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Moving from Compliance to a Culture of Inquiry: SLO Implementation and Professional Development in California Community Colleges

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Author
Apigo, Mary-Jo

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Moving from Compliance to a Culture of Inquiry:

SLO Implementation and Professional Development

in California Community Colleges

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Education

by

Mary-Jo Juson Apigo

2015

ABSTRACT OF THE DISSERTATION

Moving from Compliance to a Culture of Inquiry:

SLO Implementation and Professional Development

in California Community Colleges

by

Mary-Jo Juson Apigo

Doctor of Education

University of California, Los Angeles, 2015

Professor Mark Kevin Eagan, Chair

The national debate surrounding the quality of student learning and standards of teaching in

higher education focuses on assessment and accountability. Improving student learning

outcomes (SLOs) is at the forefront of community college accreditation standards. The

paradigm shift to student-centered teaching and assessment has not corresponded with a rapid

increase in opportunities to train faculty how to incorporate these pedagogical and evaluation

strategies in their classrooms. While professional development models such as mentoring,

professional learning communities and communities of practice are found in the literature, few

professional development models exist to train community college faculty how to develop or

assess SLOs. While community college faculty are content experts, instructors are also required

to assess SLOs; however, many lack adequate training to meaningfully complete the SLO

assessment cycle. This study explored professional development models that support community college faculty in completing the SLO assessment cycle and barriers to assessment. I conducted an explanatory sequential mixed methods study with survey, interview, and document review data to identify (1) existing professional development models for faculty completing the SLO cycle, (2) faculty and administrator attitudes toward the importance and implementation of SLO assessment and professional development, and (3) challenges encountered during the assessment process. The research population was comprised of SLO Coordinators, Academic Senate Presidents, and Chief Instructional Officers (CIOs) across the 112 California community colleges. The findings indicate that successful SLO implementation is faculty-driven and connected to established college frameworks, such as program review. Moreover, faculty need professional development that is targeted to improve their ability to conduct meaningful SLO assessment. While CIOs perceive a higher importance and motivation for SLO assessment and implementation of SLO assessment-related professional development, SLO Coordinators and Academic Senate Presidents indicate a higher need for resources and professional development to support outcomes assessment. Colleges face a lack of faculty participation in the SLO cycle and need to foster a culture of assessment and inquiry.

The dissertation of Mary-Jo Juson Apigo is approved.

Christina A. Christie

Beverly P. Lynch

Linda P. Rose

Mark Kevin Eagan, Committee Chair

University of California, Los Angeles

2015

DEDICATION

This manuscript and the completion of the Educational Leadership Program are dedicated to the loving memory of my *Lola* (grandmother) Consuelo Enriquez Juson. Despite having to quit school in fourth grade, she taught me the importance of education and value of hard work. Through her example, I learned about leadership, dedication, and resilience. She also instilled in me a love of travel, which I look forward to honoring after the submission of this manuscript.

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ACKNOWLEDGEMENTS

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VITA

Academic Preparation

2009	M.B.A. Dual Emphasis in Management & Organizational Behavior and Marketing Loyola Marymount University Los Angeles, CA
2004	B.A. American Literature & Culture and Asian American Studies University of California, Los Angeles Los Angeles, CA
2001	A.A. in Liberal Arts and Ethnic Studies Santa Monica College Santa Monica, CA

Professional Experience

2011 – present	Dean of Teaching & Learning West Los Angeles College Culver City, CA
2010 – present	Instructor, Computer Science Information Technology West Los Angeles College Culver City, CA
2014-2015	Co-Creator & Co-Leader, Cultivating a Growth Mindset, California Community of Practice California Community Colleges' Success Network (3CSN)
2008 – 2011	Director, Academic Affairs, Title V Projects West Los Angeles College Culver City, CA
2003 – 2008	Program Coordinator, TRiO Upward Bound West Los Angeles College Culver City, CA

Selected Conference Co-Presentations

2014   Strengthening Student Success Annual Conference – Costa Mesa, CA
            Growth Mindset Community of Practice Post-Conference Session

2014   UCLA Research and Inquiry Conference – Los Angeles, CA
            Growth Mindset: A Growing Solution for Fixing Education?

2014   D.R.E.A.M. 2014 Achieving the Dream Annual Conference Emerging Ideas
            Exchange – Orlando, Florida
            *After Engagement, What's Next? West Los Angeles College Semester Kickoff
            Update*

2013   3CSN Habits of Mind Fall 2013 Gathering – Sylmar, CA
            *Growth Mindset: A Growing Solution for Fixing Education? and Flexing Your
            Growth Mindset Muscles*

2013   Strengthening Student Success Annual Conference – San Francisco, CA
            Growth Mindset: A Growing Solution for Fixing Education?

2013   D.R.E.A.M. 2013 Achieving the Dream Annual Conference – Anaheim, CA
            Ready! Set! Go!: Got Engagement!

CHAPTER ONE: INTRODUCTION

The national debate surrounding the quality of student learning and standards of teaching in higher education (Bleyer, 1979; Ewell, 2001; Goldrick-Rab, 2010; Kane & Rouse, 1999; Michlitsch & Sidle, 2002) focuses on assessment and accountability (Ewell, 2008; Frye, 1999; Gibson-Harman, Rodriguez, & Grant Haworth, 2002; Guskin & Marcy, 2002; Lopez, 2002; Maki, 2002b). The birth of the assessment movement in higher education can be traced back to the First National Conference on Assessment in Higher Education in 1985 (Ewell, 2002, 2008). In 1988, the U.S. Department of Education "established new criteria for recognition of all accrediting bodies, calling for a focus on 'educational effectiveness'" (Angelo, 2002a, p. 243). National and state mandates for greater accountability coupled with the growing assessment movement in K-12 with the publication of *A Nation at Risk* created a call for improved student outcomes in higher education.

A shift from a teaching to a learning paradigm identified in 1995 (Barr & Tagg, 1995; Driscoll & Wood, 2007; Gibson-Harman et al., 2002; Lick, 2002; Tagg, 2003) changes the faculty role from a "sage on the stage" to a "guide by the side" who does not impart knowledge, but rather facilitates learning. This paradigm shift from a teaching-centered to student-centered environment "requires institutional or divisional self-analysis or assessment; turning the results of that analysis into strategies; creating student learning experiences; and measuring the intended learning outcomes" (Bonfiglio, Hanson, Fried, Robers, & Skinner, 2006, p. 43). Other changes such as evaluating what students should be able to do as a result of learning and using more formative assessments to gauge student learning to make improvements have also been implemented (Frye, 1999; Maki, 2002a; Michlitsch & Sidle, 2002; Miles & Wilson, 2004; Theall, 2002).

Statement of the Problem

The paradigm shift to student-centered teaching and assessment has not corresponded

with a rapid increase in opportunities to train faculty how to incorporate these pedagogical and

evaluation strategies in their classrooms. While professional development models such as

mentoring (Hopkins & Grigoriu, 2005; Wasburn & LaLopa, 2003), professional learning

communities (DuFour, 2004, 2007; Harris & Jones, 2010), and communities of practice (Lave &

Wenger, 1998; Wenger, 2000, 2004; Wenger & Synder, 2000) are found in the literature, few

professional development models exist to train faculty how to develop or assess Student

Learning Outcomes (SLOs). However,

> High-level professional development of faculty and staff is essential for effective
> assessment…. They [faculty and staff] may not be getting accurate information
> about their students' learning and their own effectiveness as educators because of
> limitations of current assessment activities at all levels in your institutions.
> Creating an effective professional development program is an urgent need.
> (Gardiner, 2002, p. 130)

Faculty regularly grade student assignments, but SLO assessment is a newer concept with a

different focus from student evaluation and grading.

While faculty are experts in their disciplines, few have studied the methodology and

theory of modern assessment to develop the skills and expertise for effective measurement

(Gardiner, 2002). In general, "good teachers have always developed and assessed student

learning outcomes... Today, however, faculty are asked to develop and assess outcomes for their

students in ways that are more systematic, consistent, collaborative, and documentable than

individual efforts may have been in the past" (The Academic Senate for California Community

Colleges, 2010, p. 2). Developing and assessing outcomes takes practice and requires

appropriate training and support (Svinicki, 2002; Theall, 2002; Wergin, 2002). It is important to

ask, without structured professional development, what frameworks and guidelines are there for

faculty to assess SLOs and discuss assessment results so they can inform their changes in practice and pedagogy?

Low degree completion and transfer rates in community colleges have created a focus on reform to improve teacher quality and student learning (Bailey, Calcagno, Jenkins, Kienzl, & Lienbach, 2005; Bleyer, 1979; Ewell, 2001; Goldrick-Rab, 2010; Kane, 1999; Michlitsch & Sidle, 2002). Improving student learning outcomes (SLOs) is at the forefront of community college accreditation standards (Angelo, 2002a; Driscoll & Wood, 2007; Ewell, 2002; Guskin & Marcy, 2002).   Fulfilling the accreditation mandate for completing the SLO cycle is difficult without institutional support because "many faculty will need training and support in systematic straightforward ways to do scholarly work on teaching and learning issues" (Angelo, 2002b, p. 190). All 112 California community colleges are responsible for SLO development and assessment, which impacts over 17,000 tenured/tenure-track faculty and 41,500 part-time faculty ("California community colleges Chancellor's office - Data mart," 2015).   Moreover, developing an ongoing assessment process without clear support causes some faculty to focus on outcomes assessment just to satisfy accreditation mandates, which leads to a culture of compliance rather than an internal motivator such as intellectual curiosity and an interest in improving teaching and learning (Driscoll & Wood, 2007; Ewell, 2001; Maki, 2002b).

I studied SLO implementation and professional development models that support community college faculty in completing the SLO assessment cycle. I explored how specific frameworks were used by faculty to engage in dialogue and make improvements in teaching and student learning. An additional objective was to understand how to create a culture of inquiry that focuses on student learning and student success. These issues were examined through the following three research questions:

1. What professional development frameworks exist for community college instructors to successfully and meaningfully complete the SLO assessment cycle?

2. Are there significant differences between SLO Coordinators, Academic Senate Presidents, and Chief Instructional Officers in their attitudes toward the importance of SLO assessment and related professional development activities?

3. According to community college faculty and assessment leaders, what are the challenges in completing the SLO assessment cycle? How are those challenges addressed?

Background Information on the Problem

Accreditation process. Accreditation is a voluntary system of peer-assessment and regulation developed to evaluate overall educational quality and institutional effectiveness. The Accrediting Commission for Community and Junior Colleges (ACCJC)[1] accreditation process includes a review of evidence and practices at member colleges and provides assurance to the public that the accredited member colleges meet ACCJC standards, which reflect excellent practice and conditions for high-quality education. The commission can issue a decision of reaffirmation of accreditation, place a college on sanction, or withdraw its accreditation. Institutions receive reaffirmation of accreditation when substantially meeting or exceeding the Eligibility Requirements, Accreditation Standards, and Commission Policies. The commission can (1) reaffirm accreditation of an institution, (2) reaffirm and require a follow-up report, (3) reaffirm with a follow-up report and visit, or (4) defer a decision pending receipt of additional information. Sanctions fall under one of the following categories:

1. *Warning*: when an institution deviates from the commission standards;

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[1] The ACCJC is the accrediting agency for community colleges in California and the Pacific Islands.

2. *Probation*: when an institution deviates significantly from the commission standards; or
3. *Show cause*: when an institution is in substantial non-compliance with the commission standards.

The commission can also issue the following actions that terminate accreditation:

1. *Termination*: when an institution has not corrected actions and is out of compliance with commission standards;
2. *Restoration Status*: when an institution requests granting of restoration status accompanied with a completed report demonstrating complinace with Eligibility Requirements ("Accreditation reference handbook," 2014).

Under warning, probation, and show cause, the institution's accreditation status continues. If termination is issued, accreditation status continues during the completion of the review and appeal process; accreditation terminates when these processes have completed. If this occurs, the institution has to complete the entire accreditation process again. If a college is issued a sanction, the commission can require submission of college follow-up reports and visits from accrediting teams.

Accreditation standards focus on SLOs. In response to the spotlight on assessment and accountability, the ACCJC Standards require that "the institution provides the means for students to learn and achieve their goals, assesses how well learning is occurring, and strives to improve learning and achievement through ongoing, systematic, and integrated evaluation and planning" (Standard I) (2014, p. 1) . "The institution defines and assesses student learning outcomes for all instructional programs and student and learning support services…. The institution uses assessment data and organizes its institutional processes to support student learning and student achievement." (2014, p. 2). The concept of student learning outcomes assessment as a measure of academic quality was introduced into the standards in 2002, and the revised 2014 standards further reinforce this activity. SLOs need to be developed college-wide – in instructional programs and support services – and assessed to demonstrate institutional effectiveness. The

2002 standards emphasized that institutions develop a culture of evidence and continuous improvement through SLO assessment.

The increased focus on SLO development and assessment has been a growing issue for many institutions and is especially reflected in the rise of institutions placed on sanction by the ACCJC because of gaps in their approaches to SLO development and assessment. In my analysis of ACCJC actions on institutions from 2012-2013, the commission took action on 107 institutions. Of the 107 actions, 54% of them (58/107) received a sanction of either warning, probation, show cause, or termination.

The Summer 2014 ACCJC Newsletter published "Trends in Deficiencies Leading to Sanctions," which has been updated and reported each summer since 2009 (*ACCJC NEWS*, 2014). For the first time, the summer 2014 issue included an SLO implementation category. In 2014, the number of colleges on sanction related to SLO implementation was 75% (12/16). Setting and assessing measurable SLOs was a highlight of the 2002 standards (*ACCJC NEWS*, 2013; Accrediting Commission for Community and Junior Colleges, 2012), and colleges were required to be at the Proficiency Level on the SLO Rubric (described in detail on page 8) in Fall 2012 (Accrediting Commission for Community and Junior Colleges, 2011, p. 3). In line with the continual focus on accountability of student learning, "accreditors will be under far more pressure to impose sanctions on institutions and programs if they fail to undertake these promised assessments and to provide evidence that student performance indeed measures up to established standards" (Ewell, 2008, pp. 155–156). The ACCJC is beginning to report data on deficiencies leading to sanctions based on SLO implementation, and it will be a closely watched area for colleges undergoing accreditation.

Student Leaning Outcomes (SLO) cycle. Student learning outcomes are defined as

specific observable or measurable results that are expected subsequent to a learning experience. These outcomes may involve knowledge (cognitive), skills (behavioral), or attitudes (affective) that provide evidence that learning has occurred as a result of a specified course, program activity, or process. An SLO refers to an overarching outcome for a course, program, degree or certificate, or student services area (such as the library). SLOs describe a student's ability to synthesize many discreet skills using higher level thinking skills and to produce something that asks them to apply what they've learned. ("SLO terminology glossary: A resource for local senates," 2009, p. 13)

As represented in Figure 1.1, the assessment cycle is continous, and each step feeds into the next one ("SLO terminology glossary: A resource for local senates," 2009, p. 1).
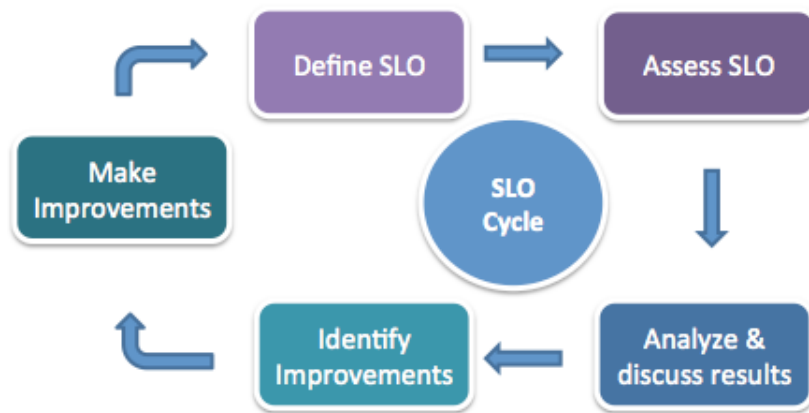
Figure 1.1 SLO Assessment Cycle

The SLO cycle includes the following phases: (1) defining SLOs (at the course, program and institutional level), (2) assessing the SLOs, (3) collecting, analyzing, and discussing data from assessment results, (4) identifying changes based on assessment, and (5) implementing changes based on assessment.   Developing SLOs involves identifying what students will be able to do with what they have learned. SLOs are the knowledge, skills, or abilities that students can demonstrate by the end of a course or program that faculty use to measure student learning. Assessing SLOs requires faculty to develop a way to measure achievement of the SLO, collect data, and analyze the results.   During analysis of assessment results, faculty discuss with each other student needs and gaps in learning, and they identify changes or improvements to improve

teaching and learning such as pedagogy, instructional strategies, changes to the assessment method, or revisions to the SLOs themselves.

Meeting ACCJC standards. While ACCJC standards mandate SLO development and assessment, it does not indicate a process for development and assessment, instead leaving such a plan up to the college's discretion. The ACCJC has developed Rubrics for Evaluating Institutional Effectiveness, which describe sample behaviors indicative of an institution's stage in the implementation process of Program Review, Integrated Planning, and Student Learning Outcomes (Accrediting Commission for Community and Junior Colleges, 2011). The levels of implementation begin with awareness and progress to development, proficiency, and sustainable continuous quality improvement. The SLO rubric includes sample behaviors that colleges should exhibit based on their level of implementation, and accrediting teams also use them to measure an institution's progress towards meeting the standards for SLO development and assessment.

According to the SLO Proficiency level, SLOs and authentic assessments are in place for all areas of the campus: courses, programs, support services, and degrees and certificates. In addition, campus-wide dialogue on the results of assessment includes identifying gaps and decision-making for improving student learning. The ACCJC required colleges to submit reports in 2012 describing how they are meeting each rubric statement on the proficiency level. SLO assessment was mandated in the 2002 standards, and colleges were required to reach proficiency in 2012. However, the ACCJC does not explicitly outline the way in which institutions achieve these sample behaviors to complete the SLO cycle and satisfy the standards. This lack of clarity, combined with limited resources, has contributed to confusion about meeting ACCJC standards and the rise in sanctions. SLO assessment is becoming more critical in the accreditation process,

but little training and support exists to prepare faculty in how to effectively conduct SLO assessment. Instead, institutions may be focused on compliance with accreditation standards rather than using SLO assessment to improve teaching, learning, and institutional effectiveness through an ongoing, systematic, documented process.

Overview of the Research Design

Research Population

For this study, I researched SLO assessment practices and challenges at the 112 California community colleges. The CA community college system served 2.3 million students during the 2013-2014 academic year and employs over 17,000 tenured/tenure-track faculty and 41,500 part-time faculty ("California community colleges Chancellor's office - Data mart," 2015). The research began with a survey, and, based on interest from survey respondents, I interviewed SLO leaders, including faculty and administrators connected to assessment, to gain further insights into challenges and what training and professional development can be used to address the challenges.

Research Design

I used an explanatory sequential mixed methods design (Creswell, 2014) with document analysis, survey data, and interviews. I conducted a document review of promising practices for SLO assessment from the National Institute for Learning Outcomes Assessment (NILOA) Resource Library[2], Assessment Commons: Internet Resources for Higher Education Outcomes Assessment[3], the Research and Planning Group Promising Outcomes Work and Exemplary Research (POWER) Award[4] recipients, and ACCJC College Status Reports on SLO

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[2] http://www.learningoutcomeassessment.org/publications.html
[3] http://www.assessmentcommons.org
[4] http://www.rpgroup.org/awards/power-awards

Implementation. I disseminated a survey to SLO leaders and/or assessment coordinators at the 112 California community colleges with questions focused on implementation of SLO assessment, professional development, and challenges encountered in the SLO assessment cycle. Qualitative data were collected through one-on-one interviews with faculty and administrators leading SLO efforts identified as interested participants through the survey. The qualitative data yielded elements of professional development frameworks to address the challenges faculty experience.

Significance of the Study

The significance of the study's findings can be useful for community college SLO leaders and/or SLO coordinators. The models can also be used for assessment in service areas such as student services and administrative services. At the local level, I will share results of the project with my campus's shared governance committees including the SLO Committee, Curriculum Committee, and Academic Senate. I also plan to share results with the sister schools in the Los Angeles Community College District at District Planning and Accreditation Council and District SLO Advisory Council. To engage the public in my findings, I plan to submit proposals to conferences such as Strengthening Student Success and State Academic Senate Plenary to share my findings and recommendations.

Since SLO assessment leading to improvements in teaching and learning is an essential component of accreditation standards, the findings are also significant for those undergoing the accreditation process. Furthermore, the research findings will begin to address a gap in the literature related to professional development models for SLO assessment and faculty dialogue at the community college level. The study also serves as a basis for further research on the impact of engaging in faculty dialogue and other professional development models for SLO assessment.

Summary

Low community college student success rates and accreditation mandates have created an increased emphasis on SLO assessment. However, there are few professional development models to train faculty in conducting assessment. This study allowed me to delve further into the processes of implementing SLO assessment and professional development: resources needed, politics, campus climate, and readiness. It also provides a better understanding of how colleges address challenges in completing the SLO assessment cycle. Ultimately, the findings showcase how professional development for outcomes assessment can be conducted within community colleges.

The review of the literature in Chapter Two provides a background of the community college student success agenda and the focus on accountability and improving student learning. The chapter also examines institutional effectiveness, the assessment movement, and the research related to types of professional development for assessing student outcomes. Chapter Three provides more detail about the study's research design. In Chapter Four, I discuss the findings, both qualitative and quantitative, from the study. The last chapter connects the findings to existing literature, includes a discussion of the findings, and outlines the recommendations based on the findings noted.

CHAPTER TWO: LITERATURE REVIEW

Community college faculty are content experts, but many lack adequate training to meaningfully complete the SLO assessment cycle as described in Figure 2.1 ("SLO terminology glossary: A resource for local senates," 2009).
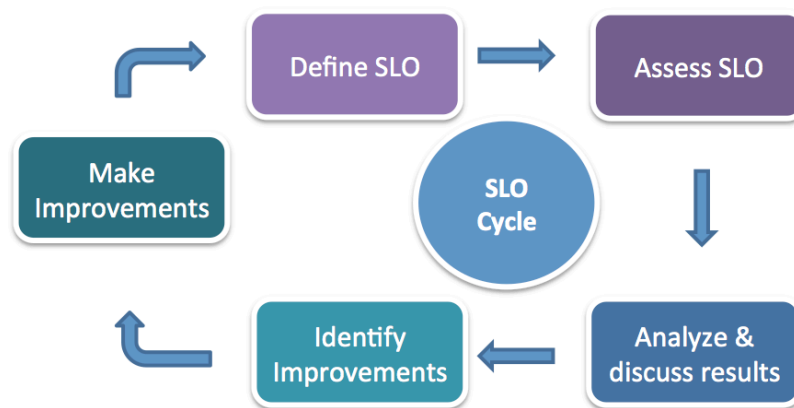
Figure 2.1 SLO Assessment Cycle

The cycle includes (1) defining what students should be able to do at the completion of a course, program, or service, (2) assessing student performance on the defined SLO, (3) collecting, analyzing, and discussing data from assessment results, (4) identifying areas for improving teaching and learning based on the assessment, and (5) implementing those changes. Since faculty may lack training for SLO assessment, I studied professional development models that support community college faculty in completing the SLO assessment cycle. I explored how faculty can use specific frameworks to engage in dialogue to improve student learning, curriculum, and pedagogy.

To provide context for faculty dialogue for improving student learning, curriculum, and pedagogy, this literature review first examines the shift from an open-access agenda to a completion agenda. Then it considers the increased attention on accountability and the call for improved student learning. It includes a review of the current challenges of student success in

community colleges and the paradigm shift from a focus on teaching to student learning. Secondly, institutional effectiveness and the assessment movement are discussed. Specific attention is paid to regional accreditation agencies' mandate of student learning outcomes assessment for community colleges in California. Finally, the literature review explores the research related to types of existing professional development for outcomes assessment in K-12 and community colleges with a focus on the need for professional development for faculty completing the SLO cycle.

Conceptual Framework

This study is rooted in two conceptual frameworks: professional development and learning organization theory. SLO assessment represents a shift toward increased accountability. Managing this organizational change (Bolman & Deal, 2008; Diamond, Gardiner, & Wheeler, 2002; Lick, 2002) effectively is essential in embracing and implementing the SLO assessment cycle so it can move beyond compliance to merely satisfy accreditation mandates and toward improving teaching, learning, and student success. However, few professional development models exist for faculty engaging in SLO assessment. Professional development programs for community college faculty play a key role in the shift from teaching to learning institutions and creation of learning organizations (Boggs, 2000; Brancato, 2003; Gibson-Harman et al., 2002; Tagg, 2003). Faculty professional development should also include components of andragogy to take into account adult learning theory (Terehoff, 2002) and professional learning (Andree, Darling-Hammond, Orphanos, Richardson, & Wei, 2009; DuFour, 2004; Harris & Jones, 2010; Terehoff, 2002).

An institution can systematically review itself and its effectiveness by adopting an organizational learning framework. According to Peter Senge, learning organizations are

"organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together" (1990, p. 8). Learning organization theory embraces continuous learning, inquiry, and collaboration for making improvements. Figure 2.2 illustrates the four characteristics of a learning organization with related examples within the CA community college context.
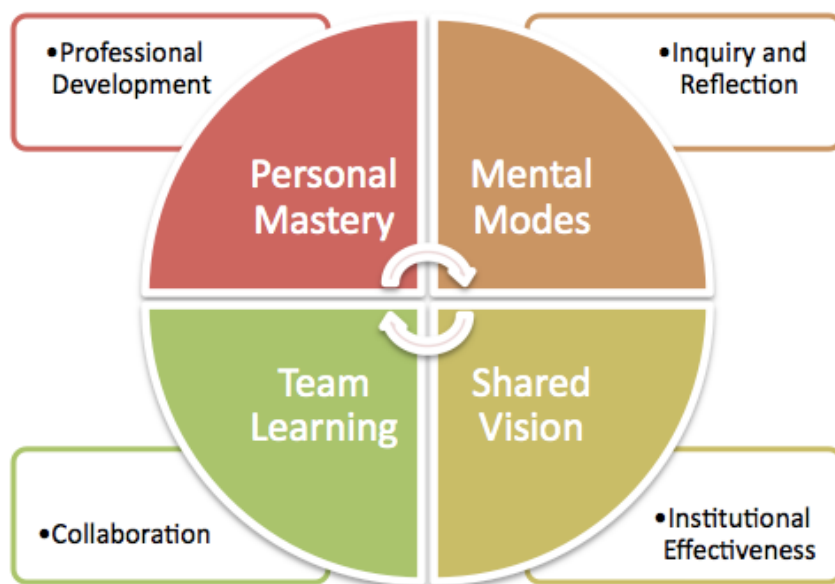
Figure 2.2 Characteristics of a Learning Organization

Senge's learning organization theory "includes teams that perceive the whole of the organization; grow professionally; navigate short- and long-term organizational experiences through exposed mental models; share a vision; and hear each voice in an ongoing communal learning process" (Reynolds, Murrill, & Whitt, 2006, p. 123). Although originally developed with the corporate community in mind, Senge's model of learning organizations has implications for the field of education. Each college or university, each program of study, and each classroom are teams of individuals working together for the purpose of learning and student success. To

foster personal mastery, institutions reinforce the value of personal growth and support it with professional development opportunities. Identifying one's mental modes involves inquiry and reflection to develop his or her framework, beliefs, and understandings about teaching and learning. It is also rooted in the tenets of constructivism, where knowledge is generated through situational learning or in a community of learners.   The learning organizations' shared vision is essential because it fosters the climate for learning, student success, and institutional effectiveness. Team learning, through professional learning communities or communities of practice, emphasizes faculty collaboration and collegiality. Learning organizations provide the opportunity for faculty to reflect, inquire, grow, change, learn together, and share their knowledge with others to improve student success and completion.

Community Colleges Moving from an Open-Access Agenda to a Completion Agenda

When the California Master Plan was developed in 1960, it established three sectors of public education: the University of California, the California State University, and the Community College System (California, 1960). Responsible for educating students through the first two years of undergraduate education, community colleges "admit any student capable of benefiting from instruction" ("California master plan for higher education: Major features," 2009, p. 1). Community colleges welcome learners with varying educational goals (Bryant, 2001; Kane & Rouse, 1999; Seybert, 2002): recent high school graduates seeking an associate degree and/or transfer to a four-year university, graduates seeking vocational training, employees seeking to upgrade skills, and life-long learners.

Students enter community colleges with various educational goals, and student preparation levels also vary. Community colleges are open access, and "because prior academic success is not a prerequisite for admission, 61% of students at community colleges take at least

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one remedial course while in college, and 25% take two or more remedial courses" (Goldrick-Rab, 2010, p. 438). Many community college students are underserved in K-12 and arrive at the community college underprepared for college-level courses. Community college faculty, whose minimum qualifications for employment generally require a master's degree in the field, are not required to have training in pedagogy (Bleyer, 1979; Brancato, 2003; Gibson-Harman et al., 2002), yet they must be prepared to teach students with varying levels of academic preparation. Furthermore, many community colleges regularly employ adjunct faculty who often teach multiple courses at various campuses (Goldrick-Rab, 2010; Hurtado, Eagan, Pryor, Whang, & Tran, 2012). Since community college faculty are content experts and may not have had training in the scholarship of teaching, they could benefit from professional development so that they have the tools necessary to teach underprepared students.

Underprepared students enter community college with the hopes of achieving their educational goals and the promise of a better life. College completion and degree attainment open doors for many people, allowing them economic mobility and increased annual earnings (Haskins, 2008; Kane & Rouse, 1999; Venezia & Kirst, 2005). While more students are accessing college, college completion rates are not improving, and too few students graduate (College Board Advocacy and Policy Center, 2012; Complete College America, 2011; Hoachlander, Sikora, & Horn, 2003). Improving the education of the nation's future workforce has a direct impact on bolstering the economy (Lumina Foundation, 2013, "The college completion toolkit," n.d.; McPhail, 2011; Moore & Shulock, 2010). To address the need for improving graduation and completion rates, the American Association of Community Colleges and other leaders signed an agreement to commit to the College Completion Challenge in 2010 ("The college completion toolkit").

In support of the College Completion Agenda, President Obama charged community colleges to produce an additional 5 million graduates by 2020. The Bill and Melinda Gates Foundation pledged $35 million toward college completion efforts, particularly at community colleges. The Lumina Foundation established a goal to increase the percent of Americans with degrees and credentials to 60% by 2025 (Lumina Foundation, 2013). The federal government, with support from foundations, has challenged community colleges to move from an open access agenda to a college completion agenda. However, the lack of comprehensive professional development opportunities for teaching faculty (Bleyer, 1979; Brancato, 2003; Gibson-Harman et al., 2002), lack of support for students in the transfer process (College Board Advocacy and Policy Center, 2011), and increasing enrollments coupled with stretched institutional resources (Goldrick-Rab, 2010) pose challenges for community colleges balancing the goal of student access with student success.

While community colleges are the access point to higher education, "only about one-third of all community college students receives any degree or certificate even eight years after initial college enrollment" (Bailey et al., 2005, p. 1). According to the Accountability Reporting for the California Community Colleges (ARCCC) Chancellor's Office 2012 report, of students who earned at least 12 units and who attempted transfer-level Math or English during the six-year enrollment period, only 41.7% of students actually transferred to a four-year institution. Low student success rates have highlighted the need for reform and improved student outcomes. The First National Conference on Assessment in Higher Education in 1985 (Ewell, 2002, 2008) marked the birth of the assessment reform movement for higher education. The U.S. Department of Education in 1988 required accrediting bodies to focus on educational effectiveness (Angelo,

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2002a). Colleges began moving away from a focus on open access to concentrating on student success and learning (Boggs, 2000; Niebling, 2004).

In California, 2.3 million students attend 112 community colleges, which makes the California community colleges the largest system of higher education in the nation ("California community colleges Chancellor's office - Data mart," 2015). The mission of the California Community Colleges Chancellor's Office is to support community colleges in providing "access to lifelong learning for all citizens and creates a skilled, progressive workforce to advance the state's interests" ("California community colleges Chancellor's office: Mission and vision," 2015). Within this context, "if we [community colleges] accept student learning as the core mission, institutional structures should be redesigned to support it" (Boggs, 2000, p. 47). In a learning paradigm, students – themselves – play an integral role in learning by taking responsibility for their own learning and participating in the construction of knowledge (Barr & Tagg, 1995).

In a learner-centered college (Barr & Tagg, 1995; Driscoll & Wood, 2007; Lick, 2002; Tagg, 2003) faculty are not responsible for providing instruction but rather for producing learning. This paradigm shift from teaching to learning (Boggs, 2000; Bonfiglio et al., 2006; Brancato, 2003; Gibson-Harman et al., 2002) requires the instructor to facilitate learning, not just merely deliver content through lectures. Rather than *covering* material, instructors help students *uncover* it. In a Teaching Paradigm, "teaching is judged on its own terms; in the Learning Paradigm, the power of an environment or approach is judged in terms of its impact on learning" (Barr & Tagg, 1995, p. 17). Assessing student learning outcomes plays a key role in improving student success and teaching effectiveness.   Assessing student learning not only provides a measurement of learning but also insight into improvements in teaching practices and pedagogy.

Institutional Effectiveness

Community colleges' challenge to improve teaching, student learning, and consequently student success rates is ultimately a charge to improve overall institutional effectiveness. ACCJC Standard 1B: Assuring Academic Quality and Institutional Effectiveness includes the following standards:

> The institution demonstrates a sustained, substantive and collegial dialog about student outcomes, student equity, academic quality, institutional effectiveness, and continuous improvement of student learning and achievement. The institution defines and assesses student learning outcomes for all instructional programs and student and learning support services…. The institution uses assessment data and organizes its institutional processes to support student learning and student achievement. The institution assesses accomplishment of its mission through program review and evaluation of goals and objectives, student learning outcomes, and student achievement. Quantitative and qualitative data are disaggregated for analysis by program type and mode of delivery.
> (Accrediting Commission for Community and Junior Colleges, 2014).

Accrediting bodies keep community colleges accountable for improving effectiveness through academic Program Review, Strategic Planning, and SLO assessment (Accrediting Commission for Community and Junior Colleges, 2014; Welsh & Metcalf, 2003) as illustrated in Figure 2.3.
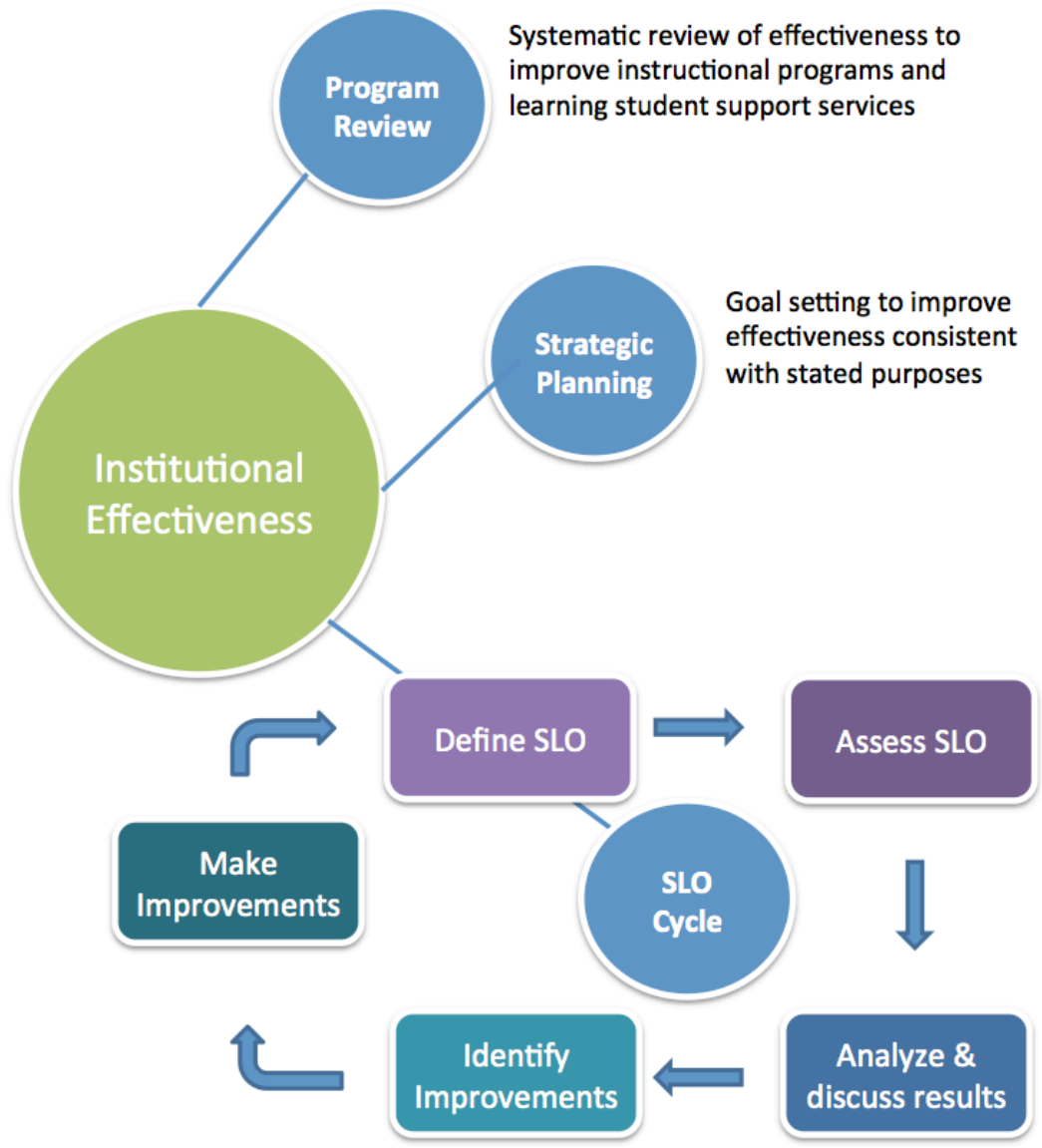
Figure 2.3 Institutional Effectiveness and SLO Assessment

 Institutional effectiveness is a systematic method for an institution to review its processes and

effectiveness through Program Review, plan for improvements through Strategic Planning, and

measure and improve student learning through the SLO Assessment Cycle. During Program

Review, faculty and staff engage in a reflective analysis of data such as student enrollment

trends, demographics, and success rates to assess the effectiveness of programs or services.

Strategic Planning at the institutional level involves setting goals and objectives to enhance

institutional effectiveness. Programs and services also develop strategic plans, aligned with institutional plans, in order make improvements identified from Program Review. SLO assessment is another indicator of institutional effectiveness, as it measures student learning at the course, program, or institutional level.

As illustrated in Figure 2.4, there are six United States regional accreditation agencies for higher education institutions ("CHEA: Directory of regional accrediting organizations," 2014). These agencies are responsible for evaluating how their member colleges and universities meet accreditation standards. Member colleges that meet standards are granted accreditation.   The accrediting agencies have similar missions and standards but serve different member colleges based on geographic location.

Figure 2.4 Regional Accrediting Agencies for Higher Education Institutions

Adoption of improving institutional effectiveness was originally a barrier because it was mandated through accreditation standards rather than a more intrinsic motivator to improve. In a survey of 168 institutions in the Southern Association of Colleges and Schools Accrediting Region, 794 faculty members and 541 academic administrators rated their (1) perceived importance of institutional effectiveness, (2) perceived institutional motivation for institutional effectiveness, (3) perceived definition of quality, (4) perceived depth of implementation, and (5) reported personal level of involvement (Welsh & Metcalf, 2003). While administrators attribute greater importance to institutional effectiveness than faculty, "faculty support for institutional effectiveness activities is likely to determine their fate. Without active faculty support and participation, institutional effectiveness activities are likely to be discarded as yet another failed management campaign" (Welsh & Metcalf, 2003, pp. 458–469). Recognition – and ultimately adoption – of the conceptual framework of institutional effectiveness contributes to community colleges' embracing activities to further continuous improvement.

Accreditation is held to be a vehicle for assuring quality and institutional effectiveness. Through a peer review process, accreditation involves evaluating a college across defined standards that foster student learning and ensures resources and processes are in place to support student learning (Accrediting Commission for Community and Junior Colleges, 2014). Program review and planning were added to the standards in the last 30 years. In 2002, student learning outcomes assessment was incorporated into the ACCJC standards.

Accrediting agencies did more than just add SLOs to the list of institutional effectiveness guidelines; instead "they [accreditors] have recast the meaning of institutional effectiveness to require that institutional assessment and improvement strategies ultimately support learning or result in improved student learning" (Beno, 2004, p. 67). Community colleges must explicitly

define what students should learn and be able to measure demonstrated knowledge. Faculty also need to develop valid, sound methods of assessment (Angelo, 2002a; Beno, 2004; Driscoll & Wood, 2007; Mentkowski & Loacker, 2002). Moreover, institutions need to identify what improvements have been made as a result of assessment. Information about assessment, student learning, and specific improvements are indicators of institutional effectiveness.

Meaningful Assessment of Student Learning Outcomes

Meaningful SLO assessment involves not only a clear understanding and application of the SLO cycle but also an institutional commitment to providing professional development to support faculty in assessment. In order to measure achievement of each SLO, there needs to be "a clear definition of the skill (competency) to be acquired; assessment tool(s) or technique(s) used to measure the attainment of the skill; and measurement, documentation, and reporting of the actual extent to which the skill has been acquired" (Friedlander & Serban, 2004, p. 103). Faculty need to document expected learning outcomes, develop sound methods of assessment, and use results to improve teaching and student learning (Beno, 2004; Somerville, 2008). SLO assessment begins with the foundation of clearly identifying what students should be able to do as a result of a course and measuring that achievement.

SLO assessment informs practice when faculty discuss assessment results with each other and use those results for improvement of teaching and student learning (Baker, Jankowski, Provezis, & Kinzie, 2012a; Banta, Black, Kahn, & Jackson, 2004; Banta & Blaich, 2010; Friedlander & Serban, 2004, 2004; Frye, 1999; Niebling, 2004; Seybert, 2002; Somerville, 2008). Faculty collaboratively reviewing student work with other faculty should be a "constructivist [process] one in which faculty draw on their own experience and expertise to make meaning of the work being studied" (Driscoll & Wood, 2007, pp. 184–185). Discussing

assessment results and getting feedback from other faculty fosters a culture of inquiry and evidence. It involves reflection on teaching, instructional techniques, assessment methods as well as analysis and reflection on intended student learning outcomes. However, reflection and analysis alone does not lead to change. In order to close the loop and complete the SLO assessment cycle, assessment results should be examined and used for improvement of programs and services (Angelo, 2002a; Baker et al., 2012a; Banta et al., 2004; Banta & Blaich, 2010; Diamond et al., 2002; Seybert, 2002). Closing the assessment loop involves making meaning from the assessment results and identifying improvements to teaching and learning to ultimately enhance student success.

Another aspect to meaningful SLO assessment is having a process that is embedded in the institutional culture (Baker et al., 2012a; Banta et al., 2004; Friedlander & Serban, 2004; Kinzie, 2010; Maki, 2002b; C. Miles & Wilson, 2004; Welsh & Metcalf, 2003; Wergin, 2002). If assessment is a stand-alone, unconnected process, faculty are less likely to engage in the process. Institutions can leverage other college-wide practices such as strategic planning and program review to institutionalize assessment and demonstrate an internal commitment to student learning.

A small study of a mid-sized CA community college examined the factors that contribute to the implementation and sustainability of SLO assessment. Six faculty members and two administrators at a community college that is regarded as a state leader in innovation and successful institutional practices participated in interviews about their college's experience with assessment and what has facilitated and inhibited assessment efforts. The study's findings point to the following five implications: (1) make SLO assessment an institutional priority with long-term support and resources, (2) identify and develop an assessment plan to streamline the

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process, (3) support faculty by providing regular opportunities for dialogue and ongoing professional development, (4) leverage faculty experiences, and (5) develop a sensible timeline to complete the SLO assessment cycle (Chaplot, 2010). Implementing and sustaining SLO assessment efforts involve institutions making assessment a priority and connecting it to broader college goals. Moreover, opportunities to share results of assessment and professional development such as faculty learning communities can help sustain assessment efforts and connect them to enhancing overall student success. In the shift from teaching to learning and an accreditation climate focused on assessment, there is a need to fill the gap in existing faculty development programs designed to prepare faculty for implementing these more effective assessment and teaching strategies.

Connecting SLO assessment to college strategic planning is another method of streamlining assessment and aligning it with college-wide priorities (Banta et al., 2004; Gallagher, 2008; C. Miles & Wilson, 2004). In another study that looked at the relationship between colleges practicing strategic planning with assessing SLOs, Gallagher (2008) surveyed and interviewed California community college chief instructional officers. Results indicated that the most influential reasons for assessing SLOs is to enhance student achievement and inform program improvement. One community college chief instructional officer explained "that planning and assessment, including accountability, closes the loop to make the process circular. Assessment helps determine the needs and planning helps to meet the needs" (Gallagher, 2008, p. 106). Using SLO assessment data to develop and support a culture of inquiry and evidence contributes to strategic planning and ultimately institutional effectiveness.

In order to conduct meaningful assessment, faculty need models of developing, assessing, and applying SLOs in a comprehensive manner (Friedlander & Serban, 2004; Serban, 2004;

Somerville, 2008). The lack of faculty development contributes to "one of the major challenges in building, sustaining, and effectively utilizing student learning outcomes assessment [which] is having the needed expertise and skills on campus…. It is the right mix of expertise and skills of the individuals involved in developing the assessment framework of an institution that plays a critical role in successful assessment efforts" (Serban, 2004, p. 23). Since SLO assessment is a faculty-driven process, successful implementation of the SLO assessment cycle relies on faculty training and professional development.

Professional Development for SLO Assessment

SLO assessment is a relatively new concept for community college faculty, and "colleges must provide professional development opportunities for faculty and co-curricular staff on effective pedagogical techniques and intervention strategies that support the attainment of specific student learning outcomes" (Friedlander & Serban, 2004, p. 103). Many community college instructors are not trained in assessment methodology, data collection, or data analysis. However, these skills are required to meaningfully complete the assessment cycle and identify improvements to teaching and student learning, pedagogy, curriculum, and assessment methods.

Existing Professional Development Frameworks for SLO Assessment

Faculty at California State University, Long Beach developed a four-part series of workshops to create an assessment plan for each college program. This case study focused on the impact of the professional development series on faculty understanding, confidence, and attitudes on program assessment activities (Haviland, Shin, & Turley, 2010). Forty-four faculty attended training and participated in pre- and post- surveys using the *Stages of Concern Questionnaire* (George, Hall, & Stiegelbauer, 2006). After the workshops, faculty gained a greater understanding of assessment, improved skills and knowledge, and confidence that

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participating in assessment is valuable because of the common college assessment system. Moreover, participants indicated during interviews that the most effective part of the workshops series was the value of working with other colleagues.

At California State University, Northridge (CSUN), political science faculty developed a Progressive Direct Assessment (PDA) process that used data collected from students across lower to upper division courses (Cole & De Maio, 2009). The CSUN political science department assessment committee developed the PDA process and applied it to over three years of assessment work. The results of the PDA process provided formative feedback for CSUN faculty. Faculty learned that students performed better with clearer expectations and detailed direction and needed better support with citations and using academic sources in student research. Faculty survey results indicated that faculty felt the PDA process was labor intensive, but the strong majority of faculty was familiar and supportive of the process.

Much of the data about SLO assessment comes from institutionally reported experiences documented in reports. A recent report by the National Institute for Learning Outcomes Assessment (NILOA), which surveyed 1,202 undergraduate-degree-granting colleges and universities on the state of SLO assessment nationally, indicated that "assessment of student learning has turned the corner in that the work is no longer primarily an act of compliance, but rather is motivated by a more appropriate balance of compliance and an institutional desire to improve" (Kuh, Jankowski, Ikenberry, & Kinzie, 2014, p. 5). While SLO assessment was initially driven by the mandate of accrediting agencies, responding colleges also indicated that internal factors – program review and an institutional commitment to improve – were also motivators for assessment work (Kuh et al., 2014). Results of SLO assessment are no longer solely used for accreditation reports but also in institutional strategic planning, resource

allocation, benchmarking, and curriculum improvement (Kuh & Ikenberry, 2009; Kuh et al., 2014).

The 1,202 undergraduate-degree-granting colleges and universities survey respondents also indicated specific ways to advance assessment activities at their institution with "more professional development for faculty" (64%) as the highest area of most need, followed closely by "more faculty using the results" (63%), and "additional financial or staff resources" (56%) (Kuh et al., 2014, p. 27). While some colleges are more advanced in their assessment work than others, professional development ranks as the highest need in order to progress assessment efforts.

Effective Professional Development Characteristics

Successful professional development involves long-term, collaborative, and more comprehensive programs that include observing colleagues, active learning opportunities, and sharing effective practices (Atkinson & Bolt, 2010; Boyle, Lamprianou, & Boyle, 2005; Hochberg & Desimone, 2010; Wasburn & LaLopa, 2003). According to the Annenberg Institute for School Reform (2004), there are four critical characteristics of professional development that improves instructional capacity: "ongoing; embedded within context-specific needs of a particular setting; aligned with reform initiatives; grounded in a collaborative, inquiry-based approach to learning" (p. 1). Effective faculty development should be connected to the college mission and include faculty ownership and support from colleagues for investments in improving teaching. Faculty development programs tied to the college mission are connected to institutional priorities and advance the educational purposes of a college. These programs are formal, structured, and seek to accomplish a goal or facilitate faculty inquiry rather than isolated efforts with a single-purpose. They are also supported and sustained with institutional resources.

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Faculty ownership and support are important components of effective professional development because they foster a climate of faculty improvement and teaching excellence.

In a survey of 130 chief academic officers of community colleges across the nation, results indicated there was a lack of committed leadership for faculty development; lack of a formal, unified professional development plan; and lack of faculty ownership (Murray, 1999). A commitment to quality teaching includes a commitment to continuous professional learning and faculty development that contributes to a scholarship of assessment (Angelo, 2002b; Ewell, 2002; Mentkowski & Loacker, 2002; Tagg, 2003).

In the context of accountability, specifically No Child Left Behind, Hochberg and Desimone (2010) discuss what professional development should look like. While this study focuses on K-12, it has implications for higher education professional development. In the accountability environment, the goal is for all students to achieve particular standards or outcomes. However, this context creates a number of challenges for instructors, such as "aligning instruction with standards, pacing instruction to allow for appropriate coverage and depth of curriculum material, and meeting the needs of low-achieving students and English language learners" (Hochberg & Desimone, 2010, p. 98). Professional development must equip faculty to meet these needs so they can prepare students to meet learning outcomes. Hochberg & Desimone (2010) propose a framework for professional development in the accountability context as illustrated in Figure 2.5.
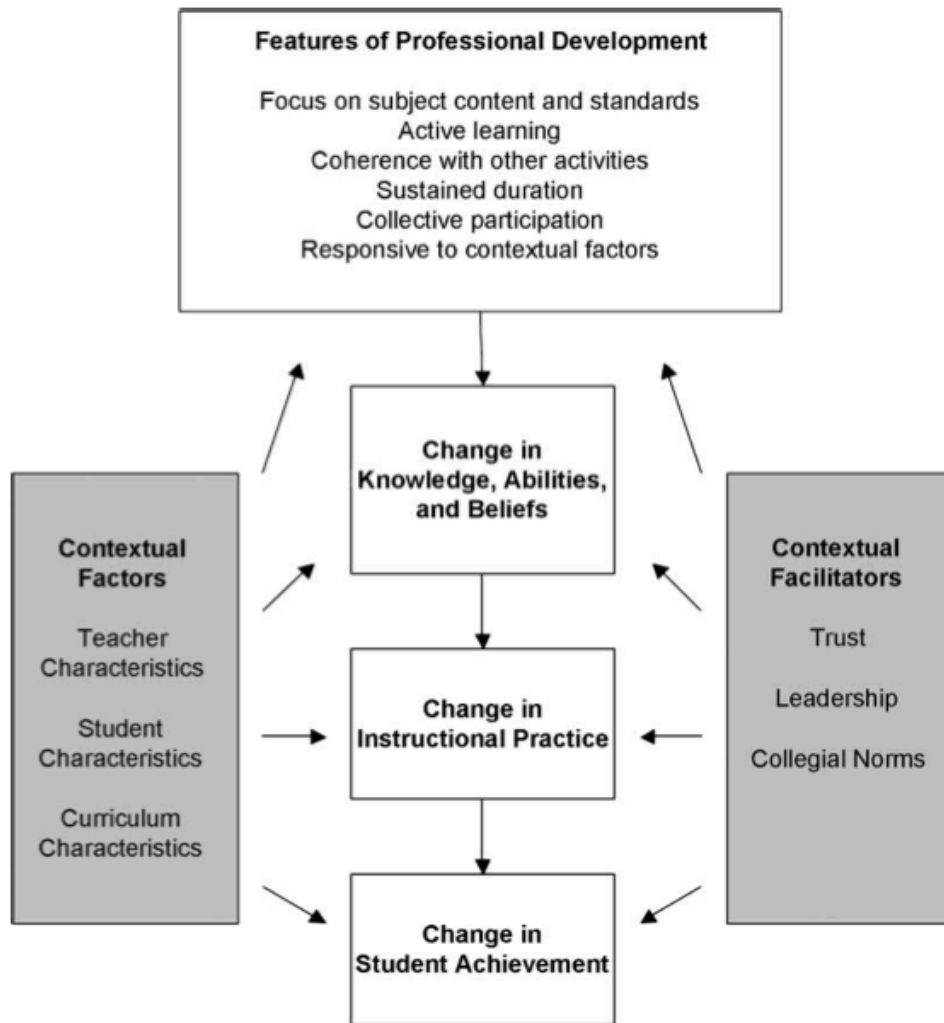
Figure 2.5 Framework for Considering the Role of Professional Development in an

Accountability Context (Hochberg & Desimone, 2010)

The framework expands upon the features of effective professional development and tailors it

within the specific context of accountability. Since accountability focuses on standards and

outcomes, faculty need professional development that is centered on addressing and achieving

these standards. Active learning and coherence with other activities help faculty apply

professional development content into their instructional practice. Sustained professional

development opportunities allow faculty access to regular support. Faculty collectively

participating with each other creates the time and space for curriculum alignment and discussion of common challenges in meeting student needs. Within the community college accountability context, accreditation has centered on outcomes assessment and building a culture of evidence of student learning; community college faculty need professional development to support them in SLO assessment. Community college faculty development programs vary due to mixed support and resources for programs. Unlike K-12, community colleges have few fixed, college-wide professional development days and instead rely on Flex Days, which are flexible days used for faculty-determined activities like conferences and workshops (California Community Colleges Student Success Task Force, 2011). While faculty have greater flexibility to identify their professional development activities, they may not be engaging in college-wide activities with coherent activities or collective participation.

Figure 2.5 illustrates how effective professional development can influence the process of faculty changing knowledge, abilities, and beliefs to impact their instructional practice and ultimately improve changes in student achievement. However, part-time faculty, who may teach up to 50 percent of the courses on a campus, have fewer professional development obligations or opportunities (California Community Colleges Student Success Task Force, 2011). In order for effective professional development to influence change, community colleges need to offer sustained professional development programs, and both full- and part-time faculty may need incentives to participate. The Community Colleges Student Success Task Force (2011) has identified one of its recommendations to revitalize and re-envision professional development, which includes developing and supporting focused professional development for faculty and staff.

Professional development must be responsive to the contextual factors indicated on

Figure 2.5. Contextual facilitators, when present, contribute to how well the framework

functions. Community colleges serve a highly diverse set of students with varying levels of

need, academic preparation, and educational goals. The curriculum must meet the needs of

students seeking to transfer, obtain a degree or certificate, upgrade skills, or engage in life-long

learning. Moreover, institutional leadership should support building a climate of trust and

collegiality that fosters instructional improvement.

Teacher Collaboration

According to Hochberg and Desimone's (2010) framework, trust, leadership, and

collegial norms play a role in facilitating professional development that impact changes in

instructional practice and improvements in student achievement. Similarly, research

demonstrates that when schools purposefully designate time for developing collaborative

working relationships with instructors, benefits include improved consistency in instruction,

willingness to take risks by trying new teaching methods and sharing practices, and increased

success in solving problems of practice (Andree et al., 2009). Collaborating with other faculty

requires "team members to make public what has traditionally been private – goals, strategies,

materials, pacing, questions, concerns, and results" (DuFour, 2004, p. 9). Teacher collaboration

can also occur in more formal, structured formats such a professional learning communities.

Professional Learning Communities

The core principles of professional learning communities (PLCs) focus on ensuring that

students learn through faculty's development of a culture of collaboration and focus on results

(DuFour, 2004). The characteristics of PLCs include shared values and norms, clear and

consistent focus on student learning, reflective dialogue, make teaching public, and focusing on

collaboration (Vescio, Ross, & Adams, 2008). According to the article, "all six studies reporting student learning outcomes indicated that an intense focus on student learning and achievement was the aspect of learning communities that impacted student learning" (Vescio et al., 2008, p. 88).

Effective characteristics of professional development include ongoing, collaborative exchanges for sharing instructional practices. Professional learning involves "powerful collaboration that characterizes professional learning communities is a systematic process in which teachers work together to analyze and improve their classroom practice" (DuFour, 2004, p. 8). Ongoing, continuous professional development has a stronger impact on teachers and student learning. Moreover, programs with longer duration and greater intensity were positively associated with student learning. According to one study, "three high-achieving schools found that high levels of student performance seemed to be associated in part with teachers' regular practice of consulting multiple sources of data on student performance and using those data to inform discussions about ways to improve instruction" (Andree et al., 2009, p. 10).

Furthermore, "effective professional development to improve classroom teaching also concentrates on high learning standards and on evidence of students' learning" (Annenberg Institute for School Reform, 2004, p. 3). Professional learning communities bring educators together to collectively examine and improve their own professional practice. Since faculty have varying responsibilities including teaching and committee work, participation in PLCs may be incentivized with stipends, release time, or food at meetings. PLCs provide a space for faculty to focus on defining what they want their students to learn, to understand how they know they are learning it, and to improve when they are not learning it. PLCs mirror the SLO assessment cycle. While accreditation was the catalyst for SLO assessment, meaningful outcomes

assessment really involves a cycle of inquiry and using data to make decisions and improvements to teaching and learning.

Summary

This chapter began with tracing community colleges' shift from an open-access agenda to a completion agenda in order to improve graduation and student achievement rates. Community colleges committed to institutional effectiveness and that adopt characteristics of organizational learning can make an impact on student success. Moreover, using results of SLO assessment to make improvements is an important part of organizational learning. To improve student learning and ultimately student achievement, colleges are moving from teaching-centered approaches to learning-centered strategies. In this shift, "faculty members are being encouraged to transform their roles and responsibilities in order to enhance their teaching and student learning, and faculty development initiatives can offer them strategies for a successful transition" (Brancato, 2003, p. 64). However, there is a gap in the literature regarding professional development frameworks for SLO assessment at the community college level. Components of successful K-12 professional development frameworks, such as teacher collaboration and professional learning communities, can be considered as models for community colleges engaging in SLO assessment.

At this point in time, there is limited peer-reviewed literature about SLO assessment models at the community college level. The knowledge generated from this research will address identifying effective characteristics needed for implementing and sustaining professional development efforts to equip faculty to complete the SLO assessment cycle. The next chapter considers the research design to explore existing professional development for SLO assessment,

the challenges faculty face in completing the SLO assessment cycle, and how those challenges are met.

CHAPTER THREE: METHODOLOGY

Poor student success outcomes in community colleges have led to a focus on improving student learning and assessing student learning outcomes (SLOs) (Bailey et al., 2005; Bleyer, 1979; Ewell, 2001; Goldrick-Rab, 2010; Kane, 1999; Michlitsch & Sidle, 2002). While community college faculty are content experts, instructors are also required to assess SLOs; however, many lack adequate training to meaningfully complete the SLO assessment cycle. Outcomes assessment is becoming more critical in the accreditation process, but there is a gap in existing professional development programs designed to train faculty in implementing these assessment strategies. In order to address this training need, I studied professional development models that support faculty in completing SLO assessment. I explored how faculty use specific professional development models to engage in dialogue to improve student learning, curriculum, and pedagogy. I conducted an explanatory sequential mixed methods study with survey, interview, and document review data to identify (1) existing professional development models for faculty completing the SLO cycle, (2) faculty and administrator attitudes toward the importance and implementation of SLO assessment and professional development, and (3) challenges encountered during the assessment process and how the challenges are addressed. This chapter describes how the following research questions were studied.

Research Questions

This study addressed the following research questions:

1. What professional development frameworks exist for community college instructors to successfully and meaningfully complete the SLO assessment cycle?

2. Are there significant differences between SLO Coordinators, Academic Senate Presidents, and Chief Instructional Officers in their attitudes toward the importance of SLO assessment and related professional development activities?

3. According to community college faculty and assessment leaders, what are the challenges in completing the SLO assessment cycle? How are those challenges addressed?

Research Design

I used an explanatory sequential mixed methods design, which involved collecting quantitative data in the first phase and then using those results to build on the second, qualitative phase (Creswell, 2014). Since the goal of the study was to identify professional development models that support community college faculty in completing the SLO assessment cycle, this approach was most appropriate because it captured faculty perceptions about the challenges and how they were addressed. I first distributed a survey to faculty and administrators participating in SLO assessment at the 112 community colleges across California. After analyzing the results, I built upon the results by conducting in-depth interviews with interested survey participants. I also conducted a document analysis of promising and effective practices for completing the SLO assessment cycle. The findings from both the survey and document review contributed to the protocol for the in-depth interviews of the interested survey respondents.

The survey had both closed- and open-ended questions related to faculty and administrators' experiences with assessment. The survey collected data about faculty perceptions of the importance of SLO assessment, implementation and level of involvement of professional development for SLO assessment, and challenges. In addition, respondents had a couple of open-ended questions to help further detail topics included in professional

development for SLO assessment and challenges with SLO assessment. At the end of the survey, participants elected to participate in a follow-up interview to further explore their perspectives and experiences in greater detail.

Through interviews, I was able to gain more in-depth information from faculty and administrators about specific challenges in completing the SLO assessment cycle and specific ways these challenges are addressed, including elements of professional development. As described by Seidman (2013), "their [interviews'] major task is to build upon and explore their participants' responses to those [open-ended] questions. The goal is to have the participant reconstruct his or her experience within the topic under study" (p. 14). Through the interviews, participants had a chance to describe their perceptions of the support for implementing an SLO assessment cycle to provide greater context for data regarding perspectives and challenges collected through the survey. Since I was most interested in the process of completing SLO assessment and improving the process with professional development, this qualitative component was an important step in the multiple methods design for this study.

Site Selection

I focused on the California community college system, which serves 2.3 million students and employs over 17,000 tenured/tenure-track faculty and 41,500 part-time faculty, because it is the largest system of higher education in the United States ("California community colleges Chancellor's office - Data mart," 2015). This choice provided a large pool of faculty and administrators involved in student learning outcomes assessment from which to draw. Moreover, there is a gap in the literature regarding SLO professional development specifically at the community college level.

Research Population

The research population included California community college SLO leaders, defined as faculty and administrators who are participating and/or leading assessment efforts at their campuses. They included faculty leaders – SLO/Assessment Coordinators and Academic Senate Presidents – and administrators: Chief Instructional Officers (CIOs), who are all charged with providing leadership over SLO assessment implementation and progress. Through surveying and interviewing these SLO leaders, I gained varied insights into challenges experienced and what training and professional development was used to address the challenges.

Sample Selection

By using criterion/purposeful sampling, I accessed educators in the 112 California community colleges who are directly participating and/or leading assessment efforts at their campus. I targeted at least three people from each campus for participation in the survey: the SLO Coordinator, Academic Senate President, and CIO. The SLO Coordinator is a faculty member who leads outcomes assessment efforts on campus. Since SLO assessment is a matter of curriculum, it is an academic and professional matter that falls under the purview of local senates ("Empowering local senates: Roles and responsibilities of and strategies for an effective senate," 2002), so I sought input from Academic Senate Presidents. Chief Instructional Officers are generally the administrator (at the vice president level) charged with leadership over SLO assessment. While college classified staff or managers may be involved in SLO assessment, I specifically focused on instructional faculty and administrators because Instructional Services is generally the largest area of the community college. Moreover, Instructional Services faculty and administrators are directly responsible for developing and assessing course and program student learning outcomes to improve teaching and student learning. While some departments in

Student Services (such as counseling, admissions, etc.) and Administrative Services (such as plant facilities, maintenance, etc.) can include outcomes related to improving student learning, more outcomes are focused on improving services, campus operations, and efficiency rather than teaching and learning.

I developed a mailing list of contact information for campus chief instructional officers using California Community College Chief Instructional Officers' member directory[5]. To obtain the email addresses for Academic Senate Presidents, I used the college directory on the Academic Senate for California Community Colleges[6]. I also reviewed each college webpage to confirm the CIO and Senate Presidents' email addresses as well as to obtain SLO Coordinator email addresses. The survey was sent to my mailing list of 351 SLO Coordinators, Senate Presidents, and CIOs to gain their experiences and ask questions about assessment practices. Participation in the study was voluntary, which was essential so that participants could respond honestly and accurately to the survey. Since the survey was conducted online, responses were confidential, and results were only reported in the aggregate. Respondents interested in participating in a follow-up interview indicated their interest at the end of the survey.

My goal was to reach at least one faculty member or administrator who is participating in the SLO cycle across all of the 112 California community colleges. Since many people (faculty, staff, and administrators) play a role in the SLO assessment cycle at a campus, I anticipated multiple completed surveys from the same college. I collected college names for tracking purposes; they only appear in the study in aggregate and interview participants were given pseudonyms. The college names allowed me to discern campus demographic information such

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[5] http://ccccio.org/directory/
[6] http://asccc.org/college_directory

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as geographic location, campus size, and type (urban, rural, suburban), and these variables were included in the analysis of covariance tests. In addition, it aided in seeking a representative sample from across the state (northern, central, and southern California). While three people were targeted from each campus (SLO Coordinator, Academic Senate President, and Chief Instructional Office), I estimated receiving about 100 completed surveys, ideally from one faculty member or administrator from nearly all of the colleges across the state, projecting a 28% response rate. I sought as high a response rate as possible by sending personalized email invitations and up to three reminders to the targeted people.   Survey respondents also could submit their name for a random drawing of one of three $50 Amazon.com gift cards.

For the follow-up interviews, I interviewed 15 participants. The participants were SLO Coordinators, Senate Presidents, and CIOs who volunteered at the end of the survey. I anticipated more faculty participants than administrators and sought a representative proportion of participants accounting for college position and college geographic region.

Data Collection Methods

To address the research questions, this study used three types of data collection methods: document analysis, a web-based survey, and interviews. The table below maps the research questions to the data collection methods; and the methods for each type of data collection are described in the following sections.

Table 3.1
Research Questions and Data Collection Methods

Research Question	Data Collection Method
1. What professional development frameworks exist for community college instructors to successfully and meaningfully complete the SLO assessment cycle?	• Documents • Web-based survey

Research Question	Data Collection Method
2. Are there significant differences between SLO Coordinators, Academic Senate Presidents, and Chief Instructional Officers in their attitudes toward the importance of SLO assessment and related professional development activities?	• Web-based survey
3. According to community college faculty and assessment leaders, what are the challenges in completing the SLO assessment cycle? How are those challenges addressed?	• Web-based Survey • Interviews

Documents. For selecting the documents to analyze of promising practices for SLO assessment, I consulted resources from the National Institute for Learning Outcomes Assessment (NILOA) Resource Library[7], Assessment Commons: Internet Resources for Higher Education Outcomes Assessment[8], and the Research and Planning Group Promising Outcomes Work and Exemplary Research (POWER) Award[9] recipients. These sources were reviewed because there is a gap in the literature related to professional development for SLO assessment at the community college level. However, organizations such as the RP Group and NILOA are committed to strengthening institutional capacity for data gathering and analysis to improve student success. They regularly publish reports and have dedicated online resources for supporting institutions in outcomes assessment practices. The RP Group, for example, annually sponsors the Promising Outcomes Work and Exemplary Research (POWER) Awards to recognize institutions that have done excellent work in outcomes assessment. I was particularly interested in how highlighted approaches serve as models and what components contribute to their successful, effective professional development models.

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[7] http://www.learningoutcomeassessment.org/publications.html
[8] http://www.assessmentcommons.org
[9] http://www.rpgroup.org/awards/power-awards

Survey. I developed and distributed a web-based survey using the email listing of SLO

Coordinators, Academic Senate Presidents, and Chief Instructional Officers. The survey (see

Appendix A) included questions related to demographic information of the participant such as

campus role, years working at the campus, and level of participation in assessment efforts on

their campus. Table 3.2 outlines the constructs (aligned with the research questions) and

variables for the closed-ended questions on the survey.

Table 3.2
Survey Constructs and Variables for Closed-ended Questions

Constructs	Variables
Perceptions of professional development practices for completing the SLO assessment cycle (RQ 1, 2) Perceptions of challenges to SLO assessment (RQ 3)	*Adapted from (Welsh & Metcalf, 2003)* • Perceived importance of SLO assessment • Perceived institutional motivation for SLO assessment • Perceived depth of implementation index of professional development for SLO assessment • Reported personal level of involvement index of professional development for SLO assessment
Types of challenges for SLO assessment (RQ 3)	*Identified from Literature Review variables for characteristics of meaningful SLO assessment* • Leadership • Resources to support SLO assessment efforts • Institutional commitment to SLO assessment • SLO assessment efforts are embedded in the institutional culture • SLO assessment efforts are connected to college strategic planning • Understanding of the SLO assessment cycle • Training for developing SLOs • Training for assessing SLOs • Training for discussing assessment results • Training for identifying improvements in teaching and learning as a result of assessment

Closed-ended questions were adapted from a study related to faculty and administrator

perceptions of institutional effectiveness activities (Welsh & Metcalf, 2003). Welsh and

Metcalf's (2003) study included a survey developed from the authors' literature review related to four variables:

1. *Perceived Motivation*, or the extent to which institutional effectiveness activities are motivated at an institution primarily by internal interests in quality improvement, instead of the need to respond to external mandates.

2. *Perceived Depth of Implementation*, or the extent to which institutional effectiveness activities are actually implemented and promote change at an institution.

3. *Perceived Definition of Quality*, or the extent to which the prevailing view of quality at the institution emphasizes educational outcomes instead of resource inputs.

4. *Reported Level of Involvement*, or how institutional participants view their personal involvement in the development and implementation of institutional effectiveness activities (2003, p. 452).

Although the study was focused on institutional effectiveness, I felt the survey instrument itself could be modified to address my research questions. I adapted the survey and modified it from a focus on institutional effectiveness to SLO assessment. I also included four of the five original indices (see Table 3.2) to address my research questions.

I modified the questions to make them specific to SLO assessment and included questions to gauge respondents' perceived importance of SLO assessment, perceived institutional motivation for SLO assessment, reported depth of implementation index of professional development for SLO assessment, and reported personal level of involvement index of professional development for SLO assessment. To address my third research question focused on challenges with SLO assessment, participants rated challenges identified from my literature review of variables for characteristics of meaningful SLO assessment such as lack of leadership, lack of resources, and lack of institutional commitment. Open-ended questions in the survey addressed my third research question related to what institutions have done to address challenges.

As an incentive to participate, participants were entered into a raffle to receive one of three $50 gift cards for taking the time to respond to the survey. At the end of the survey, respondents indicated their interest in participating in a follow-up interview.

Interviews. Analyses of data collected from the survey informed development of the interview questions. The interview protocol (see Appendix B) included in-depth questions relating to faculty attitudes toward the SLO assessment cycle, barriers to completing the cycle, and suggestions to how those barriers can be (or are being) addressed. I conducted interviews with 15 participants from community colleges across California. The participants were SLO Coordinators (faculty), Senate Presidents (faculty), or CIOs (administrators) overseeing SLO assessment progress. I anticipated more faculty participants than administrators and sought a stratified sample for each college position.

The mode of interview (phone or in-person) depended on the respondents' availabilities, preferences, and geographic locations. The interviews lasted approximately 45 minutes to 60 minutes. They were semistructured (Merriam, 2009); I followed an interview protocol with a mix of more or less structured interview questions. I developed a set of grand tour questions (Spradley, 1979) for the interview protocol, which were refined based on key challenges and other data identified through the survey analysis. Participants were reminded that their responses were confidential. The interviews were tape recorded and later transcribed verbatim. All interview participants also received a gift card for their participation.

Data Analysis Methods

I triangulated the data from the three collection methods in order to verify the results of the analysis. The survey and interviews resulted in self-reported data, and the document analysis of promising practices in SLO assessment resulted in a comparison of effective practices and

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existing campus practices. Since this study was an explanatory sequential mixed methods design, I also interpreted how the qualitative findings from the interviews connected to the quantitative survey results.

Survey. To determine the relationship between implementation of professional development for SLO assessment and position on campus, I conducted factor analysis and analysis of covariance (ANCOVA) tests. Using SPSS 22, I conducted factor analysis as a preliminary analysis to examine whether survey items measured the same underlying construct. For the " Importance" variable, one item that had a low factor loading was removed, which resulted 8 items (α = .833). For the "Motivation" variable, one item that had a low factor loading was removed, which resulted in an 6 items (α = .791). For the "Implementation" variable, two items that had a low factor loading were removed, which resulted in 9 items (α = .871). For the "Involvement" variable, one item that had a low factor loading was removed, which resulted in 6 items (α= .814). After the items were removed, the average of the items were used for subsequent data analysis.

A one-way analysis of covariance (ANCOVA) was conducted for this study. The independent variable, college position, included three levels: SLO Coordinators (faculty), Academic Senate Presidents (faculty), and CIOs (administrator). The dependent variable was the mean scores on the survey for the following indices: "Importance of SLO assessment," "Motivation for SLO assessment," "Implementation of SLO assessment professional development," and "Involvement in SLO assessment professional development." Each index included seven to eleven Likert scale questions. The multi-item indices aimed to encompass the main features of each variable and create operational measures, that when combined, address each concept (Fowler, 1995). For scoring each item in the index, the higher number assigned to

a response indicates (1) the higher perceived importance of SLO assessment, (2) the more the respondent perceived institutional improvement as the primary motivation for SLO assessment, (3) the deeper the implementation of professional development for SLO assessment, and (4) the greater the respondent's involvement in professional development for SLO assessment. Several of the items in the survey were reverse coded to protect against bias (Fowler, 1995). The covariates were years of experience in the respondent's current position and experience with SLO assessment. A third covariate, college enrollment by Full-Time Equivalent students (FTEs)[10], was also included in the analysis. The covariates were included to determine if they have an impact on more or less SLO implementation or involvement in professional development for SLO assessment.

Post-hoc tests were conducted to evaluate pairwise differences among adjusted means for three levels of college positions. The Bonferroni adjustment was used to control for Type I error across the three pairwise comparisons ($\alpha'=.05/3=.017$) for the four indices of the survey instrument (Importance, Motivation, Implementation, Involvement). P-values of .05 were used to determine statistical significance for the Importance, Motivation, Implementation, and Involvement scales. An alpha of .05 was used to determine statistical significance for the college position variables. All analyses were conducted using complete cases only for each outcome. For example, if one respondent had a missing value for the Importance outcome, but had complete responses for all of the other outcomes, then his/her response was excluded from the Importance outcome, but included in the analysis of the other outcomes.

Responses to open-ended questions were coded for major themes and patterns related to the issues surrounding assessment and what professional development opportunities address

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[10] http://scorecard.ccco.edu/scorecard.aspx

faculty concerns. I organized and coded the data into broad categories such as "participation," "compliance," "professional development," and "training needs." However, I also reviewed the responses to identify additional categories emerging from the data. As in an explanatory sequential mixed methods design, analysis of the quantitative results of the survey were used to plan and refine the qualitative follow-up interview protocol.

Interviews. Interviews were audio recorded, transcribed verbatim by a professional transcription service, checked for accuracy by me, and uploaded into atlas.ti, a qualitative data analysis software. During coding, I looked for trends in participants' responses for attitudes toward assessment. Interview questions were focused on identifying supports and barriers to completing the assessment cycle and what types of professional development helped or hindered assessment efforts. I was particularly interested in what components of training were needed to addresses the barriers to completing assessment. Conversely, I was also interested in what training efforts contributed to successful completion of the assessment cycle.

Since I wanted the categories to emerge from the data collected, I utilized the coding analysis procedure prescribed by grounded theory: open coding, axial coding, and selective coding (Corbin & Strauss, 1990; Merriam, 2009). In developing the coding categories, I reviewed the transcripts, open coded, and "construct[ed] categories or themes that capture some recurring pattern that cuts across [the] data" (Merriam, 2009, p. 181). After drafting a tentative scheme of categories, I sorted all the data into the categories. I continued constructing and revising categories through this inductive process until reaching the point where no new information, experiences, or understandings emerged from the data (Merriam, 2009; M. B. Miles, Huberman, & Saldaña, 2013). Next, using axial coding, I made connections between central categories and other categories to identify their relationship and refine the category

scheme. I ultimately used selective coding to identify the core category – the central defining aspect to which all other categories connect. I also developed a codebook to define the coding scheme and provide examples of each code.

Documents. The documents related to promising practices for SLO assessment posted on the websites such as NILOA and the Assessment Commons were reviewed and coded to identify themes related to assessment support, resources, and professional development. During coding, I organized the data into general categories such as "continuous improvement", "organizational culture", and "resources." I wanted to understand what components of these model professional development opportunities make them successful and how they can be used at other community colleges. I looked for elements in effective SLO assessment practices that cross many campuses. See Appendix C for the Document Review Protocol.

<center>**Ethical Considerations and Role Management**</center>

To ensure confidentiality of the participants, no participant names or identifying features were used in writing up the study. I clarified the purpose of the study with participants, provided a statement ensuring anonymity, and did not collect any personal identification information from the faculty and administrators who respond to the survey. Only respondents interested in participating in a follow-up interview were asked to provide their email address and contact information. The demographic questions in the survey asked respondents about their role on campus, how long they have been working, and their involvement in SLO assessment at their campus. College names were collected only for tracking purposes, and I used a pseudonym when referring to specific interview participants. Before respondents started the survey, they received a detailed introduction about the purpose of the study and a Study Information Sheet that included guidelines for their participation: potential risks, benefits, and rights. I provided interviewees

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with informed consent information before conducting the interview and used pseudonyms to protect their identity. I also password-protected all stored audio and transcription files on my computer.

As a California community college administrator with responsibility for SLO assessment at my campus, I am a fellow practitioner and familiar with many SLO leaders across the state and the available resources. Although I am an administrator, I do not have instructional departments reporting to me (unlike a dean of instruction), which positions me more as a practitioner rather than supervisor. In addition, my primary role in the study was as a researcher.

Reliability, Validity, and Credibility

As described by Creswell (2014), the researcher in a multiple methods design needs to establish the validity of both the quantitative and qualitative findings. In an explanatory sequential mixed methods design, there are additional validity concerns to address such as following up on the quantitative results with the qualitative instrument. I followed up with survey respondents by interviewing interested participants. These interviews allowed me to ask more in-depth questions and provide rich data. I piloted the interview protocol before administering it with participants. I also provided transcripts to the interview participants to member check information provided. Furthermore, I used standardized protocols and coding procedures so all participants were asked the same questions, regardless of my relationship with the person. I also practiced the data collection methods by both field-testing the survey and practicing the interview protocol.

The survey included both closed- and open-ended questions to identify respondents' campuses' implementation of professional development for SLO assessment and challenges to

completing assessment. Survey questions were modified from Welsh & Metcalf (2003)'s survey in their study *Faculty and administrative support for institutional effectiveness activities*.

Since the survey instrument included new items that I specifically designed for this study, the instrument was pre-tested to increase reliability. I tested the survey with a faculty member at a CA community college and received feedback related to improving clarity or terms and wording, revising question order, and eliminating or editing questions adopted from another survey. I also pre-tested the survey with an English faculty member, the Academic Senate Secretary, and Dean of Distance Learning at my campus. Through pre-testing, I was able to gain a better understanding of how long it took to complete the survey, which questions were unclear or confusing, and if respondents interpreted the questions in the same way. Field-testing allowed for measuring the survey's effectiveness by having faculty take the survey and provide feedback.

To ensure credibility, I needed to be aware of my own potential bias as an SLO leader at a CA community college. I have worked with my campus SLO Coordinator for almost four years and provided campus-wide leadership on SLO assessment practices. This role could impact how I interpreted successes and challenges and how I analyzed the resulting data. To avoid this bias, I ensured that findings and claims were clearly supported by the data collected.

Summary

This study used an explanatory sequential mixed methods design to identify existing professional development models for completing the SLO assessment cycle, challenges experienced during the SLO cycle, and how challenges are addressed. As a member of my District's SLO Advisory Council, I will share results of my research with members of the Council, which includes SLO Coordinators at the District campuses. Results will also be shared in the aggregate with the Student Learning Outcomes Coordinator listserv and Assessment

Listserv. I also plan to submit a presentation proposal to the annual RP Group's Strengthening

Student Success Conference that includes a student learning outcomes conference track.

CHAPTER FOUR: FINDINGS

This study explored professional development models that support community college faculty in completing the student learning outcomes (SLO) assessment cycle. I also investigated barriers and challenges to assessment. Three types of data collection methods – document review, survey, and interviews – were used to address the following research questions:

1. What professional development frameworks exist for community college instructors to successfully and meaningfully complete the SLO assessment cycle?

2. Are there significant differences between SLO Coordinators, Academic Senate Presidents, and Chief Instructional Officers in their attitudes toward the importance of SLO assessment and related professional development activities?

3. According to community college faculty and assessment leaders, what are the challenges in completing the SLO assessment cycle? How are those challenges addressed?

I conducted a document review of promising practices for SLO assessment from the National Institute for Learning Outcomes Assessment (NILOA) Resource Library[11], Assessment Commons: Internet Resources for Higher Education Outcomes Assessment[12], and the Research and Planning Group Promising Outcomes Work and Exemplary Research (POWER) Award[13] recipients. In fall 2012, the Accrediting Commission for Community and Junior Colleges (ACCJC) expected colleges to be at the Proficiency level of implementation of SLO assessment on the ACCJC SLO Rubric and required colleges to submit a status report. I reviewed 57 of 112

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[11] http://www.learningoutcomeassessment.org/publications.html
[12] http://www.assessmentcommons.org
[13] http://www.rpgroup.org/awards/power-awards

College Status Reports on Student Learning Outcomes Implementation. Table 4.1 summarizes the type and number of documents reviewed.

Table 4.1
Document Review

Type of Document	Number of Documents Reviewed
NILOA Resource Library	10
Assessment Commons	5
POWER Awards	24
College SLO Status Reports	57
TOTAL	96

To address the second research question, I sent a web-based survey to three targeted groups at the 112 CA community colleges: SLO Coordinators (faculty), Academic Senate Presidents (faculty), and Chief Instructional Officers (CIOs, administrators). The survey included both closed- and open-ended questions related to SLO assessment implementation, professional development for SLO assessment, and barriers to SLO assessment implementation.

At the end of the survey, respondents indicated their interest in participating in a follow-up interview focused on SLO assessment implementation, resources and support for participating in the assessment cycle, challenges to assessment, and impact of accreditation standards on assessment implementation. Due to travel and time constraints, 14 interviews were conducted over the phone and one interview was in-person.   The interview protocol was semi-structured and refined based on the survey analysis.

In this chapter, I first describe the sample population and demographics of the survey and interview participants. In response to the three research questions, the findings are presented in the following sections:

- Promising Practices for SLO Assessment and Professional Development

- Faculty and Administrator Attitudes Toward SLO Assessment and Related

   Professional Development

- Defining and Dealing with Challenges to SLO Assessment

The chapter concludes with a summary of the findings.

Research Sample and Participant Demographics

By using criterion/purposeful sampling, I identified faculty and administrators who are directly participating and/or leading assessment efforts at their college: SLO Coordinator, Academic Senate President, and CIO. While college classified staff or managers may be involved in SLO assessment, I specifically focused on instructional faculty and administrators because Instructional Services faculty and administrators are directly responsible for developing and assessing course and program student learning outcomes to improve teaching and student learning rather than service efficiency or campus operations (such as the business office or plant facilities). I developed a distribution list of 351 SLO Coordinators, Senate Presidents, and CIOs from member directories and reviewing college webpages for contact information. After distribution of the survey, I received responses indicating changes in position and additional contact information; I ultimately sent the survey to 362 faculty and administrators.

Survey Respondents

Of the 362 faculty and administrators who received an email invitation to participate in the survey, 145 surveys were completed, which yielded a 40% response rate. Individuals from 84 colleges participated in the survey, which represents 75% of the total 112 community colleges in the state. Figure 4.1 summarizes the responses by geographic region.
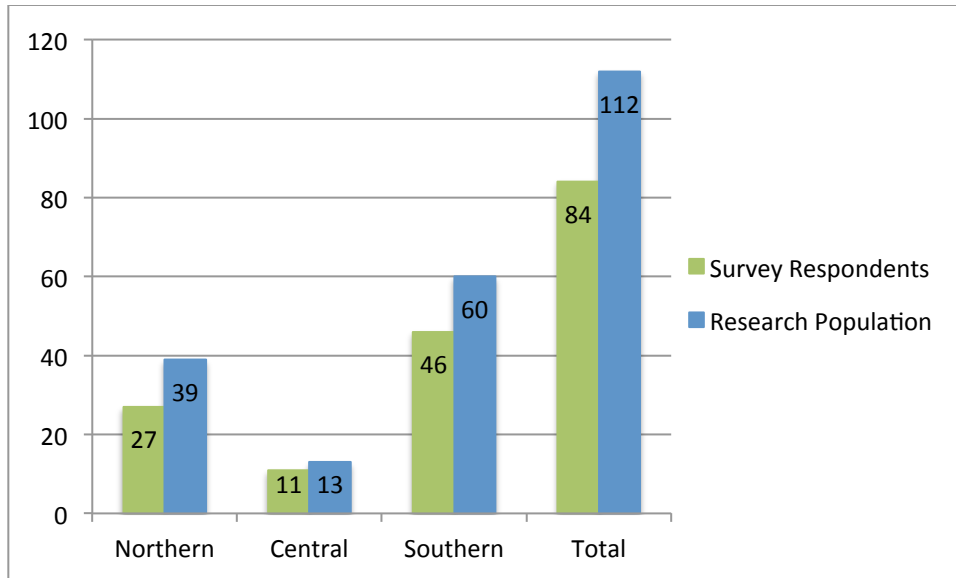
Figure 4.1 Community Colleges Represented by Survey Respondents, by Region

The research population included faculty and administrators who are directly participating and/or leading assessment efforts at their college. The SLO Coordinator is a faculty member who leads outcome assessment efforts. Academic Senate Presidents are included because SLO assessment is an academic and professional matter that falls under the purview of the Senate. CIOs are generally the administrator at the vice president level charged with overseeing SLO assessment implementation. Almost half of the SLO Coordinators across the state responded to the survey. In addition, more than one-third of Senate Presidents and more than one-quarter of CIOs participated in the survey. Table 4.2 summarizes the survey respondents by type of college position.

Table 4.2
Survey Respondents by College Position

	Survey Respondents	Research Population	Response Rate
SLO Coordinator	65	137	47%
Academic Senate President	43	114	38%
Chief Instructional Officer	30	111	27%
Did not indicate	7	0	
TOTAL	145	362	40%

Of the 145 survey respondents, the average amount of years in their position was 21 years. More than half have been in their position for 10 years or less, while 38% have been in their position for 11-20 years. A majority (80%) of respondents indicated they have been involved with SLO assessment for five or more years. Respondents also rated their proficiency level in SLO assessment; 60% indicated they were "Skilled/Intermediate" and 37% were "Expert."

Interview Participants

Nearly half (69 of 145) of the survey respondents indicated their interest in participating in a follow-up interview. In order to select the 15 interview participants, I wanted participation from a representative sample of the three positions of my research population and of the geographic regions in the state: northern, central, and southern CA. I also wanted participation both from colleges that have fully reaffirmed accreditation status and are on sanction. Four interview participants were from colleges that were on an accreditation sanction; 11 participants were from fully reaffirmed colleges.

In order to interview participants that included a proportional sample of college positions statewide, I identified the percentage of people in each position at community colleges across California. In my targeted sample from the distribution list, SLO Coordinators made up 38% of the sample; Senate Presidents were 31%; and CIOs were the remaining 31%. To select the

number of interview participants for each college position, I ensured that SLO Coordinators

comprised about 40% of the interview participants, a third were Senate Presidents, and about

one-quarter were CIOs. In the state, a third of community colleges are located in northern CA,

12% are in central CA, and little over a half in southern CA. I also ensured that similar

proportions of colleges' geographic regions were maintained in selecting interview participants.

With 112 community colleges across the state, I wanted to maintain this geographic diversity

because some college barriers and approaches to SLO implementation may be unique to location

or district affiliation. Moreover, because my study is about CA community college

implementation of SLO assessment, I wanted to have input that included a representative sample

of community colleges across the entire state. Figures 4.2 and 4.3 illustrate the interview

participants compared to research population by college position and region.
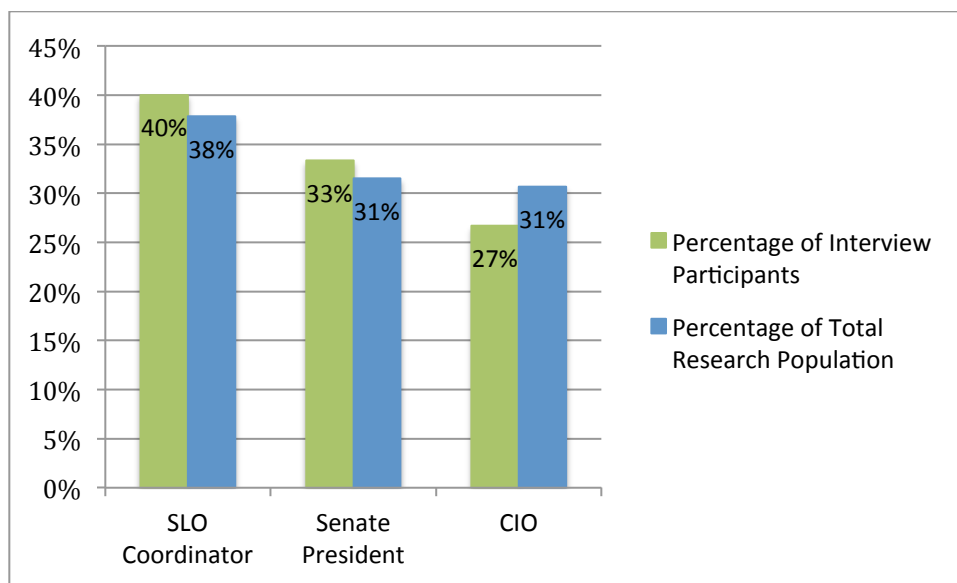
Figure 4.2 Interview Participants by College Position
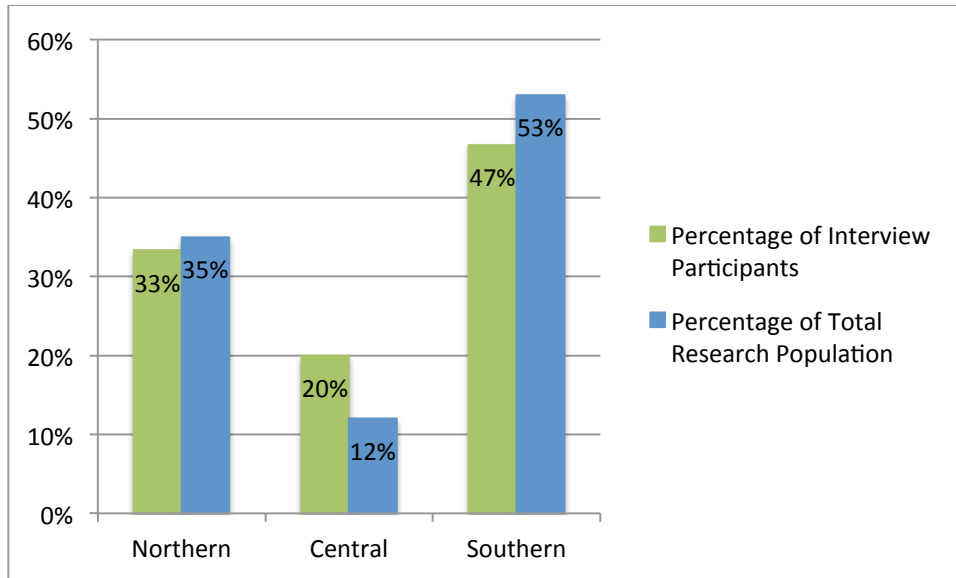
Figure 4.3 Interview Participants by College Geographic Region

Of the 15 interview participants, the average amount of years in their position was 2.5 years. Thirteen of the fifteen participants had been in their position from 0-3 years. Two participants, both SLO Coordinators, had 8-9 years of experience. The shorter amount of time in the positions is expected since Academic Senate Presidents are elected and generally serve two-year terms of office. The CIOs interviewed had one to three years of experience in the position. Additionally, a couple of participants were involved in SLO assessment through multiple positions: former SLO Coordinator and current Senate President. Table 4.3 details the demographic information of the fifteen interview participants.

Table 4.3

Pseudonym and Demographic Information of Interview Participants

	College Position	College Region	College Accreditation Status
Carla	SLO Coordinator	Northern	Reaffirmed
Carmen	Senate President	Northern	Reaffirmed
Christine	SLO Coordinator	Central	On Sanction
Danielle	SLO Coordinator	Southern	On Sanction
Sarah	CIO	Central	Reaffirmed
Dale	CIO	Northern	On Sanction
Glenn	Senate President	Northern	Reaffirmed
Jim	SLO Coordinator	Northern	Reaffirmed
Karen	Senate President	Southern	Reaffirmed
Laurie	SLO Coordinator	Southern	On Sanction
Lisa	CIO	Southern	Reaffirmed
Matthew	CIO	Southern	Reaffirmed
Peter	SLO Coordinator	Southern	Reaffirmed
Patrick	Senate President	Southern	Reaffirmed
Timothy	Senate President	Central	Reaffirmed

Promising Practices for SLO Assessment and Professional Development

Faculty Drive SLO Assessment

The purpose of SLO assessment includes evaluating student achievement and recognizing where instruction and student learning can improve. The SLO assessment cycle involves defining what students should learn, how to measure it, and reviewing data to identify what improvements to make. While the ACCJC standards mandated SLO assessment, it did not prescribe the process for implementing it. However, almost half of the interview participants described faculty playing a lead role in directing assessment efforts. SLOs are seen as a matter of curriculum and under the domain of faculty. Rather than administration or an external group defining SLOs for courses, specifying assessment methods, and reviewing the results, faculty themselves exercise their academic freedom in writing SLOs, determining measurement instruments, and analyzing data. Almost all interview participants described the SLO

Coordinator as a faculty position and the structure of the SLO Committee as a subcommittee of the Academic Senate.

During the follow-up interview, participants were asked to describe their college process for completing the SLO assessment cycle and any advice they have for others completing assessment. The interview questions did not explicitly ask about faculty driving assessment, yet in response to these two questions, almost half of the participants commented that the process for SLO assessment implementation was faculty driven. Peter, one of the SLO Coordinators, commented:

> The faculty has stepped in at the ground level and really worked this out. It hasn't been that some administrator or Dean has decided accreditation says you're going to have CLOs [course learning outcomes] here. Here are you CLOs for your courses, measure these. That will probably turn off most faculty…. We've had as much success as we've had because the faculty's been involved at the ground level – as frustrating, intimidating, and as anxiety producing as that's been – trying to work with these learning outcomes and figure out what they are and what they're meant to do.

Peter noted that the success of SLO implementation was attributed to faculty directly developing the process for assessment: defining, measuring, and assessing the outcomes. He also commented that the process had not been the smoothest, which demonstrates the need for professional development to support faculty in assessment and will be discussed in more detail later in this chapter. Despite the frustration, their college process was successful because of the faculty input and direction. This theme of faculty leading assessment efforts was common across the other sites as echoed by many interview participants.

Jim, another SLO Coordinator, explained the importance of the faculty role in implementing outcomes assessment at his campus. He described an experience at an assessment conference breakout session:

> One of the scenarios they saw as a real problem scenario was where the faculty had gone and taken this idea and ran with it. There was no input from the administration. I said,

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"Where's the problem?" Now I had not realized how few faculty were going to this particular session, because we'd sent five or six people – faculty. Somebody said, "Well, the leadership has to be involved." I said, "When the people lead, the leaders will follow." There was dead silence in the room for three seconds until the only other faculty member in the room stood up and clapped. That was the way we approached it. We said, "Look. We're going to have to do this. How do we do it so it does us and the students as much good as possible?" We designed a program, presented it to the faculty. The Academic Senate said, "Yes, this makes sense." Then once that happened, it was okay the faculty is doing this. As long as you run everything through that way, you're going to get buy in.

Jim described his college organization culture as "extremely collaborative and largely faculty-driven." He talked about the role faculty leaders play; for example the college Academic Senate appoints all faculty members to the SLO Committee. He continued his comments indicating that SLO implementation at his college was primarily faculty driven but supported by the administration. Faculty wrote the SLOs, decided which courses to assess first, and decided to move away from indirect SLO assessment with student surveys to direct assessment methods determined by the faculty. Since the "nuts and bolts" of assessment involved faculty, they need to not only be involved but also provide the direction of the initiative.

Former SLO Coordinator, Danielle, described a faculty-driven approach when her college had an accreditation sanction. Because of their college's low rates of assessment completion, the faculty participated in assessment to move from 40% to nearly 100% of courses assessed. However, she clarified, "I think part of the attitude was that that's a faculty issue, and faculty are like, 'No. We don't want it [blame] on us if we're still in trouble.' So that was a motivator. It was a negative motivator… because faculty didn't want it on their head." In this example, assessment was faculty driven because they were motivated by the threat of accreditation, rather than because of their interest in assessment. She described a campus culture of low morale and a challenging time with SLOs. Their college Academic Senate passed a motion with consequences for not completing SLO assessment: if a course were not assessed, it would be archived and no

longer offered. When she was SLO Coordinator during this time, she felt that the faculty she

worked with were scrambling to submit an assessment. The faculty were primarily motivated

and driving SLO efforts mainly to satisfy the accreditation recommendation.

The document review analysis also echoed the importance of a faculty-driven process.

The 2011 POWER Award winner for the SLO Hall of Fame document explained:

> Initially, some faculty felt that the entire SLO concept was a fraud and that it would never work. This misconception was overcome by creating and investing in a faculty-driven, faculty-based process. Importantly, it was not the concept of a few forward-thinking faculty; it became a topic of discussion for all faculty, on every key committee.

Developing the process for SLO assessment began with the faculty at this college despite the

skepticism. However, SLOs became an agenda item on key college committees so all faculty

could participate in the discussion to develop an SLO process customized for the college.

Faculty wanted flexibility to design assessment tools to meet discipline, faculty, and student

needs to measure student learning. Some faculty used individualized tools while others

developed common exams and common rubrics to gather consistent data. With faculty designing

the process through Academic Senate and support from the administration, the college created a

sustainable process for SLO assessment.

SLO Assessments as Integral to Program Review and Institutional Planning

Originally introduced in the ACCJC standards in the 1980s, the program review process

is a systematic review of college effectiveness to improve instructional programs and learning

support services. Faculty and staff participate in a collaborative effort to review student data

such as enrollment trends, delivery modes, and achievement rates to evaluate their program

operations and efficiency. Through strategic planning, departments set goals to address gaps

identified from the program review process to enhance overall institutional effectiveness. SLO

assessment is a further extension of institutional effectiveness since it measures student learning

at the course, program, or institutional level. Almost 90% of ACCJC College Status Reports on

SLO Implementation Reports and a quarter of the NILOA Case Studies and POWER Awards

described their colleges integrating SLO assessment with program review and institutional

planning. Some colleges report outcomes assessment results directly in program review and

other colleges connect SLO assessment results with goal setting and resource allocation.

In the document analysis of colleges' Status Reports on Student Learning Outcomes

Implementation, 88% (50 of 57 reports) included a reference to connecting their college SLO

process to institutional planning and program review. In response to the "Proficiency Rubric

Statement 3: Decision making includes dialogue on the results of assessment and is purposefully

directed toward aligning institution-wide practices to support and improve student learning," one

college responded:

> SLOs are a critical component of program reviews…. Program reviews include
> thoughtful discussions about improving instructional methods, adjusting assessment
> tools, clarifying assignments or assessments to better reflect the desired outcome.
> Program reviews suggesting changes and improvements via additional resources have
> these recommendations added to annual plans.

This college described how SLO assessment is tied to institution-wide practices through the

program review process. This connection of assessment and Program Review was a common

theme in the college reports. An overwhelming majority of the reports outlined an integration of

SLO assessment results with institutional planning and resource allocation through the program

review process. Program Review is the vehicle for documenting assessment in some cases and in

others as the vehicle for documenting changes as a result of assessment that lead to resource

requests.

Aligning SLO assessment with institutional processes such as Program Review also

serves as a way to address challenges to assessment. In response to the open-ended question in

the survey about how challenges are addressed, one respondent commented, "Connecting SLO assessment with program review has been helpful in showing the college that assessment is the basis for planning and improvement. Each program review cycle results in better use of assessment data. This is an ongoing process." This respondent explained the most important challenge at the college was for faculty to see the connection between assessment results and planning and to understand that SLO assessment is an extension of their work and serves as a basis for improvement. The college's response was to connect SLO assessment with an already established college process: program review, planning, and resource allocation. The integration has been helpful for the college to demonstrate that assessment is the basis for college planning and institutional improvement. Each Program Review cycle contributes to better use of SLO assessment data.

In the document review of promising practices for SLO assessment from the NILOA Resource Library, Assessment Commons Resources, and POWER Awards, a quarter of the documents detailed the importance of aligning SLO assessment with institutional planning. The 2011 POWER Award SLO Hall of Fame recipient explained the college's success factors in developing and implementing an assessment process:

> SLO assessment at Cabrillo is a required component of program review and is linked to budgeting. The senate-led linkage to program review and the accountability this created has institutionalized the SLO assessment process at Cabrillo. If a department completes program review and SLO assessment is not included, then the program must go back and do it or receive only a conditional pass on that program review. This guarantees that the process is a sustainable, valued component in every program.

Connecting outcomes assessment to Program Review was a Senate-driven decision at this college rather than something required by administration. This alignment has helped institutionalize assessment efforts and by integrating SLO assessment with an already established college framework for continuous improvement: Program Review. Moreover, results of SLO

assessment are tied to the college planning and budgeting process; departments complete program review, develop action plans, and can request resources based on changes identified from SLO data.

Additionally, a NILOA case study of La Guardia Community College showcased the college commitment to assessment and robust program review system that includes SLOs. One of the lessons learned from La Guardia Community College is to "embed assessment into other campus review systems so that assessment activities are done regularly and revisited during the next cycle." Through Program Review, LaGuardia uses student achievement data and SLO results to evaluate if students are achieving the established competencies and knowledge sets. If not, programs then develop action plans that detail how they will improve student learning; this plan is built into the program's planning for the next year. By embedding assessment into program review, the college ensures assessment takes place during an already established institutional practice.

Faculty Need Professional Development in Assessment Methodology and Pedagogy

As part of the SLO cycle, faculty identify and define the expected learning outcomes. In order to assess student achievement of the SLO, faculty need to specify how the outcome will be measured, what data will be collected, and through what assessment method. In addition to professional development needed on topics related to the SLO assessment cycle – developing SLOs, assessing, discussing results, identifying changes – professional development also includes topics related to assessment methodology and pedagogy to enhance teaching and learning. Assessments are used to stimulate discussion about student needs and ways to improve the teaching and learning process. Methods can vary from direct assessment techniques such as exit exams and embedded questions to indirect assessment methods like student surveys or

interviews. Moreover, faculty can use formative or summative assessments of learning

outcomes. The goal in collecting and evaluating assessment results is to gain a better

understanding of how to improve student learning and success.

One-third of interview participants discussed the need for professional development

related to assessment methodology. Laurie, one of the SLO Coordinators, explained:

> Many of them [faculty] did not set out to be educators. It just kind of fell in their lap or they realized they really like teaching. They didn't have anything about methodology or assessment or instruction ever, any kind of training on that. I find that I have been having to train faculty on what assessment is and how the alignment works.

The minimum qualification to teach in a California community college is to have a master's

degree in the respective subject area. Community college faculty are experts in their field, but

they do not need to have had training in pedagogy, instructional strategies, nor assessment.

However, SLO assessment requires faculty to evaluate their student learning, and faculty need

training to conduct outcomes assessment in a meaningful way.

This concern was echoed by one of the Academic Senate Presidents interviewed.

Training in assessment practices is missing from the preparation of community college

instructors, and new faculty are also unprepared for SLO practices. Patrick, a Senate President

detailed:

> My concern is, and has been, that we have faculty, or experts in their field, but they have not gone to ed[ucation] programs. They have not been, in the best sense of the word, indoctrinated in educational programs about the importance of assessment and the practices of assessment…. Many of our graduates are coming into adjunct positions… and they're not receiving an adequate education outside of their discipline in terms of assessment practices in their programs.

This faculty leader has identified a gap in his faculty readiness to conduct SLO assessment. He

recognized the importance and a specific need for assessment methodology professional

development. It seems clear that while colleges are developing their process for completing the

assessment, they also need to provide the corresponding training for all parts associated with the assessment cycle. Additionally, there is a strong need for understanding how to measure student learning, specifically multiple assessment measures, rubrics, and various tools of assessments.

Support from a college research office is another important component in supporting faculty with assessment. Lisa, one of the CIOs, also reinforced the lack of faculty training in assessment measures. She described, "Analyzing the data – you can't do that without the training piece and teaching people how to do that. That is where people are getting stuck now…. You need a researcher or somebody that is comfortable to help them…" This administrator highlighted the gap in faculty training for completing SLO assessment. However, she also indicated the need for resources such as a college researcher to assist faculty in assessment measurement and methodology. Researchers are trained in data collection methods and evaluation of results. They can assist faculty both by providing professional development in assessment methodology and in understanding SLO data.

Furthermore, the NILOA Case Study for LaGuardia Community College documented the college's ePortfolio initiative, which is a central feature of their outcomes assessment process. ePortfolios provide a way for collecting large amounts of student artifacts and organizing them for faculty review and assessment. The college's Center for Teaching and Learning (CTL) plays a critical role in supporting college assessment efforts and ePortfolio initiative. The case study highlighted the CTL's role in coordinating:

> The ePortfolio initiative by leading faculty seminars on ePortfolio technology and integrative learning; providing workshops on outcomes assessment; training peer mentors to support ePortfolio courses; and managing ePortfolio technology, data, and artifacts. The CTL connects these assessment-focused efforts to a broader array of programs focused on learning, teaching, and scholarship.

CTL provides various professional development opportunities such as year-long faculty seminars, a Carnegie Seminar on the Scholarship of Teaching and Learning, and faculty mini-grants designed to help programs implement action plans identified from the program review process. The ePortfolio initiative allows the collection of multiple measures of student learning, and the CTL provides support for both ePortoflios and SLO assessment, which helps build a campus culture focused on teaching and learning.

Multiple measures of student learning are also an important part of authentic SLO assessment. According to the Nine Principles for Assessing Student Learning from the Assessment Commons Resources:

> Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time. Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration.

Multiple measures, including performance that demonstrates learning, provides a fuller, more accurate indicator of learning. These types of measurements reveal various elements of student learning and provide richer data for outcomes assessment, which leads to a more authentic picture of student achievement.

The 2009 POWER Award for SLO Mentor of the Year was awarded to an SLO Coordinator at Feather River College who "worked directly with each faculty member to insure that outcomes were measurable, included higher levels of cognitive thinking, and were of significance to student learning. She also assisted faculty in developing outcomes and assessment strategies that addressed affective learning." This SLO Coordinator focused on training faculty on using multiple methods of assessment in an effort to capture richer data about student

learning. She not only served as a mentor but also empowered faculty to help assist other faculty

members. Moreover, she focused on sharing various types of assessment methods and strategies

for measuring student learning.

One of the Senate Presidents interviewed shared his college initiative of using signature

assignments for a more authentic, demonstrable measure of student learning. Patrick explained,

"We've tried to focus, the last year or two, on signature assignments and pedagogy and

instructional practices, and tried to host Flex sessions and workshops and bring in speakers to

highlight the importance of effective assessment, authentic assessment." Signature assignments

are key activities used to assess students' ability to demonstrate proficiencies and the ability to

perform the learning outcomes. Similar to LaGuardia, this college is exploring using the

ePortfolio platform for collecting and assessing student signature assignments. Professional

development has evolved from supporting faculty in developing SLOs to methods of authentic

assessment and instructional practices.

The 2009 POWER Award Winner for Faculty Development Programs in SLO

Assessment at Cosumnes River College was selected because of its Center for the Advancement

of Staff and Student Learning (CASSL) that provides professional development in assessment

methodology and pedagogy for faculty. A couple of the Center's goals are to:

> Provide a place where faculty can share their teaching expertise and research interests
> and experiences, including the utilization of student learning outcomes and other tools to
> improve learning; to inform faculty of upcoming trainings related to teaching
> effectiveness and scholarship of teaching, including opportunities to enhance their ability
> to conduct classroom-based research; to provide a place for faculty to discuss various
> issues related to teaching and to explore strategies to enhance student learning, including
> the utilization of student learning outcomes.

At this college, a strong professional development program with assessment-related activities

coupled with training in teaching methodology was a successful model for supporting faculty in

implementing SLO assessment. The Center offers SLO Institutes and Dialogue workshops designed to assist faculty in documenting assessment efforts and conducting inter-department dialogue about results. CASSL Innovation Grants provide small honoraria to faculty involved in educational or classroom-based research. In CASSL Seminars, faculty meet over the course of several weeks to explore teaching and learning best practices in the various disciplines. Regional professional development opportunities are sponsored as well through the CASSL Colloquium: an annual daylong event brings together college faculty from the greater Sacramento Region to discuss topics around the scholarship of teaching and learning. These activities are directly related to supporting outcomes assessment while also connected to the broader framework of improving teaching and learning.

Faculty and Administrator Attitudes Toward SLO Assessment and Professional Development

The survey collected data about perceptions of the importance of SLO assessment, institutional motivations for engaging in these practices, and implementation and level of involvement in SLO professional development by various stakeholders. The individual survey items were analyzed through exploratory factor analysis to identify underlying constructs. Several constructs were identified through these analyses. An overarching construct related to the importance respondents perceived for SLO assessment had a Cronbach's alpha of 0.833. This factor measured the role SLO assessment plays in institutional effectiveness. Table 4.4 details the factor loadings of survey items for this factor.

Table 4.4
Exploratory Factor Analysis Results for Perceived Importance of SLO Assessment Measure

Item	Loading
Documenting SLO assessment should be an integral element to any regional or department-specific accreditation criteria.	0.820
Resources dedicated to SLO assessment activities are investments in our long-term institutional effectiveness.	0.817
SLO assessment efforts to evaluate the effectiveness of our institution are worthwhile.	0.778
SLO assessment is a fad that will likely be replaced by another area of emphasis.	0.666
SLO assessment plays an important role in improving our institution.	0.520
SLO assessment will be an important component of regional accreditation well into the future.	0.519
SLO assessment at my institution is, or would be, strengthened by active participation by faculty members.	0.466
SLO assessment is not an important component of my job responsibilities.	0.380

Note: Cronbach's alpha = 0.833

The motivation factor (α = .791) measured the motivation for participating in SLO assessment. This factor identified the extent to which assessment is motivated by internal interests in quality improvement or a response to external mandates such as accreditation. The factor loadings of survey items for this factor are outlined in Table 4.5.

Table 4.5
Exploratory Factor Analysis Results for Perceived Motivation for SLO Assessment Measure

Item	Loading
Improvement of programs and services is the primary motivation for SLO assessment on our campus.	0.761
The results of our SLO assessment process seem to be more important to outside stakeholders than to our campus community.	0.689
If there were not outside requirements or mandates, our commitment to SLO assessment activities would probably diminish.	0.687
We mainly conduct SLO assessment activities because of accreditation requirements.	0.612
SLO assessment is a natural extension of the ideals of investigation and inquiry within the institution.	0.612
Change happens so slowly at our institution that it's hard to specify what changes are based on SLO assessment.	0.444

Note: Cronbach's alpha = 0.791

An overarching construct related to the implementation of SLO professional development

had a Cronbach's alpha of 0.871. It measured the extent to which SLO training is developed,

offered, and sustained. Table 4.6 indicates the factor loadings of survey items for this factor.

Table 4.6
Exploratory Factor Analysis Results for Implementation of SLO Assessment Professional
Development Measure

Item	Loading
Professional development for SLO assessment is a continual process at our institution.	0.853
Our institution has a systematic process of professional development for SLO assessment.	0.775
The benefits of professional development for SLO assessment are clearly not worth the resources we invest in the process.	0.757
Professional development for SLO assessment activities throughout our institution are not very interrelated.	0.743
Faculty, staff, and administrators are actively involved in professional development for SLO assessment.	0.663
Professional development for SLO assessment has been customized for our institution.	0.568
Our institution is committed to allocating resources for professional development for SLO assessment.	0.559
A variety of SLO assessment professional development opportunities is offered at our institution.	0.556
Administrative responsibility for professional development for SLO assessment has been assigned at our institution.	0.406

Note: Cronbach's alpha = 0.871

The previous factor focused on the implementation of SLO professional development,

and this factor gauged the personal level of involvement in that professional development. The

level of involvement factor (α= .814) measured how stakeholders perceive their personal

involvement in the development and implementation of SLO professional development. The

factor loadings of survey items for this factor are detailed in Table 4.7.

Table 4.7

Exploratory Factor Analysis Results for Level of Involvement with SLO Assessment Professional Development Measure

Item	Loading
I have participated in planning professional development for SLO assessment at my institution.	0.897
I have helped lead or conduct professional development for SLO assessment at my institution.	0.845
I am highly involved in professional development opportunities for SLO assessment at my institution.	0.656
I am not familiar with professional development for SLO assessment at my institution.	0.550
I have engaged in specific professional development activities that have prepared me for my involvement in SLO assessment.	0.519
I am not personally aware of benefits of professional development for SLO assessment.	0.352

Note: Cronbach's alpha = 0.814

A one-way analysis of covariance (ANCOVA) was run for each of the factors to examine differences across respondents' positions: SLO Coordinators (faculty), Academic Senate Presidents (faculty), and CIOs (administrators). Covariates included years of experience in respondent's current position, years of experience with SLO assessment, and college size defined by enrollment (FTES). For all the ANCOVA analysis, the three covariates were not statistically significant. P-values of .05 were used to determine statistical significance for the Importance, Motivation, Implementation, and Involvement factors.

CIOs Place Greater Importance on and Have Stronger Institutional Motivation for SLO Assessment

Importance of SLO assessment. Accounting for covariates, significant differences across the three positions emerged with respect to the importance participants placed on SLO assessment ($F(2,111) = 3.611, p = .030$). A post hoc test with Bonferroni adjustment indicated a statistically significant difference in mean scores of perceived importance of SLO assessment between Academic Senate Presidents ($M=3.687, SD=.113$) and CIOs ($M=4.172, SD=.142$), $p =$

.045. The only significant difference in mean scores is between Academic Senate Presidents and

CIOs. Pairwise comparisons between groups showed that CIOs had a higher mean score for

perceived importance of SLO assessment. As academic administrators, CIOs are charged with

overseeing SLO assessment progress, which corresponds to their higher rating of importance of

SLO assessment.

Table 4.8
Analysis of Covariance for Importance of SLO Assessment

Source	SS	df	MS	F	p
Position	2.783	2	1.391	3.611	.030
Years of Experience	.236	1	.236	.612	.436
Years of Involvement in SLOs	.300	1	.300	.778	.380
College Size	.109	1	.109	.283	.596
Error	42.777	111	.385		
Total	1865.742	117			

Table 4.9
Pairwise Comparisons of Importance of SLO Assessment by College Position

Group	Mean	Adjusted Mean	SD	Adjusted Mean Differences		
				1.	2.	3.
1. SLO Coordinator	3.961	3.998	.530	--	.087	.934
2. Senate President	3.604	3.687	.781	.087	--	.045*
3. CIO	4.267	4.172	.545	.934	.045*	--

* Significant at the *p* < .05 level

This statistical difference in means between faculty and administrators about the

importance of SLO assessment is reinforced in the qualitative analysis of challenges to

assessment. One of the challenges (discussed in more detail later in this chapter) is a faculty

perception of lack of meaning and value in SLO assessment, which two-thirds of interview

participants discussed. Carla, one of the long-time SLO Coordinators, described her issues with

the ACCJC standards mandating SLO assessment:

ACCJC standards are a moving target. They keep changing every year, so it's really frustrating. I think they imagine that they are nudging people along, but I don't know, I think it's gotten to be ludicrous….It's ridiculous. They [ACCJC Commission] don't have information, no real evidence that these things [SLO assessment efforts] have made one bit of difference, even in other regions of the country where they've been used for much longer. I shudder at the amount of dollars and the number of hours that are being spent on this stuff. It could be spent on meaningful assessment of where we're going and what our students really need. It's got everybody totally burned out on it. The idea of what is the most important thing for your students to get out of your course, that's a good question. I think crafting SLOs was worthwhile, but now it's assessment run amok.

She expressed her concerns with the ACCJC requirements about SLO assessment that may not even have evidence that SLO assessment is an effective process. She described her frustration with colleges being held accountable to changing ACCJC standards related to SLO assessment. Carla continued to describe that she thinks her college would not conduct assessment in this way if SLOs were not in the standards. Rather, she outlined using other measures because "SLOs are not the only assessment game in town – thank goodness." Despite being an SLO Coordinator, she was unsure of its importance.

Contrastingly, CIOs had a higher mean score for perceived importance of SLO assessment in the quantitative data. One of the CIOs interviewed, Lisa, reinforced the difference of faculty and administrator perceptions of the importance of assessment. She explained:

I really do see the connection between student learning outcomes, accreditation, their goal of integrated planning, which is where accreditation is heading. As an administrator, I see how the changes that they [accreditation commission] make in the standards are helping us to improve our institutional efficiency and have conversations that are better. I still don't know that faculty are there…. I don't know that they actually see the connection between student learning outcomes. It's not that it made them teach better, or that they weren't doing it before, it's really just shaped how we talk about it and think about it. Faculty have always talked. They've always done a good job. It's just changing how we're talking about what they're doing.

Lisa admitted that she sees the connections between SLO assessment and college planning in her role as administrator. However, faculty may not have this global perspective of the college activities and their connections to accreditation. Lisa described faculty being interested and

discussing improvements to student learning, and that SLO assessment has formalized the framework of these discussions.

Motivation for SLO assessment. Accounting for the covariates in the ANCOVA, findings suggest significant differences in individuals' motivation for SLO assessment across position types ($F(2,107) = 3.296$, p = .041). A post hoc test with Bonferroni adjustment indicated that there was a statistically significant difference in mean scores of motivation for SLO assessment between Academic Senate Presidents (*M*=2.550, *SD*=.102) and CIOs (*M*=3.002, *SD*=.131), *p* = .040. This suggests that SLO Coordinators and CIOs have statistically similar mean scores on perceptions about institutional motivation for SLO assessment. CIOs have a higher internal motivation for SLO assessment activities versus external requirements such as accreditation.

Table 4.10
Analysis of Covariance for Motivation for SLO Assessment

Source	SS	df	MS	F	p
Position	2.078	2	1.039	3.296	.041
Years of Experience	.060	1	.060	.190	.663
Years of Involvement in SLOs	.436	1	.436	1.382	.242
College Size	.732	1	.732	2.321	.131
Error	33.740	107	.315		
Total	894.472	113			

Table 4.11
Pairwise Comparisons of Motivation for SLO Assessment by College Position

				Adjusted Mean Differences		
Group	Mean	Adjusted Mean	SD	1.	2.	3.
1. SLO Coordinator	2.736	2.775	.567	--	.252	.449
2. Senate President	2.549	2.550	.590	.252	--	.040*
3. CIO	2.994	3.002	.508	.449	.040*	--

* Significant at the *p* < .05 level

This quantitative finding connects to the qualitative data related to the challenge of participation in SLO activities simply to satisfy the accreditation standards. Carmen, one of the Academic Senate Presidents, described her college negotiating between motivations for assessment:

> We kind of had a carrot and a stick. We said here's the carrot, here are great examples that we said we can show you from other campuses about how faculty have used these [SLO assessments] in a productive way. But, at the same time, you have no choice; we realize accreditation is making us do this. You refuse to participate at the peril of the institution.

She recognized that her college approach to motivating faculty included both highlighting the benefits and purposes of assessment and explaining the consequences of not participating. This approach represented both an internal and external motivation for assessment, which demonstrates the possibility of faculty participating in SLO activities merely for compliance. While CIOs perceive outcomes assessment activities are connected to overall institutional improvement and effectiveness, there is a challenge of an increased focus on assessment contributing to a focus on compliance with accreditation requirements.

Implementation of SLO assessment professional development. Accounting for years of experience and institutional size, the results from the ANCOVA suggest significant differences across positions in how respondents perceive the implementation of SLO assessment professional development ($F(2,108) = 4.548$, $p = .013$). A post hoc test with Bonferroni adjustment indicated that there was a statistically significant difference in mean scores of implementation for SLO assessment professional development between Academic Senate Presidents ($M=3.141$, $SD=.128$) and CIOs ($M=3.813$, $SD=.161$) ($p = .010$). This suggests that SLO Coordinators and Academic Senate Presidents have similar mean scores on depth of implementation of SLO assessment professional development. Again, the only significant

difference in mean scores is between Academic Senate Presidents and CIOs. This factor

measured the extent to which SLO assessment professional development is actually

implemented.   Academic Senate Presidents rated lower availability and level of implementation

of professional development opportunities in contrast to CIOs. It is not surprising that SLO

Coordinators would perceive a higher level of implementation because SLO Coordinators are

most likely developing and leading professional development activities as part of their role and

job responsibilities.

Table 4.12
Analysis of Covariance for Implementation of SLO Assessment Professional Development

Source	SS	df	MS	F	p
Position	4.491	2	2.245	4.548	.013
Years of Experience	.142	1	.142	.288	.593
Years of Involvement in SLOs	.131	1	.131	.265	.608
College Size	.060	1	.060	.121	.729
Error	53.319	108	.494		
Total	1380.951	114			

Table 4.13
Pairwise Comparisons of Implementation of SLO Assessment Professional Development by College Position

				Adjusted Mean Differences		
Group	Mean	Adjusted Mean	SD	1.	2.	3.
1. SLO Coordinator	3.373	3.382	.696	--	.419	.087
2. Senate President	3.127	3.141	.753	.419	--	.010*
3. CIO	3.736	3.813	.582	.087	.010*	--

* Significant at the *p* < .05 level

Involvement in SLO assessment professional development. Respondents also differed

across positions in their average level of involvement in SLO assessment professional

development, net of covariates (F(2,108) = 19.600, *p* = .000). A post hoc test with Bonferroni

adjustment indicated that there was a statistically significant difference in mean scores of

involvement in SLO assessment professional development between SLO Coordinators (M=4.459, SD=.093) and both Academic Senate Presidents (M=3.614, SD=.120) (p = .000) and CIOs (M=3.725, SD=0.151) (p = .000). This suggests that SLO Coordinators report a higher level of involvement in SLO assessment professional development than Senate Presidents and CIOs. While CIOs rated a higher level of implementation of SLO professional development, they have a lower personal involvement in the training. This result is expected since SLO Coordinators are charged with providing leadership over assessment and most likely directly involved in developing and leading SLO professional development activities, which would result in a higher level of personal involvement.

As seen in the qualitative data, faculty drive SLO assessment efforts, which includes leading efforts to develop and assess SLOs. Faculty are directly responsible for SLOs in their courses and would have a higher level of involvement in professional development so they can be better trained to participate in the SLO cycle. I would have expected Academic Senate Presidents, as faculty, to have a higher mean score for this factor. Nevertheless, Senate Presidents may support SLO professional development efforts while not directly being involved in them. Additionally, as seen in the previous factor, Senate Presidents rated a lower level of SLO professional development activities, which may account for their lower personal level of involvement.

Table 4.14
Analysis of Covariance for Involvement in SLO Assessment Professional Development

Source	SS	df	MS	F	p
Position	16.934	2	8.467	19.600	.000
Years of Experience	.133	1	.133	.308	.580
Years of Involvement in SLOs	.752	1	.752	1.741	.190
College Size	.286	1	.286	.662	.418
Error	46.655	108	.432		
Total	1910.472	114			

Table 4.15
Pairwise Comparisons of Involvement in SLO Assessment Professional Development by College Position

Group	Mean	Adjusted Mean	SD	Adjusted Mean Differences		
				1.	2.	3.
1. SLO Coordinator	4.437	4.459	.558	--	.000*	.000*
2. Senate President	3.606	3.614	.828	.000*	--	1.000
3. CIO	3.684	3.725	.528	.000*	1.000	--

* Significant at the $p < .05$ level

Defining and Dealing with Challenges to SLO Assessment

SLO Coordinators and Senate Presidents Report Greater Need for Professional Development and Resources

The survey instrument included ten close-ended questions pertaining to challenges with SLO assessment. Based on the variables identified from the literature review of characteristics of meaningful assessment, the 10 items were then grouped according to the following categories of challenges:

- Lack of leadership;

- Lack of adequate resources;

- Lack of organizational culture for SLO assessment;

- Lack of understanding of SLO assessment; and

- Lack of adequate professional development.

I used the average scores for each subgroup of the challenge category for the ANCOVA analysis.

ANCOVA was run for each of the challenge subgroups categories to examine differences across respondents' positions: SLO Coordinators, Academic Senate Presidents, and CIOs. Covariates included years of experience in respondent's current position, years of experience with SLO assessment, and college size. For all the ANCOVA analysis, the three covariates were not statistically significant. P-values of .05 were used to determine statistical significance for the challenge categories.

There is no significant effect of college position on challenges related to Leadership, Organizational Culture, and Understanding of the SLO Assessment Cycle categories after controlling for years of experience in the position, years of experience with SLO assessment, and college size. However, there is a significant effect of position on the Resources and Professional Development categories after accounting for the covariates, $F(2,108) = 5.034$, $p = .008$ and $F(2,107) = 3.566$, $p = .032$ respectively.

For the Resources category, a post hoc test with Bonferroni adjustment indicated that there was a statistically significant difference in mean scores between CIOs ($M=2.282$, $SD=.244$) and both SLO Coordinators ($M=3.080$, $SD=.151$), $p = .023$ and Academic Senate Presidents ($M=3.320$, $SD=.193$), $p = .008$. This category measured availability of resources to support college SLO assessment activities. CIOs had the lowest mean scores, indicating that a lack of resources is not a challenge. In other words, SLO Coordinators and Academic Senate Presidents identified a significant need for additional resources to support outcomes assessment. As identified in the previous section, CIOs place greater importance on assessment yet do not recognize the importance of resources to support assessment efforts. Only one of the CIOs

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interviewed expressed the need for resources such as the institutional research office to support

faculty in assessment.

Table 4.16
Analysis of Covariance for Lack of Adequate Resources to Support SLO

Source	SS	df	MS	F	p
Position	11.366	2	5.683	5.034	.008
Years of Experience	.064	1	.064	.057	.812
Years of Involvement in SLOs	2.812	1	2.812	2.491	.117
College Size	.763	1	.763	.676	.413
Error	121.910	108	1.129		
Total	1153.000	114			

Table 4.17
Pairwise Comparisons of Lack of Adequate Resources to Support SLO by College Position

				Adjusted Mean Differences		
Group	Mean	Adjusted Mean	SD	1.	2.	3.
1. SLO Coordinator	3.094	3.080	1.165	--	.985	.023*
2. Senate President	3.293	3.320	1.031	.985	--	.008*
3. CIO	2.310	2.282	.967	.023*	.008*	--

* Significant at the $p < .05$ level

For Professional Development, a post hoc test with Bonferroni adjustment indicated that

there was a statistically significant difference between CIOs (*M*=2.335, *SD*=.201) and both SLO

Coordinators (*M*=2.942, *SD*=0.124), *p* = .042 and Academic Senate Presidents (*M*=3.015,

SD=.162), *p* = .050. This suggests that SLO Coordinators and Academic Senate presidents

report a higher need for professional development for SLO assessment than CIOs. As discussed

in the previous section, it seems contradictory that CIOs place a greater importance on SLOs but

do not identify a need for professional development to support faculty in assessment. The

qualitative data discussed previously in this chapter reinforces this finding of faculty reporting a

higher need for professional development. Almost half of the faculty interviewed expressed the

specific need for training in assessment practices and pedagogy to support faculty in completing

the assessment cycle to improve teaching and learning. Community college faculty are subject

experts, but many are not trained in instructional methodology or assessment measures.

Table 4.18
Analysis of Covariance for Lack of Adequate SLO-related Professional Development

Source	SS	df	MS	F	p
Position	5.489	2	2.744	3.566	.032
Years of Experience	2.760	1	2.760	3.586	.061
Years of Involvement in SLOs	2.484	1	2.484	3.227	.075
College Size	1.383	1	1.383	1.797	.183
Error	82.340	107	.770		
Total	996.688	113			

Table 4.19
Pairwise Comparisons pf Lack of Adequate SLO-related Professional Development by College Position

				Adjusted Mean Differences		
Group	Mean	Adjusted Mean	SD	1.	2.	3.
1. SLO Coordinator	2.939	2.942	.961	--	1.000	.042*
2. Senate President	3.012	3.015	.919	1.000	--	.050*
3. CIO	2.526	2.335	.892	.042*	.050*	--

* Significant at the *p* < .05 level

Increased Emphasis on SLO Assessment Leads to Compliance with Accreditation

Standards and Contributes to Fears of Increased Accountability

ACCJC Standards require community colleges to assess their educational quality and use

results to improve institutional effectiveness. The overall purpose of SLO assessment is to

improve teaching and learning through an ongoing, systematic, documented process. Faculty

regularly reflect on their courses, evaluate their teaching, and make adjustments; outcomes

assessment formalizes this process. However, updated accreditation standards that place a

stronger emphasis on SLO assessment have created a focus on meeting the standards with broad

compliance rather than on the quality of assessments. This culture of heightened accountability

creates a fear of assessment results being tied to individual faculty performance evaluation.

Just under half of interview participants described the challenge of solely focusing on

complying with the accreditation standards for SLO implementation rather than for improving

teaching and learning. Carla, one of the SLO Coordinators commented:

> That's a whole waste of time and that's a lot of time, a lot of money that's being spent on these [assessment] databases. Data, data everywhere; not a thought to think. If we had time to sit down and actually discuss, that would be useful, but so much time and energy is being put into collecting data which is not necessarily that meaningful. It has pushed out time for conversation about things…. As far as I'm concerned, we didn't get to real heart of it. We used to have those conversations. Now, it's all about, "Are all the boxes checked?" and it's ridiculous because those checkboxes [in the database] don't mean a thing.

She expressed her frustration with her college's focus on entering assessment data into a

database in order to complete assessment. Conversation about the data and results were not

happening, but only a focus on merely entering data and checking off boxes to comply with the

SLO-related accreditation standards. This theme was common among five other colleges from

the interviews. They described challenges in dealing with unclear accreditation requirements,

faculty participating in the SLO cycle to satisfy a mandate rather than to enhance teaching and

learning, and faculty documenting assessment efforts without using the results for improvements.

One Academic Senate President, Patrick, described the challenge of meeting

accreditation standards because of the magnitude of implementing SLO assessment and the

impact it has had on colleges. He articulated:

> This is a challenging initiative. I would argue that no other initiative across the [community college] system is as problematic and as challenging as student learning outcome assessment. It is so complex and it involves so many constituencies and it's so time intensive, and ultimately I don't think any accreditor or any college administration or anyone completely understands or understood just how much time this process would take. And how much it would affect a smaller number of faculty who have to be consumed by this process, whether its department shares SLO Coordinators or others. I

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don't think they [accrediting commission] really had a full understanding of how this would play out in 2002 when they said go forth and assess.

The requirement for SLO assessment was introduced into the ACCJC standards in 2002. Colleges were required to be at the proficiency level of SLO implementation in 2012. Connected to Carla's remarks cited in the previous paragraph, in order to meet the standard, colleges focus on meeting the standard with assessment completion rates rather than unpacking the meaning behind SLO assessment and using results to identify improvements to educational quality.

Faculty interviewed expressed additional concerns about using SLO assessment data as an indicator of faculty performance during an evaluation. SLO Coordinators and Senate Presidents drew a parallel between outcomes assessment and *No Child Left Behind*, which made standardized testing a primary measure of school quality. Danielle, a former SLO Coordinator, noted:

> I don't know 100% that this is the best way to assess students. In my own opinion, I see a lot of No Child Left Behind trickling up and eventually, probably tenure retention tied straight to outcomes and that scares me, because I don't think that's where we need to go in education…. That it's just one more thing for administration and the state and just to hold us accountable for things that really don't tell them what students are learning and how students are engaged in the classroom.

This participant described how she was complying with the accreditation standards in her former role as SLO Coordinator, yet she did not fully believe in the merits of SLO assessment. Despite her role in providing leadership of SLOs, she did not feel that it was the most effective ways to assess learning. She described the fear of increased accountability and tying SLO results to faculty evaluation and tenure.

This concern was repeated by a current Academic Senate President, Glenn. When asked if SLO assessment were not in the standards would your college conduct assessment in this way or use other measures, Glenn replied:

> If they had never been put in the standards, I would say no way in hell. Now that they're already in the standards and we started doing them, some of us would be happy to see them go by the wayside, but enough people probably are finding value in them that it might continue. Part of the problem that I've always had…. The way they were presented it really sounded like issues of accountability - you're not doing your job, and so on. It just struck me as No Child Left Behind-ish. There are states where if your students don't hit the standardized test, you don't get a raise or your school doesn't get more money or whatever. To me, that's just the backwards way to go about it. I'm a bit frustrated by it, and I'd be happy if they went away, but they're not going away so ... It's one of those wishful thinkings.

While assessment has been around for many years and some faculty have embraced them, this faculty leader described his frustration with the initial presentation of SLO assessment. He related it to *No Child Left Behind* and the emphasis on increased accountability. Glenn drew parallels from *NCLB*'s focus on high-stakes testing and data-driven decision making with accreditation's emphasis on improving institutional effectiveness through SLO data. It seems clear that faculty fear using testing and accountability as the only strategy for improving educational quality.

Another Academic Senate President, Karen, talked about how faculty at her college fear assessment results will be used against them. Karen explained, "The big fear is, is it's going to come back and be some sort of an evaluative tool against faculty. That's their biggest fear. This is like 1984, it's all coming down, and this is how they're going to get us." Her reference to 1984 highlights the concern of increased accountability with "Big Brother" watching over everyone. This connects to the fear that assessment will be boiled down into a number, and faculty will be personally evaluated based on their students' achievement of SLOs.

The concern about evaluating faculty based on SLO results was also expressed as a challenge in the survey. In response to an open-ended question, one respondent described:

> The initial resistance to institutionalizing SLOs was supported by the faculty union, but it was gradually changed to full acceptance and cooperation. The fear of linking faculty evaluations to SLOs was a major obstacle.

The union at this college initially resisted SLO implementation but ultimately accepted it. A major barrier was connecting outcomes data to faculty evaluations. The respondent described addressing this challenge through continuous dialogue on the proper interpretation and use of SLO data, which has diffused the fear associated with the role of SLOs and faculty evaluations. A couple other respondents described negotiations about the faculty contract language detailing participation in the SLO cycle and connections to evaluation. One Senate President interviewed described how her college's contract language includes a point that faculty are evaluated based on participating in the SLO cycle and not on the basis of assessment data.

Faculty Perceive a Lack of Meaning and Value in SLO Assessment

Another challenge to assessment is conducting meaningful assessments that lead to data to inform faculty in making improvements to teaching and learning. Because of the challenge of focusing on compliance described earlier, faculty who are participating in assessment comply by conducting an assessment but do not analyze the results nor identify changes that lead to improvements. There is an additional challenge of faculty buy-in to SLO assessment, and some faculty may not participate in the cycle at all. Some resist assessment because they view it as extra work or do not see the value to SLO assessment. This uneven participation is a challenge because the purpose of outcomes assessment is to improve student learning and ultimately institutional effectiveness, which necessitates the widespread participation of faculty in this process.

Two-thirds of interview participants discussed faculty perceiving a lack of meaning and

value in assessment. In response to a question about barriers to assessment, Carmen, a Senate

President, described:

> Getting an authentic assessment has been challenging for many faculty, but I think [if]
> you put a group of our faculty in a room together and they are going to start talking about
> teaching and learning. Naturally. It's so interesting, because they are talking about SLOs,
> but as soon as you say the word SLO, it changes everything. It just changes the whole
> dynamic. I've been trying to figure out what is that. They enjoy talking about teaching
> and learning; they agonize over their assessments; they talk to each other almost daily
> about what's going on their classrooms and how things worked well or didn't work well.
> The big ugly nasty piece is making them write it in [the assessment database].

Carmen outlined the challenge of faculty seeing the meaning behind SLO assessment. She

referred to not getting authentic assessments that help faculty identify what improvements to

teaching and learning can be made. One of the ways to address this concern is to use what

Carmen described as both a carrot and a stick. The college's upcoming accreditation visit serves

as the stick while the approach to showcasing how departments have gathered results to make

positive changes in student learning is the carrot to SLO assessment. When asked about advice

for other community college faculty, she continued:

> For me, the big thing is I really wish I could help people divorce the term SLO from what
> they intuitively love doing anyway. I don't know where that disconnect comes from. It's
> really the exception when we have a colleague who doesn't care about their students
> learning and what they're doing in the classroom and making it better. It's almost like you
> flip a switch when you bring the term SLO into the conversation. For some reason if I
> could help people mentally get passed that ... I don't know! … SLOs needs a marketing
> makeover.

This faculty leader detailed how the term "SLOs" creates a reaction in her faculty that leads to

resistance even though they are interested in and already discussing ways to improve teaching

and learning. Because SLO assessment was introduced through an ACCJC mandate with high-

stakes consequences of accreditation sanctions, there was faculty resistance. The concept of

SLOs began to carry a negative connotation associated with the aversion to assessment and the

anxiety of its purposes. A couple of interview participants expressed their faculty describing

SLOs as "evil."

A perceived lack of meaning and value in SLO assessment contributes to a lack of faculty

participation. In the open-ended survey question related to challenges, 39% (46 of 117

respondents) identified a lack of faculty participation and buy-in to the assessment process. One

respondent commented, "Too many faculty don't want to do it, think it's a lot of extra work, and

complain loudly about it." Another explained, "Comprehensive faculty 'buy in' has been the

single greatest challenge. Many feel like they are being asked to do more and with less, which

creates discomfort and discord." Faculty participation at these campuses is not widespread, and

assessment is seen as extra, uncompensated work. Since SLO assessment was added to

accreditation standards, outcomes assessment activities have been added to existing faculty

responsibilities. While faculty may regularly evaluate their teaching, the SLO cycle is a process

for documenting this reflection. However, this documentation is viewed as creating extra

paperwork rather than a way to improve student learning.

Since ACCJC standards have included assessment for over 10 years, resistance has

lessened. However, there are still some faculty who do not participate or submit SLO

assessments that meet the requirement, but do not identify improvements to educational quality.

Another survey respondent detailed:

> In the past and to a lesser degree currently, the major challenge has been faculty buy-in.
> Some faculty are on board and find it worthwhile, others perform the tasks because they
> must, but feel it [is] a waste of time, and there a few holdouts who don't submit reports or
> whose reports are below standards.

Despite some progress, this campus still experiences uneven participation. The motivation to

participate also varies from viewing assessment activities as a meaningful, helpful process to

simply complying without seeing a value in the process.

The interview responses further confirmed these comments. Nearly half of interview participants discussed uneven faculty participation. Christine, an SLO Coordinator, explained, "When you asked about SLOs, I'd say in the beginning, honestly, there was resistance to it by many. There were key people in faculty leadership roles I think that kind of viewed it as evil." She continued to explain that the focus has shifted and in the last two years, and faculty are participating. Prior to that time, faculty in leadership roles were not supportive, which affected faculty participation overall.

Patrick, one of the Academic Senate Presidents affirmed the challenge of uneven faculty participation at his college as well. He noted:

> Some of the other obstacles, frankly, are still the push against assessment. We have faculty, particularly veteran faculty who are still around, who vociferously argue that this is a meaningless activity and that there is no good that has come of it, and they don't see why we keep pouring money into it, and are resistant.

Despite years of college assessment activities, some faculty still do not see the value to assessment and resist engaging. He mentioned a specific challenge with tenured, veteran faculty participating in assessment. Their lack of participation may be signaling to newer faculty that assessment activities are not important. This faculty leader commented that retirement for those veteran faculty is how his college will address this challenge. He did not see his college ever being able to engage those faculty in assessment but rather will wait until they are no longer at the college. It seems clear that faculty perceiving a lack of meaning in SLO assessment contributes to uneven faculty participation.

Establishing a Culture of Assessment, Inquiry, and Collaboration to Move Beyond Compliance

Community colleges can shift from a focus on compliance with accreditation standards by building a culture of assessment and inquiry. A college commitment to inquiry creates an

environment that fosters assessment. Collaboration between faculty and administrators is another key component because a college-wide commitment involves multiple stakeholders through a continuous cycle of assessment. Moreover, a culture of assessment includes space for faculty to conduct authentic assessments to gather meaningful results that directly tie to learning gaps and areas for improvement. Faculty need to feel safe to take risks and have open, honest conversations about assessment results.

Almost three-quarters of NILOA Resource Library and Assessment Commons documents emphasized a culture of assessment and inquiry. The NILOA Report on Using Assessment Results highlighting case studies of nine institutions explained how institutions are using accountability for institutional improvement. It detailed:

> Most of the case study institutions began doing their assessment work in response to requirements for accreditation. However, at some point, most made an important shift to intentionally embed assessment into their institutional culture and, specifically, their institutional planning and improvement efforts. Thus, assessment was no longer just to satisfy accreditation and accountability mandates.

SLO assessment started as an external mandate, but has become internalized by some institutions to foster a college-wide culture of inquiry and assessment. By making outcomes assessment an extension of institutional effectiveness activities, SLOs become embedded in the organizational culture of continuous improvement.

One of the Academic Senate Presidents, Patrick, echoed this need for moving beyond compliance with accreditation standards. He described his college effort to re-frame and re-brand assessment, "We wanted to move away from always saying that this is a requirement from ACCJC and try wherever possible to re-frame and talk about how this will improve student learning, and to bring in examples from other departments who have found positive results in their assessment practices." Rather than drawing on accreditation requirements as the impetus

for SLO activities, this college has shifted the focus to the meaning and purposes behind assessment. This approach reinforces a college culture of assessment and inquiry for improvement of learning, not just to meet external, accreditation mandates.

The theme of collaboration was highlighted during the follow-up interviews. Just under half of interview participants described the collaborative organizational culture at their colleges. Glenn, Senate President, remarked:

> Our structures now are very collaborative. We don't know always know what we're collaborating towards because of it being so new, but it is significant and it is genuine and the culture, which I would have said was toxic just three years ago, I think is actually healthy.

This faculty leader outlined a three-year span of time where the college had experienced reduction in full-time faculty positions and high administrative turnover. Changes in leadership led to moving faculty into interim administrative positions, which ultimately created increased workload for the remaining faculty. However, this Senate President still described the culture as collaborative. They had transitioned from a combative college culture in terms of faculty versus administration to one of collaboration between and among the groups.

At the administrator level, one of the CIOs, Sarah, also illustrated her campus culture of collaboration through committee membership. She explained:

> Curriculum Committees are designed very differently. In my college, the CIO is a voting member of Curriculum and is a co-chair with the faculty curriculum committee chair. That is one way to demonstrate how collegial our relationship is. Everyone recognizes that everyone has a role to play and that those conversations are important.

This college committee is co-chaired by both a faculty and administrator. Despite curriculum generally falling under the purview of faculty, the CIO not only has a seat at the table but also has a vote. She used this example to highlight the collaboration between the faulty and

administration and how it has been formally incorporated into one of the college's shared

governance committee structures.

Lisa, another CIO, explained how her college would still be conducting assessment if

SLOs were not in the standards. She described:

> We've got our SLO data, but it's only one tiny piece now. With the student success and equity initiatives that have come down in the last couple of years, we're now looking at other data. We're looking at completion rates, transfer rates, and persistence rates. We're looking at online versus on ground. We're looking at the equity of very specific populations and how are they completing courses versus others…. The [student learning] outcomes are becoming just one of the pieces of data instead of the only piece of data.

At her college, SLO assessment implementation started because of compliance with the

accreditation requirements. However, now other student success initiatives provide a fuller

picture of teaching and student learning. SLO assessment is a part of that picture, but not the

only element. The college looks at other data such as student success rates, persistence, and

equity gaps. SLO assessment is one of the drivers for collecting and analyzing data, but has also

prepared this college for evaluating other points of data. It seems clear that moving beyond a

culture of compliance to inquiry involves collaboration and use of various assessment data in

addition to SLO assessment.

Summary

In this chapter, I presented findings from a review of 96 documents, 145 survey

responses, and 15 interviews with SLO Coordinators, Academic Senate Presidents, and CIOs.

The chapter included information on promising practices for SLO assessment implementation

and professional development, differences in faculty and administrator attitudes toward

assessment, and challenges with assessment. Overall, the findings indicate that successful SLO

implementation is faculty-driven and connected to established college frameworks, such as

Program Review. Moreover, faculty need professional development that is targeted to improve

their ability to conduct meaningful SLO assessment. While CIOs perceive a higher importance

and motivation for SLO assessment and implementation of SLO assessment-related professional

development, SLO Coordinators and Academic Senate Presidents indicate a higher need for

resources and professional development to support outcomes assessment. Colleges face a lack of

faculty participation in the SLO cycle and can work to foster a culture of assessment and inquiry.

The next chapter will discuss how the findings connect to existing literature and will outline the

recommendations based on the findings noted.

CHAPTER FIVE: DISCUSSION AND RECOMMENDATIONS

The purpose of this study was to explore student learning outcome (SLO) assessment implementation and related professional development activities in California community colleges. The Accrediting Commission of Community and Junior Colleges (ACCJC) introduced SLO assessment into the 2002 accreditation standards. In 2012, colleges were expected to demonstrate they were at the Proficiency Level of Implementation. Through document analysis of promising practices for SLO assessment and ACCJC College Status Reports on SLO Implementation, surveys, and interviews with faculty leaders and college administrators, I gathered both quantitative and qualitative data that led to key knowledge areas from which I have identified recommendations for CA community colleges.

This study contributes to the limited research on SLO assessment implementation in California community colleges. It focuses on the perspectives of SLO Coordinators, Academic Senate Presidents, and Chief Instructional Officers (CIOs) across the 112 community colleges. Additionally, the study begins to fill in the literature gap of professional development efforts related to SLO assessment and provides data collection instruments that can be used in future research.

In this final chapter, I discuss recommendations that come from my research findings. The recommendations are organized around themes that emerged from the findings: promising practices for SLO assessment and professional development, faculty and administrator attitudes toward assessment, and defining and dealing with challenges. Within each of these sections I discuss the conclusions that I have drawn from my research, its connections to the existing literature, and recommendations for community colleges. I then discuss additional findings,

limitations of the study, and opportunities for future research. The chapter concludes with an

overall conclusion of the project.

Discussion and Recommendations

In response to the ACCJC standards requiring student learning outcomes development

and assessment in 2002, the Academic Senate for California Community Colleges published

Guiding Principles for SLO Assessment (2010) as a resource for colleges developing local

assessment practices. This document is a key resource because, while the ACCJC standards

required SLO assessment, they did not specify how to implement it. The State Academic Senate

not only recognized the potential benefits of assessment but also that many California

community colleges were struggling with developing effective practices and processes. In 2008,

the Senate passed a resolution to provide guidance for colleges regarding best practices, which

resulted in the development of this document. In this section, I discuss my study's findings and

how they connect to existing literature, including the 11 Principles for Good Assessment Practice

for SLO Assessment developed by the Academic Senate for California Community Colleges.

Promising Practices for SLO Assessment and Professional Development

Faculty drive SLO assessment. The Academic Senate's purview includes curricular

matters, and the faculty play a primary role in curriculum development, which includes SLO

development, assessment, interpreting results, and identifying improvements (Beno, 2004;

Somerville, 2008; The Academic Senate for California Community Colleges, 2010). The first

principle in *Guiding Principles for SLO Assessment* indicates, "Faculty have the primary

responsibility for developing assessment tools and determining the uses of data that are collected,

and therefore faculty engagement and active involvement in SLO assessment is essential" (The

Academic Senate for California Community Colleges, 2010, p. 9). The importance of a faculty-

driven process was affirmed by almost half of the interview participants, who described a faculty-led process of SLO implementation at their colleges. This process includes faculty providing leadership over the components of the SLO cycle: defining outcomes; determining assessment methods to measure achievement of SLOs; analyzing assessment data; and identifying areas for improvement and action plans. Student learning outcomes are an integral part of curriculum, and assessment plays a significant role in enhancing teaching effectiveness and student success.

This finding supports the literature that describes the importance of a faculty-led SLO assessment process (Chaplot, 2010; Gallagher, 2008) and how faculty engagement, such as understanding assessment, participating in the SLO cycle, and sharing results, is critically important to a meaningful SLO assessment process (Somerville, 2008). Since faculty members drive the process of SLO assessment, their experiences can motivate more faculty to participate (Chaplot, 2010). One way of sharing experiences is showcasing faculty assessment efforts, processes, and results through a faculty panel or workshop. This method would allow faculty to highlight how they used assessment data to inform learning improvements. Some interview participants in Chaplot's (2010) study described showcasing faculty participation and results of SLO assessment. However, this approach can only be successful if it assumes faculty experiences are positive. If not, they could potentially drive away and discourage other faculty from participating. For example, one of the Senate Presidents, Patrick, described veteran faculty who argue that assessment is a meaningless activity, which could indicate to newer faculty that they do not need to participate.

SLO assessment is integral to program review and institutional planning. Colleges are accountable for improving effectiveness through Program Review, Institutional Planning, and

SLO assessment (Accrediting Commission for Community and Junior Colleges, 2011; Welsh & Metcalf, 2003).   Program Review is a systematic review of program effectiveness with the goal of improving programs and services; Planning involves setting goals to make these stated improvements. Both Program Review and Planning are part of a framework for institutional effectiveness. Almost 90% (50 of 57) of the College Status Reports on Student Learning Outcomes Implementation included a reference to connecting SLO assessment with program review and planning. The focus on aligning SLO efforts with institutional planning is in line with the existing literature that describes connecting SLO assessment with college strategic planning and college-wide priorities (Banta et al., 2004; Gallagher, 2008; C. Miles & Wilson, 2004).

This alignment of SLO assessment and existing college structures is echoed in Principle Three of the *Guiding Principles for SLO Assessment*, "SLOs and SLO assessment should be connected to the overall culture of the college through the college vision or values statement, program review processes, and college curriculum, planning, and budgeting processes" (The Academic Senate for California Community Colleges, 2010, p. 12). Connecting SLO efforts to Program Review not only streamlines the process but also connects assessment to resource requests and embeds efforts within an existing college structure rather than a stand-alone, disconnect effort. Moreover, SLO assessment provides an additional form of data – student achievement of learning outcomes – for Program Review and overall institutional effectiveness.

In Chaplot's (2010) study of a mid-sized CA community college's implementation of SLO assessment, interview participants identified both facilitators and inhibitors to assessment. One of the factors enabling assessment is "increasing the value through connection with and benefit to existing practices" (Chaplot, 2010, p. 38). Faculty were more likely to participate in

the SLO assessment cycle if they could see how it aligned with existing activities and goals, such as program review and planning. A quarter of the documents of promising practices for SLO assessment from the NILOA Resource Library, Assessment Commons Resources, and POWER Awards detailed the importance of aligning SLO assessment with institutional planning. Aligning SLO assessment to planning not only connects assessment with established processes but also demonstrates the link between assessment, planning, and resource allocation.

Faculty need professional development in assessment methodology and pedagogy. SLO assessment measures student learning at the course, program, or institutional level and is an indicator of overall college effectiveness and student success. Assessing student learning ultimately leads to improvements in teaching and learning. In order to gather these data about student learning, the SLO assessment cycle includes (1) defining the expected learning outcome, (2) determining the appropriate assessment method and conducing the assessment, (3) collecting, analyzing, and discussing assessment data, (4) identifying changes based on assessment results, and (5) implementing the changes.   Figure 5.1 illustrates the SLO assessment cycle that faculty engage in to measure student learning.
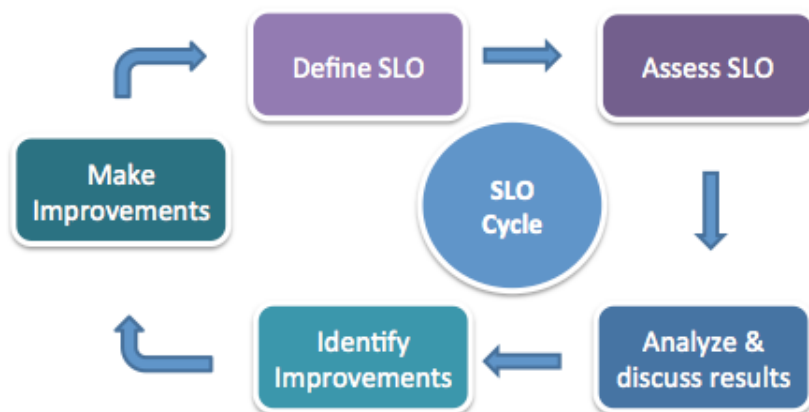

Figure 5.1 SLO Assessment Cycle

As described in the existing literature, community college faculty are experts in their content, but many lack adequate training to successfully complete the SLO assessment cycle (Friedlander & Serban, 2004; Kuh et al., 2014; Serban, 2004; Somerville, 2008). Faculty need professional development to understand and participate in the SLO cycle. Furthermore, faculty need training in both assessment methodology in order to effectively measure SLOs and in pedagogy so they are equipped to make improvements in teaching and learning.

Responses from the survey and the document analysis indicated that the format for existing SLO assessment training activities included a combination of professional development formats: all-college meetings, ongoing workshops, and professional development for targeted audiences (e.g. department faculty, new faculty, department chairs). Professional development for SLO assessment requires ongoing training through multiple venues. Because of this continuous need, ***colleges should connect SLO assessment efforts with Professional Development Committees/Centers on campus.*** A third of the interview participants discussed the need for professional development related to assessment methodology. Almost a third of the documents from the National Institute for Learning Outcomes Assessment (NILOA) Commons indicated that pedagogy was a key professional development topic offered.

Successful professional development programs are ongoing, long-term and include collaborative activities for learning about and sharing effective practices (Atkinson & Bolt, 2010; Boyle et al., 2005; Hochberg & Desimone, 2010; Wasburn & LaLopa, 2003). In this study, interviewees said most faculty have not been trained in assessment methodology to learn about the importance of assessment and practice of measuring student learning. They expressed the need for various methods of assessment: qualitative and quantitative, direct and indirect, summative and formative. Faculty also need assistance in developing assessment instruments

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that measure their intended learning outcomes and how to interpret the results. Survey respondents reported the need to train faculty in using valid and reliable assessment measures, in creating rubrics, and engaging in meaningful evaluations of assessment data. This need for professional development is in line with Gallagher's (2008) study where she concludes that "an aggressive system of professional development and training could prove useful in holding institutions accountable for student learning and providing documentation of their progress" (Gallagher, 2008, p. 107). Community colleges need a framework to develop and measure SLOs in a systematic, sustainable way and collaborating with Professional Development Centers can help shape this framework.

SLO assessment needs to be one of the topics embedded in professional development programs, rather than an unconnected, separate set of workshops. SLO Committees and Professional Development Committees need to work together to discuss training needs and collaborate to meet these needs. In the survey, almost 90% of respondents indicated that the SLO Coordinator primarily conducts SLO professional development at their colleges. These training efforts can be developed in tandem with the Professional Development Committee or Teaching and Learning Center so that they are connected to college-wide training efforts.

Faculty and Administrator Attitudes

CIOs place greater importance on SLO assessment but do not report a need for resources and professional development. In the survey, respondents indicated their level of agreement or disagreement with statements related to (1) importance of SLO assessment, (2) motivation for SLO assessment, (3) implementation of professional development for SLO assessment, and (4) personal level of involvement in SLO professional development. The factor representing the importance of SLO assessment measured the role SLO assessment plays in

institutional effectiveness. There was a statistically significant difference in mean scores between Academic Senate Presidents and CIOs. CIOs had the highest mean score, which indicates their higher perceived importance of SLO assessment. This finding is expected since CIOs are academic administrators charged both with overseeing SLO implementation and accountability reporting for external agencies such as accreditation reports.

The factor measuring motivation for assessment identified the extent to which assessment is motivated by internal interests for improving educational quality or a response to external mandates such as accreditation. A higher score indicates the more the respondent perceived institutional improvement as the primary motivation for SLO assessment. Again there was a statistically significant difference in mean scores between Senate Presidents and CIOs. CIOs have a higher internal motivation for SLO assessment activities over external requirements. The CIOs interviewed described college assessment processes connected to program review and planning. One of the CIOs, Lisa, confirmed that she sees the connections between SLO assessment and college planning in her role as administrator, but that the faculty may not understand this alignment. This finding is expected since the CIO position has a more global perspective of the college and how processes connect and feed into each other.

The factor representing implementation of professional development for SLO assessment measured the extent to which SLO training is developed, offered, and sustained. For this factor, there again was a statistically significant difference in mean scores between faculty and administrators: Senate Presidents and CIOs. Senate Presidents rated a lower level of implementation of professional development opportunities in contrast to CIOs. It is not surprising that CIOs would perceive a higher level of professional development implementation because it is in line with their perception of increased importance of SLO implementation. More

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than half of the Senate Presidents interviewed described their colleges' weak professional development for SLOs both in terms of limited offerings and limited faculty attendance and participation.

The factor for level of involvement measured how stakeholders perceive their personal involvement in the development and implementation of SLO professional development. For this factor, there was a statistically significant difference in mean scores of involvement in SLO assessment professional development between the SLO Coordinator and both Senate Presidents and CIOs. SLO Coordinators report a higher level of involvement in SLO assessment professional development over both Senate Presidents and CIOs. This result is expected because the SLO Coordinator position includes providing leadership over assessment activities. They are most likely directly involved in developing and leading SLO professional development, which would result in a higher level of personal involvement. Senate Presidents may support SLO professional development efforts while not directly being involved in them, especially if they are released from teaching assignments and would not need to submit assessment data. Additionally, Senate Presidents' lower rating of SLO professional development implementation corresponds to their lower level of personal involvement. While CIOs report a higher level of implementation of SLO assessment professional development, they may not participate personally in developing training if they are supporting a faculty-led process. They also may not need SLO professional development if they are not teaching and do not have students to assess.

Based on quantitative analysis, there was an inverse relationship in the importance and implementation of SLO assessment and professional development and the resources needed to support SLO assessment according to CIOs. As administrators, CIOs recognized the importance of SLO assessment, but did not recognize the need for adequate resources and professional

development to support SLO assessment efforts. In Chaplot's (2010) study identifying facilitators and inhibitors to assessment, one of the inhibitors to assessment is the "lack of administrative foresight and inadequate resources" (Chaplot, 2010, p. 38). Successful SLO implementation includes appropriate and consistent resources such as release time for an SLO Coordinator and/or a faculty team and support from the institutional research office. Participants indicated that "administration needed to build value to the process by publicly and consistently giving it a high priority and supporting that endorsement by allocating appropriate resources" (Chaplot, 2010, p. 39). A reduction in resources can communicate declining support and thus lessened importance of SLO assessment.

Engagement of community college CIOs is also critically important to meaningful SLO practices because "they position the importance of assessment as an institutional priority and provide the necessary personnel and financial resources to manage the work of assessment" (Somerville, 2008, p. 115). CIOs understand the importance of SLO assessment and are in the position to support assessment activities with the necessary resources. Long's (2008) study identified differences in what faculty and administrators consider to be important for successful implementation of SLO assessment. Faculty recognized the need for broad engagement from across the college and support in the form of funding for assessment software, training supplies, and research office staff. Administrators described broader issues such as leadership that supports assessment and the need for human resources support. Moreover, administrators clearly noted the larger context for assessment activities and the need for demonstrating accountability for meeting accreditation standards. This study confirms the literature describing the difference in faculty and administrator perceptions of SLO assessment.

In order to address this incongruity, ***colleges should align priorities of SLO assessment and related professional development with the appropriate resources and training.*** Principle Nine from the *Guiding Principles for SLO Assessment* describes, "Effective outcomes assessment requires a college commitment of sufficient staff and resources" (The Academic Senate for California Community Colleges, 2010, p. 22). Welsh & Metcalf's (2003) study revealed statistically significant differences of faculty and administrator attitudes toward the importance of institutional effectiveness activities. They concluded:

> If either faculty or administrators do not recognize the importance of institutional effectiveness initiatives for institutional improvement and self-knowledge, it is unlikely that institutional effectiveness initiatives will succeed in improving either the operation or stature of higher education in the United States in any enduring way (Welsh & Metcalf, 2003, p. 463).

The findings in this study also indicated differences in faculty and administer perceptions toward SLO assessment implementation and professional development. Faculty have a primary responsibility for assessment efforts but cannot meet this responsibility without adequate resources and support. CIOs are charged with reporting on meeting accreditation standards and SLO assessment implementation, yet they do not recognize the need for increased SLO resources and professional development. There is a disconnect in the importance of SLO assessment and the resources needed to support the efforts.

Defining and Dealing with Challenges

Increased emphasis on SLO assessment leads to compliance with standards and fears of increased accountability. SLO assessment was required through accreditation standards, which created a top-down, mandated approach that was imposed on colleges. Forty percent of the interview participants described their colleges' challenge of focusing on compliance with the accreditation standards rather than using assessment to improve teaching

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and learning.   Principle Ten of the *Guiding Principles for SLO Assessment* emphasizes, "SLO

assessment of student learning outcomes is a process that is separate from faculty evaluation"

(The Academic Senate for California Community Colleges, 2010, p. 24). The State Academic

Senate takes a clear stance in separating SLO assessment data from the faculty evaluation

process. If assessment data is used as a basis for evaluating a faculty member's performance, the

assessment process may not be as authentic for fear of personal accountability.

The State Academic Senate recognizes the potential consequences of tying faculty

assessment data with faculty evaluation. This type of direct connection would create a high-

stakes environment of assessment similar to *No Child Left Behind*'s emphasis on student testing

(Ravitch, 2010). In Chaplot's (2010) study of SLO assessment implementation at a CA

community college, she identified a faculty concern that assessment results would be used in

faculty evaluations. Participants discussed fears of being evaluated based on outcomes data and

that this fear could translate into participating in assessment not with the goal of improving

learning, but with the goal of getting good assessment results. This approach could lead to

inauthentic assessment of student learning. Somerville's (2008) study identified trust as a

critically important factor that affects meaningful assessment of SLOs. One of the greatest fears

discussed in his study was using assessment data in a punitive way against faculty. SLO

assessment practices must be clearly explained, including the purpose of assessment and the use

of assessment results to inform teaching and learning improvements.

Meaningful SLO assessment involves using assessment results for improving teaching

and learning (Baker, Jankowski, Provezis, & Kinzie, 2012b; Banta et al., 2004; Banta & Blaich,

2010; Friedlander & Serban, 2004; Frye, 1999; Niebling, 2004; Seybert, 2002; Somerville,

2008), not using assessment data as a basis for faculty evaluation. In this study, both SLO

Coordinators and Senate Presidents expressed the faculty concern of increased accountability with changing ACCJC standards and fear of using assessment data when conducting faculty evaluation. Danielle, former SLO Coordinator, did not fully believe in the purposes of SLO assessment despite her role as Coordinator. She expressed the fear of increased accountability and attaching SLO results to faculty evaluation and tenure. Senate President Glenn drew parallels with *NCLB*'s focus on high-stakes testing and accreditation's emphasis on improving institutional effectiveness through SLO data.

Establishing a culture of assessment, inquiry, and collaboration to move beyond compliance. SLO assessment efforts are connected to community colleges' challenge to improve teaching, learning, and ultimately student achievement and success. For many students, community colleges are the gateway to higher education; however, roughly eight years after initial enrollment, only about one-third of students complete any degree or certificate (Bailey et al., 2005).   The California Community College Chancellor's Office reports that 41.7% of students who attempted transfer-level coursework actually transferred to a four-year institution in 2012. Regional accrediting commissions, such as the ACCJC, hold colleges accountable for improving institutional effectiveness through processes such as Program Review, Planning, and SLO assessment as detailed in Figure 5.2.
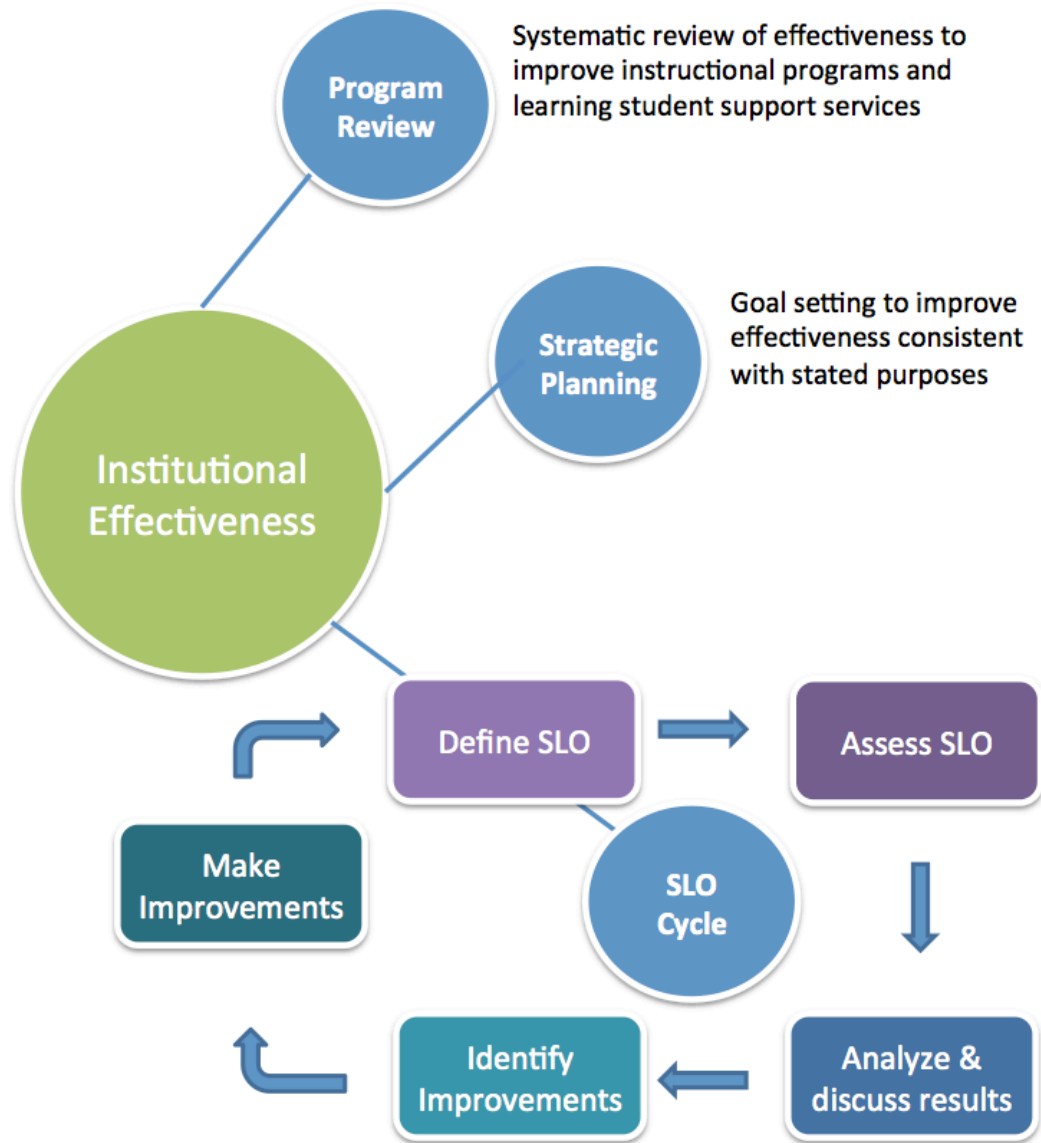
Figure 5.2 Institutional Effectiveness and SLO Assessment

These college-wide initiatives provide a framework for reviewing college effectiveness, setting goals, and making improvements to impact student success. The State Academic Senate's *Guiding Principles for SLO Assessment* describes in Principle Eleven, "Faculty should engage in SLO development and assessment not because it is a requirement for accreditation but rather because it is good professional practice that can benefit programs and students" (2010, p. 25). While the requirement for SLO assessment originated from accreditation standards,

outcomes assessment is ultimately a process for reviewing student learning to identify achievement gaps, make changes based on assessment, and improve student success rates. Moreover, "colleges and universities must cultivate an institutional culture that values gathering and using student outcomes data as an integral tool for fostering student success and increasing institutional effectiveness as contrasted with a compliance exercise" (Kuh et al., 2014, p. 35). Colleges need to meet accreditation standards, but can move away from compliance toward fostering a culture of inquiry and collaboration.

In order to move toward a culture of inquiry, *faculty need time, space, and opportunities for open discussions about student learning so they can improve student success in a safe environment.* Lisa, one of the CIOs, described her college administration's focus on creating a culture of safety around assessment results and that negative SLO data would not be connected to a negative evaluation. Almost three-quarters of NILOA Resource Library and Assessment Commons documents emphasized a culture of assessment and inquiry. Colleges in the case studies began assessment work because of accreditation requirements but shifted to embedding assessment into their organizational culture. Survey respondents described responding to assessment challenges by framing discussions around teaching and learning rather than mandates.

Since SLO assessment is so deeply connected to accreditation mandates, it creates a high-stakes process. However, inquiry and change take time. Learning organization theory reinforces continuous learning, inquiry, and collaboration for making improvements. In an educational context, learning organizations provide the opportunity for personal improvement through professional development, inquiry, reflection, collaboration, and a shared vision of institutional effectiveness. The findings in this study support Senge's (1990) learning organization theory

because of the need for faculty professional development for SLO assessment and community colleges to foster an institutional culture of assessment, inquiry, and collaboration. Participants in Chaplot's (2010) study of facilitators and inhibitors to SLO assessment discussed the value of a physical space that provides resources and a venue for dialogue and discussion about using SLOs to improve teaching and learning. Somerville (2008) identified the critical importance of spaces for dialogue, collaboration, and sharing among campus groups.

This study also confirms findings by others that successful SLO implementation requires resources, institutional support, professional development for assessment, and an organizational culture that fosters assessment and inquiry over compliance. Faculty need professional development to be equipped to identify learning outcomes and measure them appropriately. Reviewing SLO data also requires resources such as training and support from the research office. Discussing data can be a vulnerable activity; it necessitates time and space – in a safe environment – for discussions and collaboration with other faculty. Identifying improvement and implementing them may also require further professional development in pedagogy and instructional methodologies to address the learning gaps uncovered in the assessment cycle.

Because of limited resources to support instructional costs, community colleges rely heavily on adjunct (or temporary) faculty who play an increasingly significant role in teaching and student learning (Goldrick-Rab, 2010; Hurtado et al., 2012). In Fall 2014, adjunct faculty comprised 71% of the faculty in the CA community colleges ("California community colleges Chancellor's office - Data mart," 2015). Since assessment is a college-wide activity designed to improve overall institutional effectiveness, community colleges need to develop mechanisms to ensure all faculty are involved in the SLO assessment cycle. Professional development should be planned to include times when adjunct faculty can attend, as well as having additional

resources – SLO Coordinators, additional staff, online videos, etc. – to support them in assessment activities.

Additional Findings

This study's research questions focused on SLO implementation from the perspective of faculty leaders and administrators. Faculty voices were represented by Academic Senate Presidents and SLO Coordinators, both of whom serve as faculty leaders and are most likely full-time faculty at their colleges. Survey and interview participants also shared challenges and insights concerning adjunct faculty participation, which is beyond the scope of this study. Respondents described issues around involving adjunct faculty in assessment. Others outlined ways of incentivizing participation through paying adjunct faculty a stipend for attending SLO meetings and completing the SLO assessment cycle. Since many community colleges regularly employ adjunct faculty who often teach multiple courses at various campuses (Goldrick-Rab, 2010; Hurtado et al., 2012), this population deserves further study. Incentivizing participation may work for some colleges, but this method is dependent on college budgets and may not be sustainable.

While the ACCJC required all colleges to be at the Proficiency Level of Implementation for SLO assessment by Fall 2012, almost ten percent of colleges revealed they were not yet at this required level. Colleges either described themselves on the College Status Reports or through the interviews as transitioning overall from Development to Proficient on the ACCJC Rubric. Others indicated they were not at the Proficient level for all of the sample behavior statements rubric. One CIO, Matthew, explained, "I would put us behind schedule somewhat, on the cusp between Development and Proficiency…. We're doing everything, but we need to do it better. So, I wouldn't want to give us Proficiency." The SLO Cycle has many components:

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development, assessment, review and analysis of data, and identification of changes as a result of assessment. The cycle occurs in instructional areas at the course and program levels. Support areas of the college, such as student services and administrative services also participate. Institutional SLO assessment is another requirement. Outcomes assessment requires college-wide participation with both faculty and staff in the instructional and support services.

Since assessment is part of continuous improvement, it seems that there may always be areas that can be enhanced either through breadth (widespread participation) or depth (quality of participation in the SLO cycle). In Gallagher's (2008) study of the relationship between SLO assessment and strategic planning, she surveyed CIOs in 108 of the CA community colleges. They indicated that the main motivation for assessing SLOs was to improve student success and inform program improvement, followed closely by preparing documentation for accreditation reports. Improving overall student success is at the heart of college continuous improvement. Interviewees from this study described changing college processes for SLO assessment and program review because of what they learned from previous cycles. Depending on college needs, they made adjustments to the SLO cycle, types of professional development, or approaches to encouraging faculty involvement. This flexibility and commitment to continuous improvement contributes to successful SLO implementation.

Limitations of the Study

Though I included three types of data collection methods to yield both quantitative and qualitative data, this study is not without its limitations. First, this study focused on SLO assessment in community colleges restricted to California and the ACCJC accrediting body. It would be valuable to explore SLO assessment efforts from community colleges outside of California and a comparison of other regional accrediting bodies' standards. A couple interview

participants described national assessment conferences they have attended, and future research can include the national perspective or input from community colleges across the nation about SLO assessment efforts and implementation.

I also limited my sample population for this study to SLO Coordinators, Academic Senate Presidents, and Chief Instructional Officers. However, the structure of SLO assessment leadership can vary on each college and other positions can be included in a future study. For example, during the interviews, more than three-quarters of the participants mentioned the connection between SLO assessment efforts and the college research office. Some SLO Coordinators report to a Dean in the Institutional Effectiveness/Research Office. Other SLO Committees are co-chaired by the SLO Coordinator and an administrator in the Research Office. A future study can include staff from the Research Office in the research population.

While my survey was sent to all SLO Coordinators, Academic Senate Presidents, and CIOs for whom I could identify contact information, the interview portion of data collection involved self-selection. I relied on volunteers from the survey respondents for my pool of interview participants. While almost half of the survey respondents indicated an interest in participating in the follow-up interview, they were ultimately self-selecting themselves for participation and may not have fully representative views of the entire research population.

Opportunities for Future Research

This study revealed several anticipated findings, but also uncovered some unanticipated findings. Future research can look at the impact of adjunct participation in SLO assessment and ways of including their participation in addition to monetary compensation. A study that targets part-time faculty involved in SLO assessment can explore their motivations and barriers for participating. My study focused on faculty leaders discussing assessment implementation at

their college. However, a study that includes the perspective of the general faculty population can provide additional insights into assessment activities, needed assessment activities, and challenges.

Future research is needed for assessment efforts in both the service areas and administrative service areas of the community college. This study focused on the instructional services of the community college because faculty in this area of the college is directly responsible for developing and assessing course and program student learning outcomes to improve teaching and student learning. However, outcomes assessment, as required by the ACCJC, is a college-wide initiative.

Finally, this study focused primarily on SLO assessment implementation and on professional development activities related to SLO assessment. A future study can target the implementation and impact of specific types of SLO-related professional development activities. For example, a case study of types of professional development implemented, such as professional learning communities or structured teacher collaboration, can both describe the process for developing these types of professional development and its impact on SLO assessment efforts.

Conclusion

This research was conceived as an extension of my professional experience working as a community college administrator charged both with leadership over SLO assessment efforts and professional development activities. To address improved student success, I believe that SLO assessment is one method for reviewing and analyzing student achievement. Coupled with overall college institutional effectiveness frameworks, outcomes assessment is a way to measure

student learning, to document reflections about student achievement, and to outline action plans for improvement.

In conclusion, this chapter has provided recommendations to address the concerns and barriers mentioned by the faculty leaders and administrators who participated in the study. While administrators recognize the importance of SLO assessment and implementation, they do not identify a need for adequate resources and professional development to support these efforts. SLO assessment is about improving teaching and learning; SLO professional development should reflect that purpose. Moreover, faculty who are not trained in pedagogy and assessment methodology should have continuous training to meet these needs. Colleges should align SLO assessment efforts with campus Professional Development Committees or Teaching and Learning Centers. Outcomes assessment, as a college-wide initiative, requires widespread participation and appropriate resources such as assessment database software, research office expertise in data collection and analysis, and release time for SLO Coordinators or other assessment leaders. Ultimately, colleges should examine and define what SLO assessment means for their college – beyond accreditation requirements – to inform how SLOs will be implemented and what kind of assessment culture they want to foster.

APPENDIX A: SURVEY INSTRUMENT

Note: Items in brackets were not included in the actual survey. The survey questions were not numbered in the online survey.

o Circle bullets indicate to choose one option.
❒ Checkboxes indicate to check all options that apply.

The survey was created in Qualtrics and distributed via email.

[Demographics]

1. Please select the name of the California community college where you are currently employed. (This information will only be used by the researcher for tracking purposes and will only appear in the study in aggregate and/or under a pseudonym, such as College A.)

Drop down menu of college names

2. Which of the following best describes your main role at your campus?
   o Full-time Faculty – Please state subject taught _____
   o Part-time Faculty – Please state subject taught _____
   o Administrator – Please state position title _____
   o Staff – Please state position title _____
   o Other_____

3. How long have you been working in your current position at this campus?
   o 1-2 years
   o 3-5 years
   o 6-10 years
   o 11-15 years
   o 16-20 years
   o 21-25 years
   o More than 25 years

4. How long have you been involved with SLO assessment?
   o Less than 1 year
   o 1 year
   o 2 years
   o 3 years
   o 4 years
   o 5 or more years
   o I am not involved with SLO assessment. [If checked, insert skip logic to question 3A.]

5. What is your involvement in the SLO Assessment cycle at your campus?
    Check all that apply.
    ❒ SLO Coordinator or equivalent
    ❒ Chair/Co-Chair of SLO Committee or equivalent
    ❒ Academic Senate President
    ❒ Chief Instructional Officer
    ❒ Other _____

6. In your participation in SLO assessment, do you consider yourself to be:
    o Novice
    o Skilled/Intermediate
    o Expert

7. On average, during the Spring 2014 term, please indicate how often each type of professional development for SLO assessment was offered at your campus.

	Never	Once a term (semester or quarter)	Once a month	Twice a month	Three times a month	Weekly	I don't know
Workshops							
Small group trainings							
One-on-one trainings							

8. Please describe the <u>topics</u> included in professional development for SLO assessment provided at your institution.

9. Who primarily <u>leads or conducts</u> SLO assessment professional development for your institution? Check all that apply.
    ❒ SLO Coordinator or equivalent
    ❒ Administrator at your institution
    ❒ Faculty at your institution
    ❒ Faculty from **another** institution
    ❒ Administrator from **another** institution
    ❒ SLO Committee
    ❒ Academic Senate
    ❒ Consultant
    ❒ Other _____
    ❒ I don't know

[Perceived Importance of SLO Assessment]
Read each statement. Select the descriptor that matches how much you agree or disagree with each statement.

Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5

	1	2	3	4	5
10. SLO assessment plays an important role in improving our institution.	1	2	3	4	5
11. SLO assessment will be an important component of regional accreditation well into the future.	1	2	3	4	5
12. SLO assessment efforts to evaluate the effectiveness of our institution are worthwhile.	1	2	3	4	5
13. SLO assessment is not an important component of my job responsibilities.	1	2	3	4	5
14. At my institution, SLO assessment is primarily the responsibility of administrators.	1	2	3	4	5
15. SLO assessment is a fad that will likely be replaced by another area of emphasis.	1	2	3	4	5
16. SLO assessment at my institution is, or would be, strengthened by active participation by faculty members.	1	2	3	4	5
17. Resources dedicated to SLO assessment activities are investments in our long-term institutional effectiveness.	1	2	3	4	5
18. Documenting SLO assessment should be an integral element to any regional or department-specific accreditation criteria.	1	2	3	4	5

[Internal Versus External Motivation]
Read each statement. Select the descriptor that matches how much you agree or disagree with each statement.

Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5

	1	2	3	4	5
19. We mainly conduct SLO assessment activities because of accreditation requirements.	1	2	3	4	5
20. Improvements of programs and services is the primary motivation for SLO assessment on our campus.	1	2	3	4	5
21. If there were not outside requirements or mandates, our commitment to SLO assessment activities would probably diminish.	1	2	3	4	5

22. SLO assessment is a natural extension of the ideals of investigation and inquiry within the institution.	1	2	3	4	5
23. Change happens so slowly at our institution that it's hard to specify what changes are based on SLO assessment.	1	2	3	4	5
24. The results of our SLO assessment process seem to be more important to outside stakeholders than to our campus community.	1	2	3	4	5
25. Our institution offers such quality that SLO initiatives can do little to improve it.	1	2	3	4	5

[Depth of Implementation Index of Professional Development for SLO Assessment]
Read each statement. Select the descriptor that matches how much you agree or disagree with each statement.

Strongly Disagree	*Disagree*	*Neither Agree nor Disagree*	*Agree*	*Strongly Agree*
1	2	3	4	5

26. Our institution has a systematic process of professional development for SLO assessment.	1	2	3	4	5
27. Professional development for SLO assessment is a continual process at our institution.	1	2	3	4	5
28. Faculty, staff, and administrators are actively involved in professional development for SLO assessment.	1	2	3	4	5
29. Professional development for SLO assessment activities throughout our institution are not very interrelated.	1	2	3	4	5
30. Professional development for SLO assessment has been customized for our institution.	1	2	3	4	5
31. Our institution is committed to allocating resources for professional development for SLO assessment.	1	2	3	4	5
32. The benefits of professional development for SLO assessment are clearly not worth the resources we invest in the process.	1	2	3	4	5
33. Administrative responsibility for professional development for SLO assessment has been assigned at our institution.	1	2	3	4	5
34. A variety of SLO assessment professional development opportunities is offered at our institution.	1	2	3	4	5
35. Professional development for SLO assessment does little to help our institution fulfill its mission.	1	2	3	4	5
36. Our institution dedicates sufficient resources to professional development for SLO assessment.	1	2	3	4	5

[Personal Level of Involvement Index of Professional Development for SLO Assessment]
Read each statement. Select the descriptor that matches how much you agree or disagree with each statement.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

37. I am highly involved in professional development opportunities for SLO assessment at my institution.	1	2	3	4	5
38. I have participated in planning professional development for SLO assessment at my institution.	1	2	3	4	5
39. I have helped lead or conduct professional development for SLO assessment at my institution.	1	2	3	4	5
40. I am not familiar with professional development for SLO assessment at my institution.	1	2	3	4	5
41. I have engaged in specific professional development activities that have prepared me for my involvement in SLO assessment.	1	2	3	4	5
42. I have not made improvements as a result of participating in professional development for SLO assessment.	1	2	3	4	5
43. I am not personally aware of benefits of professional development for SLO assessment.	1	2	3	4	5

[Challenges with SLO Assessment]
Read each statement. Select the descriptor that matches how much you agree or disagree with each statement.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

44. There is a lack of leadership for SLO assessment.	1	2	3	4	5
45. There are adequate resources to support SLO assessment efforts.	1	2	3	4	5
46. There is an institutional commitment to SLO assessment.	1	2	3	4	5
47. SLO assessment efforts are not embedded in the institutional culture.	1	2	3	4	5
48. SLO assessment efforts are connected to college strategic planning.	1	2	3	4	5
49. There is unclear understanding of the SLO assessment cycle.	1	2	3	4	5

50. There is inadequate training for **developing** SLOs.	1	2	3	4	5
51. There is inadequate training for **assessing** SLOs.	1	2	3	4	5
52. There is inadequate training for discussing assessment results.	1	2	3	4	5
53. There is inadequate training for identifying improvements in teaching and learning as a result of assessment.	1	2	3	4	5

54. Please describe the <u>most important</u> challenges your institution has experienced in completing the SLO assessment cycle.

[Responding to Challenges with SLO Assessment]

55. Please describe how your institution <u>is addressing or will address</u> these most important challenges.

56. Please describe how your institution <u>has already addressed</u> these most important challenges.

57. Are you willing to engage in further study by participating in a one-on-one, follow-up interview regarding SLO assessment on your campus? *All interview participants will receive a gift card for their participation.*
    - o   Yes
    - o   No
    - o   Maybe – I would like more information first.

58. If yes or maybe, please provide your contact information below:
    First and Last Name: _____
    Position: _____
    School Name: _____
    Email Address: _____
    Phone Number: _____

THANK YOU for taking your time to fill out this survey. All of your responses will be confidential and only be reported in the aggregate. If you are interested in submitting your name for a random drawing of one of three $50 Amazon.com gift cards, please include your contact information below. Your information will not be connected to your responses. If you are the winner of a gift card, you will be contacted personally.

First and Last Name: _____

Email Address: _____

Phone Number: _____

APPENDIX B: INTERVIEW PROTOCOL

Verbal Consent Script. Thanks again for agreeing to participate in this interview. I want to start with the verbal consent information. The purpose of this study is to explore student learning outcomes (SLO) assessment efforts and related professional development opportunities at California community colleges.

Your participation in this interview is voluntary, and your responses will remain anonymous. I will give you a pseudonym and no participant names or identifying features will be used in writing up the study.

I would like to record this interview. The recording of the interview will be transcribed. And you will have the option at that point to review the transcripts and edit any of your responses.

May I record this interview? [Pause for verbal consent]

[Turn on the recording.]

1. What is your primary role in the SLO assessment cycle at your college?

2. How do you describe the organizational culture at your college?
   Probes: How does your college deal with change involving instruction? How has your campus handled SLO implementation? Was it embraced or avoided? What is the culture for assessment? How does the culture/politics impact your campus?

3. Please describe the SLO cycle at your college. What is the process?
   If the participant has not mentioned these components, ask about them.
   a. [What is the process for] SLO development
   b. [Tell me about the process for] SLO assessment
   c. Discussion of SLO assessment results
   d. Identifying improvements as a result of assessment
   e. Using results to make improvements

4. What support or resources are available for those engaging in the SLO cycle? Can you give me some examples?
   If the participant has not mentioned these areas, ask about them.
   a. Professional development (trainings, workshops, etc.)
   b. SLO coordinator
   c. Written documents (handbooks, guides, etc.)

5. What challenges do you (or faculty at your college) face in completing the SLO cycle?
   a. *Probes: Challenges in terms of leadership, resources, training, etc.*
   b. Can you give me an example that you recall most vividly?
   c. How have these challenges been addressed?

6. *[ASK IF lack of faculty participation is NOT mentioned above]* In the survey, many respondents indicated that a major challenge to SLO assessment at their college was lack of faculty participation. To what extent has that been the experience at your college?
    a. PROBE IF PARTICIPANT AGREES (i.e. indicates participation as challenge): Could you give me a recent example?
    b. PROBE IF PARTICIPANT DISAGREES (i.e. has a lot of faculty participation): I'd love to hear a story . . . OR . . . Could you give me a specific example about how you've achieved high faculty participation?

7. What advice do you have for community college faculty/and or administrators to successfully and meaningfully complete the SLO assessment cycle?
    a. Has this been a challenge at your college? Can you share an example?
    b. Compliance vs. identifying improvements to teaching and learning
    c. Completing the cycle vs. stuck on a particular component of the cycle

8. In preparation for our conversation today, I had emailed you an attachment of the ACCJC Rubric for SLOs. I'm sure you're probably familiar with it. What I'd like to know is where would you place your college on the ACCJC Rubric for SLOs *[show rubric during in-person interview/email in advance of the phone interview]* (awareness, development, proficiency, sustainable continuous quality improvement)?
    a. Why?
    b. Do the rubric statements fully describe the level of implementation at your college?

9. If the participant has not mentioned the role of accreditation, ask have the ACCJC standards impacted the SLO process at your college? How?
    a. If SLO assessment was not in the standards, do you think your college would be conducting assessment in this way or use other measures?

10. Do you have any final comments – anything to expand on what we've talked about or share anything we didn't discuss?

Thank you very much for your time and participation.

Transcribing this interview is the next step in the process for me, and you have the option to review the transcript of the recording. Please contact me before March 15th if you would like to review the transcript.

And as a thank you for your time, I'll be sending you a link in the next day or so for your Amazon gift card.

Rubric for Evaluating Institutional Effectiveness – Part III: Student Learning Outcomes
(See cover letter for how to use this rubric.)

Levels of Implementation	**Characteristics of Institutional Effectiveness in Student Learning Outcomes** *(Sample institutional behaviors)*
Awareness	• There is preliminary, investigative dialogue about student learning outcomes. • There is recognition of existing practices such as course objectives and how they relate to student learning outcomes. • There is exploration of models, definitions, and issues taking place by a few people. • Pilot projects and efforts may be in progress. • The college has discussed whether to define student learning outcomes at the level of some courses or programs or degrees; where to begin.
Development	• College has established an institutional framework for definition of student learning outcomes (where to start), how to extend, and timeline. • College has established authentic assessment strategies for assessing student learning outcomes as appropriate to intended course, program, and degree learning outcomes. • Existing organizational structures (e.g., Senate, Curriculum Committee) are supporting strategies for student learning outcomes definition and assessment. • Leadership groups (e.g., Academic Senate and administration), have accepted responsibility for student learning outcomes implementation. • Appropriate resources are being allocated to support student learning outcomes and assessment. • Faculty and staff are fully engaged in student learning outcomes development.
Proficiency	• Student learning outcomes and authentic assessments are in place for courses, programs, support services, certificates and degrees. • There is widespread institutional dialogue about the results of assessment and identification of gaps. • Decision-making includes dialogue on the results of assessment and is purposefully directed toward aligning institution-wide practices to support and improve student learning. • Appropriate resources continue to be allocated and fine-tuned. • Comprehensive assessment reports exist and are completed and updated on a regular basis. • Course student learning outcomes are aligned with degree student learning outcomes. • Students demonstrate awareness of goals and purposes of courses and programs in which they are enrolled.
Sustainable Continuous Quality Improvement	• Student learning outcomes and assessment are ongoing, systematic and used for continuous quality improvement. • Dialogue about student learning is ongoing, pervasive and robust. • Evaluation of student learning outcomes processes. • Evaluation and fine-tuning of organizational structures to support student learning is ongoing. • Student learning improvement is a visible priority in all practices and structures across the college. • Learning outcomes are specifically linked to program reviews.

Rev. 10/28/2011

APPENDIX C: DOCUMENT REVIEW PROTOCOL

Data Sources
- RP Group POWER (Promising Outcomes Work and Exemplary Research) Awards - http://www.rpgroup.org/awards/power-awards
- National Institute for Learning Outcomes Assessment (NILOA) Resource Library – http://www.learningoutcomeassessment.org/publications.html
- Assessment Commons: Internet Resources for Higher Education Outcomes - http://www.assessmentcommons.org
- ACCJC College Status Reports on SLO Implementation

To obtain the following information
- SLO Assessment activities
- Types of SLO professional development
- College leadership's commitment to SLO efforts
  - Evidence that SLO assessment is a college priority
  - Evidence that SLO assessment is connected to other college processes (e.g. Program Review, Planning)
- Faculty involvement in SLO assessment
- College resources allocated to assessment
  - Campus SLO Leader(s) release time
  - Additional SLO facilitators/faculty leading assessment efforts
  - Database or other system for assessment data
- Evidence of completing all phases of SLO assessment cycle
  - SLO development
  - SLO assessment
  - Discussion of SLO assessment results
  - Identifying improvements as a result of assessment
  - Using results to make improvements

APPENDIX D: RECRUITMENT LETTER

UNIVERSITY OF CALIFORNIA LOS ANGELES
RECRUITMENT LETTER EMAIL

Subject: Research Participation Invitation – Survey of SLO Assessment and Professional Development

My name is Mary-Jo Apigo, and I am an Ed.D. candidate in the Educational Leadership Program at the University of California, Los Angeles (UCLA). I am also the Dean of Teaching & Learning at West Los Angeles College.

I am writing to invite you to participate in my dissertation study *Moving from Compliance to a Culture of Inquiry: SLO Implementation and Professional Development in California Community Colleges.* Dr. Kevin Eagan from the Education Department at UCLA is my faculty sponsor. The purpose of this study is to explore student learning outcomes (SLO) assessment efforts and related professional development opportunities at California community colleges.

As an <SLO/Assessment Coordinator, Academic Senate President, and Chief Instructional Officer (CIO)> *(this will be customized for each of the three target groups)*, you were selected to be in this study because you are a California community college SLO leader, defined as faculty or administrator who is participating and/or leading assessment efforts at you campus.

At the end of this email, I have included a link to a short survey, which is estimated to take 8-10 minutes. Please respond as accurately and honestly as you can. Your responses will be confidential and only be reported in the aggregate. Your participation in the survey is voluntary. By submitting responses to the survey, you agree to participate in the research exploring SLO assessment efforts.

At the end of the survey, you can submit your name for a random drawing of one of three $50 Amazon.com gift cards. Your information will not be connected to your responses.

Most importantly, your participation will provide valuable input on the state of SLO assessment professional development among California community colleges. I will share aggregate findings through the Student Learning Outcomes Coordinator and Assessment listservs.

If you have any questions or concerns, please feel free to contact me at mapigo@gmail.com or (310) 936-5589 or my faculty sponsor, Dr. Kevin Eagan at keagan@ucla.edu. If you would like additional information about the study, please click here to review the Study Information Sheet. (https://app.box.com/s/e2z9xtjm97wir2rzop6o)

Click this link to participate in the SLO survey –
http://uclaed.co1.qualtrics.com/SE/?SID=SV_a4uVUNb2OG6R0hL

Thank you for your time in completing this survey and contributing to the study.

UNIVERSITY OF CALIFORNIA LOS ANGELES
CONSENT TO PARTICIPATE IN RESEARCH

Moving from Compliance to a Culture of Inquiry: SLO Implementation and Professional Development in California Community Colleges

Mary-Jo Apigo, Ed.D. candidate in the Educational Leadership Program at the University of California, Los Angeles (UCLA) is conducting a research study for her dissertation. Dr. Kevin Eagan from the Education Department at UCLA is her faculty sponsor.

You were selected as a possible participant in this study because you are a California community college SLO leader, defined as faculty or administrator who is participating and/or leading assessment efforts at you campus. I am seeking three types of participants for the study: the SLO/Assessment Coordinator, Academic Senate President, and Chief Instructional Officer (CIO). Your participation in this research study is voluntary.

Why is this study being done?

Low degree completion and transfer rates in community colleges have created a focus on reform to improve teaching quality and student learning. Improving student learning outcomes (SLOs) is at the forefront of community college accreditation standards. However, few professional development models exist for faculty engaging in SLO assessment. The purpose of this study is to explore SLO assessment efforts and related professional development opportunities at California community colleges.

What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following:

- Take a short, 8-10 minute online survey. The survey includes likert-scale questions and a few open-ended questions.
- Elect to participate in a follow-up, one-on-one interview regarding SLO implementation and professional development activities at your campus.

How long will I be in the research study?

Participation will take a total of about 10 minutes for the survey. The follow-up interview (for those participants who choose to participate) will last between 45 and 60 minutes.

Are there any potential risks or discomforts that I can expect from this study?
Survey questions focus on campus implementation of SLO assessment and related professional development. Some participants may feel uncomfortable if they do not wish to discuss this information. Responses will only be reported in the aggregate, and I will use a pseudonym when referring to specific colleges by name.

Are there any potential benefits if I participate?

Participation will provide valuable input on the state of SLO assessment professional development among California community colleges. I will share aggregate findings through the Student Learning Outcomes Coordinator and Assessment listservs.

Will I be paid for participating?

Survey participants can submit their name for a random drawing of one of three $50 Amazon.com gift cards.

Will information about me and my participation be kept confidential?

Any information that is obtained in connection with this study and that can identify participants will remain confidential. To ensure confidentiality of the participants, no participant names or identifying features will be used in writing up the study. Only respondents interested in participating in a follow-up interview will be asked to provide their email address and contact information. The demographic questions in the survey ask respondents about their role on campus, how long they have been working, and their involvement in SLO assessment at their campus. Campus names will be collected only for tracking purposes, and I will use a pseudonym when referring to specific colleges by name.

What are my rights if I take part in this study?

- Participants can choose whether or not to be in this study and may withdraw consent and discontinue participation at any time.
- Whatever decision made, there will be no penalty, and no loss of benefits to which participants were otherwise entitled.
- Respondents may refuse to answer any questions that they do not want to answer and still remain in the study.

Who can I contact if I have questions about this study?

- **The research team:**
  If there are any questions, comments or concerns about the research, participants can talk to the one of the researchers. Please contact: Mary-Jo Apigo, the researcher, at mapigo@gmail.com or (310) 936-5589 or Dr. Kevin Eagan, Faculty Sponsor, at keagan@ucla.edu.

- **UCLA Office of the Human Research Protection Program (OHRPP):**
  If there are any questions about participant rights while taking part in this study, or concerns or suggestions and want to talk to someone other than the researchers about the study, please call the OHRPP at (310) 825-7122 or write to:
  UCLA Office of the Human Research Protection Program
  11000 Kinross Avenue, Suite 211, Box 951694
  Los Angeles, CA 90095-1694

Do you consent to participate in this study by completing this survey?

- o Yes

- o No

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