups of four and working on a quiz that had four problems. Feola handed each group a quiz sheet that had all four questions on it, with space provided for the group to write down the solution to each of the four problems. (All the groups worked on the same set of four problems.) Feola also handed them the quiz with each problem printed on strips of paper. Students in each group divided up the quiz amongst themselves, with each student being responsible for one problem. After solving the problem on their own, students discussed all the problems within their groups. Based on their discussions, students in a group also fine-tuned the solutions that they wrote out on the quiz sheet that had to be submitted to Feola. The researcher's notes during this observation indicated the following:

- ~~etc~~ Students were very excited and involved.
- ~~etc~~ All the students conversations were related to the task at hand.
- ~~etc~~ Students were teaching one another and some of them had very innovative ways of explaining concepts that the researcher thought

would be useful for the faculty to observe and incorporate into the lectures.

~~etc~~ The classroom environment was not the quiet passive room with rows of students but rather clusters of students bent over problems and talking excitedly to one another.

Interestingly enough, among all the six participating faculty from that college, Jessie Feola had the highest success in a subsequent course with 67.63%. However, the student success rate was 46.59% compared to the departmental averages of 50.16%. That is, Feola's students did well in subsequent courses but very few were successful in her course. This could be due to a variety of reasons. Maybe Feola had very high standards and therefore very few were successful in her class or, perhaps when she moved between different types of activities during the class session, students lost track of the concept that she was teaching. Another possibility is that she was not able to maintain the focus of the students—a key ingredient to student success in developmental classes. (See finding 7.) Therefore, the researchers believe that if Jessie Feola was able to keep the students focused on the task at hand during the entire class session, there might be an increase in the success rate of students.

Deviation 2: The second deviation from the typical teaching pattern was observed with faculty member Stephanie Wong who conducted an outdoor activity with

students to explain the idea of *The Slope of a Line*. Here are a few observations from the researcher's classroom notes:

~~etc~~ Students were excited about the activity.

~~etc~~ Stephanie Wong could not keep the attention of the students who wandered away and had conversations among themselves which were not related to math. This could be because the activity was outdoors and the space was unrestricted; therefore, Wong had a hard time communicating to the whole group at once. Often Stephanie Wong's instructions were communicated from one student to the next instead of all students hearing the instructions from the faculty member directly.

~~etc~~ The students were able to complete the activity without being able to connect it to the mathematical idea that Wong was trying to illustrate.

Stephanie Wong's subsequent success rate of 44.95% is significantly lower than the departmental average of 67.63%; however, Wong's success rate (48.45%) is higher than the department average of 46.59%. Again, we can speculate that Stephanie Wong does not have very high standards and therefore students find it easy to pass the class, but are not prepared to pass the subsequent class. However, the researchers believe that if Wong could connect the activities in a concrete way to the underlying mathematical concepts, then there would be an improvement in student performance.

The common practices of English faculty members are discussed in the next section.

Finding 6: Common practices of English faculty

Most English faculty who participated in the study emphasized the importance of the writing process in the context of achieving high student outcomes.

The participating English faculty members emphasized the importance of the writing process. They indicated that for developmental writing students to be successful, the teacher needed to be able to effectively communicate to the students and be supportive of that process as well.

Three of the faculty with the highest students outcomes (Lila Madonia, Zelma Hyslop and Juanita Gonzales) spent an extensive amount of time on students practicing writing during the class session. In fact, Madonia and Hyslop started every class session with a free writing activity. These two faculty members, during their interviews, emphasized the importance of the writing processes and that having students write essays regularly was the key to success. Anderson College has an exit-writing exam for all students before they progress from one course to the next course in the sequence. The English faculty members with the highest student outcomes in Anderson College, Zelma Hyslop and Juanita Gonzales, required students to regularly practice on essays that were similar to what they could expect on the departmental exit exam.

The emphasis on writing, be it for a specific exit exam or for the practice of writing, seems to pay off when it comes to student success. This will be discussed again in the next section that isolates those common practices among math and English faculty who have high student outcomes.

Finding 7: The practices of math and English faculty with high student outcomes

Although all faculty members who participated in the study had similar discipline prescribed formats to their classroom session as discussed in findings 5 and 6, there are some specific practices that the researchers noted among faculty with high student outcomes. Math faculty with high student outcomes, provided a very structured classroom environment, which kept students on task during the class session and on track for the whole semester. English faculty with high student outcomes had students practice on writing regularly during class session assigned writing assignments outside of class.

Faculty who had high student outcomes displayed very similar behaviors in the classroom. Similar classroom behaviors included the following:

1. Very clear, to the point explanations: The faculty members with high student outcomes always stayed focused on the core ideas of the lesson. They kept the students focused and did not allow the discussions to move on to tangential topics. This strategy seemed to work well with developmental students.

2. Did not assume prior knowledge: Faculty with high student outcomes did not assume that students had knowledge of the prerequisite classes. They focused on where the student was with respect to academic knowledge and then started the journey of bridging the gap from where they were to where they should be.
3. Highly structured classroom environment: Faculty with high student outcomes provided a structured class environment that helped the students stay on course and not fall behind. However because of the nature of the subjects, a structured environment in math is different from that in English. In math, a structured class environment includes students staying on task during the class period; practicing on several problems either individually or in a group; the teacher easily transitioning between having students work on solving problems on their own and bringing them back as a whole class; the teacher being well prepared to continuously reinforce the key ideas and why the students are doing what they are doing and how it connects to the concept being learned. In developmental English, the structured class primarily means an emphasis on writing, and the teacher constantly requiring students to work on their writing skills. For developmental classes maintaining a highly structured classroom environment was important for the success of students regardless of the faculty member's individual style.

4. Emphasis on examples done during the class period: Faculty with high student outcomes used many examples to illustrate points over the course of the class period.

Interviews of faculty with high student outcomes also revealed the following common themes:

1. General satisfaction with the institution and its support of teaching and learning: Faculty with high student outcomes were satisfied with the institutional support for teaching and learning compared to faculty with lower student outcomes who complained about the institution not responding to logistical needs of faculty. Faculty with lower student outcomes seemed to be dissatisfied with the materials provided for the classroom instruction like the markers for the white boards or the working of the overhead projector.
2. A focus on teaching students, and whatever it took to make the students successful: The faculty members with high student outcomes did not focus on what the students could or could not do, but instead focused on what they had to do for the students. Faculty with lower student outcomes on the other hand, were disheartened by the under preparedness of developmental students and felt helpless when it came to their performance which they contributed to lack of study skills and motivation.
3. Faculty members with high student outcomes tried strategies to keep students on track and keep up with the material. They did not assume the attitude that

their job was just to come teach the class and leave and not worry about whether the students were prepared or not or whether students had the necessary study skills to be successful or not. These faculty members assumed the responsibility of identifying the obstacles to their students being successful and then saw it as their responsibility to come up with necessary strategies to overcome those obstacles.

These practices are further explored in the context of *student support* in the next finding section.

Finding 8: Faculty with high student outcomes supported students academically

All math and English faculty members indicated that supporting students emotionally and academically was critical when working with developmental students. However, when dealing with the challenges of underprepared developmental students with low study skills, the faculty with high student outcomes stayed focused on what they could do to make the student successful in the course. On the other hand faculty with lower student outcomes focused the fact that many of the reasons why students were not successful were beyond their realm of influence.

Supporting Students: Math faculty stressed the importance of motivating students and being patient with them. They also concurred that the study skills of the students in developmental mathematics were poor, and that many students come to class fearing mathematics. According to them, providing support and motivation for developmental students will improve retention and student success. English faculty

members expressed similar opinions and echoed phrases like being patient with the student, having tolerance for poor writing, etc. English faculty member Zelma Hyslop, who has high student outcomes, expressed that it was essential that faculty members in developmental classes to pay special attention to treating developmental students like regular students and not talking down to them.

Motivating students was a common challenge identified by several math faculty members in this study. Math faculty member Mathew Eutsey, who had the highest student outcomes, gave quizzes every day at the end of the class period as a motivation to keep students in class for the entire period, and to also force students to keep up with their work. Eutsey also balances this highly structured classroom environment with a sense of humor and, perhaps more importantly, demonstrates a caring attitude towards students. Eutsey demonstrates the caring attitude by talking to students during break time and enquiring about why they did not do well on an exam and encouraging them to drop by during office hours for additional help. On the other hand, faculty member Darryl Giorgio who has low student outcomes, felt helpless when it came to motivating students and commented that:

Motivating the student is what it takes. But it's hard to motivate someone who is working two full-time jobs, a single mother with eight children trying to do a full-time student thing as well with too many units. I mean there is absolutely nothing I could do to motivate that person to spend more time doing that since they have no more time.

In that regard, Grubb (1999) shares a comment from one instructor who represents the common belief that the students in developmental classes are not college material,

These students are the most needy, the most undereducated, and often limited by disabilities. It's not uncommon to find a student who had allegedly studied something like parts of speech for several weeks who still identifies "a" as a verb. What to do with these students in a postindustrial world is a real quandary (p. 172).

On the other hand, faculty member Lila Madonia (English), with the highest student outcomes among all twenty-four faculty, felt that the teacher needed to be in tune with where the students were academically in order to begin the process of bridging the gap between where the students were and where the student needed to be at the end of the semester. Madonia commented, "The student becomes the focus and not the teacher...The student need must drive the format of the class." Along these lines, Grubb (1999) observes,

Bridging the gap between the competencies students bring with them to those they need to do well in the classroom and in society is crucial to making them useful members of society. (p. 173)

The difference between faculty with high student outcomes and those with lower student outcomes was the way in which they approached the issues of student motivation and under preparation. Faculty with high student outcomes, both in math and English, kept students as the central focus and tried whatever it took to move the

students forward. However, those with lower student outcomes tended to express helplessness and frustration and exhibited a *C'est la vie* attitude towards these issues.

Grubb (1999) echoes what the researchers observed during the study,

The contrast between dismissing some students as “not college material” and finding a religious or social motive for basic skills instruction is one of the central debates within the open-access college. (p. 173)

The researchers repeatedly emphasized that the single difference between faculty with high student outcomes and those with lower student outcomes was the *take charge* attitude exhibited by the faculty members with high student outcomes. Those faculty members take responsibility and believe that it is their moral obligation to the students to break down all obstacles that prevent students from being successful.

The next section explores the practices of faculty outside of the classroom environment particularly the time they spend attending workshops and conferences.

Finding 9: Participation in workshops/conferences

Faculty with high student outcomes were less involved with workshops and conferences than those with lower student outcomes as self reported during the interviews and with the online questionnaire.

Faculty who completed the online questionnaire responded to questions related to their involvement with workshops and conferences on a Likert scale that ranged from *Agree* to *Disagree*. A correlation analysis was conducted between the

responses to these questions and the measure of student outcomes for each of the faculty. The correlation analysis indicated that a statistically significant ($R = 0.5958$, $p < 0.05$) but moderate correlation was found between success rate in a subsequent class and the level of involvement with workshops. The positive value for R indicates that faculty who had high success rate in subsequent classes reported that they do not regularly attend workshops as do faculty with lower student success rates in subsequent classes. The researchers also conducted an ANOVA and obtained a significant difference $df(2,21) = 6.355494$, $p < 0.05$ in the mean success rates in subsequent classes for faculty who reported that they did not regularly attend workshops to those who reported that they regularly attended workshops. (See ANOVA output in Appendix XIV.) That is, the average success rate in subsequent classes was higher for faculty who reported that they did not attend workshops regularly to those who reported that they did attend workshops regularly.

Also, a statistically significant correlation ($R = 0.6399$, $p < 0.05$) was noted between success rate in a subsequent class and the level of involvement with conferences. Again, the positive value of R indicates that the faculty whose students had high subsequent success rates reported that they do not attend conferences regularly as do faculty with lower student success rates in subsequent classes.

The researchers then analyzed the qualitative information, gathered from the interviews, related to faculty involvement with workshops and conferences. The responses from math faculty during the interviews, in response to questions related to

participation in committees and attendance of conferences, were varied. Some strongly felt that faculty should attend at least one conference a year and should regularly participate in committees both within the department and within the campus. Interestingly, the two faculty (Olu Faragay and Cody Koeppel) with student outcomes above the departmental average in Anderson College attended conferences regularly and served on committees. They felt that conferences, in particular, were beneficial to student learning. They felt that committee involvement depended on the type of committee. If the function of the committee was to deal with academic issues of curriculum, teaching policies etc., then it was beneficial. But if the function of the committee was administrative, then they indicated that it did not influence teaching and learning.

The two faculty members, Mathew Eutsey and Jason Wadman, who have highest student outcomes in math at Beckman College had opinions that contradicted those of the math faculty member Darryl Giorgio (Anderson College) with regard to conferences and committees. They strongly argued that committee involvement was a sheer waste of time and took away from time that could be spent with students. One of the two faculty members felt that departmental committees were useful, but that campus wide committees were not. Eutsey, who has the highest student outcomes among the entire math faculty, felt that conferences were a waste of time. Darryl Giorgio, on the other hand, who was a strong advocate for attending conferences, did not have high student outcomes.

The English faculty with the highest student outcomes felt that conferences were very beneficial in improving teaching and learning but indicated that they did not attend conferences as regularly as they liked for reasons ranging from family constraints to not making the time to attend conferences.

Finding 10: Miscellaneous—Colleagues, Assessment, Challenges

✎ Faculty members value interaction with their colleagues.

✎ Math faculty use tests, quizzes and exams as their assessment tools and English faculty use quizzes and essays as their primary assessment instruments.

✎ Math faculty indicated that motivating developmental students was the biggest challenge and English faculty indicated finding time to complete grading as the biggest challenge.

Colleagues: Most faculty members interviewed felt the conversations they have with their colleagues help them most with the process of teaching and learning. Some of them also felt that visiting the classrooms of colleagues was beneficial; however, the only opportunity that they had to do this was during the faculty evaluation period. Faculty member Mathew Eutsey with the highest student outcomes in math commented, “You learn a lot in observations.” Many of the math faculty were teaching *overloads*—teaching classes more than their contract required them to do. As faculty member Helen Baxter pointed out,

This [informal conversations with colleagues] is one thing, after all that I have taught, I have found it

difficult to achieve. Because everybody is teaching an overload to make more money and therefore we really do not have time to sit down and talk.

English faculty felt the same way as their math colleagues that interaction among faculty was beneficial to the teaching and learning process. Faculty member Lila Madonia, a teacher with the highest student outcomes among all 24 faculty members participating in the study, noted, "It is funny how when people sit down to do a task, you are talking about 500 different things and sharing. You talk about things in the classroom and you share teaching strategies."

Assessment: In terms of assessment, all math faculty members used a combination of quizzes, tests and exams. Most faculty members did not allow student to use their textbooks or their notes on the exam. Some of them allowed students to use a note card with formulae. The only exception to this was faculty member Mathew Eutsey who, incidentally, had the highest student outcomes in mathematics among faculty members in both colleges. Eutsey allows students to use notes on exams. The researchers then checked the subsequent success rates for students who successfully completed Eutsey's class to see if the students were successful in the subsequent class when they were allowed to use notes on tests in the prerequisite course. The researchers were surprised to find that the success in the subsequent class for Mathew Eutsey was 66.13% compared to the departmental average of 56.56%.

English faculty used a combination of quizzes, exams and writing assignments to assess student work. The two faculty with the highest student outcomes in Anderson College, Zelma Hyslop and Juanita Gonzales, used writing to assess student progress. In fact, their teaching strategy in the class involved a lot of writing as well. The English faculty with high student outcomes used rubrics to assess student writing. They also made sure that their comments on essays were thorough diagnostic for students to use to improve their writing.

Challenge: The biggest challenge expressed by most math faculty was the difficulty of motivating the students and getting them to do their homework before they come back to class for new content material.

The biggest challenge expressed by most English faculty was that their workload was heavy and that they had a hard time keeping up with the grading. It should be noted that class size for faculty member Helen Baxter in Anderson College is 25 and in Beckman College is 27, which is not a significant difference. However, the English faculty in Anderson College expressed not having the time to grade as more of a problem than the English faculty in Beckman College. Unlike the math faculty, only one English faculty talked about motivating students as being the biggest professional challenge.

Researcher's biases and surprises

Bias: When observing the classes, the researcher made some preliminary assessment of which faculty would have the higher student outcomes. Of the six

faculty members who had student outcomes higher than the departmental average, the researcher, after observing the classes, felt that five of the six would not have high student outcomes because they had a traditional style of teaching—no group work or hands on activities. This was a bias of the researcher who believed that the non-traditional style of teaching enhanced student learning and therefore expected to see the traditional faculty members have low student outcomes. However, the actual data proved the researcher wrong in that it did not matter if the style was traditional or non traditional, as long as the faculty member kept the student on task and had the student involved in doing the actual work rather than being passive observer.

Similarly, of the six faculty members who had student outcomes lower than the departmental average, the researcher was sure that two, if not three, would have high student outcomes. This was because, these faculty member had

- ~~✍~~ An easy going classroom environment
- ~~✍~~ Two of the three faculty mentioned did group work regularly
- ~~✍~~ One of the faculty members did hands on activities.

Again, this was later disproved by the student outcomes analysis.

Surprise 1: Two English faculty in Beckman College, Loraine Redrick and Elnora Sparr, explained that they approached student learning from a metacognitive perspective. That is, they try to develop in their students an ability to know what they know and what they do not know. The classroom activities seemed to follow this as well.

These were the only two faculty members out of the sample of twenty-four who referred to learning theory and tried to revise instruction to maximize learning. The researchers were very impressed and expected these two faculty members to not only have the highest student outcomes but also to be far ahead of the rest. However, as shown in Table 4.4, their student outcomes measures were not as high as the rest of the English faculty (see Appendix XVI) members at their college.

Table 4.4: Student Outcomes—Two English Faculty

ID	Retention Rate Base Course	Success Rate Base Course	Subsequent Success Rate	Average of three measures
Beckman College	77.81%	60.99%	66.72%	68.51%
Lorraine Redrick	82.73%	56.36%	60.42%	66.50%
Elnora Sparr	79.58%	44.17%	67.47%	63.74%

The researchers would like to point out that the focus is on the three measures of student outcomes (Retention Rate, Success Rate and Success Rate in a Subsequent class) that are determined by the grade the students earn in the class. However, whether the grade that students earn is by itself the best assessment tool is a controversial issue.

Surprise 2: In Anderson College, students must pass an exit exam in writing that is standardized for all students for a particular English course. This exit exam is an essay, which is then graded by two faculty members using rubrics. The purpose for this is to ensure that students progressing to the next class have certain minimum levels of competency. The exit exam is also expected to minimize the discrepancy in student preparation that may be attributed to the student's instructor and the

instructor's teaching method. Beckman College, on the other hand does not have this exit exam. The researchers therefore expected the student outcomes for English faculty member in Anderson College to be higher than Beckman College. However, student outcomes in the sequence of English courses in Beckman College were higher than in Anderson College.

The following section will provide the findings of another area that impacts student success, institutional support for teaching.

Institutional support for teaching

While teachers impact student success profoundly, the institution influences student success as well because it exists to support teaching and learning. This part of the Teaching and Learning Improvement Project examined the perceptions of teachers with high student outcomes⁷ to determine which college efforts have had the greatest impact on their teaching.

The questions that guided this part of the research included⁸:

- ~~☞~~ How do teachers with high student outcomes perceive the support of their college?
- ~~☞~~ How do faculty evaluations support teaching?
- ~~☞~~ How does professional development support teaching?
- ~~☞~~ How does the academic senate support teaching?

While the researcher asked about the academic senate as a support mechanism, faculty members did not identify it as a meaningful support. Several faculty members identified the senate as an important part of Beckman College because of its “watchdog” function and because it forced the district and administration to “treat us like professionals.” However, when asked about the

⁷ The formula for determining student outcomes was explained previously. While 24 faculty members were asked about these issues through a questionnaire and interview, the eight with the highest outcomes were the primary focus of this study. The findings in this section of the chapter reflect the perspectives of those eight faculty members on institutional support. These eight faculty members represent a range of teaching experience from 5 to 30 years. To see a more detailed profile of these eight faculty members, please see Appendix XV.

⁸ The researcher asked these questions through an online questionnaire and face-to-face interview. Because the information obtained from both instruments was similar, the researcher did not identify the data source for each of the following findings.

specific ways the senate supported teaching and learning, faculty members provided general responses or none at all. Zelma Hyslop responded and referred to it as a “mysterious body.” Another faculty member, Lila Madonia, questioned the integrity of the senate when she said that she was not sure how to regard it because she was not sure if it was an “elitist” organization. The academic senate is not included in the findings because faculty members did not indicate that the senate impacted their teaching.

While the academic senate was not seen as having an impact, the other mechanisms, staff development and evaluation, were viewed as supportive in various ways. But those mechanisms were identified as supportive only if they enhanced faculty relationships with each other and with the school. Faculty members felt that an environment that promoted collaboration, feedback, shared values, and personal mastery⁹ supported their teaching. When faculty members talked about their most powerful learning moments, they would cite the collaborative element involved. In other words, teachers felt that their teaching was enhanced most when they could work with others. They also talked about the importance of meaningful feedback for growth, and that evaluation efforts fell short when the feedback was artificial or non-existent. Another element that impacted teaching efforts for these teachers was their awareness of and agreement with a institutional focus on teaching and learning. Finally, teachers felt supported when they were afforded opportunities and support to

⁹ The terms shared values and personal mastery are taken from Senge’s book on learning organizations, *The Fifth Discipline* (1990). In the text, he refers to the four elements that make up a learning organization: shared values, personal mastery, mental models, and team learning.

develop professionally, when they could set goals for themselves and pursue them. The evidence for these findings follows.

Faculty members value collaborative and collegial networks

While the participating faculty members saw the value in various support mechanisms like evaluation and staff development, that value extended as far as the degree of collaboration found with those efforts. In other words, the more collaborative the endeavor, the more meaningful that effort was for the teacher.

All who volunteered for this study referred to the power of collaboration in informing and encouraging their growth as teachers. While initially they may have shrugged at the suggestion that a particular activity impacted their teaching, they would suddenly recall an interaction or incident during that activity that forced them to think differently. They also shared that when they were working on a project, they would head towards a colleague or group of colleagues to share the idea. For example, Olu Faraguay mentioned that he regularly shared his challenges (student motivation, curriculum, instruction) with his colleagues, so that he could get alternative points of view, a sense that he was on the right track, or that he wasn't alone with his dilemma. Jason Wadman appreciated working with colleagues and talking about pedagogy because, he said, "I've had trouble teaching certain concepts in math is because they're so obvious to me." He valued collaboration because it offered opportunities for him to make explicit the processes he used when solving problems for his students.

Informal encounters

Faculty members indicated that it was the informal encounters with their colleagues that impacted them the most. Lila Madonia shared her thoughts on informal collaboration when she said:

Sometimes the most casual conversations are the ones that are the most fruitful. More organized conversations do not give a way for a lot of idea sharing. I think it is networking and making friends with people and finding out how they tackle problems and approach certain things that are beneficial to me as a teacher....Casual, informal exchanges of ideas are more useful. We should do more of that.

Jason Wadman expressed the same sentiment and added that it was the discussions in the mailroom and in the hallway that meant the most to him. Jose Salvadore even suggested that “there must be some mechanism that we need to make this happen more.” When asked how the school could encourage these kinds of conversations more, Matthew Eutsey suggested that teachers can just “get together...sit down as a group of people...we’re bound to learn something.” While all of the faculty members interviewed expressed an appreciation for collaboration, they valued those informal encounters most of all.

The department context

Nearly all the faculty members indicated that the department and its support for them was critical to their success as teachers. Throughout her interview, Lila Madonia referred to her department a great deal. When she was citing a formative

staff development experience for her, she indicated that it was influential precisely because it made her like she belonged in her department. That feeling of belonging was important to other faculty members as well. Jason Wadman indicated, “There are a lot of friendships that go beyond shop talk. This is one of the attractive things about this department.” Both Zelma Hyslop and Juanita Gonzales felt well supported by their department colleagues, particularly when they first joined the school. Developing a class was difficult and the both felt that their colleagues were instrumental with their ability to do so.

Faculty members also referred to the importance of working with their colleagues in other departments, but they felt those collaborations did not happen often enough. Cody Koeppel shared an eye-opening experience he had when he was able to participate in an effort that included members of the campus community outside of his department. He was pleased to interact with those colleagues and learn about their “amazing” level of commitment to students.

Importance of geography

Another feature that crept into the study when faculty members talked about collaboration was the importance of geography. Each faculty member referred to the impact of physical proximity on developing those collaborative relationships. They felt that when department members were physically isolated from the rest of their colleagues, they became isolated socially and culturally as well. They also noted that, while geography could facilitate collaboration, it could impede it as well. This

played out strongly with inter-departmental collaboration. Lila Madonia stated that “there are not many opportunities for us to collaborate with faculty from other departments,” and “it upsets me that I don’t know other people.” This frustration with the inability to get to know and collaborate with colleagues outside of the department was noted in virtually all of the interviews.

Faculty members value meaningful feedback

Part of what made collaboration so meaningful to these faculty members was the resulting feedback. They not only wanted to hear the value of a lesson or an approach, but its shortcomings as well. While they often depended on feedback from departmental colleagues, some also sought information from others on campus. Olu Faraguay, in particular, felt that it was also important to obtain feedback from those in other departments. He said, “I talk to other professors in other departments because that’s where your students are going.” He follows up on student progress and the sometimes changing expectations of those instructors.

Feedback from evaluations

These faculty members saw the various evaluation mechanisms as tools to encourage feedback processes¹⁰. Olu Faraguay indicated that he wished the evaluation process was more rigorous; he thought that more conversations and visits

¹⁰ Both colleges have an evaluation process that includes an administrative evaluation, student evaluations, colleague evaluations, and a self-evaluation. Anderson College requires all four components in their review process. Beckman College requires two: administrative and student reviews. The other two, colleague evaluations and self-evaluations, are optional. Faculty members indicated that when colleague and self-evaluation are viewed as optional, people do not take them seriously. Most of the faculty interviewed at Beckman College felt the mandatory inclusion of colleague and self-evaluation would provide valuable feedback and insight.

about teaching and learning could only impact those processes in a positive way. Most of the faculty members felt that student evaluations were particularly instrumental for improvement of their teaching, especially since students were in the classroom every day. Olu Faraguay emphatically stated that, “I have been changed by my students. The students change me.” Cody Koeppel shared this sentiment when he said, “I feel like I am always learning something...the students have taught me better ways of doing things.” Jason Wadman indicated that the “the feedback that I have gotten back from the students during the tenure review process has helped me refine my teaching.”

Feedback from colleagues

Throughout the interviews, faculty members repeatedly referred to the importance of feedback from colleagues as well. They saw the conversations and the opportunities to observe (as an evaluator or evaluatee) as critical to professional growth. Nearly all of the faculty members referred to the importance of observations, particularly informal ones, to get and give feedback. They felt observations were critical for growth, helping them to develop and refine their teaching. One teacher in particular, Cody Koeppel, referred to the formative power of observing other teachers. None of the participants mentioned administrative feedback as important or formative.

Faculty members value a focus on teaching and learning

Most of these faculty members shared an awareness and appreciation of the college's mission of teaching and learning. During the interview, Olu Faraguay expressed enthusiasm for his college's efforts to "build an environment for learning." Faculty members valued efforts that supported teaching and learning. It was when efforts did not seem as strongly connected to that mission that faculty members withdrew from the process.

Each of these faculty members seemed to operate with a filter. They limited their participation on committees and departmental initiatives to efforts that impacted their classroom teaching and their intellectual growth as professionals. In fact, Matthew Eutsey indicated that he was not very involved in campus activities precisely because the focus was not always on teaching and learning, which made those activities irrelevant to him. This filter also led some faculty members to avoid office politics. Cody Koeppel acknowledged his discomfort with some of the politicking in his department and purposely removed himself from that scenario as best he could because he did not want to take the time away from his teaching.

It was that filter that also convinced faculty members not to get involved in some of the committee efforts on campus because they felt that committee work had a "minimal" impact on their day-to-day teaching experiences. Matthew Eutsey said that committee work "was not terribly meaningful," and that "the committees do not

discuss the things that are important.” Most felt that committee work could be detrimental to teaching when it had an opaque focus or took too much time.

School focus

Faculty members appreciated a focus on teaching and learning, but more importantly, on developmental education. They saw the importance of developmental education, and in spite of its challenges, articulated a strong commitment to it. A few of the interviewees expressed a desire for the rest of the department or school to place more importance on developmental education. Olu Faraguay frequently framed his responses to questions by restating or referring to the mission of community colleges, and that he conducted himself accordingly. He employed a mechanic analogy to articulate the approach teachers should use when dealing with students with special needs. People go to a mechanic with a specific purpose: to get something fixed or to ensure maintenance. It is a commonly held belief that it is not the mechanic’s job to question driving habits, or to complain about poor decision-making skills. Rather, it is his/her job to diagnose the situation, fix it, and provide advice. Similarly, Olu Faraguay states, it is not the job of educators to get bogged down with excuses and accusations. Educators need to focus on the job at hand, and not get distracted.

A focus on teaching and learning was evident through each school’s staff development program. Zelma Hyslop felt that Anderson College regularly demonstrated “a lot of commitment...for faculty to continue to develop

professionally,” and to “help each teacher grow.” Some faculty members attended internal staff development efforts less frequently because those events often seemed removed from teaching and learning.

Sometimes committee work was seen as valuable when it seemed strongly connected to classroom processes. Olu Faraguay talked about working with other teachers on proficiency tests and how that influenced his teaching because it “gives you direction.” Juanita Gonzales expressed a commitment to school-wide committee work because she thought it was important to “avoid warped perspectives and get a much better dialogue.”

Two faculty members, Cody Koeppel and Juanita Gonzales, seemed somewhat disconnected from the school efforts. Koeppel often shrugged his shoulders when asked questions about effectiveness and impact, claiming that he didn’t quite know the whole story so he would pass on the question. Gonzales, when asked about the school’s administration and its support for teaching and learning, paused and referred to the whole situation being “irritating....what do we need everyone else for?” She felt that administrators were not directly involved in the teaching and learning enterprise, and were therefore unnecessary.

The faculty members at Anderson College who were interviewed but did not have high student outcomes seemed even more disconnected from the college and expressed a greater cynicism about college efforts and its motives. They often referred to antagonistic relationships with administrators. Their comments about

support often focused on specific aids, like overhead markers and staples. While they did not indicate that they were looking for new jobs, they felt that they were unhappy and overwhelmed with their positions.

At Beckman College, the faculty members who did not have high student outcomes were divided in terms of their relationship with the school. The math department, like the faculty at Anderson College with lower student outcomes, expressed disillusionment with the school and its policies. The English department members though, seemed even more closely aligned with the school and its policies than the faculty members in that department with high student outcomes. They were active in campus discussions about teaching and learning, and were intimately connected to various collaborative efforts on campus. While some of their comments may have been critical of the administration, they expressed a great deal of satisfaction with the school and admiration for their colleagues.

Department focus

Faculty members seemed to be aware of department goals and challenges and articulated an alignment, not with particular individuals, but with ideas or values. Lila Madonia indicated “the English department has clear goals of where they want the student to be at the end of the semester.” Each expressed a desire to have that focus on teaching and learning more explicit in efforts. If it did not translate to student learning, it was not a worthwhile endeavor.

One individual, Cody Koeppel, felt a bit uneasy about his department. He felt that there were unsavory maneuverings going on and that the “air is poisoned.” He removed himself from those events as a result. He also suggested that the department needed to spend time on teaching and discipline specific items rather than bureaucratic issues.

Faculty members value opportunities to develop professionally

Faculty members carefully and deliberately chose the efforts they enlisted for and the amount of effort they were willing to expend. Each of the four faculty members, while eager for feedback, seemed sure of him/herself and conveyed a strong sense of efficacy. Jason Wadman reflected on his place in the system by saying, “I’m pretty cut and dried....I’m very self-contained.” While the rest of the faculty may not have shared his sentiment about their place in the school, they saw their job as manageable and that they were capable of taking care of their responsibilities.

A number of the faculty members referred to their own sense of style when asked about the impact of staff development and evaluation. They wanted more information to grow, but they were not looking for a package or an approach to take the place of their role as a professional. They each seemed highly reflective of their processes as teachers and learners, referring to themselves as perpetual learners. Lila Madonia reflected on her challenges as an instructor and felt that one of them was to keep herself engaged and interested so she spent time finding new subject matter and

approaches to do so. Matthew Eutsey regarded efforts to instruct in pedagogy as unnecessary and distracting. He indicated that, “I hate to be told that this is what you should do. I’m a firm believer that everyone who teaches should develop his or her own style.” Each faculty member revealed a sense of mastery over both the content and teaching in general. Furthermore, they viewed mastery as a journey, one that would require continual work and constant attention.

Importance of self-evaluation

All the faculty members saw the evaluation process as a way of providing feedback about teaching. Lila Madonia indicated that, “I didn’t realize how much it would influence my teaching. I spend more time revising everything in my classroom because of tenure review.” Most of the faculty members, however, did not feel that the impact of evaluation practices was broad-based. About half of the participants referred to evaluations as being somewhat artificial and that, while they could learn more strategies, there was something intangible about teaching that people could not give advice about. Cody Koeppel felt that the evaluation process had not “changed the style of my teaching that much.”

Nearly all of the faculty members saw self-evaluations as being particularly potent for the improvement of teaching. Zelma Hyslop was particularly fond of self-evaluation and felt activities that led to critically assessing yourself as a teacher to be important and necessary. Lila Madonia and Jose Salvadore also saw the self-evaluation processes as supporting and promoting quality teaching practices. And

while Jose Salvadore saw self-evaluation and goal-setting as an important part of teaching, he claimed that the formal processes were less important because they represent, “what I would do anyway.”

Value of problem-solving

Both colleges spent time and money on staff development programs to encourage faculty development. Jason Wadman used phrases like “joke” and “busy work” when asked about the impact of staff development efforts. When asked about alternatives to formal staff development training, Matthew Eutsey responded with, “Teachers get the best training when they’re teaching.”

In contrast, other faculty members felt that staff development efforts at Beckman College were useful and did impact their teaching. Lila Madonia signed up for different activities to learn about pedagogy, and to get to know others on campus. She said, “I am able to get ideas that I integrate back into the classroom.” Jose Salvadore described one retreat as “eye-opening” and “very effective because it dealt with issues in our specific classes.” Both Lila Madonia and Jose Salvadore saw a place for pedagogy training.

Overall, internal efforts were judged worthwhile when they allowed faculty members to work with their immediate colleagues and engaged them with a particular problem or project that directly impacted the teaching arena. Two of the English faculty members, for example, referred to dealing with proficiency exam

problems and how those efforts forced them to think about their own teaching and revise accordingly.

These findings about institutional support for teaching were shared with the Teaching and Learning Institute participants at Beckman College as the data was being collected. These participants provided insights about the direction of the data collection, as well as the nature of the conclusions. In many respects, the findings from this part of the Teaching and Learning Improvement Project parallel those from the Teaching and Learning Institute that are discussed next.

The Teaching and Learning Institute

This project sought to establish a Teaching and Learning Institute at Beckman College. Preparation of new faculty members has evolved over time from a two-day orientation directed by the administration to a more comprehensive set of monthly activities planned and presented by the staff development committees within the district. Developing a formal institute that is dedicated to action research principles and the inclusion of new teachers in the planning process is the next phase in the evolution. Table 4.5 presents a comparison of planning, activities, and evaluation of new faculty activities from pre-2001 to the spring of 2002 and beyond.

The comparison presented in Table 4.5 illustrates the enrichment of the process as responsibility shifted from administration to staff development. The critical factors in that enrichment were the high priority placed on teaching by the Staff Development Committee and the time that was devoted to producing a more holistic collection of activities to enhance the classroom efforts of new faculty members. During the period of administration controlled new faculty orientation, activities were focused only upon faculty logistic and clerical responsibilities.

As new faculty development became a Staff Development Committee responsibility, activities were established utilizing research and planning by staff development committee members. Their goal was to establish a more comprehensive set of activities to augment the standard administrative orientation.

As new faculty development evolves under the auspices of the Teaching and Learning Institute, the new faculty orientation and other activities will reflect action research principles. Staff development committee members, newly hired faculty members, and Teaching and Learning Institute members will collaborate to develop future activities.

Table 4.5: New Faculty Development Efforts at Beckman College Over Time

	Administration Driven (Pre 2001)	Staff Development Driven (2001-2002)	Teaching & Learning Institute Collaboration (2002 and Beyond)
Planning	Program planned by administrators.	Activities and program planned by Staff development committees.	Activities developed jointly by Staff development committee and first year faculty.
Activities	Two day logistic orientation.	Two day logistic orientation.	Comprehensive planning and orientation program.
		Series of monthly seminars on topics selected by Staff development committees.	Incorporation of Teaching and Learning Improvement Project findings.
			Formal and informal activities to bring first year teachers together to share and discuss their experiences.
Evaluation	None	Brief participant survey at conclusion of each activity.	Assessment of prior orientation activities by Staff development personnel; assessment of profiles and backgrounds of first year teachers; pre- activity survey of new teachers; focus group activity during orientation process to continue planning activities; post activity evaluations by first year faculty and presenters.

This research project contributed to the evolution of new teacher improvement efforts. The investigations conducted by project researchers

contributed to the ongoing evolution and improvement of new faculty development processes. Those investigations illuminated past and current practices, consideration of student performance as an improvement device, and the support that faculty members can access as needed. More importantly, those efforts laid the groundwork for institutional collaboration to bring about improvement in teaching and learning. The change from a top-down process to a dynamic interaction of all stakeholders holds the promise of bringing about real change driven by the practitioners.

What are the perceptions of newly appointed faculty members about teacher development efforts at Beckman College?

Thirty-one faculty members were hired and began teaching duties within the district containing Beckman College in the fall of 2001. Of these, eleven regularly attended professional development activities presented for their benefit. Six of the eleven volunteered to participate in Teaching and Learning Institute activities.

All 31 of the first year teachers were asked to provide information about their backgrounds, institutional knowledge, and teaching practices by completing questionnaires and participating in interviews and focus group sessions. Their responses indicated a diversity of backgrounds. Their experiences suggested that no single path leads to the community college teaching ranks. Some came with extensive teaching experience at the K-12 level. Others served apprenticeships of varying lengths as adjunct faculty members at a variety of community colleges, preparing to assume full-time positions that would, hopefully, lead to tenure. Many

assumed responsibilities as teaching assistants during their years as graduate students. Still others entered the community college teaching profession with no formal teaching in their background, coming directly from the private business sector. Despite these differences, the college is responsible for providing each of them with meaningful professional development opportunities.

The six first year teachers who participated in all of the Teaching and Learning Institute activities provided information about their experiences as first year teachers. They also participated in a follow up assessment of their views, attitudes and beliefs concerning their own development and student learning. As a counter balance, three first year teachers who did not participate in Teaching and Learning Institute activities volunteered to participate in the same assessment.

The six faculty volunteers represented a cross section of the thirty-one newly hired teachers. The sample included men and women, faculty members with extensive teaching experience prior to beginning their careers at Beckman College, and novice teachers assuming their first full time positions. This sample represented over half of the faculty members who regularly attended new teacher development activities. Characteristics that they shared were the opportunity and the motivation to attend activities intended for their professional development.

The three volunteers who did not participate in professional development activities also provided important feedback. They too shared common characteristics. They questioned the value of new faculty activities. Though the

reasons for non-participation varied, they were unable to attend any professional development activities.

The six Teaching and Learning Institute participant volunteers believed that focusing upon students and the quality of classroom interaction with them was the most effective strategy they could use to nurture learning. They utilized various techniques to encourage active classroom participation by students, with the intent of having them become involved learners. This sample indicated the desire to provide a student focused setting.

In contrast, responses by the three non-participant faculty members indicated a much greater focus upon their own activities and responsibilities and less on student learning.

Both sample groups were asked to indicate how they determined that students were successful in their classes. There was a convergence of beliefs between the two samples. Teachers from both samples stated that student attendance was an important indicator. If students continued to show up and to participate in their classes, that was considered a success. The development of self-confidence in their students was also an important goal of both samples in assessing their own success. Responses from both samples indicated that the degree to which their students took ownership of their own learning was an important indicator of success. The development of student responsibility and autonomy was important to both samples.

Asked to indicate how they preferred to become more effective as teachers, respondents in both samples indicated that interacting with their colleagues and obtaining feedback from students were the most important methods. They stated that both formal and informal interaction with colleagues was valuable. They asked for more opportunities to interact with other teachers during their first year.

Though respondents from both samples valued feedback from their students, they expressed concern that they received student evaluations in the formal tenure review process only after their classes were completed. They preferred feedback from students earlier in the semester so that they could respond to concerns that students expressed.

Asked to share what factors had the greatest affect upon their development as teachers, representatives from both samples indicated that the influence of a mentor at some point in their careers had been critical. First year teachers at Beckman College expressed a preference for a more extensive and more meaningful mentoring program. Though many of the new teachers had been assigned formal mentors within their departments, they expressed concern that little thought had been given to the selection. They felt that too often, their mentors did not have the time or the knowledge necessary to address many of their questions.

Activities deemed valuable by first year teachers

A variety of first year teacher activities were developed and presented by the Staff Development Committee in the fall of 2001. The series of seminars began with

an orientation activity, followed by monthly presentations that included topics such as teaching methodology, student discipline, and the use of technology in the classroom. All activities were conducted on Friday afternoons.

In addition to staff development activities, first year faculty members were asked to participate in Teaching and Learning Institute activities, and to evaluate those activities and the information presented. Those activities included three formal presentations by project researchers. Evaluation and assessment of activities included the use of questionnaires, focus groups, and interviews.

The activities deemed most valuable by the participants were those that brought teachers together to share and to discuss teaching and related issues. This same sentiment was expressed by veteran teachers who participated in this research project. Though they expressed appreciation for other types of activities, first year teachers articulated an emphatic preference for opportunities to meet with fellow teachers, both inside and outside of their departments. They asked for more opportunities, both formal and informal, to get together with other teachers. They felt that the experiences of other teachers were of tremendous value to them in their professional development.

Though many first year teachers found staff development seminars of minimal value, they expressed a high level of satisfaction with the activity devoted to dealing with difficult or disruptive students. As novice teachers, many were unfamiliar with the processes and procedures necessary to manage these students.

Their lack of knowledge about the process, combined with their inexperience in dealing with student issues, created a great deal of discomfort and concern. A particularly appealing aspect of this activity was that it applied directly to what they faced in their classrooms. They were able to derive direct practical benefit from the information they received.

First year teacher concerns

Scheduling of events recurred as a concern of all first year faculty respondents, both participants and non-participants. In addition to classroom teaching, office and campus hour obligations, grading and class preparation time, the new teachers were also expected to attend the activities developed for their benefit. Given that the overwhelming majority of full time teachers at Beckman College have Monday through Thursday teaching schedules, the Staff Development Committee and project researchers believed that Friday scheduling of events would be the most accommodating.

Interviews with first year faculty indicated how problematic the Friday only scheduling of events was for them. First year teachers who did participate in professional development and Teaching and Learning Institute activities were asked what they perceived to be the barriers to participation. They provided the following responses:

- ~~☞~~ Having to learn all of the college procedures and teaching a full load.
- ~~☞~~ Some of the activities were useful, but some were not very helpful.

~~☞~~ Taking a Friday for activities that are not helpful is frustrating.

~~☞~~ Having the activities all on Fridays.

~~☞~~ Maybe having some on different days or at different times.

Those who did not participate in professional development activities provided the following responses to the same question:

~~☞~~ All of the activities being on Friday. Taking classes myself, there were too many conflicts for me to attend.

~~☞~~ Time constraints. Scheduling conflicts. Family commitments.

~~☞~~ I teach five days, including two nights a week. I just can't squeeze in another meeting.

~~☞~~ Working on my doctorate, Friday is the one weekday when I can get a lot of work done.

In addition to their college responsibilities, the new teachers were also balancing family obligations and continuing their own education. They found it necessary to devote Fridays to their families, their studies, or other pressing obligations. One first year faculty member expressed the concern that giving up a Friday for an activity that was of limited benefit was not a productive use of time. Only if the information was pivotal would such an expenditure of time be warranted. The faculty member did not indicate how to determine that an activity was pivotal.

An interesting contrast of opinions was brought to light by comparing the attitudes of faculty who participated in the Teaching and Learning Institute activities

and those who had not. Subsequent to the presentation of Christian's research, participants were asked to discuss and reflect upon information regarding student retention and student success. The subsequent discussion indicated great interest in the findings, and a high level of enthusiasm for the possibility of utilizing student performance data to improve teacher performance. Of particular interest to the participants was the possibility of validating the individual teacher's approach by looking at success in subsequent courses. Additionally, the participants indicated an understanding that utilizing student success data in previous and subsequent courses could bring to light too stringent or too lenient grading practices.

In contrast, interviews with non-participant first year teachers indicated a limited and more restrictive view of the value of student retention and success figures. These faculty members were more inclined to utilize subjective measures of performance. They shared the following indicators of student success as more informative and more telling than retention or success figures:

- ~~✍~~ Positive student comments on evaluations, classroom assessments, or in casual conversation.
- ~~✍~~ Students enrolling in other classes taught by the teacher.
- ~~✍~~ The quality of final class projects produced by students.
- ~~✍~~ The ability of students to write essays.

They were skeptical of the value student retention and student success figures to evaluate their own performance. They did, however, express the desire to learn effective strategies for retaining more students in their classes.

What are the principles, beliefs and goals of district staff development committees regarding first year teacher development?

Data and information was collected from the Staff Development Committee chairs through the use of interviews and by examining staff development and college documents. Staff Development Committee chairs provided their perspectives on new faculty development activities prior to the 2001-2002 academic year, on current activities, and on their plans for future efforts. The college documents provided information about past and present teacher development activities at Beckman College.

Prior to the 2001-2002 academic year, new faculty development at Beckman College consisted primarily of a two-day logistic orientation. This orientation was under the authority of Anderson College administration. As a result of administrative reorganizations within the district containing Beckman College, beginning in the fall semester of 2001 responsibility for the development of newly hired faculty members at Beckman College fell to the Staff Development Committee.

Staff Development Committee guiding principles

As the Staff Development Committee assumed responsibility for new faculty development, the focus of activities changed significantly. The fundamental principle guiding the change in focus was the belief that staff development committees were responsible for providing appropriate, meaningful and useful activities for all district staff members, particularly first year teachers. Guiding the selection of new faculty activities for the 2001-2002 academic year was the desire to provide opportunities for new faculty members to learn how to become more effective in the classroom. Committee members perceived that their fundamental responsibility was to coordinate and participate in the development of activities that would accomplish that result.

Acting upon the principle that faculty development is fundamentally a staff development committee responsibility, the committee chairs engaged in personal development to improve their ability to perform their duties. That development included research into new teacher development efforts of other community colleges, attendance at academic senate activities regarding teacher support and development, and attendance at state and national staff development conferences. They expressed a sincere desire to be effective in their roles as staff development committee chairs.

Staff Development Committee beliefs

Committee members believe that by providing appropriate activities and support, they can help teachers to improve their performance. They believe that

what teachers do in the classroom has a significant impact on students. By focusing upon first year teachers, they believe that over time they can help to establish a culture wherein teachers accept significant responsibility for the success of their students.

In the interest of providing meaningful and appropriate activities, experts in various fields related to teaching were recruited to lead the monthly seminars. Considerable time and effort was expended to contact and engage these experts. Staff Development Committee members believed that these experts would appeal to new faculty, and would provide them with useful information.

Committee members were surprised to find that the activities they provided were poorly attended, even those presided over by experts. They were disappointed that attendance rates rarely topped eleven out of the 31 first year teachers. They expressed the concern that poor attendance may have been a reflection of faculty apathy and acceptance of the status quo.

In response to the low level of attendance at teacher development activities, Staff Development Committee members expressed an interest in exploring possible enticements for attendance beyond the personal desire to improve. They believed that stipends or reassigned time would significantly increase new teacher participation. The basis for this belief was the experience they had providing stipends for other staff development activities. External incentives did appear to

increase participation. An example provided was payment for teacher attendance at a series of workshops on the development of distance learning courses.

Staff development goals

The primary goal of Staff Development Committee members at Beckman College is to provide meaningful and useful activities for first year teachers. Assuming responsibility for first year teacher orientation and development activities, they provided a more holistic, more relevant, and more valuable experience for first year teachers. Their personal efforts to increase their own knowledge and experience in the field of staff development reflects their commitment to achieving that goal.

Staff Development Committee support for faculty goes beyond new faculty development. They have also attempted to address concerns expressed by individual faculty members, both tenured and non-tenured, for help and support. They have attempted to inform new faculty members that they are available to help them to address any concerns that they have regarding teaching, tenure evaluation, student issues, or any other concerns that they might have. Their goal is to be as effective as they can in helping all faculty members improve.

How can the Teaching and Learning Improvement Project investigations of faculty with high student outcomes and institutional support be incorporated into the effort to improve new faculty development at Beckman College?

In collaboration with the Staff Development Committee at Beckman College, the Teaching and Learning Institute began with a presentation to first year faculty in

the fall of 2001. As part of the December staff development activity for new faculty, 12 of the 31 first year faculty members of the district were introduced to the principles and goals of the Community College Teaching and Learning Improvement Project. In addition, they were provided with information about research protocols and goals, the focus of this research upon new faculty, and the principles of action research.

Teaching and Learning Institute activities continued in the spring semester of 2002. Project researchers collaborated in the development of two activities to bring research findings to first year faculty members. These activities included presentations to new faculty on the findings of the first two components of the Teaching and Learning Improvement Project. In addition, the activities provided the opportunity for participants to give feedback on the information presented.

The researchers used focus groups to present research information about teacher practices and institutional support. These focus groups were conducted at the colleges within the district containing Beckman College. The principal researcher for each component presented information discovered in the investigation of that component.

The first focus group was devoted to the investigation of teacher practices. The principle researcher for this component, Christian, presented information about teacher practices linked with high student outcomes, the definition of high student outcomes, and the data discovered to this point. At the conclusion of this aspect of

the presentation, the researchers conducted a focus group activity to solicit feedback from participants.'

The second focus group was devoted to research regarding institutional support for teaching. Prior to the presentation of institutional support findings, first year faculty attendees responded to written questionnaires regarding their perceptions of institutional support for their efforts. Preliminary research findings were then presented by Bedard. Participants then participated in a focus group activity to discuss their impressions of the information provided.

Carrying forward the findings from the investigations of teachers with high student outcomes and institutional support will require a commitment on the part of the Staff Development Committees and college personnel. The institutional researcher at Beckman College must be responsible for providing the quantitative data necessary to establish linkages between teacher practice and student performance. Providing this data to teachers in disciplines with sequential courses holds the potential for real improvement in teaching that translates into greater student success.

Our research efforts indicate a surprising lack of knowledge among first year teachers regarding institutional support for teaching and learning at Beckman College. The colleges need to address this lack of institutional awareness and develop processes to bring this information to teachers in a more effective way. Based upon the information that Bedard uncovered, there are many components of

teacher support. Unfortunately, few first year teachers were aware of or able to access that support.

How can this information be used to drive the ongoing and continuous improvement of efforts at Beckman College to support newly appointed teachers?

The collaboration between project researchers, college personnel, and first year teachers was the first step in establishing a *look, think, and act* model for the improvement of teaching at Beckman College. Action research is the key to the ongoing development of a vital and dynamic Teaching and Learning Institute. Preliminary plans to change the approach to the development of first year teacher activities are already in place. This represents the first step in carrying forward the Teaching and Learning Institute.

In place of the top down model utilized for the pre-2001 and current year efforts, the planning phase for the next year will include the intended audience of newly appointed teachers in the development of activities and options intended for their benefit. They have indicated quite clearly that they have distinct preferences for the selection of topics and the timing of activities intended for their benefit. They appreciate the efforts of Staff Development Committees to provide them with the opportunity to engage in professional growth activities. But they have also indicate a great respect and desire for interacting more with their colleagues, both inside and outside of their disciplines. They would like to see activities devoted to nurturing more frequent contact between faculty.

They also expressed a sincere interest in the data driven methods that were developed for and incorporated into this culminating project. It will be the responsibility of those who carry forward the Teaching and Learning Institute concept at Beckman College to develop internal methods to compile and disseminate the data and research that composed the first two investigations of this project.

Implementing the research findings

Prior to the beginning of this research project in the fall of 2001, those responsible for staff development at Beckman College became aware of the need for a more effective first year teacher development program. The two efforts progressed independently along parallel tracks, with UCLA researchers addressing the requirements for a doctoral project (including Human Subjects approval) prior to data collection and analysis, and Staff Development Committee members planning independent activities for first year faculty members to begin at the start of the fall semester.

Upon receiving approval from Human Subjects for the beginning of the Community College Teaching and Learning Improvement Project in late October of 2001, researchers began collecting data regarding teaching practices and measures of student success, and the institutional support for teachers that exists at the colleges. The collection and analysis of this data was completed in the spring semester of 2002.

While the preliminaries of this research project were being addressed, the professional development effort at Beckman College went forward. Succeeding the new faculty orientation activity at the beginning of the fall semester were three teacher development seminars planned and presented in each of the next three months. The two efforts came together with the first joint activity in December of 2001, with a presentation to first year teachers of the preliminary findings of this project, including planning for the incorporation of additional Teaching and Learning Institute activities for the spring semester.

The first Teaching and Learning Institute activity of the spring term was planned with the participation of staff development committee members. It was held in February as part of the new faculty development agenda. This forum focused upon research findings from the investigation of teaching practices and student outcomes. Six first year teachers volunteered to participate and subsequently shared their thoughts and perspectives on the usefulness of student outcomes data in their assessment of their own effectiveness. Of particular interest to these teachers was the opportunity to investigate how well their students performed in subsequent classes. They recognized the value of this innovative approach in establishing the effectiveness of their own efforts to help students to learn. They expressed a high level of interest in having these figures provided to them.

In conjunction with the final Staff Development Committee activity of the spring term, project researchers held a forum for the presentation and discussion of

findings regarding institutional support efforts at the colleges. Planning for this event included project researchers and staff development committee members. Due to previous low levels of attendance at professional development activities, at the request of the staff development committee chair, we agreed to allow a broader audience of attendees. In addition to first year teachers, staff development committee members also attended this event. Assessment of this forum by participants provided valuable information regarding first year teacher awareness of support that is available to them. In a surprising number of instances, first year teachers were only minimally aware of components of support available to them.

The culminating activities of the Teaching and Learning Institute at Beckman College included obtaining feedback from first year faculty members and Staff development committee members. Feedback was obtained using questionnaires and interviews. Interviewees included first year teachers and staff development committee representatives. Responses from participants will form the basis for planning future staff development committee and Teaching and Learning Institute activities.

Evaluating the effectiveness of these efforts to support the development of first year teachers indicates the need for an integrated planning approach and much greater lead time. The availability of timely information is critical to the planning process. Planning of activities cannot proceed without access to data and information as it is needed. Our plans for a Teaching and Learning Institute were

predicated on our ability to develop, to collect, and to analyze data within the confines of the academic semesters. The intention was to have this information form the basis for the improvement of teaching.

Given that activities must be planned, scheduled and advertised well in advance of the presentation, our time frame was not conducive to the completion of all of the activities we had proposed. Staff development planning efforts for 2001-2002 began in the summer of 2001. Teaching and Learning Institute efforts were delayed until well into the fall semester of 2001. As the Teaching and Learning Institute concept moves forward into the next cycle, planning for the subsequent academic year must begin prior to the conclusion of the spring term.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

This project began as an investigation into the practices of community college teachers with high student outcomes, the institutional support that exists for those teachers, and the way to bring this information to first year teachers in a manner that would translate into improved student outcomes. This translation is timely, considering that the accreditation process has applied pressure on community colleges to use student outcomes to guide improvement efforts.

At the beginning of our research, we hypothesized that we would find useful information that differentiated teachers with high student outcomes from their colleagues, and that new teachers would be able to utilize this information to improve the performance of their students. We believed that the institutional support provided to the teachers, particularly those with high student outcomes, would be illuminated and made available to those requiring the most support, first year teachers. Our goal was to incorporate the findings from these two investigations to the development of a Teaching and Learning Institute.

Our findings supported some of our hypotheses, while refuting others. Findings from Christian's research on teachers with high student outcomes included the following:

~~•~~ Math teachers with high student outcomes provided structured environments that kept students on task during the class session and on track throughout the semester.

~~☞~~ English teachers with high student outcomes emphasized the importance of the writing process to their students in all classroom activities.

~~☞~~ Teachers with high student outcomes indicated that supporting students both emotionally and academically was critical when working with students in developmental classes.

~~☞~~ Teachers with high student outcomes took responsibility for taking their students from where they were to where they needed to be. This was in contrast to other teachers in the sample who focused upon shortcomings in the preparation and abilities of their students.

Findings from Bedard's investigation of institutional support for teaching included the following:

~~☞~~ Faculty members valued collaborative and collegial networks. Physical proximity affects the ability of those networks to form.

~~☞~~ Faculty members valued meaningful feedback.

~~☞~~ Faculty members appreciated and supported an institutional focus on teaching and learning.

~~☞~~ Faculty members valued opportunities to develop professionally.

Findings from Simpson's investigation of the Teaching and Learning Institute included the following:

~~☞~~ New faculty members used both quantitative and qualitative measures to gauge student success.

✍ First year teachers believed that focusing upon classroom interaction with students was the best way for them to nurture student success.

✍ Determining when professional development activities are scheduled was critical to the participation of first year teachers.

Conclusions

Focusing on the teacher

The teachers with high student outcomes exhibited a keen sense of awareness of where their students were in relation to course content and responded accordingly. During the class session, they never seemed to lapse, even momentarily, into an automaton mode. Rather, they were in tune with students individually, and with the class as a whole. As the English faculty members with high student outcomes pointed out, it is all in knowing where your students are. Only then can you take them to where you want them to be. Building this *culture of consciousness* in each of the individual faculty members and within the classroom environment is essential in order to improve the outcomes of developmental students. The risk of not moving in this direction is the loss of students to the anxieties of developmental math and writing courses that prevents them from attempting college level work.

This consciousness about teaching and student outcomes can be achieved by facilitating round table discussions among faculty members within the departments and within the institution. Faculty members who participated in the study were unanimous that discussions with colleagues were invaluable; several indicated that

they wished there was more time for them to discuss ideas with other faculty. One faculty member with high student outcomes commented, “I talk to my colleagues when I have problems with student performance. I also visit classes to watch other faculty teach.” Lead program persons and institutional leaders must foster this learning community of faculty members so that they can begin to cultivate a broader understanding of the teaching and learning process.

Another aspect of creating a culture of consciousness is to develop¹ the core concepts of a teacher/researcher in every faculty member. The teacher /researcher, or the reflective practitioner, is one who approaches teaching and learning from a standpoint of systematic inquiry, with the goal of improving student outcomes. The most common type of research in this case is action research, where the teacher tries out a strategy to mitigate or eliminate a problem and then systematically studies the process to determine the success, or failure, of the strategy. In order to cultivate this culture of awareness, the institution must provide support to the individual teacher and to the programs by providing data to the departments.

In addition, the institutional researcher should work closely with teachers. This would allow the researcher to provide the data directly to the teachers, who can then discuss the implications with their colleagues, and can therefore become more cognizant of how their teaching influences student performance. In such a working arrangement, institutional researchers will be better able to understand the classroom

¹ Development can occur in the form of staff development activities.

dynamics and the different variables that come influence student outcomes. This understanding will help institutional researchers revise the data collection and analysis process to include more than just quantitative data. With respect to the specifics of this study, the institutional researchers must compute the measures of student outcomes, particularly the Composite Success Measure, and not only make the information available to faculty, but discuss it with them in detail as well.

Every aspect of the institution, from faculty development to faculty evaluations to administrative support, needs to be focused on creating a culture of awareness such that the faculty, the academic programs, and the institution itself will reflect on and pursue strategies that will lead to the true measure of success: improvement in student learning outcomes.

Institutional learning

In order to create a *culture of consciousness* at the institutional level, the school should begin with its mission and vision. That identity needs to be understood and shared by all staff members, not just administration. Administrators need to be involved, alongside faculty members, in projects that promote teaching and learning and its support. Only then will both parties have a clearer understanding of what the school and each staff member has to offer.

To enhance that focus on teaching and learning, relevant data needs to be shared with all school groups so that everyone is aware of school and program effectiveness. Faculty members need to be supported when examining that data.

When they determine their responses to the data, the school has an obligation to support their efforts at improvement. At the same time, the institution can help individual faculty members and programs to develop valid and reliable indicators of progress and hold them responsible for that progress.

All of these elements, shared goals, collaboration, feedback, and respect for professional decision-making, are hallmarks of a college that views itself as committed to teaching and learning because it is aware of its role and responsibility to support teacher and program efforts. By doing so, it recognizes that it is a place that values continuous improvement and devotes its time and energies to collaboratively identifying areas of improvement strategies for getting there. In short, it is a learning organization.

The role of the Teaching and Learning Institute

The effort to improve student performance by improving the quality of instruction cannot focus on quantitative measures of student success alone. Teaching and learning occurs in a context that requires a broadened perspective. In their responses to our inquiries, both new and veteran faculty members indicated their awareness of the key role that teaching plays and how their performance affects their students. However, their responses also indicated the complex ways that teachers measure student performance and their own performance. Teachers utilize student enthusiasm, progress attained, the development of autonomy, and student ownership in their own learning as measures of student success in addition to course retention

and grades. That complexity must be reflected in Teaching and Learning Institute activities.

The development of activities that encourage new faculty participation must include broader participation. In addition to Staff Development and Teaching and Learning Institute representatives, first year teachers must also be involved. They sent a clear message to researchers that they appreciated the effort to develop activities for their benefit, but they also indicated that many of the activities were of minimal value to them. Given that these faculty members cared enough about their professional development to give up significant amounts of time to participate, they would have better appreciated activities that they deemed of greater value. At the top of that list are activities that bring teachers together to discuss teaching rather than having presentations by experts who are not necessarily in the classroom.

In addition to the theme of professional development activities, new teachers also indicated a concern with the timing of those activities. The conflicts created by classroom obligations, class preparation and grading, and other teacher responsibilities placed a premium on the timing of professional development activities. Based upon the feedback of research volunteers, it is reasonable to conclude that a contributing factor was the lack of involvement of new teachers in determining the timing of these events.

The conclusions that we draw from our investigations can be translated into action. Responses from those who participated in this project provided both

information and insight as we developed proposals for the implementation of processes and responses that addressed our findings and conclusions. The next steps are indicated in our recommendations.

Recommendations

Focusing on the behaviors of teachers with high student outcomes

This project established that faculty members with high student outcomes conduct their classes in a manner that encourages student learning. In developmental math classes, a structured environment and emphasis on attendance were critical components of the classroom environment. In the developmental English class, a continuous focus on writing skills differentiated faculty with high student outcomes. This information needs to be included in Teaching and Learning Institute activities in the future.

Supporting students both academically and emotionally

An important trait shared by faculty members with high student outcomes was the recognition that they needed to support their students both academically and emotionally. It was not enough for teachers to be subject experts who were technically competent in the classroom. Those who had high student outcomes found ways to support their students academically, but also understood the importance of emotional support. This information must be included in future teacher development activities and presented to new teachers.

The need for teachers to address students at every level of preparedness

Another important trait shared by faculty members with high student outcomes was the complete focus upon the student and the awareness of the academic preparation of students in their classes. These faculty members were not distracted by the under-preparedness of students in their developmental classes. They took responsibility for student success and moved students from where they were to where they needed to be. This information must be included in future Teaching and Learning Institute activities.

Providing data to those who need it

Community colleges should develop mechanisms to provide meaningful student performance data to faculty members in a timely manner. That data should include measures of student retention and student success, but should also incorporate success in subsequent courses in developmental classes that are offered sequentially. The Composite Success Rate should be incorporated in a non-threatening way so that faculty members can assess their overall effectiveness through the sequence of developmental classes without the fear of reprisal or punishment.

Addressing the impact of proximity

Given the value that faculty members place on collaborative and collegial networks, the colleges must focus on providing opportunities for these communities of learners to develop. In order to avoid feelings of isolation, careful consideration

must be given to the assignment of faculty offices and classrooms. If the colleges wish to nurture the sense of community that teachers believe is so important, they must ensure that physical proximity is given careful consideration. Assignment of physical resources, both faculty offices and classrooms, should be conducive to interaction between teachers.

Institutional actions conveying the primacy of teaching and learning

Community colleges must act in ways that make it clear to teachers that the primary institutional focus is upon teaching and learning. From financial resource allocation to personnel decisions, the message of the importance of teaching and learning must be clear. The colleges can validate this focus by providing meaningful opportunities for faculty members to participate in professional development activities. They can address classroom needs that teachers identify in a timely and appropriate manner. They can engage faculty members in making decisions that affect the instructional programs, and ensure that decisions that affect the academic programs involve significant faculty participation.

Developing measures that capture the complexity of student achievement

Though it is appropriate to emphasize the importance of quantitative measures of student success, the colleges must also acknowledge the importance of qualitative measures that teachers use. Evaluation of teacher effectiveness must include an appropriate focus on student retention, student success, and success in subsequent courses, but it must also acknowledge the qualitative measures that

faculty members utilize to validate their own performance. Professional development can help teachers to understand the importance of improvement in skill and understanding that they see their students develop. Regardless of where their students begin, teachers value the effort and progress that their students make. They realize the value of the development of self-confidence and autonomy in their students. While they are aware that it is more difficult to quantify these measures, they also believe that they should be used as indicators of student performance.

Involving participants in planning

As the Teaching and Learning Institute moves into the next year and beyond, mechanisms must be developed and implemented to involve the newly hired faculty members in the planning, evaluation, and updating of activities. In the first year of the Staff Development Committee's responsibility for faculty development activities, only 35% of first year teachers participated. The Teaching and Learning Institute can only be effective if greater participation is encouraged and realized. Involving the intended participants in the planning phase will encourage their attendance.

Providing opportunities for faculty members to interact

This study has revealed concerns and identified methods to inform the Teaching and Learning Institute. A key responsibility of the Institute will be to focus on activities that bring faculty members together in both formal and informal settings. These activities should include topic-driven forums, effective mentor programs, and social events that bring teachers together. Based upon responses from

faculty members in all parts of this project, the activities that they most appreciate and most value are those that bring teachers together with teachers. By providing opportunities for faculty members to interact and to support each other, the Teaching and Learning Institute can nurture the collegial networks and the collaboration that teachers so value.

Implementation

The implementation of our recommendations will depend on the involvement of faculty and the groups that represent them. The support of the Academic Senate and the collective bargaining group will be key to the implementation and institutionalization of this project. Staff Development Committee involvement in our research established the connection to faculty groups necessary for the continuance of our efforts.

The collective bargaining agent must be involved in the establishment of informal classroom observations and student evaluations to ensure that such measures do not unduly or inappropriately affect the standing of first year teachers. In addition, the incorporation of a self-evaluation process for first year teachers can only occur if the collective bargaining agent is involved. Issues that are fundamentally evaluative in nature are appropriately under the purview of collective bargaining. They must play a role in protecting the security of our new teachers.

The participation of the Staff Development Committee with our project has created the link necessary for the continuance of our effort. As a formal committee

of the Academic Senate, the Staff Development Committee is ideally situated to garner broader faculty support for a Teaching and Learning Institute. Utilizing the processes and procedures established by the Academic Senate and the Staff Development Committee, we will be able to broaden and deepen the scope of activities that fall under the auspices of a new faculty Teaching and Learning Institute.

APPENDICES

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Appendix I

Measuring Up 2000: The State-by-State Report Card for Higher Education

PARTICIPATION:	B+	
YOUNG ADULTS (60%)	California	Top States
<u>High school freshmen enrolling in college within 4 years in any state</u>	43%	54%
<u>18- to 24-year-olds enrolling in college</u>	38%	42%
WORKING-AGE ADULTS (40%)		
<u>25- to 44-year-olds enrolled part-time in some type of postsecondary education</u>	4.3%	4.7%

Performance Gaps: In California, 58% of 18- to 24-year-olds from high-income families enroll in college, compared to 33% of those from low-income families. Also, of 18- to 24-year-olds whose parents have at least some college education, 55% enroll in college, compared to 31% for those whose parents did not attend college.

Change Over Time: In California from 1987 to 1998, the percentage of 18- to 24-year-olds enrolled in college increased from 28% to 38%.

AFFORDABILITY:		A
FAMILY ABILITY TO PAY (50%) Percent of income needed to pay for college expenses minus financial aid:	California	Top States
<u>at community colleges</u>	26%	17%
<u>at public 4-year colleges/universities</u>	31%	19%
<u>at private 4-year colleges/universities</u>	73%	30%
STRATEGIES FOR AFFORDABILITY (40%) State grant aid targeted to		
<u>low-income families as a percent of federal Pell Grant aid to low-income families</u>	37%	106%
<u>Share of income that poorest families need to pay for tuition at lowest priced colleges</u>	4%	9%
RELIANCE ON LOANS (10%)		
<u>Average loan amount that students borrow each year</u>	\$4,361	\$3,094

Note: In the Affordability category, the lower the figures, the better the performance for all indicators except for "State grant aid targeted to low-income families as a percent of federal Pell Grant aid."

COMPLETION:		C
PERSISTENCE (20%)	California	Top States
<u>1st year community college students returning their 2nd year</u>	48%	64%
<u>Freshmen at 4-year colleges/universities returning their sophomore year</u>	83%	84%
COMPLETION (80%)		
<u>First-time, full-time students completing a bachelor's degree within 5 years</u>	53%	66%
<u>Certificates, degrees and diplomas awarded at all colleges and universities per 100 undergraduate students</u>	13	20

Performance Gaps: For every 100 black students enrolled in college in California, 10 receive a degree or certificate. In comparison, for every 100 white students enrolled, 13 receive a degree or certificate.

Facts and Figures **Number/Amount Percent**

Institutions of Postsecondary Education

<u>Public 4-year</u>	32
<u>Public 2-year</u>	109
<u>Private 4-year</u>	182
<u>Private 2-year</u>	73

Students Enrolled by Institution Type

<u>Public 4-year</u>	404,743	23%
<u>Public 2-year</u>	1,149,704	66%
<u>Private 4-year</u>	148,283	9%
<u>Private 2-year</u>	29,877	2%

Students Enrolled by Level

<u>Undergraduate</u>	1,732,607	89%
<u>Graduate</u>	192,422	10%
<u>Professional</u>	33,171	2%

Enrollment Status of Students

<u>Full-time</u>	936,626	48%
<u>Part-time</u>	1,021,574	52%

Net Migration of Students

Positive numbers for net migration mean that more students are entering than leaving the state to attend college. Negative numbers reveal the reverse. 26
 (1996)

Average Tuition

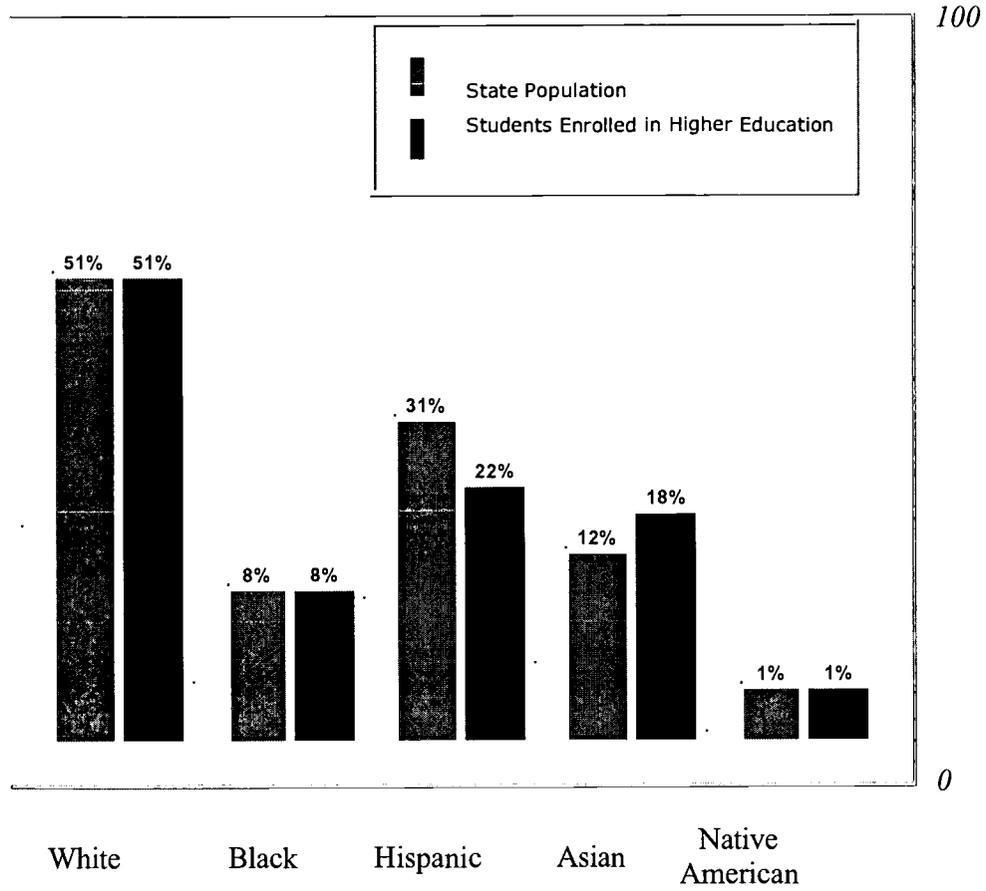
<u>Public 4-year institutions</u>	\$2,712
<u>Public 2-year institutions</u>	\$380
<u>Private 4-year institutions</u>	\$13,016

State and Local Appropriations for Higher Education

<u>Per \$1,000 of personal income, FY 1999</u>	\$10
<u>Per capita, FY 1999</u>	\$268
<u>% change, FY 1990-1999, in constant dollars</u>	38%

Note: Unless otherwise indicated, data are from 1997-98. Percentages might not add to 100 due to rounding.

Ethnic Distribution



Appendix II

Student Data from the State Chancellor's Office (Fall 2000)

<http://misweb.cccco.edu/mis/statlib/stw/studF00.htm#units>

Enrollment Status

Fall 2000 --Students by Enrollment Status

Enrollment Status	Headcount	Percent of All	Percent of All
First-time Student	248,455	15.7%	
First-time Transfer	141,396	8.9%	
Returning Transfer	37,322	2.4%	
Returning Student	148,389	9.3%	
Continuing Student	697,929	44.0%	
Uncollected /Unreported	254,617	16.0%	
Not Applicable	59,011	3.7%	
All Students	1,587,119	100%	

Academic Level

Fall 2000 --Students by Academic Level

Academic Level	Headcount	Percent of All	Percent of All
Special Admit - K-12	65,226	4.1%	
Freshman No HS Grad	112,045	7.1%	
Freshman & c/ Adult School	17,738	1.1%	
Freshman HS Graduate	628,213	39.6%	
Sophomore No HS Grad	14,423	0.9%	
Sophomore & c/ Adult School	785	0.0%	
Sophomore HS Graduate	140,592	8.9%	
AA Degree	61,641	3.9%	
BA Degree	121,616	7.7%	
Other No HS Grad >=60 Units	7,671	0.5%	
Other HS Grad >=60 Units	82,765	5.2%	
Unknown	334,404	21.1%	
All Students	1,587,119	100%	

Unit Load

Fall 2000 --Students by Unit Load

Unit Load	Headcount	Percent of All	Percent of All
Noncredit	204,806	12.9%	
0.0-2.9	191,643	12.1%	
3.0-5.9	329,420	20.8%	
6.0-8.9	201,382	12.7%	
9.0-11.9	149,440	9.4%	
12.0-14.9	221,612	14.0%	
15+	103,756	6.5%	
Unknown	185,060	11.7%	
All Students	1,587,119	100%	

Appendix III

Successful Course Completion in Fall 1994 and 1995. Data from the California Community College Chancellor's Website

Discipline	Fall 1994			Fall 1995		
	Successful	Attempted	% Successful	Successful	Attempted	% Successful
Agri./Natural Resources	15,855	21,165	74.9	17,661	23,235	76.0
Architect	6,017	8,493	70.8	4,144	6,074	68.2
Biological Sciences	64,475	100,531	64.1	62,408	96,463	64.7
Business & Mgmt.	160,698	248,054	64.8	146,782	225,904	65.0
Commercial Services	13,053	17,098	76.3	9,379	11,777	79.6
Communications	14,273	20,715	68.9	17,202	24,739	69.5
Computer & Info. Svcs.	74,660	116,134	64.3	79,717	123,361	64.6
Cons. Ed. & Home Eco.	53,502	75,095	71.2	80,586	111,589	72.2
Education	210,658	288,920	72.9	205,679	280,752	73.3
Eng. & Related Tech.	82,592	116,577	70.8	81,824	112,510	72.7
Fine and Applied Arts	166,763	235,288	70.9	162,777	228,610	71.2
Foreign Language	57,391	85,707	67.0	56,060	82,922	67.6
Health	67,287	81,339	82.7	65,672	79,971	82.1
Humanities (Letters)	270,216	411,621	65.6	260,998	397,535	65.7
Interdisciplinary Studies	178,671	266,342	67.1	174,769	262,346	66.6
Mathematics	142,167	266,946	53.3	140,371	263,792	53.2
Physical Sciences	76,233	116,431	65.5	73,791	113,378	65.1
Psychology	74,819	119,508	62.6	74,160	118,679	62.5
Public Affairs & Svcs.	103,224	137,926	74.9	82,363	107,240	76.8
Social Sciences	222,837	355,268	62.7	216,799	345,451	62.8
Other	12,969	18,208	71.2	11,675	16,575	70.4
Total	2,068,360	3,107,366	66.6	2,024,817	3,032,903	66.7

Definition: The successful course completion rate is the sum of course enrollments receiving an official end-of-term letter grade of A, B, C, or CR divided by attempted course enrollment. Attempted enrollment includes the sum of students receiving an official end-of-term letter grade of A, B, C, CR, D, NC, F, I, W, and MW. Treated as unknown (excluded) are course enrollments with letter grades RD, UD, UG, and XX. (See Measure 2.20 for definitions.)

Uses of Measure: Successful course completion is an indicator of student academic performance. This measure can be broken out for different categories of students and curricular areas.

Analysis: In Fall 1995, disciplines attaining highest levels of successful course completion include Health (82.1%), Commercial Services (79.6%), Public Affairs and Services (76.8%), Agriculture and Natural Resources (76.0%), and Fine and Applied Arts (71.2%). Lowest rates of successful course completion occurred in Mathematics (53.2%), Psychology (62.5%), Social Sciences (62.8%).

Source: Chancellor's Office, Management Information System

Appendix IV

New Faculty Orientation Examples



New Faculty Orientation Tuesday, August 7, 2001

AGENDA



Tuesday, August 7, 2001 – Liberal Arts Campus (LAC) F101
8:00 am - 9:10 am

Welcome and Introduction to LBCC

E. Jan Kehoe, President
Long Beach City College

Welcome and Introduction of Academic Senate Executive Committee

Steve Wallich, Academic Senate
President
Academic Senate Executive Committee

Faculty Professional Development

Frances Shelby, Faculty Professional
Development Coordinator

SESSION I

9:15 am - 10:45 am

Teaching and Learning at Long Beach City College

Donald Ken Douglas and Della Dukoss
Moderators

Faculty Panel F110, Small Group Discussion, F101

John Hauck
Paul Savone
Lorraine Blouin
Bonnie Brinkman

11:00 am - 11:15 am

Faculty Contract & Tenure Review - Community College Association

David Thrift, CCA

11:15 am - 12:30 pm

LUNCH
(Sponsored by CCA)

1



New Faculty Orientation

Continue:

Tuesday, August 7, 2001

SESSION II
12:45 pm - 1:45 pm

Building L
 Tour of Building L
 Career Center and Job Placement
 Library: Open Access Laboratory
 Center for Learning Assistance Services
 Writing & Reading Center
 Faculty Resource Center
 Faculty Professional Development Office

Nemita Buenaventura
 Alison Bowers
 Laurie Potter
 Amit Schital

2:00 pm - 3:20 pm

A Campus Walkabout

Academic Affairs:	Marilyn Brock, Vice President/Deans of Academic Affairs
Student Services:	Art Byrd, Vice President of Student Support, Planning and Research
Administrative Services:	Randall Wooten, Vice President of Administrative Services
Human Services:	Vic Collins, Executive Dean, Human Resources

SESSION III
3:30 pm - 4:00 pm

Student Panel

Della DuRoss, Moderator

4:00 p.m. - 4:30 p.m.

Concluding Session



New Faculty Orientation Wednesday, August 8, 2001

AGENDA

Wednesday, August 8 - Liberal Arts Campus (LAC)
8:00 am - 9:00 am

>Welcome

Shannon Wilson, Classified Senate President

Jillian Sederholm, Associated Student Body President

SESSION I

9:00 am - 11:00 am

Participation in the Life of the College, Shared Governance,
Campus Committees, and Student Clubs

Steve Walloch, Academic Senate President

Faculty Panel F110, Small Group Discussion F110 and F101
Moderator

Charlotte Joseph,

Ginny Baxter
Diana Oigimachi
Craig Hendricks
Joan Zuckerman, Committee Membership

11:00 a.m. - 11:30

Campus Walking Tour

1:45 am - 1:00 pm

LUNCH -
(Sponsored by the Administrators' Association)



New Faculty Orientation



Wednesday, August 8, 2001	
<i>Continue:</i>	
SESSION II 1:20 pm - 3:10 pm	
A Campus Walkabout	
Connecting & Student Development & Student Support Services Matriculation & Disabled Students Programs & Services Admissions and Records	Lisa Sugimoto, Dean Counseling & Student Support Services Ross Miyashiro, Dean of Admissions & Records Brendan Hayes, Lieutenant John Fylpaa, Dean of Student Affairs
College Police/Classroom Environment & Student Discipline	
3:10 - 4:00 pm	Faculty Mentoring Program
4:00 - 4:30	Concluding Session
	Lorraine Bloum, Mentoring

SANTA ROSA JUNIOR COLLEGE
NEW FACULTY/ MANAGEMENT ORIENTATION
AGENDA

Wednesday, August 15, 2001
Pedroncelli Center
Conference Room

-
- 8:30 - 9:30 **WELCOME - Pedroncelli Center (Coffee & Pastries)**
- Overview of the Day, Jennifer Mann, Staff Development
 - Brenda Flywithhaws, President, Academic Senate
 - Raulo Ynterri, President, Classified Senate
 - Robert Agrella, Superintendent/President
 - Doug Garrison, Executive Dean, Petaluma Campus
 - Ice Breaker - Jennifer Mann
- 9:30 - 9:45 **OPENING REMARKS**
- Rene Peron, Behavioral Sciences
- 9:45 - 9:55 **WORKPLACE SAFETY**
- Sally Miller, District Police
- 9:55 - 10:05 **SEXUAL HARASSMENT**
- Marie Thompson, District Compliance Officer
- 10:05 - 10:15 **BREAK**
- 10:15 - 10:30 **ACADEMIC AFFAIRS OVERVIEW**
- Ed Buckley, Vice President, Academic Affairs
- 10:30 - 10:45 **SRJC Faculty & Disability Resource Students**
- Karl Vigeland, Chair, Disability Resource Department
- 10:45 - 11:00 **STUDENT SERVICES OVERVIEW**
- Marty Lee, Dean, Counseling & Supportive Services
- 11:00 - 12:00 **CAMPUS WALKING TOUR**
- Jennifer Mann, Coordinator, Staff Development
 - Tammy Sakanashi, Coordinator, New Faculty Development
- 12:00 - 1:00 **LUNCH BUFFET "UNDER THE OAKS"**

NEW FACULTY ORIENTATION AGENDA

Wednesday, August 15, 2001
Pedroncelli Center
Conference Room



-
- 1:15 - 2:20 **LIBRARY/MEDIA SERVICES TOUR/STAFF DIRECTORY
PHOTOS**
- Will Bary, Associate Dean, Learning Resources
 - Russ Bowden, Manager, Media Services
- 2:20 - 2:45 **CRISIS INTERVENTION TEAM & HEALTH SERVICES**
- Lake McClenney, Student Psychological Services
 - Susan Quinn, Director, Health Services
- 2:45 - 3:00 **AFA CONTRACT & INTRODUCTION TO TENURE
REVIEW PROCESS**
- Deborah Sweitzer, Chief Negotiator, AFA
 - Katherine Caddes, DTREC Representative
- 3:00 - 3:15 **NEW FACULTY DEVELOPMENT PROGRAM & MANUAL**
- Tammy Sakanashi, Coordinator, New Faculty Development
- 3:15 - 3:30 **QUESTIONS, WRAP-UP & EVALUATION**

Appendix V

Faculty Questionnaire

(<http://www2.bc.cc.ca.us/schristi/culminatingproject/facultyquestionnaire.html>)

Dear faculty:

Thank you for volunteering to participate in this study.

This survey should not take more than two hours. Please make sure that you add your written comments in the fields provided.

Thanks again.

Name:

Courses Taught :

Respondent Information:

1. Please indicate your faculty status:

- Part-time
- Full-time, not tenured
- Full-time, tenured

2. Please indicate your gender:

- Female
- Male

3. Please indicate your discipline:

- Math
- English

4. What is the highest degrees you possess?:

- Bachelor's degree. If yes, specify discipline.
- Master's degree. If yes, specify discipline.
- Doctorate degree. If yes, specify discipline
- Other. Specify.

5. Please indicate the number of years you have been teaching at the community college level:

- less than or equal to 2 years
- more than 2 years and less than or equal to 5 years
- more than 5 years and less than or equal to 10 years
- more than 10 years and less than or equal to 15 years
- more than 15 years

6. Please indicate the number of years you have been teaching at this institution:

- less than or equal to 2 years
- more than 2 years and less than or equal to 5 years
- more than 5 years and less than or equal to 10 years
- more than 10 years and less than or equal to 15 years
- more than 15 years

The Faculty:

7.a. How do you define high student outcomes in your classes?

7.b. How do you use student outcome information/data in your teaching profession and in your day-to-day work of preparing for classes, tests etc.

If you are a math faculty answer questions 8 and 10. If you are an English faculty answer questions 9 and 11.

What do you think are the average retention rates in the following categories at your institution?

No.	Course	Less than 50%	50% or more, and less than 60%	60% or more, and less than 70%	70% or more, and less than 80%	80% or more
8	Prealgebra	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Elementary algebra	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Intermediate algebra	<input type="checkbox"/>				
9	Basic writing	<input type="checkbox"/>				
	Introductory composition	<input type="checkbox"/>				

What do you think are **your** retention rates in the following classes?

No.	Course	Less than 50%	50% or more, and less than 60%	60% or more, and less than 70%	70% or more, and less than 80%	80% or more
10	Prealgebra	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Elementary algebra	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Intermediate algebra	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Basic writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Introductory composition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Teaching Style:

12. The teaching styles that you think are effective: (choose all that apply)

- didactic
- discussion/group work
- hybrid (combination of didactic and discussion)
- discovery
- other. Specify:

13. Do you consider yourself to be an effective teacher?

- Yes
- No

Why?

How do you know that you are an effective teacher or not?

14. The teaching style you mainly use:

- didactic
- discussion/group work
- hybrid (combination of didactic and discussion)
- discovery
- other Specify: _____

15. You encourage critical thinking in your classroom.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

16. You show enthusiasm and interest in the subject.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

17. You attend classes regularly.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

18. You use technology in the classroom and other media aids, and/or the library.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

Interaction with students inside the class:

19. You always welcome questions in class.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

20. You encourage class discussion.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

21. You encourage expressions of differences in opinion in your classroom.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

22. You care about individual student progress.

- agree
- mildly agree
- neutral

mildly disagree

disagree

23. You are available to students beyond office hours.

agree

mildly agree

neutral

mildly disagree

disagree

24. You interact with students socially.

agree

mildly agree

neutral

mildly disagree

disagree

25. You work on academic projects/independent studies with your students.

agree

mildly agree

neutral

mildly disagree

disagree

26. How many hours a week do you spend preparing for every course that you teach?

0 to 3 hours

4 to 7 hours

- 8 to 11 hours
- 12 to 15 hours
- Other

Comments:

--	--

27. You keep yourself up to date with the latest developments in your discipline.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

Comments:

--	--

28. You develop or participate in the development of curriculum, services, and/or activities.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

Comments:

--	--

29. You are prompt and regular in attendance at meetings with students and/or staff.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

Comments:

--	--

30. You participate in campus-wide committees.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

Comments:

--	--

31. You participate in as recruiting and articulation activities with local schools, other community colleges, and four-year schools.

- agree
- mildly agree
- neutral
- mildly disagree
- disagree

Comments:

Institutional Information:

32. Please indicate the primary mission of this institution (please check all that apply):

- transfer
- vocational education
- remedial education
- contract education
- Other, please specify: _____

Comments :

33. Please rate this institution's **overall effectiveness** with a letter grade (please check one):

- A
- B
- C
- D
- E

Comments:

--	--

34. Please rate this institution's **effectiveness at supporting teaching** with a letter grade (please check one):

- A B C D E

Comments:

--	--

Departmental Information:

35. Faculty members within your department work together to improve instruction.

- strongly agree mildly agree neutral mildly disagree strongly disagree

Comments:

--	--

36. Faculty members from different departments work together to improve instruction at this institution.

- strongly agree mildly agree neutral mildly disagree strongly disagree

Comments:

--	--

Institutional Support for Teaching:

37. Faculty members are committed to this institution. (please check one):

- strongly agree mildly agree neutral mildly disagree strongly disagree

38. I am committed to this institution. (please check one):

- strongly agree mildly agree neutral mildly disagree strongly disagree

39. How does the institution successfully **support** teaching efforts at this school?

--	--

40. How does the institution **inhibit** teaching efforts at this school?

41. I am satisfied with my institution's efforts to support teaching. (please check one):

- strongly agree mildly agree neutral mildly disagree strongly disagree

Comments:

Please rate the effectiveness of the following mechanisms at improving teaching quality at this institution:

42. Faculty senate (please check one):

- very effective effective neutral somewhat effective not effective

43. Faculty/staff development efforts (please check one):

- very effective effective neutral somewhat effective not effective

44. Faculty/staff evaluation policies and practices (please check one):

- very effective effective neutral somewhat effective not effective

Of the following mechanisms designed to support teaching, please rate their effectiveness at supporting **your** teaching efforts:

45. Faculty senate (please check one):

- very effective effective neutral somewhat effective not effective

46. Faculty development efforts (please check one):

- very effective effective neutral somewhat effective not effective

47. Evaluation policies and practices (please check one):

- very effective effective neutral somewhat effective not effective

Faculty Senate:

48. I am involved with this institution's faculty senate. (please check one):

- agree mildly agree neutral mildly disagree
 disagree

Comments:

49. Please indicate the primary mission of the faculty senate (check all that apply):

- shared governance curriculum development budget
 planning
 other-please specify: _____

Comments:

Faculty Development Efforts:

Of the following faculty development efforts, indicate **your** level of involvement:

50. Flex-time (please check one):

- very involved involved neutral
 somewhat involved not involved

51. Sabbaticals (please check one):

- very involved involved neutral somewhat
 involved not involved

52. Workshops (please check one):

- very involved involved neutral somewhat
 involved not involved

53. Conferences (please check one):

- very involved involved neutral somewhat
 involved not involved

Of the following faculty development efforts, indicate their level of effectiveness at improving teaching at this institution:

54. Flex-time (please check one):

- very effective effective neutral somewhat effective not effective

55. Sabbaticals (please check one):

- very effective effective neutral somewhat effective not effective

56. Workshops (please check one):

- very effective effective neutral somewhat effective not effective

57. Conferences (please check one):

- very effective effective neutral somewhat effective not effective

Of the following faculty development efforts, indicate their level of effectiveness at improving your teaching:

58. Flex-time (please check one):

- very effective effective neutral somewhat effective not effective

59. Sabbaticals (please check one):

- very effective effective neutral somewhat effective not effective

60. Workshops (please check one):

- very effective effective neutral somewhat effective not effective

61. Conferences (please check one):

- very effective effective neutral somewhat effective not effective

62. Please indicate the level of faculty involvement when deciding on faculty development efforts (please check one):

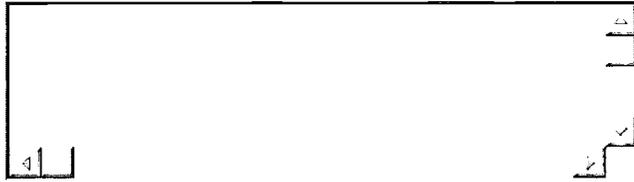
- very involved involved neutral
 somewhat involved not involved

Evaluation:

63a. How are tenure decisions made at this institution?

63b. How are tenure decisions made within your department?

63c. What do you think about the tenure process in general? Do you think it should be continued or stopped?



Indicate the level of effectiveness for the following evaluation mechanisms at improving teaching at this institution:

64. Evaluations by students (please check one):

- very effective effective neutral somewhat effective not effective

65. Evaluations by colleagues (please check one):

- very effective effective neutral somewhat effective not effective

66. Evaluations by administrators (please check one):

- very effective effective neutral somewhat effective not effective

67. Self-evaluations (please check one):

- very effective effective neutral somewhat effective not effective

Indicate the level of effectiveness for the following evaluation mechanisms at improving your teaching:

68. Evaluations by students (please check one):

very effective effective neutral somewhat effective not effective

69. Evaluations by colleagues (please check one):

very effective effective neutral somewhat effective not effective

70. Evaluations by administrators (please check one):

very effective effective neutral somewhat effective not effective

71. Self-evaluations (please check one):

very effective effective neutral somewhat effective not effective

Thank You. DO NOT forget to click the "Submit" button below.

Appendix VI

Program Retention and Success Rates in Fall 2000

Program Retention/Success Rates For Credit Enrollments
 (Source: California Community Colleges, Chancellor's Office.
http://misweb.cccco.edu/mis/onlinestat/ret_sucs_rpt.cfm)

Anderson College: Retention Rate For 2000 Fall Semester, Discipline: All

Program Type	Total Enrollments	Retained	Retention Rate(%)
AGRICULTURE AND NATURAL RESOURCES (01)	783	654	83.52
ARCHITECTURE AND ENVIRONMENTAL DESIGN (02)	150	139	92.67
BIOLOGICAL SCIENCES (04)	717	603	84.10
BUSINESS AND MANAGEMENT (05)	1,903	1,558	81.87
COMMUNICATIONS (06)	130	101	77.69
COMPUTER AND INFORMATION SCIENCE (07)	1,696	1,493	88.03
CONSUMER EDUCATION & HOME ECONOMICS (13)	2,517	2,213	87.92
EDUCATION (08)	4,343	3,950	90.95
ENGINEERING & RELATED INDUSTRIAL TECHNOLOGY (09)	1,433	1,318	91.97
FINE AND APPLIED ARTS (10)	2,256	1,928	85.46
FOREIGN LANGUAGE (11)	828	684	82.61
HEALTH (12)	1,102	1,042	94.56
HUMANITIES (15)	4,333	3,593	82.92
INTERDISCIPLINARY STUDIES (49)	6,152	5,418	88.07
MATHEMATICS (17)	2,838	2,117	74.59
PHYSICAL SCIENCES (19)	946	768	81.18
PSYCHOLOGY (20)	1,618	1,451	89.68
PUBLIC AFFAIRS & SERVICES (21)	2,028	1,882	92.80
SOCIAL SCIENCES (22)	5,734	4,751	82.86
Grand Total	41,507	35,663	85.92

Program Retention/Success Rates For Credit Enrollments

Beckman College

Retention Rate For 2000 Fall Semester

Discipline: All

Program Type	Total Enrollments	Retained	Retention Rate(%)
AGRICULTURE AND NATURAL RESOURCES (01)	128	98	76.56
BIOLOGICAL SCIENCES (04)	1,234	818	66.29
BUSINESS AND MANAGEMENT (05)	3,206	2,285	71.27
COMMERCIAL SERVICES (30)	253	225	88.93
COMMUNICATIONS (06)	614	362	58.96
COMPUTER AND INFORMATION SCIENCE (07)	4,557	3,254	71.41
CONSUMER EDUCATION & HOME ECONOMICS (13)	2,178	1,687	77.46
EDUCATION (08)	4,945	3,931	79.49
ENGINEERING & RELATED INDUSTRIAL TECHNOL(09)	1,592	1,316	82.66
FINE AND APPLIED ARTS (10)	7,331	5,751	78.45
FOREIGN LANGUAGE (11)	1,340	1,025	76.49
HUMANITIES (15)	7,449	5,675	76.18
INTERDISCIPLINARY STUDIES (49)	3,330	2,739	82.25
LAW (14)	236	175	74.15
LIBRARY SCIENCE (16)	21	9	42.86
MATHEMATICS (17)	5,746	4,017	69.91
PHYSICAL SCIENCES (19)	2,785	2,116	75.98
PSYCHOLOGY (20)	1,861	1,355	72.81
PUBLIC AFFAIRS & SERVICES (21)	1,064	916	86.09
SOCIAL SCIENCES (22)	7,983	6,125	76.73
Grand Total	57,853	43,879	75.85

Program Retention/Success Rates For Credit Enrollments
Statewide
Retention Rate Fall 2000

Note: The Statewide figures represent 108 reported out of total of 115 reporting entities statewide

Program Type	Total Enrollments	Retained	Retention Rate(%)
AGRICULTURE AND NATURAL RESOURCES (01)	25,704	22,734	88.45
ARCHITECTURE AND ENVIRONMENTAL DESIGN (02)	6,505	5,294	81.38
BIOLOGICAL SCIENCES (04)	94,095	74,095	78.74
BUSINESS AND MANAGEMENT (05)	244,406	196,990	80.60
COMMERCIAL SERVICES (30)	11,675	10,034	85.94
COMMUNICATIONS (06)	33,483	27,758	82.90
COMPUTER AND INFORMATION SCIENCE (07)	204,944	165,481	80.74
CONSUMER EDUCATION & HOME ECONOMICS (13)	141,062	120,586	85.48
EDUCATION (08)	337,917	285,355	84.45
ENGINEERING & RELATED INDUSTRIAL TECHNOLOGY(09)	127,812	112,143	87.74
FINE AND APPLIED ARTS (10)	287,986	238,819	82.93
FOREIGN LANGUAGE (11)	96,775	75,762	78.29
HEALTH (12)	80,656	72,785	90.24
HUMANITIES (15)	434,087	351,156	80.90
INTERDISCIPLINARY STUDIES (49)	305,149	239,638	78.53
LAW (14)	9,559	7,901	82.66
LIBRARY SCIENCE (16)	3,718	2,999	80.66
MATHEMATICS (17)	296,029	218,165	73.70
MILITARY STUDIES (18)	81	68	83.95
PHYSICAL SCIENCES (19)	112,464	90,078	80.09
PSYCHOLOGY (20)	126,424	102,987	81.46
PUBLIC AFFAIRS & SERVICES (21)	132,253	120,270	90.94
SOCIAL SCIENCES (22)	379,452	306,701	80.83
Grand Total	3,492,236	2,847,799	81.55

Program Retention/Success Rates For Credit Enrollments
Anderson College
Success Rate For 2000 Fall Semester
Discipline: All

Program Type	Total Enrollments	Succeeded	Success Rate(%)
AGRICULTURE AND NATURAL RESOURCES (01)	783	567	72.41
ARCHITECTURE AND ENVIRONMENTAL DESIGN (02)	150	118	78.67
BIOLOGICAL SCIENCES (04)	717	486	67.78
BUSINESS AND MANAGEMENT (05)	1,903	1,313	69.00
COMMUNICATIONS (06)	130	74	56.92
COMPUTER AND INFORMATION SCIENCE (07)	1,696	1,153	67.98
CONSUMER EDUCATION & HOME ECONOMICS (13)	2,517	1,955	77.67
EDUCATION (08)	4,343	3,002	69.12
ENGINEERING & RELATED INDUSTRIAL TECHNOL(09)	1,433	1,112	77.60
FINE AND APPLIED ARTS (10)	2,256	1,615	71.59
FOREIGN LANGUAGE (11)	828	520	62.80
HEALTH (12)	1,102	972	88.20
HUMANITIES (15)	4,333	2,829	65.29
INTERDISCIPLINARY STUDIES (49)	6,152	4,257	69.20
MATHEMATICS (17)	2,838	1,426	50.25
PHYSICAL SCIENCES (19)	946	657	69.45
PSYCHOLOGY (20)	1,618	1,145	70.77
PUBLIC AFFAIRS & SERVICES (21)	2,028	1,047	51.63
SOCIAL SCIENCES (22)	5,734	3,324	57.97
Grand Total	41,507	27,572	66.43

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Program Retention/Success Rates For Credit Enrollments
Beckman College
Success Rate For 2000 Fall Semester
Discipline: All

Program Type	Total Enrollments	Succeeded	Success Rate(%)
AGRICULTURE AND NATURAL RESOURCES (01)	128	82	64.06
BIOLOGICAL SCIENCES (04)	1,234	652	52.84
BUSINESS AND MANAGEMENT (05)	3,206	1,850	57.70
COMMERCIAL SERVICES (30)	253	138	54.55
COMMUNICATIONS (06)	614	301	49.02
COMPUTER AND INFORMATION SCIENCE (07)	4,557	2,200	48.28
CONSUMER EDUCATION & HOME ECONOMICS (13)	2,178	1,357	62.30
EDUCATION (08)	4,945	3,210	64.91
ENGINEERING & RELATED INDUSTRIAL TECHNOL(09)	1,592	1,161	72.93
FINE AND APPLIED ARTS (10)	7,331	4,708	64.22
FOREIGN LANGUAGE (11)	1,340	916	68.36
HUMANITIES (15)	7,449	4,669	62.68
INTERDISCIPLINARY STUDIES (49)	3,330	2,191	65.80
LAW (14)	236	150	63.56
LIBRARY SCIENCE (16)	21	7	33.33
MATHEMATICS (17)	5,746	3,167	55.12
PHYSICAL SCIENCES (19)	2,785	1,810	64.99
PSYCHOLOGY (20)	1,861	1,024	55.02
PUBLIC AFFAIRS & SERVICES (21)	1,064	794	74.62
SOCIAL SCIENCES (22)	7,983	4,687	58.71
Grand Total	57,853	35,074	60.63

BEST COPY AVAILABLE

Program Retention/Success Rates For Credit Enrollments

Statewide Success Rate Fall 2000

Note: The Statewide figures represent 108 reported out of total of 115 reporting entities statewide

Discipline: All

Program Type	Total Enrollments	Succeeded	Success Rate(%)
AGRICULTURE AND NATURAL RESOURCES (01)	25,704	19,606	76.28
ARCHITECTURE AND ENVIRONMENTAL DESIGN (02)	6,505	4,330	66.56
BIOLOGICAL SCIENCES (04)	94,095	58,557	62.23
BUSINESS AND MANAGEMENT (05)	244,406	155,264	63.53
COMMERCIAL SERVICES (30)	11,675	8,785	75.25
COMMUNICATIONS (06)	33,483	22,784	68.05
COMPUTER AND INFORMATION SCIENCE (07)	204,944	129,421	63.15
CONSUMER EDUCATION & HOME ECONOMICS (13)	141,062	101,844	72.20
EDUCATION (08)	337,917	248,789	73.62
ENGINEERING & RELATED INDUSTRIAL TECHNOL(09)	127,812	95,458	74.65
FINE AND APPLIED ARTS (10)	287,986	202,028	70.15
FOREIGN LANGUAGE (11)	96,775	62,679	64.77
HEALTH (12)	80,656	65,043	80.64
HUMANITIES (15)	434,087	280,769	64.68
INTERDISCIPLINARY STUDIES (49)	305,149	186,946	61.26
LAW (14)	9,559	6,635	69.41
LIBRARY SCIENCE (16)	3,718	2,458	66.11
MATHEMATICS (17)	296,029	155,543	52.54
MILITARY STUDIES (18)	81	53	65.43
PHYSICAL SCIENCES (19)	112,464	73,489	65.34
PSYCHOLOGY (20)	126,424	79,332	62.75
PUBLIC AFFAIRS & SERVICES (21)	132,253	104,444	78.97
SOCIAL SCIENCES (22)	379,452	236,546	62.34
Grand Total	3,492,236	2,300,803	65.88

Appendix VII

Faculty Interview Protocol (Institutional Support)

General college	<p>1. How does XXX college support teaching and learning today?</p> <p>2. How effective are those efforts?</p> <p>3. What should the college do differently?</p>
Faculty relationships	<p>4. What is the nature of faculty relationships within your department?</p> <p>5. What is the nature of faculty relationships between departments?</p> <p>6. What is the level of faculty commitment to XXX college? How do you know?</p>
Union	<p>7. What role do you see the union playing at XXX college?</p> <p>8. How has the union impacted teaching and learning at XXX college?</p>
Evaluation	<p>9. How are faculty evaluated at XX college?</p> <p>10. How has the evaluation process impacted your teaching?</p> <p>11. How should it be modified to improve its impact on teaching and learning?</p>
Staff development	<p>12. How would you characterize XXX college's professional development efforts?</p> <p>13. What efforts have you participated in recently?</p> <p>14. How have they impacted your teaching?</p> <p>15. How should professional development efforts be improved to impact teaching and learning more?</p>
Academic senate	<p>16. What role does the academic senate play at XXX college?</p> <p>17. What is the nature of your involvement with the senate?</p> <p>18. How has the senate impacted your teaching?</p> <p>19. What recommendations would you make to the senate so it could have a greater impact on teaching and learning at XXX college?</p>
Professional growth	<p>20. Overall, what do you attribute your growth as a professional to?</p>
Final	<p>21. Did you want to say anything else about teaching, XXX college, or teaching at XXX college?</p>

Appendix VIII

Administrator Interview Protocol (Institutional Support)

General college	<p>16. Historically, what efforts have been made to improve teaching and learning at this institution?</p> <p>17. How does XXX college support teaching and learning today?</p> <p>18. How effective are those efforts?</p> <p>19. What should the college do differently?</p> <p>20. What is the level of faculty commitment to XXX college? How do you know?</p>
Administration	<p>21. How does the administration support teaching and learning?</p> <p>22. How effective are those efforts?</p> <p>23. What should the administration do differently?</p>
Union	<p>24. What role do you see the union playing at XXX college?</p> <p>25. How has the union impacted teaching and learning at XXX college?</p>
Evaluation	<p>26. How are faculty evaluated at XX college?</p> <p>27. How has the evaluation process impacted teaching and learning?</p> <p>28. How should it be modified to improve its impact on teaching and learning?</p>
Staff development	<p>29. How would you characterize XXX college's professional development efforts?</p> <p>30. What efforts have you participated in recently?</p> <p>31. How have they impacted teaching and learning?</p> <p>32. How should professional development efforts be improved to impact teaching and learning more?</p>
Academic senate	<p>16. What role does the academic senate play at XXX college?</p> <p>22. What is the nature of your involvement with the senate?</p> <p>23. How has the senate impacted your teaching?</p> <p>24. What recommendations would you make to the senate so it could have a greater impact on teaching and learning at XXX college?</p>
Final	<p>25. Did you want to say anything else about teaching, XXX college, or teaching at XXX college?</p>

Appendix IX

Meeting Observation Protocol

Group:

Date:

Time:

Attendees (affiliation):

Agenda: (attached)

Nature of agenda issues:

How are agenda items submitted?

Who submits? (patterns)

Major issues discussed:

How are issues related to teaching and learning?

Describe any conflict. Resolution?

Communication patterns:

(certain people talking, one person sharing info v. actual discussion, congeniality v. collegiality)

Appendix X

Document Analysis Table

Document	Contents	Connections/Questions

Appendix XI
Summary Form

Faculty Identifier/Department/School

Structural Processes:

Positive:

Negative:

Responses:

Cultural/Environmental Processes:

Positive:

Negative:

Responses:

Appendix XII

Summary Table—Institutional Support

Identifier	Staff development	Evaluation	Academic senate	Union	Committees	Institution	Department	Individuals	Growth/Change/Challenge	Misc
Faculty identifier										
Faculty identifier										
Faculty identifier										
Faculty identifier										
Faculty identifier										
Faculty identifier										
Faculty identifier										
Faculty identifier										

Appendix XIII

Social Interaction with Students (ANOVA Output)

Anova: Single Factor

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Agree	6	3.42	0.57	0.02
Mildly Agree	7	3.57	0.51	0.02
Mildly Disagree	7	4.47	0.64	0.0010
Disagree	4	2.58	0.65	0.003

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.074 7628	3	0.024921	3.733737	0.027938	3.098393
Within Groups	0.133 4905	20	0.006675			
Total	0.208 2533	23				

The neutral category was eliminated because there were no responses in that category.

Appendix XIV

Faculty participation in workshops (ANOVA Output)

Anova: Single Factor

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Mildly Agree	8	4.10	0.51	0.005
Neutral	8	4.72	0.59	0.010
Mildly Disagree	8	5.22	0.65	0.003

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.078523 507	2	0.039262	6.355495	0.006945	3.466795
Within Groups	0.129729 75	21	0.006178			
Total	0.208253 257	23				

Groups "Agree:" and "Disagree" were deleted because there were no responses in both those categories.

Appendix XV

Profile of faculty with high student outcomes

	English	Math
Identifier	AE1	AM1
Gender	Female	Male
Years teaching	5 years teaching	11 years teaching
Years teaching at College A	2 years teaching at College A	7 years teaching at College A
Student outcomes average	70.81%	70.90%
Department student outcomes average	62.95%	60.38%
Identifier	AE2	AM2
Gender	Female	Male
Years teaching	10 years teaching	20 years teaching
Years teaching at College A	10 years teaching at College A	8 years teaching at College A
Student outcomes average	68.44%	70.36%
Department student outcomes average	62.95%	60.38%

Appendix XVI

Student Outcomes English Faculty in Beckman College

ID	Retained Success in Base Course			Success in Base Course			Retention Rate in Base Course			Enrollment in Subseq Course			Retention Rate in Subseq Crse			Average of three measures		
	in course	Base Course	Success in Base Course	Rate in Base Course	Retention Rate in Base Course	Success in Base Course	Rate in Base Course	Retention Rate in Base Course	Success in Subseq Course	Rate in Subseq Course	Retention Rate in Subseq Course	Success in Subseq Course	Rate in Subseq Course	Retention Rate in Subseq Course	Success of three measures			
49	25	23	25	100.00%	92.00%	12	12	16	75.00%	75.00%	75.00%	75.00%	75.00%	89.00%				
14	22	20	25	88.00%	80.00%	12	12	15	80.00%	80.00%	80.00%	80.00%	80.00%	82.67%				
27	20	17	22	90.91%	77.27%	5	5	7	71.43%	71.43%	71.43%	71.43%	71.43%	79.87%				
28	23	19	26	88.46%	73.08%	14	14	18	77.78%	77.78%	77.78%	77.78%	77.78%	79.77%				
35	59	46	65	90.77%	70.77%	42	34	46	91.30%	91.30%	91.30%	91.30%	91.30%	78.48%				
32	39	36	50	78.00%	72.00%	17	17	20	85.00%	85.00%	85.00%	85.00%	85.00%	78.33%				
U	61	57	74	82.43%	77.03%	39	35	47	82.98%	82.98%	82.98%	82.98%	82.98%	77.98%				
63	52	42	60	86.67%	70.00%	28	27	35	80.00%	80.00%	80.00%	80.00%	80.00%	77.94%				
10	24	22	31	77.42%	70.97%	17	16	19	89.47%	89.47%	89.47%	89.47%	89.47%	77.53%				
33	91	68	102	89.22%	66.67%	39	35	47	82.98%	82.98%	82.98%	82.98%	82.98%	76.78%				
62	23	17	31	74.19%	54.84%	11	11	11	100.00%	100.00%	100.00%	100.00%	100.00%	76.34%				
46	53	46	60	88.33%	76.67%	30	27	43	69.77%	69.77%	69.77%	69.77%	69.77%	75.93%				
11	39	33	53	73.58%	62.26%	24	22	25	96.00%	96.00%	96.00%	96.00%	96.00%	74.62%				

ID	Retained Success in Enrollment			Retention			Success			Retention			Subseq			Average		
	in Base course	Base Course	Enrollment Course	Rate in Base Course	Retention Course	Rate in Base Course	Success Course	Retained in Subseq Course	Success in Subseq Course	Enrollment in Subseq Course	Rate in Subseq Crse	Subseq Success Rate						
43	122	106	154	79.22%	79.22%	68.83%	59	52	69	85.51%	75.36%	74.47%						
3	115	104	132	87.12%	87.12%	78.79%	59	47	82	71.95%	57.32%	74.41%						
22	63	55	75	84.00%	84.00%	73.33%	25	21	32	78.13%	65.63%	74.32%						
18	21	18	25	84.00%	84.00%	72.00%	14	11	17	82.35%	64.71%	73.57%						
48	25	18	30	83.33%	83.33%	60.00%	12	10	13	92.31%	76.92%	73.42%						
55	152	141	189	80.42%	80.42%	74.60%	99	79	124	79.84%	63.71%	72.91%						
41	24	17	29	82.76%	82.76%	58.62%	11	10	13	84.62%	76.92%	72.77%						
30	176	158	212	83.02%	83.02%	74.53%	90	75	124	72.58%	60.48%	72.68%						
50	43	38	56	76.79%	76.79%	67.86%	30	26	36	83.33%	72.22%	72.29%						
44	67	50	80	83.75%	83.75%	62.50%	26	24	34	76.47%	70.59%	72.28%						
45	19	17	24	79.17%	79.17%	70.83%	10	8	12	83.33%	66.67%	72.22%						
51	106	88	136	77.94%	77.94%	64.71%	52	46	63	82.54%	73.02%	71.89%						
20	52	37	70	74.29%	74.29%	52.86%	30	27	31	96.77%	87.10%	71.41%						
23	21	8	21	100.00%	100.00%	38.10%	4	3	4	100.00%	75.00%	71.03%						
60	67	49	84	79.76%	79.76%	58.33%	43	34	47	91.49%	72.34%	70.15%						
53	17	14	26	65.38%	65.38%	53.85%	10	10	11	90.91%	90.91%	70.05%						
36	90	68	113	79.65%	79.65%	60.18%	43	37	53	81.13%	69.81%	69.88%						
5	24	22	28	85.71%	85.71%	78.57%	17	9	20	85.00%	45.00%	69.76%						

ID	Retained Success in Enrollment			Retention			Success			Retained			Success			Retention		
	in Base course	Base Course	Enrollment Course	Rate in Base Course	Rate in Base Course	Retention Course	Rate in Base Course	Rate in Base Course	Success Course	Retained Course	Retained Course	Success Course	Success Course	Retention Course	Rate in Subseq Course	Subseq Success Rate	Average of three measures	
26	29	19	36	80.56%	52.78%	9	9	12	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	69.44%		
19	73	60	93	78.49%	64.52%	37	32	49	75.51%	75.51%	75.51%	75.51%	75.51%	75.51%	75.51%	69.44%		
54	59	43	80	73.75%	53.75%	27	26	33	81.82%	81.82%	81.82%	81.82%	81.82%	81.82%	81.82%	68.76%		
21	70	50	86	81.40%	58.14%	29	26	39	74.36%	74.36%	74.36%	74.36%	74.36%	74.36%	74.36%	68.73%		
All	4117	3227	5291	77.81%	60.99%	2041	1714	2569	79.45%	79.45%	79.45%	79.45%	79.45%	79.45%	79.45%	68.51%		
V	99	72	126	78.57%	57.14%	53	47	68	77.94%	77.94%	77.94%	77.94%	77.94%	77.94%	77.94%	68.28%		
31	229	201	314	72.93%	64.01%	130	115	171	76.02%	76.02%	76.02%	76.02%	76.02%	76.02%	76.02%	68.06%		
W	25	13	28	89.29%	64.29%	14	8	16	87.50%	87.50%	87.50%	87.50%	87.50%	87.50%	87.50%	67.86%		
1	110	92	139	79.14%	66.19%	59	44	76	77.63%	77.63%	77.63%	77.63%	77.63%	77.63%	77.63%	67.74%		
8	60	51	80	75.00%	63.75%	33	29	45	73.33%	73.33%	73.33%	73.33%	73.33%	73.33%	73.33%	67.73%		
6	91	53	104	87.50%	50.96%	39	33	51	76.47%	76.47%	76.47%	76.47%	76.47%	76.47%	76.47%	67.72%		
61	41	30	55	74.55%	54.55%	15	14	19	78.95%	78.95%	78.95%	78.95%	78.95%	78.95%	78.95%	67.59%		
9	150	126	204	73.53%	61.76%	73	62	93	78.49%	78.49%	78.49%	78.49%	78.49%	78.49%	78.49%	67.32%		
2	66	39	82	80.49%	47.56%	20	18	25	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	66.68%		
T	91	62	110	82.73%	56.36%	39	29	48	81.25%	81.25%	81.25%	81.25%	81.25%	81.25%	81.25%	66.50%		
X	194	149	236	82.20%	63.14%	92	70	130	70.77%	70.77%	70.77%	70.77%	70.77%	70.77%	70.77%	66.40%		
40	36	28	54	66.67%	51.85%	21	19	24	87.50%	87.50%	87.50%	87.50%	87.50%	87.50%	87.50%	65.90%		
16	24	20	29	82.76%	68.97%	15	8	18	83.33%	83.33%	83.33%	83.33%	83.33%	83.33%	83.33%	65.39%		

ID	Retained Success in Enrollment in Base Course			Retention Rate in Base Course			Success Rate in Base Course			Retained in Subseq Course			Success in Subseq Course			Retention Rate in Subseq Course			Subseq Success Rate			Average of three measures		
	course	Course	Course	Rate in Base Course	Rate in Base Course	Rate in Base Course	Course	Course	Course	Course	Course	Course	Course	Course	Course	Course	Course	Course	Course	Course	Course	Course	Course	Course
47	90	71	125	72.00%	56.80%	45	35	53	84.91%	66.04%	64.95%													
59	37	33	56	66.07%	58.93%	29	24	35	82.86%	68.57%	64.52%													
12	78	57	105	74.29%	54.29%	40	33	51	78.43%	64.71%	64.43%													
S	191	106	240	79.58%	44.17%	74	56	83	89.16%	67.47%	63.74%													
57	76	61	102	74.51%	59.80%	37	26	46	80.43%	56.52%	63.61%													
56	47	39	76	61.84%	51.32%	23	21	28	82.14%	75.00%	62.72%													
39	36	22	54	66.67%	40.74%	13	12	16	81.25%	75.00%	60.80%													
7	44	37	65	67.69%	56.92%	18	14	25	72.00%	56.00%	60.21%													
34	93	73	159	58.49%	45.91%	54	46	61	88.52%	75.41%	59.94%													
4	8	6	11	72.73%	54.55%	1	1	2	50.00%	50.00%	59.09%													
15	122	74	171	71.35%	43.27%	38	30	48	79.17%	62.50%	59.04%													
25	32	26	45	71.11%	57.78%	12	7	15	80.00%	46.67%	58.52%													
42	19	13	25	76.00%	52.00%	6	5	11	54.55%	45.45%	57.82%													
13	13	10	20	65.00%	50.00%	5	5	12	41.67%	41.67%	52.22%													
37	49	32	73	67.12%	43.84%	17	14	32	53.13%	43.75%	51.57%													

Appendix XVII

Student Outcomes of All Participating Faculty

Subject	ID	Retention Rate Base Course	Success Rate Base Course	Subsequent Success Rate	Average of three measures
Eng	U	82.43%	77.03%	74.47%	77.98%
Math	H	83.94%	75.40%	66.13%	75.15%
Eng	P	89.63%	60.55%	62.24%	70.81%
Math	C	85.45%	70.02%	56.29%	70.59%
Math	E	84.40%	68.54%	58.14%	70.36%
Eng	Beckman--Eng	77.81%	60.99%	66.72%	68.51%
Eng	O	91.94%	44.15%	69.23%	68.44%
Eng	V	78.57%	57.14%	69.12%	68.28%
Eng	W	89.29%	64.29%	50.00%	67.86%
Eng	T	82.73%	56.36%	60.42%	66.50%
Eng	X	82.20%	63.14%	53.85%	66.40%
Math	K	71.37%	59.68%	65.04%	65.36%
Math	I	72.14%	60.48%	60.85%	64.49%
Eng	S	79.58%	44.17%	67.47%	63.74%
Eng	Anderson--Eng	82.49%	49.69%	56.66%	62.95%
Eng	R	84.64%	48.08%	54.76%	62.50%
Math	B	72.99%	45.83%	65.00%	61.27%
Eng	M	85.20%	49.67%	47.12%	60.66%
Math	Anderson--Math	73.18%	51.39%	56.56%	60.38%
Math	Beckman--Math	68.33%	50.16%	60.67%	59.72%
Math	L	64.51%	46.59%	67.63%	59.58%
Math	F	68.15%	49.68%	60.58%	59.47%
Eng	N	85.19%	53.70%	38.89%	59.26%
Eng	Q	78.20%	44.36%	54.55%	59.03%
Math	G	75.00%	64.42%	36.96%	58.79%
Math	A	74.01%	38.64%	63.49%	58.72%
Math	J	73.60%	48.45%	44.95%	55.67%
Math	D	54.80%	39.98%	57.69%	50.82%

Beckman--Eng: All English faculty at Beckman College who taught developmental English in Fall 1999, Spring 2000, Fall 2000 and Spring 2001.

Anderson--Eng: All English faculty at Anderson College who taught developmental English in Fall 1999, Spring 2000, Fall 2000 and Spring 2001.

Anderson--Math: All math faculty at Anderson College who taught developmental math in Fall 1999, Spring 2000, Fall 2000 and Spring 2001.

Beckman--Math: All math faculty at Beckman College who taught developmental math in Fall 1999, Spring 2000, Fall 2000 and Spring 2001.

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