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Advancing Evaluation in Community Colleges: A Mixed Methods Case Study of Outcomes-Based Assessment Training in Student Affairs

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ADVANCING EVALUATION IN COMMUNITY COLLEGES: A MIXED
METHODS CASE STUDY OF OUTCOMES-BASED ASSESSMENT
ASSESSMENT TRAINING IN STUDENT AFFAIRS

by

Tammy L. Russell

A dissertation submitted to the Graduate College
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
Educational Leadership, Research and Technology
Western Michigan University
December 2016

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ADVANCING EVALUATION IN COMMUNITY COLLEGES: A MIXED
METHODS CASE STUDY OF OUTCOMES-BASED ASSESSMENT
TRAINING IN STUDENT AFFAIRS

Tammy L. Russell, Ph.D.

Western Michigan University, 2016

Many student affairs departments struggle to contribute to an institution's evidence base of student learning. In part, this results from student affairs personnel not having adequate training in how to assess learning outside the classroom. This is a particular challenge for small community colleges, in which individual units (e.g., admissions or financial aid) may have only one or two employees. Failure to assess co-curricular learning poses challenges to institutions in meeting accreditation standards, placing them at risk for increased scrutiny and loss of state funding under a performance-based system. The purpose of this mixed methods study was to use a case study evaluation approach to understand the influence of a SMART philosophy-based assessment training on student affairs professionals' knowledge, attitude, and ability to demonstrate productivity related to the assessment of student learning in a small community college in southwest Michigan.

Semi-structured interviews, participant rating forms, and document review provided the data for this evaluation case study. Results were triangulated from multiple sources using mixed methods. Findings suggest the assessment training and support program, "*Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs*," had a positive influence on participants' knowledge, attitude, and ability to demonstrate productivity as

related to the assessment of student learning in student affairs. Five major themes developed during the course of the study: (1) awareness of student learning in student affairs, (2) responsibility for assessment of student learning, (3) confidence in the ability to assess student learning in a meaningful way, (4) value, both internal and external to the department, and (5) ownership of the practice of student learning assessment. Pre- and post-workshop participant ratings and a review of the department's annual student learning outcomes plan provided further evidence of the training program's positive influence.

As the data evolved, the five themes transformed into a hierarchical structure in which each subsequent theme built upon the one before it. Additionally, each of the first three themes aligned with the constructs of knowledge, attitude, and ability to demonstrate productivity, providing insight into how development occurred over the course of the training program. A conceptual staircase model was developed to demonstrate relationships between and across these various components. These findings can assist leaders in student affairs, particularly in community colleges, in developing and delivering a highly effective training program that strengthens and promotes a genuine culture of assessment. Pragmatic recommendations are shared based on participant feedback and insight from an inside researcher perspective.

This study contributes to the field of evaluation, measurement, and research (EMR) by demonstrating an alternative approach for institutional researchers charged with demonstrating the effectiveness of co-curricular programs and services in teaching students and providing an additional example of how effectively quantitative and qualitative inquiry can be integrated with intentionality to strengthen the validity of findings.

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ACKNOWLEDGMENTS

This work would not have been possible without the endless support of many family, friends, mentors, and colleagues. Along this long journey, I have been blessed in countless ways and by so many people.

I would like to thank Dr. Gary Miron for his expert guidance, sincere interest, and endless patience as my advisor and dissertation committee chairperson. My path through the doctoral program was far from linear. Dr. Miron remained at my side, subtly prodding me during my less productive phases, of which there were many. I will be forever grateful.

I would also like to thank the other members of my committee, Dr. Ramona Lewis and Dr. Eric Archer for their expertise in both subject matter and research methodology. Additionally, I wish to recognize Dr. Jessaca Spybrook, Dr. Patricia Reeves, and Dr. Brooks Applegate for thoroughly preparing me for this venture through my doctoral coursework.

Working full-time and juggling the responsibilities of family and motherhood while earning my doctoral degree has been a challenge, but not one that I faced alone. I have been incredibly fortunate to have the full support of my employer, Glen Oaks Community College. I extend my heartfelt gratitude and appreciation to Dr. David H. Devier and Dr. Patricia Morgenstern for making many accommodations that allowed me to complete my degree. Additionally, I would like to acknowledge the unending encouragement that I received from many co-workers who are also dear friends, including Sarah Simmons (whom I affectionately refer to as my dissertation life coach), Tonya Howden, Beverly Andrews, Amy Young, Tracy Labadie, and Trista Nelson (a brutally honest editor extraordinaire). Finally, and with their

Acknowledgments—Continued

permission, I wish to share my gratitude to the many individuals in Student Services who made it such a pleasure to conduct my research--Jaime Raifsnider, Hannah Fries, Anne Springsteen, Adrienne Skinner, Karen Webber, Lyle Raven, Jean Zimmerman, Leanne Barnell, Ben Fries, Barb Murk, Clarice Beck, Theresa Hawkins, and Pat Oswalt. Many others at Glen Oaks—too many to list—have offered encouraging words throughout this experience. Thank you.

My husband, Mark, and I started dating just months before I started the doctoral program. We have come a long way together. Now, along with our daughter, we begin a new chapter in in our lives one that does not involve the response, “I have to write.” Thank you, honey, for never losing hope that I would finish and for making many sacrifices over the years. The only thing that comforted me when I felt guilty about not having enough “mommy time” for Amelia was knowing that she had such an amazing father who filled her life with love, compassion, and lots of fun. I love you.

In conclusion, I wish to dedicate this work to three amazing women—past, present, and future. My mother, Harriet “Mickey” DeRoo, despite her own 8th grade education, instilled in me a love of learning at a very early age. I have fond memories of working with her on many elementary school projects. Why simply color an 8.5 x 11” map of the United States, as assigned by the teacher, when you can make a poster board size jigsaw puzzle, complete with trivia, major waterways, and state capitals? She passed from this life 13 years ago. I wish she could have witnessed how far her efforts have carried me.

As for the present, my sister, Jamie (DeRoo) Lincoln, is always there for me, regardless of the circumstances. There were certainly times in our lives that we did not see eye to eye as

Acknowledgments—Continued

sisters often fail to do, but now I look back and realize that she has always been a steadfast supporter. When speaking to others about me, she often says in a humorous manner, “I taught my little sister everything she knows.” She is right. She has taught me about all the important things in life, and now she is helping to teach these lessons to my daughter, whom she loves as her own.

This brings me to acknowledge a young girl who is well on her way to becoming an amazing woman in the future—my daughter, Amelia Paige Russell—who, upon this writing, is on the brink of starting kindergarten. Amelia, I have worked hard, and thus have been blessed with many academic and professional accomplishments. None, however, has been as important and as rewarding as being your mommy. I thank God for entrusting your father and me with such a kind, generous, hilarious, bright, and loving little girl to call our own. As you go forth in life, be all that God created you to be and know how endlessly you are loved.

Tammy L. Russell

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CHAPTER I

THE PROBLEM

Background of the Problem

Colleges and universities are experiencing ever-greater demands to provide evidence of student learning, in addition to overall institutional performance. Rising costs for students and their families, diminishing federal and state funding, declining public trust, and increased competition among colleges and universities are a few of the factors contributing to the national accountability movement in higher education (Barham & Scott, 2006; Blimling & Whitt, 1999). As more states move to a model of performance-based funding, as opposed to funding based on student enrollment, community colleges, in particular, are feeling pressures to document evidence of effectiveness (Piland, 2014). The demand applies not only to the curricular domain of community colleges, but in co-curricular programs and services (Bresciani, 2006).

The demand has grown for colleges and universities to provide evidence specifically of student learning in areas across the institution (Slager & Oaks, 2013). “Student learning outcomes define the goals of learning experiences; they specify what a student should be able to know, do, or value after participating in those activities” (Keeling, Wall, Underhile, & Dungy, 2008, p. 13). All regional accrediting bodies for institutions of higher education in the United States have standards pertaining to student learning outcomes (SLOs), some of which are specific to co-curricular programs and services (Brittingham, 2009). The Higher Learning Commission (2015), for instance, requires that an “institution assess achievement of the learning outcomes that it claims for its curricular and co-curricular programs (p. 18).” Such imperatives

further the need for better assessment of programs and services provided by those in student affairs.

In response to increased expectations, many institutions, including community colleges, are using outcomes-based assessment in order to demonstrate effectiveness and justify their value to students, parents, policymakers, accrediting agencies, and the public at large (Leveille, 2006). Outcomes-based assessment reflects the process of articulating intended end results prior to taking action, documenting decisions that are made based on results, and following up to determine if decisions had the intended effect (Bresciani, 2006). Engaging in outcomes assessment allows co-curricular programs and services to surpass mere satisfaction measures and move toward evidence-based measures of student learning (Bresciani, 2011). Piland (2013) suggests that focusing on the assessment of student learning in community college co-curricular programs is particularly valuable, as the connection between essential support services and student learning is not adequately recognized or valued.

In 2004 and 2006, the American College Personnel Association (ACPA) and Student Affairs Administrators in Higher Education (NASPA) published two of the most influential documents in contemporary literature regarding student learning and development, *Learning Reconsidered* and *Learning Reconsidered 2*, respectively (Bresciani, 2011). These compelling documents argue for “transformative education—a holistic process of learning that places the student at the center of the learning experience (Keeling, 2006, p. 32).” They assert that learning is inseparable from the overall student experience. Inherent in this transformative mindset is acknowledgement of student affairs’ critical role in contributing to the promotion and assessment of student learning. In doing so, it is important that educators and student affairs professionals

create context-based, measurable student outcomes that will not only contribute to transformative change, but serve to meet the demands of funding and accreditation mandates (Keeling, 2006).

Statement of the Problem

The problem is that, historically, student affairs departments have experienced challenges in finding meaningful ways to contribute to an institution's evidence base of student learning (Bresciani, 2011). In part, this results from student affairs personnel not having adequate preparation or training in how to conduct meaningful assessment of student learning outside the classroom (Schuh & Gansemer-Topf, 2010; Schuh & Upcraft, 1998; Seagraves & Dean, 2010). Too frequently, institutions expect those in student affairs to construct and assess student learning outcomes (SLOs) without sufficient training, which Rodriguez and Frederick (2014) found to be counterproductive. Further, "many institutions have no staff members with expertise in student affairs theory, practice, and measurement and design (Cooper & Saunders, 2000, p. 8)".

Without ample and appropriate training in how to construct and assess measurable SLOs, student affairs professionals in community colleges will not have the necessary skills to contribute to the integrated approach necessary to achieve a transformative educational environment. Additionally, their ability to meet the increasing demands for accountability will remain hampered, placing institutions at risk for increased scrutiny and loss of state funding under a performance-based system. Small community colleges are in particular jeopardy, as individual units within student affairs (e.g., admissions or financial aid) often have as few as one or two employees.

Purpose of the Study

The purpose of this mixed methods study was to use a case study evaluation approach to understand the influence of a SMART philosophy-based assessment training on student affairs professionals' knowledge, attitude, and ability to demonstrate productivity related to the assessment of student learning in a small community college in southwest Michigan. SMART outcomes are *specific, measureable, attainable, relevant, and time-bound*. The SMART approach to writing outcomes emphasizes intended results or achievements, as opposed to specific strategies to achieve a goal. The study explores how student affairs departments may utilize such training to enhance the contributions of community college student affairs personnel in developing and sustaining its culture of assessment and evidence-based practices, a prerequisite to the movement toward a transformative educational environment for students. This study contributes to a current gap in the literature by increasing our understanding of how relevant and practical training may enhance the capacity of student affairs personnel in making meaningful contributions to the documentation of student learning.

Research Questions

This study uses mixed methods to answer the following exploratory questions:

1. How, and in what ways, does a customized assessment training and support program based on the SMART philosophy influence the following attributes among student affairs personnel of a small community college?
 - a. *knowledge* in how to assess student learning
 - b. *attitude* toward assessment of student learning

- c. *ability to demonstrate productivity* related to assessment of student learning
2. How might a community college consider utilizing such training to enhance the contributions of student affairs personnel in developing and sustaining its culture of assessment and evidence-based practices?

Contribution to the Field of Evaluation, Measurement, and Research (EMR)

Student learning outcomes are paramount to the purpose of institutions of higher education. The assessment of these outcomes provides some of the most critical evidence of institutional effectiveness. As Volkwein (2011) notes, “Driven substantially by trends in accreditation, the desire to assess student learning outcomes, and the growing pressure to report these outcomes, the IR [institutional research] profession is developing rapidly both domestically and internationally (p. 7).” In a large-scale study, Volkwein (2011) found that the majority of institutional research offices in the United States engage in substantial activity related to the assessment of SLOs, demonstrating that IR professionals play a significant role in demonstrating that effective learning is taking place across the institution, including student affairs.

Although the terms *assessment* and *evaluation* are frequently used interchangeably, Schuh and Upcraft (1998) draw the following distinction regarding their use in student affairs: “We define assessment as any effort to gather, analyze, and interpret evidence that describes institutional, departmental, divisional, or program effectiveness, while evaluation is any effort to use this evidence to improve effectiveness” (p. 3). Love and Estanek (2004) expanded this definition declaring that assessment in student affairs practice reflects “on-going efforts to gather, analyze, and interpret evidence which describes individual, programmatic, and

institutional effectiveness and using that evidence to improve practice” (p. 308), suggesting that assessment plays a critical role in the evaluation of effectiveness in student affairs.

This study seeks to contribute to the fields of evaluation and research, specifically for community college institutional research professionals charged with assisting student affairs departments in capturing and reporting student learning outcomes. See Chapter V for a summary and discussion of the contributions to Evaluation, Measurement, and Research (EMR).

Scope and Setting

The Researcher’s Position

Prior to discussing the scope and setting of the study, it is imperative that I disclose my role as an employee of the community college at which the study takes place. In discussing a researcher’s position in a study, Greene (2014) writes about *insider research*, “that which is conducted within a social group, organization or culture of which the researcher is also a member (p. 1).” Where the researcher and the study stand in relation to one another determines positionality, which Greene (2014) notes, can fluctuate over the course of the research. Savin-Baden and Major (2013) define positionality as reflecting the position that a researcher chooses to adopt in relation to three areas: the subject, the research subjects, and the research context. The reciprocity of these areas will influence and shape how a study is undertaken, as well as the thoughts and behaviors of one’s colleagues (Costley, 2010). Further discussion regarding positionality and insider research as it pertains to this study appears in the Methods chapter.

Setting

This mixed methods case study evaluates the influence of a 12-week assessment training and support program provided to staff employed in the student affairs department of a small, rural community college in southwest Michigan. Herein, the department under study is referred to as *Student Services*, the name used by the institution to reflect the department performing student affairs functions. Targeted participants include personnel from admissions, financial aid, academic advising, student activities, and TRIO Student Support Services (a grant program funded by the Department of Education). Together, these five units represent the majority of Student Services. The staff within these units are the most engaged in student affairs-related SLOs; thus, they are the most appropriate to share insight into the study's research questions. The methods chapter provides further rationale, including a grounding in the literature, for selecting these particular units within Student Services to include in the study.

Background of the Training Program

The customized training, titled “*Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs*” was developed by a committee within the institution to address the expressed needs of staff within Student Services, the encompassing department name used within the institution to reflect the individual units previously listed. A two-part “ah-ha!” moment acted as a catalyst to the development of the training program, as paraphrased in the following conversation between the researcher (and Director of Institutional Effectiveness and Research at the college) and Director of Financial Aid.

Ah-ha! Moment:

Director of Institutional Effectiveness and Research (IER) – “I understand you’re struggling with the student learning piece of HLC [Higher Learning Commission, the institution’s regional accrediting body].”

Director of Financial Aid (FA) – “Yes. The questions do not seem to apply to us. We’re not in the classroom. We don’t teach in Student Services; we *serve*.”

IER – “Tell me...if you had to identify the single most important thing a student can take away from their experience with Financial Aid, what would it be?”

FA – “We want our students to avoid defaulting on their student loans.”

IER – “So, what do you do in the Financial Aid office in hopes that students avoid default?”

FA – “We hold informational sessions, do 1:1 and small group loan counseling, we walk them through the process, we problem-solve, etc.”

IER – “And, you do all these things to...”

FA – “To teach them how to avoid default.” [Pause.] “I just said *teach*, didn’t I?”

IER – “Yes, you did.”

FA – “Okay, so I understand the idea behind the P-D-C-A cycle of assessment [the predominant model of assessment promoted at the institution]. We’re good at planning new interventions and getting them off the ground, but then someone asks me how Financial Aid is assessing student learning. We are then deer in the headlights!”

IER – “Let’s fix that.”

Scope and Context

As the Student Services department does not exist within a vacuum, it is important to provide a context as to where the assessment of student learning lies within the institution's overall mission and strategic plan. The institution's mission is "to provide quality educational programs that meet the life-long learning needs of its students and the communities it serves (D. H. Devier, personal communication, October 19, 2015)." The college's strategic plan draws from two types of outcomes – student learning and college-centered. Student learning outcomes (SLOs) exist at three levels – course, program, and institutional. Both academic and non-academic (or co-curricular) areas within the institution are expected to contribute to student learning and development. It is within the "Non-Academic Program SLOs", highlighted in Figure 1, that this research study lies. Prior to this study, no clearly documented evidence of student learning or development existed in relation to the Student Services department at this institution.

Outline of Dissertation

This dissertation is organized into five chapters. The current chapter outlines the problem, purpose, and research questions. It also describes the scope and setting in which the study takes place.

Chapter II provides the theoretical and conceptual background related to the assessment of student learning outcomes within Student Affairs, particularly in the community college setting and within the current context of the accountability movement. The use of SMART outcomes as a strategy to increase the capacity of Student Affairs personnel in making meaningful contributions to the assessment of student learning outcomes is explored. A logic

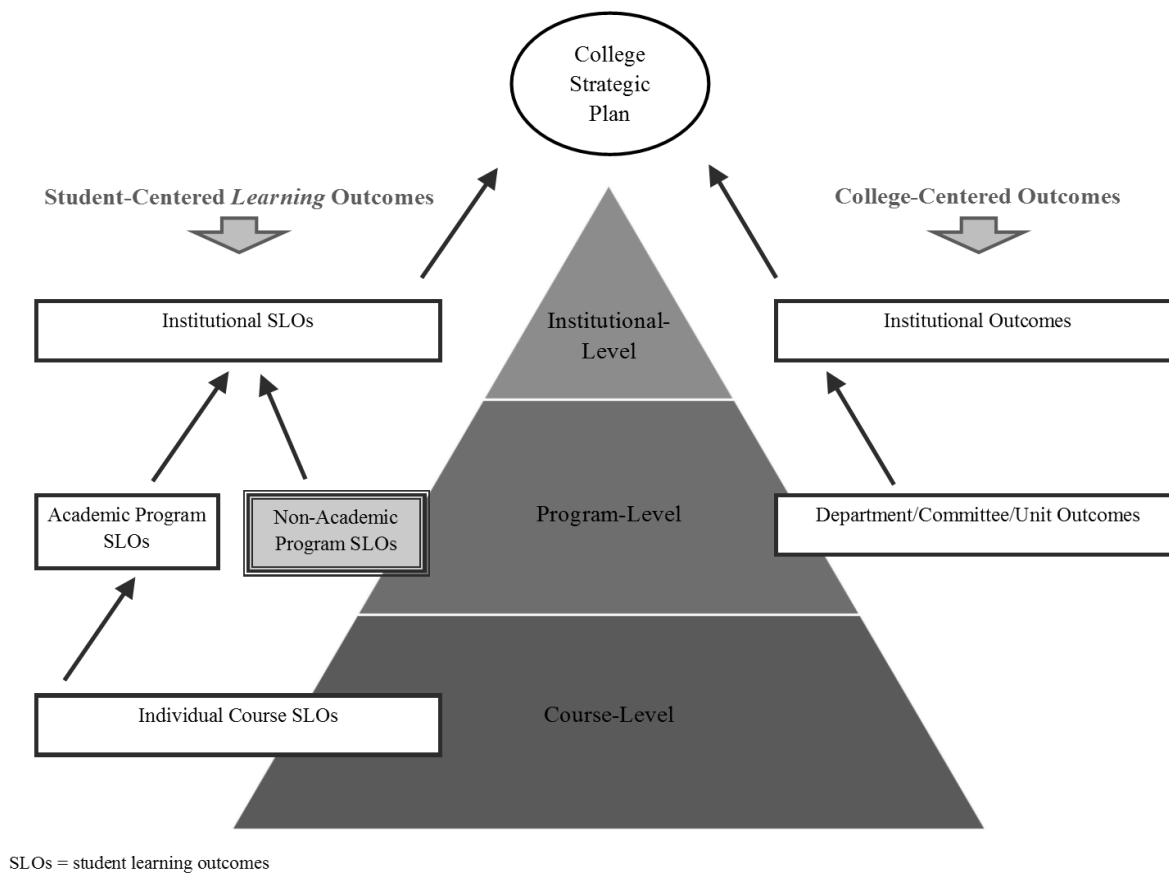


Figure 1. Levels and Type of Assessment within the Institution Being Studied

model is shared and discussed as a theoretical model. Finally, the purpose, methods, and applicability of the case study to the proposed research questions is explored.

Chapter III presents the methodology used to address the proposed research questions. The study design and philosophical tradition, as well as population, data collection and analysis are shared. Finally, ethical considerations are discussed. Chapter IV presents the results of the study. Chapter V synthesizes the preceding chapters, discusses implications, presents conclusions of the study, and offers suggestions for further research.

CHAPTER II

THEORETICAL AND CONCEPTUAL BACKGROUND

Higher Education in the United States

Incredible diversity exists across the nation's higher education. As of 2012-13, the U.S. Department of Education (2016a) reported over 7,200 postsecondary public, private nonprofit, and for-profit institutions that participate in federal student financial aid programs. Of these, over 4,700 award either 2-year or 4-year degrees. The structure and type of these institutions vary widely, including:

- Two-year community colleges
- Four-year undergraduate colleges
- Research universities
- Liberal arts institutions
- Vocational schools
- Comprehensive master's institutions
- Single-purpose institutions (e.g., information technology schools)

(Eaton, 2011)

At the turn of the millennium, approximately 16 million students were enrolled either part-time or full-time in postsecondary education in the United States (Eckel & King, 2004). In 2012–13, colleges and universities awarded 966,000 certificates below the associate's degree level, one million associate degrees, 1.8 million bachelor's degrees, 752,000 master's degrees, and 175,000 doctoral degrees (U.S. Department of Education, 2016b).

The cost of postsecondary education, to both students and the nation as a whole, is staggering. The average annual cost of tuition and fees in 2015-16 was \$3,435 and \$9,410 for in-district 2-year community colleges and in-state 4-year institutions, respectively (College Board, 2016). The following was noted in a 2013 Spotlight on *The Condition of Education* report by the National Center for Education Statistics (NCES):

In 2011, the federal government provided \$146 billion in student financial aid in grants and loans. The total amount, in constant 2011 dollars, disbursed in grant aid increased almost fourfold, from \$10 billion in 2000 to \$38 billion in 2010 (U.S. Department of Education, 2013).

Accountability in Higher Education

In his 2010 address as president of the Association for the Study of Higher Education (ASHE) to attendees at its annual meeting, Zumeta (2011) broadly defined accountability as “the responsibility for one’s actions to someone or to multiple parties as a result of legal, political, financial, personal, or simply morally based ties (p. 133).” In applying the term to higher education in the public realm, he narrows the definition to a “social contract between higher education and the supporting society of which it is a part (p. 133)”, which Zumeta (2011) notes is subject to continual reinterpretation as societal values, needs, and expectations change over time.

Accountability in higher education in the United States is not a recent phenomenon, although the heightened level of scrutiny placed on the public sector is traceable to a time of rapidly increasing postsecondary enrollment following World War II with enactment of the GI Bill. Prior to this time, the value of a college education was assumed; colleges and universities were not expected to provide evidence of what occurred in classrooms (Huba & Freed, 2000). As

the number of colleges and universities grew in the 1950s and 60s, many states created governing bodies to oversee the use of public funds sought for new campuses (Zumeta, 2011). With the emergence of state budget appropriations in the late 1960s, the public placed greater emphasis on funds used to finance public education and the societal benefits resulting from the investment. In 1977, Lenning wrote:

In this 'age of accountability', administrators and others have been especially concerned about educational outcomes and their measurement...Institutions are also being called on to provide factual evidence that they and their programs are providing the benefits that were intended, and that these outcomes are being produced in a cost-effective manner (p. 9).

These sentiments led to the birth of the outcomes revolution in the 1980s. Several factors contributed, including the recession early in the decade (and subsequent rises in tuition); increased reliance on business models to address quality improvement; and, criticism of workers' skill levels, most notably in the publishing of *A Nation at Risk* in 1983 (Zumeta, 2011). Today, this emphasis on outcomes resonates across campuses stronger than ever.

Fueled by concerns over increasing college costs, discouraging completion rates, and complaints from employers who feel graduates lack the necessary knowledge and skills to excel in the workplace, today's colleges and universities are increasingly asked to respond to questions about student learning and the value of higher education (Leveille, 2006). Students, parents, policymakers, accrediting agencies, and the public at large are asking postsecondary institutions to provide evidence of how higher education improves students' lives, promotes community

economic development, and contributes to the welfare of the nation (Leveille, 2006; Schuh, 2009).

Governance

No national authority exists for higher education in the United States. The U.S. Constitution reserves governmental functions to the states, if not explicitly reserved to the federal government. Education is one of those functions. As such, each state is charged with establishing and governing its public colleges and universities (Eaton, 2011; Eckel & King, 2004). The degree and structure of this self-governing vary significantly by state, ranging from community colleges with locally elected boards of trustees to large institutions, such as the University of Michigan, that are handled as autonomous, separate branches of state government (Eckel & King, 2004).

Prior to the 1940s, federal government involvement in higher education was nearly nonexistent. The need to build military capacity during World War II led to federal funding for scientific research at colleges and universities. With the signing of federal financial programs by President Roosevelt in 1944, the age of federal reporting requirements began (Eckel & King, 2004). Despite this expanding influence on the part of the federal government, institutions remain primarily self-governing with varying degrees of state involvement, as previously discussed. The caveat is that institutions must be accredited by a federally recognized agency in order to participate in federal financial aid programs, which provide students with low-cost loans (U.S. Department of Education, 2016).

Accreditation

The first regional accreditation association was established in 1885 in New England. By 1919, five other regional accrediting bodies were instituted across the nation by institutions seeking internal means to monitor quality (Dickeson, 2006).

As self-governing entities, accreditation associations are composed of and funded by participating institutions. Each develops its own standards to assure minimum quality and improvement over time. Standards addressed include academic rigor and quality, fiscal accountability, and student learning outcomes (Eckel & King, 2004). Accreditation associations are built on the two fundamental principles of self-regulation and peer review, as Eaton (2011) summarizes:

All accrediting organizations have similar processes and practices: a self-review by the institution or program against the accreditation standards, an on-site visit by an evaluation team of peer experts sent by accrediting organizations and a subsequent review and decision by the accrediting body to award or deny accredited status. This review is repeated every three to ten years if the institution or program is to sustain its accreditation. Accreditation is a periodic, standards-based, evidence-based, judgment-based, peer-based process (p. 4).

Historically, accreditation associations have enjoyed a high degree of autonomy. Official recognition by the U.S. Department of Education as a regional or national accreditation association indicated a reliance on the accreditor's ability to monitor institutions for academic and fiscal soundness (Eckel & King, 2004). More recently, however, there have been increased appeals for greater federal involvement in the accreditation of colleges and universities. Despite

accreditors' assertions that institutions provide empirical evidence of what students are learning, critics claim that higher education has not withstood adequate scrutiny. Calls have been made for increased governmental oversight of institutions eligible for federal financial aid programs, including the use of more rigorous evaluation measures (Dickeson, 2006; Schuh, 2009; Eaton, 2011).

In its oversight of accrediting bodies, the federal government expects that accreditation will monitor and address outcomes related to student achievement (Eaton, 2011). Thus, one of the primary expectations of accountability in higher education is the assessment of student learning outcomes (SLOs). Learning outcomes describe “the students’ intended educational attainment in terms of specific knowledge, skills, and attitudes (Maki, 2004).” In response to these calls for increased accountability, all accreditors established standards that require colleges and universities to delineate expectations regarding student learning and provide evidence that said learning is actually taking place (Busby, 2015; Eaton, 2011). As such, the discussion now turns to the assessment of student learning outcomes.

Community Colleges

In the decade following the Great Recession, the United States economy has fought to regain the economic pace it had previously known. Education is widely viewed as an important factor in future economic stimulation and stability. By 2020, it is predicted that 65% of all jobs in the nation will require some level of post-secondary education or training. At the current pace, the prediction is there will be five million fewer workers than needed who fit this minimum requirement. This realization has prompted policymakers to increase their focus on colleges and

universities to meet the growing demands of a highly skilled and educated workforce, with particular emphasis on community colleges (NCSL, 2014).

Community colleges are particularly well suited to meet the growing needs of the American workforce. As open-access, low-cost institutions that offer a wide array of academic degree and vocational certificate programs, community colleges tend to serve a more diverse population of students than the nation's four-year institutions, including low income, racial/ethnic minorities, first-generation, part-time, and working students (NCSL, 2014). In 2010, for those age 25-64 years, the difference in median earnings between those with a high school diploma and those with an associate degree, nationally, exceeded \$10,000 per year (NCHEMS, 2016). Increasing the income potential of traditionally under-represented populations in the United States would both stimulate economic growth and better prepare the nation for meeting the demands of tomorrow's workforce (White House, 2015).

The Obama administration recognized the importance of tapping into the community college resource when unveiling its America's College Promise Proposal, a tuition-free community college plan for students who meet certain minimum criteria pertaining to academic success and persistence. To justify the expense, the plan includes an emphasis on measures of accountability for the community colleges to meet (White House, 2015).

Outcomes-Based Assessment of Student Learning

Ewing (2005) notes that student learning outcomes have always been central to higher education, writing, "Faculties in university classrooms have from the outset had an implicit notion of what they wanted students to learn..., how they teach, and the ways they assess student performance (p. 1)." It is natural for educators to want to know if their teaching results in actual

students learning. Sandeen and Barr (2006) note, “This curiosity about ‘how we are doing’ has become a major force in education at all levels and is now widely known as *assessment* (p. 131).”

It was only recently, however—during the mid-1980s—that critical attention has focused on operationalizing what students should know and be able to perform at specific points of time during their formal education (Ewing, 2005). The catalyst for this attention was, in large part, the publication of several national reports, including National Institute of Education’s *Involvement in Learning* (1984) and the National Governors Association’s *Time for Results* (1986). When leaders in higher education struggled to respond to these highly publicized reports, the U.S. Department of Education mandated that all accreditation associations’ document evidence of institutional outcomes using assessment practices (Seagraves & Dean, 2010).

Assessment is a means to draw conclusions based on these operationalized student outcomes. Astin (1991) suggests, “An institution’s assessment practices are a reflection of its values (p. 3)”. At the foci of any institution’s values and mission lies a commitment to student learning and development. Outcomes-based assessment provides a means to communicate of these values and demonstrate how the mission plays an integral part in guiding the academic programs and services the institution provides (Gardner & Milliken, 2014).

Bresciani (2006) defines outcomes-based assessment as an intentional process in which professionals in higher education:

...articulate what the program intends to accomplish in regard to its services, research, student learning, and faculty/staff development programs. The faculty and/or professionals then purposefully plan the program so that the intended results (e.g., outcomes) can be achieved; implement methods to systematically—over time—identify

whether end results have been achieved; and, finally use the results to plan improvements or make recommendations for policy consideration, recruitment, retention, resource allocation, or new resource requests. This systematic process of evaluation is then repeated later to determine whether the program improvements contribute to intended outcomes (p.14).

Outcomes assessment serves many purposes. It acts as a mechanism to reveal, to both internal and external stakeholders, how all aspects of a college or university are contributing to student learning and development (Gardner & Milliken, 2014). As such, it functions as both quality improvement and a source of external accountability. Bresciani (2006) notes that results from outcomes-based assessment may provide justification to colleges and universities in terms of its programs and services, as well as validation pertaining to its use of financial resources.

Assessment of Student Learning Outcomes in Community Colleges

Whether transitioning directly into the workforce or into a 4-year institution as a transfer student, it is assumed that community college students will gain the knowledge and skills necessary for advancement. The mounting pressures on community colleges to assess and report on measures of effectiveness for both curricular and co-curricular programs and services has resulted in the incorporation of outcomes-based assessment as a primary means of demonstrating institutional success (Taylor, 2014). One of the driving forces in the use of outcomes-based assessment is the pressure to demonstrate the value and relevance of its programs, particularly as they relate to current workforce demands (Palomba & Banta, 1999; Upcraft & Schuh, 1996).

Gardner and Milliken (2014) have found that when utilized effectively, outcomes-based assessment may inform overall student learning and development efforts at community colleges. As such, and despite shrinking resources, many community college administrators have asked department and division leaders to review all services provided to students in order to implement comprehensive quality improvement plans that include outcomes-based approaches (Taylor, 2014), but there are challenges in doing so. Decreases in human and financial resources, as well as administration and faculty who are “stretched too thin”, are common examples cited (Cohen and Brawer, 2008). Another challenge pertains to professional development. Training is necessary for college personnel to gain the skills necessary to conduct outcomes-based assessment, yet leading these activities at community colleges often fall under the “other duties as assigned” of faculty or staff members who may not themselves have the training necessary to prepare others (Rodriguez and Frederic, 2014), a point particularly relevant to the current study.

Despite the challenges, Cohen and Brawer (2008) cite several contextual factors that highlight the importance of community colleges conducting effective outcomes-based assessment, including:

- Eroding public confidence in higher education
- Greater diversity in the postsecondary student population, including large numbers of students requiring remedial (pre-college level) education
- Potentially competing needs and priorities of programs within the same institution
- General contempt for external accountability demands

These contextual factors highlight the unique nature of community colleges in the development of student learning outcomes. A collaborative process must be used in establishing common learning outcomes for students as diverse as those served at community colleges, as

noted by Maki (2004) in describing the process as having “no universal model that fits all institutions. Rather, institutions embed or evolve practices that enable them to sustain a culture of inquiry (p. 4).”

Notwithstanding the individualized approach to constructing student learning outcomes, community colleges tend to create them using a similar hierarchical structure. In the two-year institution, student learning outcomes are generally developed at three levels – course, program, and institutional (Rodriguez & Frederick, 2014). This is the case with the institution under study, as depicted in Figure 1. It is at the program-level that community college student affairs departments identify student learning outcomes based on co-curricular programs and services.

Assessment of Student Learning in Student Affairs

Multiple contextual factors drive the assessment of student learning in student affairs. All regional accrediting bodies for postsecondary institutions in the nation have standards pertaining to student learning outcomes (SLOs), some of which are specific to co-curricular programs and services provided by Student Affairs (Brittingham, 2009). The Higher Learning Commission (2015), for instance, requires that an “institution assess achievement of the learning outcomes that it claims for its curricular and co-curricular programs (p. 18).” The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and New England Association of Schools and Colleges (NEASC) have similar requirements specific to systematic assessment of student learning in co-curricular programs and services (Busby, 2015).

In addition to accrediting bodies, professional associations in the field have greatly influenced the role of student affairs in assessing student learning by including it as a professional competency. In 2015, the National Association of Student Personnel Administration

(NASPA) and American College Personnel Association (ACPA) delineated 10 professional competency areas for professionals in student affairs, including “teach, train, and practice in such a way that utilizes the assessment of learning outcomes to inform future practice (p. 20).” Still, as Keeling et al. (2008) writes, “many student affairs professionals have not thought of themselves as educators; indeed some resist that label, preferring to understand their work as *providing excellent services* [italics in original], p. 8).” A discussion regarding the challenges that result from this perception appears below. First, a brief history is important to provide context.

A Brief History

Assessment is not a new concept to student affairs. Still considered one of the most influential reports published in the field, *The Student Personnel Point of View* (1937) resulted from a culmination of efforts by several existing committees jointly charged to examine problems associated with vocational guidance in colleges. The newly formed committee based its recommendations on the philosophy that college students’ needs extend beyond instruction and business management. In order to be an effective institution, this seminal report posits that colleges, as an essential function, must carry on “studies designed to evaluate and improve these functions and services (American Council on Education, p. 4).”

Despite the groundwork laid in 1937 in *The Student Personnel Point of View*, student affairs was not acknowledged for having a role in student learning until the report was revised in 1949. Learning experiences provided by those in student affairs were considered extra-curricular, outside of formal coursework or the classroom setting. Over the next several decades, student

affairs professionals increased their focus on student learning, but continued to play primarily a peripheral role (Schuh & Gansemer-Topf, 2010).

On the 50th anniversary of *The Student Personnel Point of View* (1937), the National Association of Student Personnel published a report that placed student learning at the center when identifying expectations of student affairs offices across the nation (NASPA, 1987). The revised publication charged student affairs professionals with moving beyond the provision of services and oversight of student activities to increased collaboration with those in academic affairs to provide experiences in which students can learn and develop (Schuh & Gansemer-Topf, 2010). This report, as well as several others published by student affair professional associations, prompted a refocus on the philosophy of student learning outside the classroom environment (Manning, Kinzie, & Schuh, 2006).

Despite this refocus, emphasis on student learning within student affairs continued to wane until 1996, the year *Student Learning Imperative* was published by the Association of College Personnel Administrators (ACPA). Its primary purpose was to “stimulate discussion and debate on how student affairs professionals can intentionally create conditions that enhance student learning and personal development (p. 1).” The document, coupled with the birth of several professional associations, further increased the field’s emphasis on student learning as a focus of practice in student affairs (Manning et al., 2006).

In the mid-1990s, student affairs professional associations were growing in strength and influence with increased attention from scholars on the role of student affairs in student development on college campuses (Schuh & Gansemer-Topf, 2010). In 1998, the American Association for Higher Education, American College Personnel Association, and National Association of Student Personnel Administrators joined forces to publish *Powerful Partnership:*

A Shared Responsibility for Learning, which promoted assessment as a critical function in advancing student learning and development. In discussing the developmental nature of learning, the report declared that “assessment of learning should encompass all aspects of the educational experience (p. 5)” and that doing so must involve collaboration between academic and student affairs professionals (AAHE, ACPA, & NASPA, 1998).

In 2004 and 2006, the American College Personnel Association and Student Affairs Administrators in Higher Education published two of the most influential documents in contemporary literature regarding student learning and development, *Learning Reconsidered* and *Learning Reconsidered 2*, respectively (Bresciani, 2011). These compelling documents argue for “transformative education—a holistic process of learning that places the student at the center of the learning experience (Keeling, 2006, p. 32).” They assert that learning is inseparable from the overall student experience. Inherent in this transformative mindset is acknowledgement of student affairs’ critical role in contributing to the promotion and assessment of student learning. In doing so, it is important that educators and student affairs professionals create context-based, measurable student outcomes that will not only contribute to transformative change, but serve to meet the demands of funding and accreditation mandates (Keeling, 2006).

Challenges

In another seminal publication, *Good Practice in Student Affairs: Principles to Foster Student Learning*, Blimling & Whitt (1999) assert that student affairs professionals who are skilled in conducting assessment can improve practice, leading to better student achievement. The authors stress the use of measurable educational outcomes as a means of quality improvement. Two challenges to doing so in student affairs that are particularly relevant to this

research are (a) difficulties in making student learning outcomes meaningful and (b) the lack of training and professional development to support the work.

In *Learning Reconsidered*, Keeling (2004) defines learning as “a complex, holistic, multicentric activity that occurs throughout and across the college experience (p. 5).” Keeling (2006) posits that simple transfer of knowledge from an instructor to a student is an outdated model embedded in a positivist epistemology that fails to recognize the importance of intellectual understanding making practical sense of our experiences. He writes:

...we have always helped our students learn in real life settings and helped them reflect on the meaning of what they have learned in the context of their own lives. We simply have not paid a great deal of attention to our role as learning facilitators nor have we developed the language to describe what we are doing in teaching/learning terminology (p. 9).

When we learn, we make meaning of ourselves and the world around us. It stands to reason that in assessing learning, we want to do so in meaningful ways.

A substantial obstacle in meaningful assessment is the lack of knowledge and skills needed to assess learning outside the classroom (Seagraves & Dean, 2010; Upcraft & Schuh, 2002). In *Assessment Reconsidered* (2008), Keeling, Wall, Underhile, & Dungy cite four primary areas of competency necessary to practice assessment - mapping, integrating, supporting, and assessing learning. Cooper and Saunders (2008) note:

The irony of the student affairs profession is that, often, those asked to be in charge of program assessment are the midlevel professionals who have not taken a research or measurement course in several years. Some colleges and universities are lucky enough to have within the division of student affairs an assessment specialist who is available to

assist with design and implementation of studies. At many institutions, however, there are no staff members who have expertise in student affairs theory, practice, and measurement and design (p. 8).

Professional development is an influential way to improve the quality and effectiveness of assessment, not only by educating faculty and staff as to the different methods of assessment available (Schuh & Gansemer-Topf, 2010), but by increasing their confidence (Banta, Jones, & Black, 2009). Rodriguez and Frederick (2014) note several reasons why community colleges, in particular, lack adequate professional development to achieve these results, including:

- Expectation to develop and assess student learning outcomes without training
- Budget restraints that place professional development low on the list of priorities
- Professional development activities are often led by a committee of staff and faculty under the responsibility, “other duties as assigned”

These challenges are complicated further by a sense of urgency to fulfill accreditation requirements. Yet, it is critical to increase the capacity of student affairs personnel to assess their students’ learning. As Hersh and Keeling (2013) express, “Too often, assessment is orphaned to the province of a small group of dedicated faculty and staff, isolated from the mainstream, who understand assessment’s benefits and are willing to engage its costs (p. 9).”

The Future of Assessment in Student Affairs

Assessment within higher education is here to stay (Bloxham & Boyd, 2007; Schuh & Upcraft, 1998; Bresciani, 2011; Keeling, Wall, Underhile, & Dungy, 2008). With the decline in institutional resources across the nation, the competition for financial support across programs

within colleges and universities is fierce. Increasingly, student affairs departments find themselves in a position in which they must not only demonstrate their impact on student outcomes, but also validate their worth to the institution as a whole (Sandeem & Barr, 2006). In 1998, Schuh and Upcraft wrote:

There is little doubt that assessment of higher education in general and of student affairs programs, services, and facilities in particular are here to stay. Once thought of as just another educational fad, assessment is now the cornerstone of our ability to plan, improve, and most important, survive (p. 2).

Approaches to Conducting Assessment

The Predominant Model of Assessment in Colleges and Universities

The PDCA (plan-do-check-act) method of assessment was originally developed by Shewhart and Deming to as a means of addressing quality improvement in industry ("The plan, do," 2016). It is now a widely accepted method of assessment in many fields from healthcare to education (Taylor et al., 2013). The PDCA procedure can be summarized in the following manner.

Plan – Recognize a problem/opportunity/area for improvement and plan a change.

Do – Test the planned change by carrying out a small-scale (or pilot) study.

Check – Review and analyze the results and reflect on what was learned.

Act – Take action based on what you (or the organization) learned.

If the action was not successful, incorporate what was learned and begin the cycle again.

Given the widespread use of a systematic approach as PDCA in institutions of higher education across the nation, why are colleges and universities, and student affairs departments in particular, struggling to document student learning and development outcomes?

The SMART Approach to Writing Outcomes

In *Assessment Reconsidered*, Keeling et al. (2008) is not alone when writing, “Key to the concept of student learning outcomes, as to formal assessment practice, is the principle of intentionality; that is, student learning outcomes represent the desired goals of learning experiences that the institution intentionally develops, structures, delivers, and assess (p. 14).” The assessment literature (Driscoll & Wood, 2007; Palomba & Banta, 2001) calls for those in higher education to take broader goals and develop more specific, measurable outcomes that can be truly assessed. Assessment plans need to be based on, and linked to, effective, measurable, and meaningful student learning outcomes that have the capacity to generate useful and reliable data (Keeling et al., 2015). Livingston, Philips, & Kline (2014) state the issue most precisely, writing, “Good student learning outcomes are written in such a way that they can be easily measured (p. 2).”

The first published article to reference SMART objectives/outcomes - those that are written to be specific, measurable, attainable, relevant, and time bound – appeared in a management article written by Doran (1981). Citing mass confusion by managers in how to frame goal statements, the author suggested using a SMART approach to achieve results (Doran, 1981).

The use of SMART outcomes has been shown to increase performance in a variety of settings (Lawlor & Hornyak, 2012) and is widely accepted as a strategy toward goal attainment.

Deardorff, Wit, and Heyl (2012) promote the use of SMART outcomes in assessing student learning; however, a thorough literature review indicates little action toward this recommendation, whereas the P-D-C-A model of assessment is widespread.

Logic Model

Logic models serve several critical functions in program and case study evaluation. They assist program developers and evaluators in conceptualizing the primary components of a program that, when implemented, are anticipated to result in changes among participants—in this case, those participating in the workshop, *Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs*. Logic models provide a framework for identifying anticipated outcomes ranging from short- term to long-range improvements. They provide a visual representation that allows even complex, theory-laden programs to be more understandable by a variety of stakeholders. Logic models also provide a framework for the analysis of data and a structure for reporting the findings in an understandable manner to stakeholders. Finally, they serve as tools for communicating to intended users both the logic behind the program, as well as the anticipated outcomes (Weiss, 1997; Patton, 2015).

There are two primary types of logic models – theory of change models and program logic models. The latter details available resources, planned inputs and activities, outputs, and outcomes, and is often used in evaluation designs (Knowlton & Phillips, 2009). Using logic models for case study research can open the “black box” of programs or interventions (Yin, 2006), making it an appropriate tool to address the research questions of this study.

In advance of the training program's implementation, the committee developed a program logic model in collaboration with key stakeholders, including personnel in Student Services (Appendix A). The model includes the necessary resources to implement the training program, specific activities employed, and clearly defined outputs. Further descriptions and important considerations of these elements appear in Figure 2. Short-term, intermediate, and long-term outcomes, as well as an impact statement follow these. The scope of the study herein includes the short-term and intermediate outcomes. The general path is linear in nature, flowing from the study's problem statement. Key assumptions and external factors are delineated as a foundation of the model.

Building a Culture of Assessment

As discussed earlier, increasing college costs, discouraging completion rates, and complaints from employers who feel graduates lack the necessary knowledge and skills to excel in the workplace have fueled concerns over what today's students are learning and the value of higher education (Leveille, 2006). Hersh and Keeling (2013) cite evidence from Arum and Roksa's 2010 book, *Academically Adrift: Limited Learning on College Campuses*, and the Association of American Colleges and Universities' 2002 landmark study, *Greater Expectations: A New Vision for Learning as a Nation Goes to College*, as indication that today's students are not learning what institutions purport them to learn.

In response to these issues, many institutions have made noble attempts to advance the assessment of student learning on campus as a means of improving outcomes. At many institutions, activity pertaining to assessment surges during self-study phases of the accreditation

RESOURCES	ACTIVITIES	OUTPUTS
<ul style="list-style-type: none"> • Support of college & department leadership <ul style="list-style-type: none"> • Primarily in the form of time away from regular duties • WEAVEonline software <ul style="list-style-type: none"> • Entities created for Student Services allow for integration into institution-wide mechanism for reporting assessment • On-site expertise in assessment <ul style="list-style-type: none"> • Core group of 3 employees who have received extensive professional development in assessment of student learning outcomes (SLOs) • Training materials based in use of SMART philosophy <ul style="list-style-type: none"> • Home-grown materials with examples customized to each individual unit within the department • Institution's desire to become more intentional in measuring student learning <ul style="list-style-type: none"> • Expressed by college leadership team, evidenced by resources committed to project, and verified by enthusiasm of Student Services staff to engage 	<ul style="list-style-type: none"> • Staff participation in SMART outcomes workshop <ul style="list-style-type: none"> • 1/2 day interactive workshop with heavy emphasis on examples of SLOs written using SMART and Not-so-SMART approach • Staff participation in WEAVEonline training, as needed <ul style="list-style-type: none"> • Only individuals with responsibility to record progress in the college's assessment tracking software need to participate • Individual and small group unit-specific training and support sessions <ul style="list-style-type: none"> • In addition to 1/2 day workshop, training committee members to meet with participants in unit groupus to work on SLO development (e.g., only advisors with training committee) • Bi-weekly progress meetings with training coordinators. <ul style="list-style-type: none"> • Designed to ensure progress continues • Ongoing support to monitor progress and provide feedback <ul style="list-style-type: none"> • Training committee members monitor progress by maintaining contact with unit directors 	<ul style="list-style-type: none"> • 15 Student Services staff trained in how to meaningfully contribute to the assessment of student learning <ul style="list-style-type: none"> • All employees within purposively selected departments to participate in training program, including leadership, in order to meet stated objectives • 5 new WEAVEonline entities created to monitor unit progress (TRIO, financial aid, Student Activities, Advising, and Admissions) <ul style="list-style-type: none"> • A critical component in order for the institution to have access to the SLO measurements taking place in Student Services • Established processes for tracking assessment activities <ul style="list-style-type: none"> • Rubrics, talley sheets, and other mechanisms for efficient and accurate tracking and documenting assessment of SLOs needed

Figure 2. Logic Model – Description of Resources, Activities, and Outputs

process or when an institution is being considered for accreditation renewal. Upon completion of the process or submission of the accreditation report, the pressure to assess drops off or is set aside for four or more years until the cycle begins again (personal communication, D. H. Devier, October 19, 2015).

Developing and sustaining a culture of assessment and evidence-based practice within an institution requires an “all hands on deck” approach (Lassiter & Akey, 2015). Hersh and Keeling (2013) proclaim that professional staff will adopt a commitment to rigorous assessment practices in teaching and learning under the following three conditions (p. 9):

1. It helps them to do their work;
2. It improves student outcomes; and,
3. It is a rewarded activity.

These attributes provide a lens by which to evaluate whether any perceived changes that occur as the result of a training program are likely to have a sustainable impact on establishing a culture of assessment and evidence-based practice within an institution.

Chapter II provided the reader with a theoretical and conceptual background on topics related to the study. The model presented in Chapter V returns to this discussion. The current chapter also provided a framework for the data collection and analysis discussed in the subsequent chapter on methods.

CHAPTER III

RESEARCH METHODS

The purpose of this mixed methods study was to use a case study evaluation approach to understand the influence of a SMART philosophy-based assessment training on student affairs professionals' knowledge, attitude, and ability to demonstrate productivity related to the assessment of student learning in a small community college in southwest Michigan. The study explored how student affairs departments may utilize such training to enhance the contributions of community college student affairs personnel in developing and sustaining its culture of assessment and evidence-based practices.

The evaluation was both formative and summative in nature. It sought to improve the training program and determine if it achieved its anticipated outcomes. The study used mixed methods to answer the following research questions:

1. How, and in what ways, does a customized assessment training and support program based on the SMART philosophy influence the following attributes among student affairs personnel of a small community college?
 - a. *knowledge* in how to assess student learning
 - b. *attitude* toward assessment of student learning
 - c. *work behaviors* related to assessment of student learning
2. How might a community college consider utilizing such training to enhance the contributions of student affairs personnel in developing and sustaining its culture of assessment and evidence-based practices?

This chapter explains the methodology used to conduct the study. It begins with a discussion regarding the study's underlying philosophical tradition. It then describes the research design, population, data collection methods, validity, and data analysis procedures. The chapter concludes with ethical considerations and attention to research quality and rigor.

Philosophical Tradition

This study emanates from a pragmatic worldview, one in which “the mandate of science is not to find truth or reality, the existence of which are perpetually in dispute, but to facilitate human problem-solving” (Powell, 2001, p. 884). Rather than focus on the nature of reality, pragmatists emphasize the nature of experience and focus on outcomes of actions (Morgan, 2014). The interaction between people and nature defines reality; thus, experience determines reality. Pragmatic theory assumes that “a statement is true if it works” (Seale, 2012, p. 20).

In education, students are considered an integrated whole and highly involved in one's own learning, whether the learning be biological, psychological, or social in nature (Carpenter, 2004). Student learning and development are intertwined; that is, they develop simultaneously. Students learn about the world around them as they mature and develop. Learning outcomes are a reflection of the interaction between a student and his/her educational experiences (Keeling, et al., 2008). This interpretation of student learning reality suggests a pragmatic worldview.

Pragmatism addressed the research problem of this study. The stated research questions strive for practical understanding about a real-world issue with no hope or intention of validating the nature of reality, understanding the true essence of a phenomenon, deconstructing social constructions, or generating grounded theory (Patton, 2015). Rather, the researcher sought to gain practical and useful understanding and insights in order to inform practice. As Patton (2015)

writes, “For pragmatists, findings that carry no practical value are meaningless precisely because they are useless. (p. 152).”

Pragmatism and Mixed Methods Research

Mixed methods approaches are based largely in the philosophical science of pragmatism (Patton, 2014; Greene & Caracelli, 2003; Johnson & Onwuegbuzie, 2004). Patton (2014), a self-described pragmatist, cites the influence of evaluation pioneer, Lois-ellin Datta, in building a strong case for pragmatism as the bedrock for mixed methods. Datta (1997) wrote “the qualities of the pragmatist’s approach, as seen by various evaluators, includes a ‘paradigm of choices’, design flexibility, methodological appropriateness as the standard of quality, improved situational responsiveness, and a reliance on practical results and level of certainty as criteria of truth (p. 34).” Morgan (2013), in writing about the integration of qualitative and quantitative methods, furthers the premise of pragmatism as a paradigm of choices, describing it as “particularly appropriate for mixed methods research because of the complexity of the choices involved in integrating qualitative and quantitative methods (p. 8).”

Research Design

Case Studies in Evaluation

Yin (2013) defines case study as “an empirical inquiry that investigates a contemporary phenomenon (the “case”) in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident (p. 1).” In conducting case study evaluation, the researcher does not assume that a program follows a path that is rational, predictable, or measurable. This makes use of this design particularly fitting for a newly

developed training and support program not previously administered with the population under study.

Case studies allows for space in exploring and evaluating the impacts of a program (Balbach, 1999). Case studies are appropriate for answering the ‘how’, ‘why’, and ‘what happened’ questions (Balbach, 1999; Yin, 2013). Additionally, they can be particularly useful in evaluating programs that are unique (Balbach, 1999), which describes the training program that was developed within this institution to directly address the learning needs expressed by those for whom it was designed. Case study evaluations may be used to draw relationships between an initiative (i.e., the training program) and its actual outcomes (Mark, 2008, as cited in Yin, 2014). For these reasons, the case study was an appropriate choice for the research questions herein.

In comparison to other evaluation methods (e.g., surveys), case study evaluations are able to “capture the complexity of a case, including relevant changes over time, and...attend fully to contextual conditions, including those that potentially interact with the case.” (Yin, 2006) The unit of analysis, or case, was the training program, “*Intentional Change: Making Meaningful Contributions to the Assessment of Student Learning Outcomes in Student Affairs*” within the particular context of the Student Services department of the selected institution.

Triangulation of data collection and analysis is a hallmark of the case study design and increases both the study’s reliability and validity. Triangulation is the “the convergence of data collected from different sources, to determine the consistency of a finding (Yin, 2006).” In discussing data analysis in case studies, Morra and Friedlander (2005) describe triangulation as the key technique used to develop reliability and validity of findings through agreement across and among multiple types of data sources, leading to verification through the consistency of evidence. A case study evaluation should deliberately triangulate evidence from multiple sources

to confirm and corroborate findings (Yin, 2014). An explanation of the data sources used in this study appears later in the chapter.

Case studies as a design have many strengths. They can use a range of methods appropriate for the situation. When used with qualitative methods, case studies allow for a program's complexity to be studied in depth and in its particular context. Multiple perspectives can be considered, allowing for better understanding of how and why things happened in the program. Gathering multiple perspectives inherently increases the potential for more engaged participants in the research. The inductive nature of qualitative case studies allow for the exploration and understanding of processes, dynamic change, and unanticipated program outcomes (Simon, 2009).

Case studies are not without potential limitations. Simon (2009) indicates that researcher subjectivity is unavoidable, but suggests that such subjectivity can be important to understanding and interpreting the case under study. Single cases may not be relevant to understanding situations in other contexts. Given the strengths and potential limitations, concessions may be necessary depending on the purpose of the study. Balbach (1999) states, "What one gains in richness by doing a case study evaluation, one loses in the breadth of generalizations (p. 3)." Strategies used to address concerns regarding subjectivity and generalizability are discussed in the following section pertaining to the use of a mixed methods approach.

Mixed Methods Research

"A mixed methods design is useful when the quantitative or qualitative approach, each by itself, is inadequate to best understand a research problem and the strengths of both quantitative and qualitative research (and its data) can provide the best understanding (Creswell, 2013, p.

20)”. The use of mixed quantitative and qualitative methods in conducting research and evaluation is common (Patton, 2015). “Because qualitative and quantitative methods involve differing strengths and weaknesses, they constitute alternative, but not mutually exclusive, strategies for research. Both qualitative and quantitative data can be collected in the same study (Patton, 2015, p. 22).” Use of both methods of inquiry allows the researcher to cross-validate findings, allowing for more in-depth understanding of results.

The motivation for using a mixed methods approach in this study is the desire to produce convergent findings; that is, to examine the research questions using triangulation to determine if similar results are obtained using different methods (Morgan, 2014). Such cross-validation strengthens the researcher’s conclusions. Greene and Caracelli (2003) categorize mixed method inquiry using five broad categories, one of which is triangulation, which they describe as “multiple methods used to find areas of convergence of data from different methods, with an aim of overcoming the biases or limitations of data gathered from any one particular method.” Morgan (2013) describes the interplay of the two methodological approaches in the following excerpt:

Qualitative methods, such as participant observation and open-ended interviewing, have strengths that are especially useful for inductive-subjective-contextual research, while quantitative methods, such as survey interviews and experimental interventions, are especially well suited to deductive-objective general research. Thus, both qualitative and quantitative research provide well-developed matches between a set of research purposes and a corresponding set of research procedures (p. 9).

The discussion now turns to the use of mixed methods in conducting program evaluation. In doing so, the researcher relies heavily on the work of Patton (2015), a leader in the field of qualitative evaluation and research.

Mixed Methods Applied to Program Evaluation

Qualitative research is inductive by nature. Informally referred to as a “bottom up” approach, inductive logic begins with specific observations in the field and lead to general patterns of understanding. Open-ended observations, the key to naturalistic inquiry, allow for exploration and discovery of patterns that exist in the phenomenon under study. The researcher attempts to understand this phenomenon without the predetermined outcomes characteristic of quantitative inquiry (Patton, 2015).

In conducting program evaluation, the qualitative methods provide for an inductive path to understanding the relationship between program resources, inputs, and activities and the program’s outcomes, based on participants’ experiences. As opposed to experimental research in which variables are controlled or manipulated, naturalistic inquiry allows programs to be evaluated using a dynamic process. Variables are observed in their natural setting in order to allow complex realities to be explored and understood (Patton, 2015). “Qualitative methods are often used in evaluations because they tell the program’s story by capturing and communicating the participants’ stories. Relying heavily on fieldwork, evaluation case studies have all the elements of a good story. They tell what happened when, to whom, and with what consequences (Patton, 2015, p. 18).”

Consideration of unintended outcomes or consequences in evaluation is critical to provide a fair assessment of the program (Chen, 2014). Patton (2015) notes that qualitative

inquiry is particularly suited for identifying unintended outcomes in program evaluation, writing, “To find unanticipated effects, you have to go into the field where things are happening, observe what is really going on, interview program participants about what they’re experiencing, and find out through open inquiry what is happening, both intended and unintended (p. 10).”

Whereas qualitative methods tend to produce an abundance of detailed information about a relatively small number of subjects, a quantitative approach allows for the capture of relevant data from larger numbers of individuals using a limited set of questions. This produces results that are broad, generalizable, and more concise for reporting purposes (Patton, 2015).

It is imperative to consider one’s motivation in deciding whether to used mixed methods. One rationale for a mixed methods approach is the desire to yield convergent findings across different methods that address the same research questions (Morgan, 2013). This convergence, or triangulation of data, was the primary rationale for choosing mixed methods for this study.

In context of educational research, Miron (1998) suggests the researcher consider several factors in deciding whether to use mixed methods. These include:

- The researcher’s abilities, limitations, personality, academic/disciplinary background, and preference for particular methods
- The academic traditions of the particular field
- The nature of the research problem and anticipated outcomes
- The research setting in which the study is to be conducted
- Time and financial resources (pp. 394-395)

All of these factors were found to be relevant and thus, considered in the development of this study.

The Methodological Paradigm Debate

The decision of methodology to use, whether quantitative, qualitative, or both, is not without debate (Husén, 1999). For pragmatists, Patton (2015) describes the use of mixed methods as “the radical middle” and summarizes the premise of the “paradigm war” by writing:

Philosophers of science and methodologists have been engaged in a long-standing epistemological debate about the nature of “reality” and knowledge. That philosophical debate finds its way into research and evaluation in differences of opinion about what constitutes “good” research and high-quality evidence. In its simplest and most strident formulation, this debate has centered on the relative value of two different and competing inquiry paradigms: (1) using quantitative and experimental methods to generate and test hypothetical-deductive generalizations versus (2) using qualitative and naturalistic approaches to inductively and holistically understand human experience in context-specific settings. (p. 88)

Convergent Parallel Design

This study uses a convergent parallel design in order to best understand the research problem by collecting and analyzing different, but complementary data. Under this design, quantitative and qualitative data are collected at the same time and the methods are equal in prioritization. Initially, data analysis remains independent by method, but results are combined during overall interpretation in order to seek convergence between the two data sources (Creswell, 2013).

Selection of Participants

The institutional setting selected for the study employs 15 individuals in the various units of the Student Services department selected for participation in this study—admissions, financial aid, academic advising, student activities, and TRIO Student Support Services. Due to the relatively small size of these areas, a census approach was appropriate in selecting participants. Patton (2015) refers to this as “complete target population” in which everyone within a unique group of interest is interviewed and/or observed. The rationale for selecting only individuals within the Student Services department, as opposed to the institution at large, was based on the purpose of the study and the evaluation case study methodology. Only current employees within Student Affairs at the case study site were determined to have the experience necessary to provide the researcher with personal and professional insight into the topic at hand. Sampling was not used in this study. Had the Student Services department employed a significantly larger number of staff, such as that found in a large community college, sampling may have been necessary.

The rationale for including the five above indicated units within the Student Services department was based in both institutional context and the available literature. Institutionally, these areas are structured under the same executive leadership, share a common mission, and are within very close proximity to one another within the building, distinctly separate from other departments in the college. In *Rentz's Student Affairs Practice in Higher Education*, Carpenter (2004) devotes entire chapters to admissions, academic advising, student activities, financial aid, and counseling (which shares many characteristics of the college's TRIO Student Support Services program), justifying the inclusion of these units in the present study. Carpenter (2004)

includes other areas that are considered student affairs; however, these areas do not exist at the study institution (e.g., residence halls and student health).

Additional service and support units exist within the institution's student affairs area but were not selected to participate in the study. These include Student Government, International Student Services, Registration/Records, and Career Counseling, all of which are housed within Student Services. The number of international students and those who actively participate in Student Government are very small at the current time (less than five in each) and the student affairs personnel responsible for this group is also an academic advisor, a unit included in the study. The Career Counseling advisor was just recently assigned this role after several years during which the institution did not actively promote career services on campus; this student affairs staff also serves as a full-time academic advisor and was included in the study. The researcher was unable to find any support in the literature for including Records/Registration in the study as an integral component of student affairs pertaining to the assessment of student learning outcomes.

Data Collection Methods

Data Sources

Due to the complex nature of a case within its context, case study evaluations should depend on multiple sources of evidence, examples of which include interviews, document review, field observations, archival records, physical artifacts, and observation (Yin, 2014). The primary data source in this study is in-depth interviews with 15 staff members, as previously indicated. The secondary data collection method involves document review, specifically an

accounting of the departments' *WEAVEonline* entities that demonstrate the qualities inherent of goals and outcomes written using the SMART approach, which is the primary focus of the customized assessment training (intervention) provided. *WEAVEonline* is the college's assessment tracking software program.

Procedures

The primary means of data collection for this study was participant interviews. All 15 participants identified from Student Services agreed to participate in the study and provided responses to the researcher's semi-structured interview questions over the duration of two 30-60 minute interview sessions. The rationale for scheduling two sessions was to allow for assessment of student affairs professionals' knowledge, attitude, and ability to demonstrate productivity related to the assessment of student learning, both pre- and post-training. Both sessions used the same interview protocol. Additionally, the college president agreed to participate in a single interview following completion of the training program. The study yielded 31 interviews (pre- and post-training interviews for each of the 15 Student Services participants and one interview with the president). All were audio recorded for transcription.

In order to collect data from the institution's *WEAVEonline* entities, the researcher was granted access to the online assessment tracking program by the Dean of Students with permission of the college president. Access allowed the researcher to view all the assessment components that are entered into the system, including learning outcomes, specific measures, time frames, strategies, responsible parties, and action plans, if applicable. *WEAVEonline* allows authorized users to connect program-level learning outcomes with institutional-level learning outcomes, a connection referred to as an association in the software program.

Instrumentation

In the qualitative paradigm, the researcher is the primary instrument and requires the competence and skill to secure quality results (Patton, 2002). “The researcher is the main instrument in collecting and interpreting data (Simon, 2009, p. 14).” Interview protocols, rating forms, and rubrics developed for this study promoted a systematic and transparent process by which researcher bias is lessened (Yin, 2014). The researcher used several forms to collect data during this study:

- *Participant Semi-Structured Interview Protocols (Appendices B, C)*

It is important to note that, as a primarily qualitative evaluation case study, the interview protocols were designed to act as a guide for discussion and dialogue between the student researcher and the participant regarding the research topic. This instrument is not standardized, nor has it been validated. The researcher developed it to parallel the research questions posed by the study.

- *Participant Interview Protocol – Item Ratings (Appendix D)*

Following the interview questions, both pre- and post-workshop, participants completed item ratings pertaining to their perceived knowledge, skills, and behaviors regarding the use of SMART outcomes in measuring student learning outcomes in the context of student affairs.

- *Participant Workshop Evaluation Form (Appendix E)*

Following workshop sessions, participants provided feedback regarding their personal experience, perceived quality of the workshop, and the degree to which the material was

relevant. Additionally, in order to measure intended behavioral change, participants indicated ways in which they planned to incorporate the workshop material into their actual work. The purpose of this instrument was to strengthen any research conclusions that may be drawn pertaining to the impact of the training program.

- *Evidence of SMART Outcomes Rubric (Appendix F)*

The use of the WEAVE*online* assessment tracking software was assessed using a rubric designed to measure actual use of the workshop material and as a means of determining the degree to which the outcomes developed by those in Student Services met the criteria of the SMART approach.

Informed Consent

Informed consent is a legal and ethical obligation prior to conducting research with human subjects (Leedy & Ormrod, 2014). The president of the community college provided consent to conduct research on the campus. Approval was obtained by the Western Michigan University Human Subjects Institutional Review Board prior to conducting research (Appendix I). Individual subjects signed informed consent forms prior to participating.

Data Analysis Process and Procedures

Data from semi-structured in-person interviews with stakeholders, both prior to and following the training intervention, were triangulated with archival data obtained from the college's electronic system for tracking assessment practices (i.e., WEAVE*online*); both were used as evidence of change participants' knowledge, attitudes, and work behaviors related to

measurement of student learning outcomes. Combined, these multiple data sources provide a more complete picture of the impact of the customized assessment training program over time.

Quantitative Analysis

Multiple instruments in this study collected quantitative data. During both pre- and post-interviews, participants self-reported ratings pertaining to knowledge of and attitude towards the assessment of student learning in student affairs. Additionally, respondents completed a workshop evaluation form that used a numerical rating scale.

A paired sample t-test is a statistical technique used to compare population means of two correlated samples, such as matched pairs in a pre-post study. By using the paired sample t-test, a statistical conclusion is drawn as to whether there is a difference in the pre-workshop and post-workshop self-rating items of participants (Appendices B-1 and B-2). In a paired sample t-test, the difference between the two observations of each pair (the participants' pre- and post-item ratings) was calculated. The standard deviation of the mean difference of each pair was used to calculate the standard error. Subsequently, the t-statistic was determined. Under the null hypothesis, this statistic follows a t-distribution with $n - 1$ degrees of freedom.

The hypotheses of this study were as follows: H_0 (null) = the mean of two paired samples is equal; H_1 (alternative) = the mean of two paired samples is not equal. The significance level was set at $\alpha = .05$. Several assumptions must be met in using this particular statistical calculation. This test assumes a normal distribution of the data and equal variance of the two samples. Cases must also be independent of one another. Only matched pairs can be included. Since all participants completed both the pre- and post-instruments, these assumptions were met.

Qualitative Analysis

The organization and analysis of the study's qualitative data followed general phases defined by Creswell (2013) and Marshall and Rossman (2010)—data organization, immersion in the data, data coding, and data analysis.

Data Organization and Immersion

Preparing and organizing large volumes of data are essential first steps prior to reducing the data into themes through the process of coding (Marshall and Rossman, 2010). The study's qualitative data were organized using several methods. Interview transcriptions were saved in electronic format to allow for searching of relevant words, terms, and phrases. Transcriptions were also printed in hard copy and sorted to allow for manual coding from multiple perspectives (e.g., all pre-workshop interviews combined, Participant A pre- and post-interview combined, all interviews from participants of a particular educational attainment level combined). Immersion in the data involved reading and re-reading of the data in order to become familiar with the individuals, context, and events that took place in relation to the training program itself. Quantitative data obtained during interviews, following the workshop, and upon document review were entered and stored in a Microsoft Excel® spreadsheet for later calculation of descriptive statistics.

Data Coding and Analysis

Patton and Applebaum (2003) wrote, "The ultimate goal of the case study is to uncover patterns, determine meanings, construct conclusions and build theory (p. 67)." According to Yin

(2014), three guiding strategies are available to the case study researcher: use of theoretical propositions, consideration of rival explanations, and development of a rich case description. The latter was the most appropriate to address the research questions of this study in its context. Stake (1994) promotes the use of categorical aggregation as a strategic approach to analyzing case study data. Categorical aggregation seeks to find meaning in instances found in the data. In this research, categories were formed around the constructs under study (e.g., how participants described their attitude toward the assessment of student learning).

Early recorded interviews were transcribed with initial data coded into themes that emerged. Remaining interviews were transcribed as completed. A constant comparative approach was used throughout the analysis. Themes were coded manually, which were then compared to data from secondary sources (i.e., program documentation during pre-interviews; *WEAVEonline* entities during post-interviews). This “zig zag” approach, developed by Strauss and Corbin (1990), is an iterative process that increases the confidence of findings. As findings emerged through the researcher’s interactions with the data, themes were identified.

Based on identified themes, categories of data were formed. The researcher constantly compared the data while expanding, collapsing, and merging categories. The researcher sought and interpreted patterns using thematic categories. Rival explanations were considered, as suggested by Strauss & Corbin (1998). Patterns and interpretations were then finalized. The researcher used content analysis, which Patton (2015) refers to as “any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings (p. 541).”

During analysis and in preparation of the report, direct quotations were highlighted as an important strategy. “The use of quotes in a case study write-up helps demonstrate that the

evaluator has captured the respondents' perceptions and feelings accurately. Paraphrasing provides weaker evidence (Balbach, 1999, p. 9)." Since there is inherent uncertainty in any form of evaluation, it was important in the analysis for the researcher to, "let others know where interpretations are being made and the degree of confidence one places in them" (Balbach, 1999, p. 9). Thick, rich description appear in the results chapter as these act as an important foundation for qualitative analysis and reporting (Patton, 2015).

Trustworthiness

Positivists tend to question the trustworthiness of qualitative research, likely due to alternative conceptions of reliability and validity as these concepts cannot be addressed in naturalistic inquiry as in quantitative research. Many qualitative researchers prefer using different terms to reflect these concepts related to trustworthiness, perhaps to create distance from those who ascribe to the positivist worldview (Shenton, 2003).

Lincoln and Guba (1985) posit that trustworthiness of a qualitative research study is critical to evaluating its worth. Lincoln and Guba's constructs have received a great deal of support by many qualitative researchers over the past three decades (Shenton, 2003).

Trustworthiness involves establishing credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985).

Credibility, most closely associated with internal validity, pertains to confidence placed in the truth of the findings (Lincoln & Guba; 1985; Patton, 2015). Several techniques have been proposed to improve credibility of findings. These include prolonged engagement in the field, constant comparison, triangulation, and peer debriefing. Examination of previous research to frame findings and the researcher's use of reflexive notes also add to the study's credibility

(Patton, 2015). In writing about methods to improve credibility, Patton (2015) stresses the importance of alternative explanations:

Being able to report that you engaged in a systematic and conscientious search for alternative themes, divergent patterns, and rival explanations enhances credibility, not to mention that it is simply good analytical practice and the very essence of being rigorous in analysis. This can be done both inductively and logically. Inductively, it involves looking for other ways of organizing the data that might lead to different findings. Logically, it means thinking about other logical possibilities and then seeing if those possibilities can be supported by the data. When considering rival organizing schemes and competing explanations, your mind-set should not be one of attempting to disprove the alternatives; rather, you look for data that support alternative explanations (p. 653).

In this study, the researcher spent extended time in the field as the primary means of establishing credibility. The researcher's discussions with participants about student learning outcomes and the process of integrating meaningful assessment into daily practice occurred with much greater frequency than formal periods of data collection.

Transferability, most closely related to external validity or generalizability in quantitative research, reflects an effort to demonstrate that findings have applicability in other contexts (Merriam et al., 2001). The use of thick description is the primary strategy recommended to enhance transferability. A contrasting view suggests that the possibility of transferability should not be immediately discarded. Despite a case being unique, it is positioned within a broader context and may be an example of a broader group (Stake, 1994). Transferability of findings

from this study is most likely in the case of a small community college that shares characteristics with the study institution. All of the Student Services staff work within the confines of one enclosed area set apart from others within the institution. This proximity encouraged continual engagement in the process. Additionally, the presence of on-site expertise and the willingness of a committee of individuals to provide assessment training and support would be critical factors in transferability of findings to an alternative setting.

Dependability, related to the concept of reliability, refers to whether a study can show that its findings are consistent and could be repeated (Shenton, 2003). To increase a study's dependability, the researcher should report processes within the study in detail (Marshall & Rossman, 2010). Such in-depth coverage also allows the reader to assess the extent to which proper research practices have been followed. In order to strengthen the study's dependability, the researcher of the current study provided an in-depth description of all applicable processes.

Confirmability, in comparison to the positivist's construct of objectivity, indicates a degree of neutrality or the degree to which participants shaped the findings, as opposed to the researcher. Triangulation helps in reducing the effect of investigator bias. "Neutrality is not an easily attainable stance, so all credible research strategies include techniques for helping the investigator become aware of and deal with selective perception, personal biases, and theoretical predispositions (Patton, 2015, p. 58). In addition to the use of triangulation in the current study, the researcher relied heavily on direct quotes to focus on participants' own voice.

Ethical Considerations of Insider Research

There are ethical considerations of conducting research within an institution in which the researcher is employed. In an early writing on the topic, Merton (1972) would refer to the

researcher of this study as an *insider researcher*, “an individual who possesses a priori intimate knowledge of the community and its members (p. 9).” Much later, Chavez (2008) notes the following distinctive levels:

Insider researchers may be considered to be *total insiders*, who share multiple identities or profound experiences with the community they are studying, or *partial insiders*, who share a sole identity with a certain extent of distance or detachment from the community (p. 476).

The researcher in this study is a partial insider. Although the institution employs me, I report jointly to the President and Academic Dean in my role as Director of Institutional Effectiveness and Research. I do not hold a supervisory role over any participants, nor do I have an impact on any decisions made in regards to participants’ assigned duties, compensation, or evaluation. I do work in collaboration with many of the study’s participants on projects both related and unrelated to the study’s focus. In recent years, the amount of insider research that is being conducted has increased, particularly in the field of education (Greene, 2014).

There are both benefits and limitations of conducting research as an insider. In their book, *Doing Work Based Research: Approaches to Enquiry for Insider-Researchers*, Costley, Elliott, and Gibbs (2014) provide a summary of the opposing views. Inside researchers possess pre-existing knowledge of the program’s current and historical context and is more likely to blend in without causing disruption to the setting. Interactions are more natural, less inhibited, and more likely to open in regards to participants’ sharing of information and insight. Insider researchers have more ready access to participants and settings, and may be more readily accepted (Greene, 2014).

Inside research is not without its critics. Inside researchers may be viewed as too familiar, placing them at risk for not being objective. Assumptions based on prior knowledge may alter the inside researcher's ability to draw inaccurate assumptions (Greene, 2014). Inside researchers are accused of being inherently biased, as being too close to the subject matter to ask provocative questions necessary to study the culture (Merriam et al., 2001). Van Heugten (2004) claims "The selection of a topic that clearly reflects a personal interest and the selection of colleagues as subjects raise the spectre of insider bias (p. 207)." An additional concern is that results from insider research are not generalizable to outside settings. Despite these criticisms, Costly (2010) defends the use of inside research by emphasizing the pragmatic benefits:

Work based research may not transfer exactly to another situation, but it involves the application of research, which has usefulness and application to a particular situation. It has usefulness to the community of practice and to the individual researcher, and it has the potential to generate theory. It embraces complexity and can be empowering and innovative, saving time and money by making improvements (p. 4).

Several authors recommend strategies to guard against the potential risks to insider research. Costley (2010) suggests being attentive to participant feedback, critically evaluate the data early to discover any inherent bias, and use triangulation in gathering and analyzing data. These methods were employed in the study.

Limitations

At this point, it is prudent to return briefly to the discussion regarding positionality. A limitation exists for an inside researcher collecting data directly from participants. As an

employee holding a director level position within the community college in which the study took place, the researcher had to be conscious and deliberate in monitoring all aspects of data collection, analysis, and reporting. In doing so, the researcher employed many of the suggestions made by experts in the field to guard against researcher bias, such as clarifying the researcher's role with participants and continual self-monitoring in order to promote trustworthiness in the findings. Additionally, the researcher consulted with and sought feedback from the dissertation chairperson regarding any concerns that arose throughout the process. Although collecting data as a director within the institution was a limitation, the reader should not be too concerned in this particular study. There was no evidence of aversion amongst participants to share; in fact, participants were quite forthcoming throughout the interview process.

A second limitation pertains to the small sample size and resulting data for quantitative analysis. Despite the small sample, quantitative analysis was successful. A third limitation to the study was the selection of a single site. Although transferability is difficult to establish, the study produced robust, contextualized findings that may have applicability in a broader sense, particularly among small community colleges that face similar struggles in measuring student learning outcomes. A fourth limitation pertains to the researcher's lack of formal education or academic preparation in the field of higher education. Despite this, she has considerable experience as a master's level social worker, making her uniquely qualified to conduct interviews in a manner that generates rich data. Additionally, the researcher has five years of experience in her current position at the institution, which includes significant responsibilities related to overall assessment.

Summary

This chapter opened with a discussion of pragmatism as the philosophical basis underlying the study. The writer then provided background information on mixed methods as an appropriate choice for addressing the research questions posed in this evaluation case study. Once this rationale was established, the chapter presented the specific methodology employed. Three methodological approaches were used to collect data: (1) in-depth interviews with training program participants, (2) systematic document review of entries in the institution's s web-based software program, and (3) participant surveys used to collect item ratings. Limitations were also discussed, paying particular attention to the researcher's positionality in the research setting

CHAPTER IV

RESULTS

This chapter begins with a description of the characteristics of participants, followed by an overview of the training program in which they participated. A logic model developed with key stakeholders is presented, along with an explanation of how it was used in the study. This is followed by the results of the study based on the analysis of 31 semi-structured interviews, participant pre- and post-workshop ratings pertaining to the concepts outlined in the research, and systematic document review. In concluding the chapter, a summary of key findings of the research is shared.

This study uses a mixed methods approach to answer the following exploratory questions:

1. How, and in what ways, does a customized assessment training and support program based on the SMART philosophy influence the following attributes among student affairs personnel of a small community college?
 - a. *knowledge* in how to assess student learning
 - b. *attitude* toward assessment of student learning
 - c. *ability to demonstrate productivity* related to the assessment of student learning
2. How might a community college consider utilizing such training to enhance the contributions of student affairs personnel in developing and sustaining its culture of assessment and evidence-based practices?

Description of Participants

Fifteen individuals are employed in the five units of Student Services selected for the study, based on the sampling explanation found in the methods section. These units include admissions, financial aid, student activities, advising, and the TRIO Student Support Services program. Two of these 15 Student Services employees hold leadership roles as assistant deans within the department. These 15 individuals and the college president were invited to participate in the study; all agreed, yielding 16 study participants. Table 1 shows participant demographics pertaining to years employed in higher education and the field of student affairs, area of Student Services, highest level of educational attainment, and gender.

Overview of the Training Program

This section provides a brief overview of the training and support program, *Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs*, which is the focus of the evaluation.

At multiple points over the duration of 12 weeks, Student Services staff had contact with trainers regarding the development, use, and goal attainment of measurable outcomes related to student learning. Initially, training committee members met with directors of individual units (e.g. admissions) to gather information regarding any previous attempts to design instruments or collect data for assessment purposes. During these sessions, training facilitators explored which concepts were considered most desirable for students to learn or develop when interacting with or participating in services provided by individual student affairs units or in conjunction with

Table 1

Participant Demographics (Student Services, N=15)

Variable	Range	Mean	Median
<i>Years Employed in Higher Education</i>	3 - 32	13.8	14
<i>Years Employed in Student Affairs Role</i>	3 - 29	12.0	10
Variable	N	Percentage	
<i>Student Services Unit (primary role)</i>			
Admissions	2	13.3%	
Advising	4	26.7%	
Financial Aid	2	13.3%	
SSS TRIO Student Support Program	3	20.0%	
Student Activities	2	13.3%	
Student Services Leadership	2	13.3%	
<i>Highest Level of Education (degree)</i>			
Associate	2	13.3%	
Bachelor's	5	33.3%	
Master's	8	53.3%	
<i>Gender</i>			
Male	2	13.3%	
Female	13	86.7%	

Note. Some percentages may not total 100% due to rounding.

other services. Figure 3 identifies the six primary areas of student learning considered by key stakeholders to be most critical.

With these key stakeholders, facilitators discussed whether there were any existing processes in place to capture this learning and development. Key stakeholders brainstormed and explored options with particular attention paid to the concern of excess burden. The reality is that Student Services at this institution, not unlike many student affairs departments across the nation, experienced reductions in staffing due to declining student enrollment in recent years.

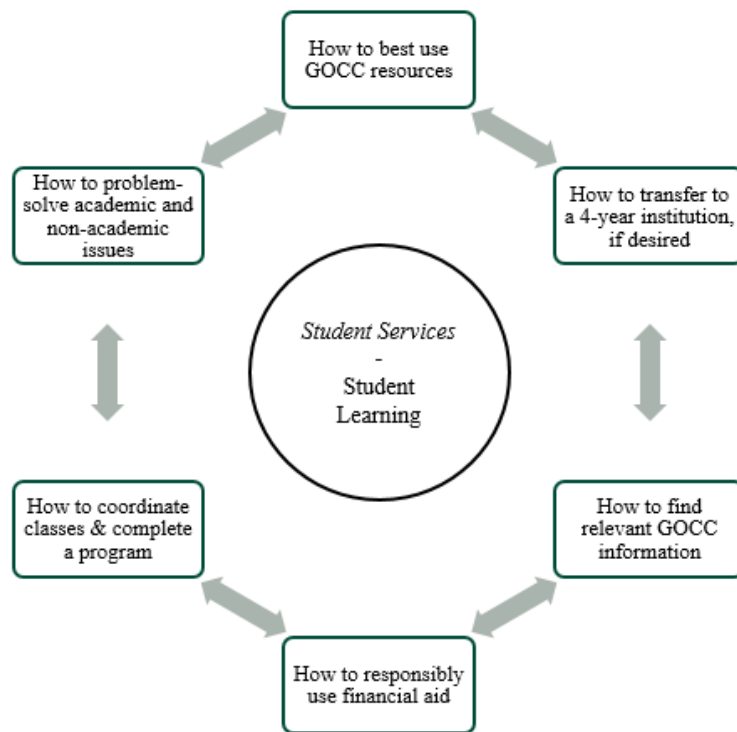


Figure 3. Desirable Areas of Student Learning Identified by Stakeholders

Following the initial session with unit directors, training committee members held a half-day department-wide workshop to introduce the principles of writing, monitoring, and reporting on SMART outcomes. Fourteen of the 15 employees of the Student Services department participated. Although one individual was unable to participate in the half-day workshop, this employee did participate in several pre-workshop planning sessions and post-workshop follow-up sessions with her colleagues. Thus, data obtained from this participant was included in the analysis. The workshop relied heavily on the use of real-world examples to demonstrate student learning outcomes (SLOs) written in a manner consistent with the SMART approach, as well as those that do not meet the criteria of being specific, measurable, attainable, relevant, and time

bound. Figures 4-6 show examples of presentation slides from the workshop. Prior to conclusion of the workshop, participants worked in small groups to practice writing unit-specific, measurable student learning outcomes intended to make meaningful contributions to the assessment of program-level (SLOs).

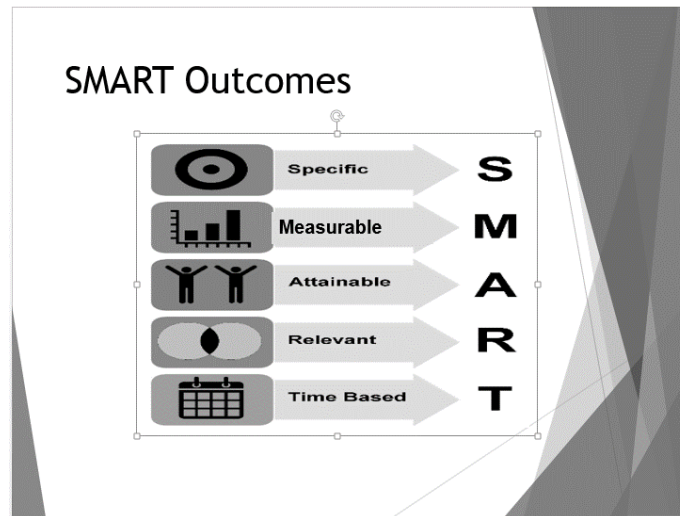


Figure 4. Workshop Slide: Introducing SMART Outcomes

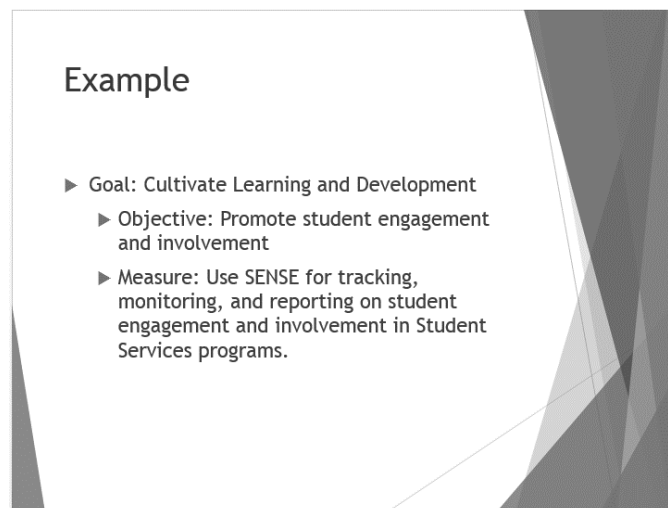


Figure 5. Workshop Slide: Example of a Not-So-SMART Student Learning Outcome

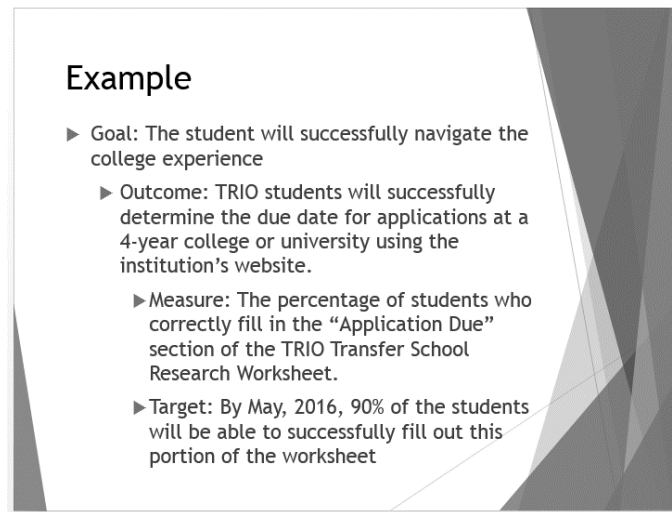


Figure 6. Workshop Slide: Example of a SMART Student Learning Outcome

Immediately following the one-half day workshop session, participants were asked to complete an evaluation form in which items were rated using a 7-point scale (Appendix E). Results are displayed in Table 2. Post-workshop feedback was very positive. Ratings were consistently high with little variance, indicating that participants felt the workshop was relevant and of high quality.

These findings are important in that they address the training program's fidelity. Program fidelity, the degree to which a program is delivered as it was intended, is important in determining whether a program truly meets its intended outcomes. Failing to consider program fidelity may result in Type III errors, or falsely concluding that outcomes are the result of a specific program or invention when, in fact, they are not (Esbensen, Matsuda, Taylor, & Peterson, 2011).

In the weeks following the half-day workshop, training committee members provided small group and one-on-one support to participants in refining their student learning outcomes

Table 2

<i>Workshop Evaluation Mean Ratings (N=14)</i> <i>(1 = Strongly Disagree to 7 = Strongly Agree)</i>	Mean (SD)
The content of the workshop was relevant to the topic of capturing student learning that occurs within student affairs.	6.57 (0.51)
The materials used in the workshop were of high quality.	6.50 (0.52)
The workshop presenters were effective in communicating the information.	6.71 (0.47)
The workshop increased my knowledge of SMART outcomes.	6.70 (0.43)
The workshop increased my appreciation for the use of SMART outcomes.	6.43 (0.51)
The workshop increased my level of preparation to write SMART outcomes.	6.57 (0.51)

Note. One study participant did not attend the main workshop event in which the evaluation form was used.

and developing and/or revising instruments for collection and analysis of student learning outcome data. Additional assistance was provided to those who required training in the use of the institution's WEAVEonline assessment software to track and document assessment efforts. WEAVEonline is an online assessment management tool created at Virginia Commonwealth University for the purposes of documenting and managing assessment in the academic setting (WEAVEonline, 2016). Data collection and analysis for purposes of case study evaluation occurred throughout the process.

Qualitative Results: Emerging Themes

Based on the data coding procedures outlined in the Methods section, five major themes developed during the course of data analysis:

1. Awareness of student learning in Student Services
2. Responsibility for assessing student learning
3. Confidence in ability to assess student learning in a meaningful way
4. Value, both internal and external to Student Services, that it matters to students and to the institution to assess student learning
5. Ownership of the practice of student learning assessment

Following is an exploration of themes as each materialized at two points in time, prior to and following completion of the assessment training program.

Theme One: Awareness

Pre-Training

Prior to participation in the training program, interviewee responses to initial questions pertaining to student learning and the assessment of student learning fell primarily into one of two levels of awareness: (a) those who perceived student learning solely to be a function of the classroom, and (b) those who assumed some student learning was taking place in Student Services, but expressed a lack of awareness about what to do with it. Distribution was approximately equal and appeared loosely correlated with participants' highest level of educational attainment and job classification.

Learning occurs in the classroom, not Student Services.

When asked to share thoughts about the measurement of student learning in Student Services, several participants expressed a clear sense of disconnect with the topic. One paraprofessional simply responded, “It’s not what we do.” An administrator responded similarly, “When I think learning, I think classroom.” Several participants, primarily those in support positions, echoed sentiments such as “It’s not a topic [assessment of student learning] that I think a whole lot about” and “Generally it’s in the classroom that we’re doing that [assessing student learning].” One rather candid participant, when asked to share her thoughts about capturing student learning, replied, “Actual learning? You know we’re not in the classroom with them?”

A common situation that unveiled itself during pre-interviews was a tendency for participants to respond positively about the role of assessment in Student Services (perhaps based on the desire to appear well informed), but then provide examples focused only on the classroom. The following is an example from one participant:

We talk to the students themselves, and get their perspective of how their learning is going in their classrooms. And then, we also try to get the professors' side of where they're at in their student learning and assessment, and how it's going as far as grading-wise and attendance-wise, and things like that...So, we have a little more impact in it, just in that we could run reports... assessment on how students are doing in their classes with their learning based on that outcome.

Others affirmed that student learning outcomes were actively assessed in Student Services, but with further inquiry, it became clear that only student satisfaction was being evaluated:

Researcher: Can you please describe to me any actual work duties that you perform on a regular basis that relate to the assessment of student learning here in Student Services?

Participant: Yes. We do surveys...we have them do an anonymous survey that is based on numbers. So, they rate the services they've received. We ask that they tell us what was their most meaningful bit of information or advice they got from participating in the program...that kind of thing.

I know (or believe) learning occurs in Student Services, but I don't know what to do with it.

Those who indicated awareness that learning is a desirable outcome of students' interaction with Student Services expressed uncertainty and frustration about not having the knowledge or skills to manage it, as suggested by this administrator's response to a question about position responsibilities: "Most of what we're doing is evaluating satisfaction and use of our services and programs...the actual learning piece is largely absent from what we've been doing, and I wouldn't honestly know where to start with that." Others reiterated the sentiment, with such as "I understand the concept of it [measuring student learning], but how to do it the way it's truly meant to be done...[sigh] probably not so much."

A few participants acknowledged awareness of playing an indirect or supportive role in the assessment of student learning, but implied that meaningful assessment is the role of academics, such as:

The actual student learning... I feel like we should be able to help in some capacity. I'm just not sure exactly what... Yeah, because we're kind of taken out of that. We get the

students up to that, the student learning point, and then we help them along the way as we can, but we're not involved in the actual measuring learning part of it.

Post-Training

Following completion of the training program, interview responses reflected a substantial increase across nearly all participants in their level of awareness of student learning and the ability to assess such learning within the context of Student Services. The following two assertions best characterize this increased awareness: (a) Student Services contributes a great deal to student learning, and (b) Students learn important life skills in working with Student Services.

Faculty aren't the only ones who teach our students or assess their learning.

Participants referred to “teaching” (or derivatives of the term) in the context of Student Services three times across all 15 participants during pre-interviews, whereas post-interviews yielded 14 participants. One participant said, “I’m teaching them numerous things to get them started on their journey.” Another affirmed, “I think that we are the first that educates them on something and asks them to demonstrate that.” I clarified, through further inquiry, that interviewees did not perceive themselves or their department as engaging in higher volumes of teaching, but that it was the *awareness* of this teaching that increased.

One participant felt the increased awareness led to a collaborative effort with faculty, stating, “We can see that it's actually kind of a team effort...that it's not just the instructors teaching, but that here in Student Services...we're also helping the students and helping them learn specific tangible goals and skills.” An administrator suggested that increased awareness of

Student Services' role in teaching as separate units (e.g. admissions) and as a collaborative whole:

It [the training program] definitely has brought to light how we contribute to student learning as a department, and as individual offices in the department. It kind of just helps you see how Student Services does contribute to the student learning, and can assess it.

The training program brought to life a concept that was vaguely familiar to one participant, but not regularly practiced. This individual was able to relate it to everyday work:

I had learned about Smart Goals before, but had never really thought of it and the studying of my work...so, kind of seeing how what I do on a daily basis can be measured. I didn't really think of it that way before, but after talking and doing the training, I can see how we can use, you know, the SMART Technique to set some goals and actually measure what we do.

Students learn important skills in Student Services that make them more successful in college and in life.

Numerous participants acknowledged the role that Student Services plays in educating the whole student. This holistic perspective is noted as a participant summarized her increased awareness in the following manner:

I think Student Affairs is very important. For our students to learn, they need skills - not necessarily just what you can learn in a classroom, but also more of the life skills - the kind of help navigating the other things that play a key role in their success in college.

Another described learning in a holistic fashion in describing the teaching that takes place in

Student Services pertaining to academic goal setting, suggesting that:

Students are continuously learning - not only academically, but socially, psychologically...to grow in their critical thinking ability and their thoughts about life, and their progression through their life on where they're going to be when they get done with a college degree.

A number of Student Services staff, including some outside the Financial Aid office, referenced the importance of teaching financial literacy to students as an important life skill. One noted, “We created SMART objectives from the questions that were already on the quiz [referring to student loan entrance counseling]. We picked out what we think are the most important ones for them to know, to help them educate themselves.”

Theme Two: Responsibility

A second theme uncovered in the data pertains to responsibility. Unlike the Awareness theme, there was greater variability across participants in how they perceived their role in assessing student learning as a Student Services staff, most notably during pre-interviews.

Pre-Training

Prior to engaging in the assessment training program, participant responses generally fell into three categories pertaining to level of perceived responsibility for measuring student learning in Student Services: (a) those who believe that Student Services staff do not teach, (b) those who feel the role of Student Services is to support teaching by faculty, and (c) those who acknowledge the responsibility to teach students directly, but feel inadequately prepared to do so.

Our job is not to teach, but to serve.

Perhaps not surprisingly, those who noted to have less overall awareness that student learning occurs and can be assessed in Student Services tended to express the perspective that the responsibility of teaching belongs in the academic arena. When asked about one's role in relation to assessment of student learning, a participant replied, "When we think of it [the role of assessing student learning]...I automatically go to the academic thing, which probably tells you something about the way people think of this." Another declared, "Our [Student Services] mission as a whole is to serve students in whatever way we can, or as best we can. But, the mission is not to assess students at Student Services." Further evidence includes the statement, "We care about it [capturing student learning], but it's not what we do. It's not a function, or our task, or our mission in this particular institution [referring specifically to Student Services]."

In addition to these direct declarations, numerous interviewees failed to reference any aspect of teaching or student learning when asked to describe their position's roles and responsibilities. In response to being asked to identify any current tasks associated with capturing student learning, one individual was unable to identify any, stating, "I'm trying to think. [Pause.] Nothing." Based on extensive dialogue with participants and the aforementioned evidence noted in Theme One, I concluded that general lack of awareness of student learning in Student Services provides a reasonable explanation for the absence of such references.

Our job involves supporting the faculty in their teaching.

A few participants suggested that Student Services staff play primarily a supportive role to the teaching provided by faculty. Those who held this perception considered it helpful and

noble in meeting student academic needs, albeit secondary in nature. The following comments demonstrate this conclusion:

The actual student learning...I feel like we should be able to help in some capacity. I'm just not sure exactly what... Yeah, because we're kind of taken out of that. We get the students up to that - the student learning point - and then we help them along the way as we can...but we're not involved in the actual measuring learning part of it."

Our job involves direct teaching, but that doesn't mean I know how to assess it.

The following dialogue occurred when a participant was asked to describe the assessment of student learning in her program within Student Services:

Participant: I know for us, we have a big part, especially the life skills part of it. We do workshops and really try to help support outside of what they wouldn't necessarily get in the classroom. We're going to help support, give them the skills so they're successful in the classroom.

Researcher: Are you able to capture that learning in any way?

Participant: Not too much. Mainly, just looking at grades and seeing if students are successful. We do help them set goals at the beginning of some of the semesters, so we can kind of measure, but not too much.

This exchange highlights the general response characteristics of those who were coded in Theme One as having awareness of student learning taking place in Student Services, but not necessarily having the knowledge or skills to measure it in a meaningful way.

Post-Training

Following the training program, participants overwhelmingly expressed in an increased level of both individual and department-level responsibility to assess the student learning they now acknowledged as occurring in Student Services. In large part, participant comments can be characterized in two ways, with many interviewees represented by both: (a) the sense that it is the job of Student Services to contribute to assessment efforts, and (b) the sense that assessment of both learning and teaching are important, particularly as they relate to continuous quality improvement.

It's my job to contribute to assessment efforts (and I'm enjoying it).

In stark contrast to comments made by several individuals during pre-interviews, the majority of interviewees not only acknowledged responsibility for assessing student learning in Student Services, but appeared to embrace it as an opportunity to provide evidence of the important work that is done in the individual units and department as a whole. Measuring student learning as an outcome became a way of demonstrating the level of drive and compassion that many have for helping students succeed, as suggested in the following statement:

I think it's important that we assess that [student learning that occurs in Student Services], and make sure that we are helping the students as much as we can...and that we're not just saying that we're doing things, but actually have the evidence that we've actually helped them learn skills.

One participant was able to relate assessment of student learning to the earliest services a student receives from the institution in the form of pre-admissions guidance, stating, "I think that it's the

responsibility of Student Affairs to capture, or to assess student learning, because I believe that student learning begins the moment they make the decision to go to school.” This increased sense of responsibility appears to be the direct result of increased awareness, Theme One, as noted in this example:

I feel a lot of responsibility for it. Now, more so than they did before, because honestly, I never really thought of us having all this potential to assess that learning, and actually come up with data for it, because I wasn't really aware of that as an issue.

It's not only student learning that we must assess, but our effectiveness in teaching.

In concert with an increased sense of responsibility for assessing student learning, participants demonstrated increased understanding of the impact that assessment practices can have on their ability, as well as their team's ability, to have a positive impact on students. One person reflected, “I think it's my responsibility to my colleagues and my team to assess so that I can be part of creating the best possible environment and opportunity for student learning.” Several participants were able to identify how this increased sense of responsibility has already changed expectations and practices within the department:

We have been able to capture a lot of data that will help us evaluate our processes going forward. I think that we are capturing now more data and seeing how valuable we actually are, and I think that that is actually going to help us make our classes better to help with certain student learning...I'm helping especially with having them develop soft skills...I think that's really essential to my job function.

Continuous quality improvement is an expectation of all employees within the institution. There was a sense of relief and mild excitement expressed by interviewees who were able to

draw connections between the assessment of student learning and quality improvement initiatives. For a few subjects, a lightbulb moment occurred when this connection was drawn. For others, it was apparent they had come to this conclusion at some point during the training program, as suggested by this confident statement: "If we don't know that they're learning based on what we're telling them [students], and the process we're using, then we don't know that we need to change something so that it gets better in the future." Another participant described clearly the utility of measuring student learning outcomes as the basis for future quality improvement by writing:

I feel the big responsibility for figuring out how we can use our students, and the things we do for our students, how we can use that to assess the learning, and continue to use that data then to improve what we're teaching our students, and to improve program services.

As a matter of confirmation, I sought feedback from Student Services leadership staff to determine if she had noticed any changes that had occurred in staff in regards to how they perceived their role and responsibility in tracking student learning. The response was affirmative:

In going through this process, I was actually impressed with how they could think individually instead of being prompted all the time...I think some of them actually could communicate that and say, 'This is how we contribute. Could we put something in there about this activity that we do? Would that count toward our goals that we have for our department?' So I think there's a better understanding."

Theme Three: Confidence

The third theme uncovered in the data pertains to confidence, specifically confidence in the ability to assess student learning in a meaningful way that contributes to student and institutional success.

Pre-Training

Prior to the assessment training program, participants' level of confidence in how to capture and effectively demonstrate student learning that occurs within the department can be characterized as significantly lacking. It is important to distinguish that lack of confidence, however, did not equate to lack of interest or desire to assess student learning. Quite the contrary, many participants expressed hope in learning how to make meaningful contributions in this regard.

Confident that we do great work with students? YES! Confident I can show they've learned from it? Not so much.

Perhaps the most succinct response to demonstrate a high willingness to learn how to assess student learning, but a lack of confidence to do so is reflected in the response by one administrator in saying, "I would like to contribute to that [capturing student learning]...I just need to know how, or what to do... I'd be happy to do that. Just tell me what to do." On a similar note, a paraprofessional staff commented, "I think a lot of us are really passionate about students, and we really want to help, but we don't know how to." One administrator had a near visceral reaction when asked to discuss her confidence level around the topic, stating:

If someone came up, and said, “Your life depends on your ability to demonstrate that what you're doing with your student has an impact.” I couldn't. They would just have to shoot me at this point, because I can't do it. I can't do it. It's just sad. [Pause.] I understand the concept, but I have a lot of anxiety tied to it... Because the anxiety, you know, when you get stressed and scared, the frontal lobe shuts down... Yeah, I think, as soon as someone says, "Do measurements and stuff like that"...[Pause.] I don't think I even think I have to get near anything; it's just an automatic reflex. I want to go hide somewhere.

The vast majority of respondents were unable to identify any formal training in the assessment of student learning or in writing measurable outcomes. Others had some prior exposure, albeit limited, to student learning outcomes or how to write SMART outcomes in earlier master's degree courses or professional conferences, but this limited experience appears to have done little to boost confidence levels in being able to contribute in a meaningful way to student learning within the Student Affairs context. When asked directly about confidence in establishing measurable learning outcomes, a participant responded, “I'm not confident at all... I sit down, and I try to write that stuff out, and it's like my head starts hurting because I don't do it very often, and I'm not practiced in it.” Similarly, another responded, “I mean, I understand the concept of it, but how to do it the way it's truly meant to be done, probably not so much.” This lack of training or professional development appears related to the low level of confidence noted across participants.

Post-Training

Participant confidence level did not increase as dramatically from pre- to post-interviews, as compared to the overall change noted in the two previous themes, awareness and responsibility. There was relative consistency across responses, best characterized as moderate improvement with optimism that time and additional practice writing and evaluating measurable outcomes would result in greater gains of confidence.

There's still room for improvement, but I'm feeling more confident that I can do this.

Participants openly acknowledged an increased sense of confidence in how to develop and measure of student learning outcomes, but to a realistic degree. Some participants (e.g., those in director roles) engaged more often with the training committee and addressed some issues related to goal-writing that others did not. For instance, development of the program logic model and formulation of broad goal statements were projects completed with unit directors prior to group training with the larger group. These individuals tended to report greater gains in confidence. One such participant stated:

I feel more confident now in the contribution. I'm still not wholly confident that I know how best to do it, but I got some tools now that we've talked about in particular, that I feel we can build that into more areas of our program than we have before.

It is reasonable to conclude that individuals with greater exposure to training concepts, materials, and the training committee members themselves would experience larger gains in confidence level with the topic at hand. Others certainly expressed greater levels of confidence

and attributed the improvement to the training program, as suggested by this participant's response:

I am confident that we are heading in the right direction...It's a very big project. It's something that is not happening overnight, but I think we're definitely now on a better path...not necessarily that we were on other paths before, but I think we're on a more directed path right now.

One participant who engaged in preliminary work in establishing broad goals for Student Services was unable to attend the half-day workshop. When asked to describe her confidence level upon completion of the 12-week program, she responded, "Not very confident. It's confusing. I haven't sat in on as much as others." This reaction further supports the notion that greater participation in the program yielded greater degrees of change.

Theme Four: Value

Pre-Training

Interestingly, during pre-interviews, references to feeling valued within the context of teaching and learning and/or being able to validate the work that is done in Student Services were nearly non-existent throughout much of the discussion. In fact, only two respondents provided insight into the issue, and only after being asked the final wrap-up question, "Do you have any other thoughts on this topic that you feel are important for me to know?" In responses from these two respondents, the concept of "fit" appeared, in terms of where Student Services' support of students fit into the whole of the institution. One participant expressed this concept by saying:

We are the hub where student learning starts. I feel like that should be noted. *This* is where they understand that college is a commitment, and they're making this life change, and they have to decide - with us or without us - what the outcome is going to be...and we need to be able to help get them there, not only with the customer service side, but with the information and being able to really have them understand what impact this is going to make on their life...But, we do have a lot of responsibility as far as what happens with students.

The limited references to value may be due to the nature of the questions focusing on position responsibilities, knowledge, and other seemingly straight forward topics. Additionally, it is reasonable to conclude that participants who did not view themselves as having a role in student learning (see previous discussion on responsibility, theme 2) would not be highly cognizant of its value. It may also have been the timing of pre-interviews taking place prior to significant exposure to training material and thought-provoking discussions around the topic. Regardless, the two references made were similar in nature and reflected a desire to express the importance of the work that Student Services does and a desire for it to be better recognized.

Post-Training

Following completion of the training program, participant responses to a various (seemingly unrelated) questions throughout the interview included references to feeling valued within the context of teaching and learning and/or being able to establish value for the work being done with student learning and the assessment of student learning within the department. Two perspectives on value emerged, with many participants citing evidence of experiencing

both: (a) a gain of internal value in which Student Services staff gained appreciation for the importance of the teaching within the department, and (b) progress toward achieving external value from those outside of Student Services. Throughout both perspectives, it became clear how important it was for staff to have tangible results of their students' learning as evidence for themselves and others. This notion is threaded throughout many post-interview responses.

We have internal confirmation of our value as teachers.

Participants expressed a sense of clarity in realizing that what they do on a daily basis with students is indeed teaching and, in many cases, directly attributed the realization to the training program, as indicated by the following:

The training I sat through...it was a real eye-opener. It really helped me to understand what this is all about....now I understand that we in Student Affairs really do some kind of teaching, even though it's not in the classroom setting. You know, we are educating students in one way or another, the moment we meet them.

When asked how important it is to have tangible results of students learning, a participant replied, "Very important. I mean, yeah, I like having the data as opposed to just being able to say, 'We're doing it, so the students are absorbing it.'...So, yeah. I think it's really important."

Another participant noted the importance of using these tangible results, not only in the department, but also with other stakeholders in the institution:

I think it'll just be important to share the data and outcomes that we find here in Student Services, and share it with the college as a whole, because again, just to kind of communicate that we are helping students learn, and that it's a team effort that we're all playing a role.

We now have the tools necessary to gain external value as teachers.

When discussing value from an internal perspective (i.e., self-confirmation that Student Services is contributing in a meaningful way to the assessment of student learning outcomes), participants generally demonstrated greater emotional investment in their responses. Interest in the conversation increased, as did volume of speech. Overwhelmingly, when discussing the ability to demonstrate evidence of teaching and learning, interviewees displayed body language that suggested pride (e.g., lifting of the head, straightening of the shoulders, and a lifted chest). Participants offered greater emphasis on words considered evidential in nature, examples of which are highlighted in this passage:

I think it's been very beneficial [the training program] and will help us be able to show others on the college campus and in the college community how we *do* contribute to student learning outcomes. Because, you know, when you think of student learning, you think of it only in the classroom...and, I think that we now can say, "Hey, look. *Here's* how we contribute." And, we have something on paper, and it's not just us spouting what we believe; it's what we *know*.

Similar sentiments were expressed by another interviewee, again with emphasis placed accordingly per audio recording:

This [holding up a copy of the *Student Services: 2016-17 Student Learning Outcomes* document] gives us, as the Student Services department, the ability to say, "No. *Here* is how we contribute. *This* is what we do. We have an important role here to support students while they're on our campus." *We* are the reason that they retain and complete their degrees, and so forth.

Others participants were less emotive in their responses, but nonetheless pleased with the prospect that tools now existed that would encourage external value of the teaching and learning that occurs in Student Services. One participant referred to increased “street cred” with faculty and administration as a source of external value, stating, “they [faculty and administration] don't necessarily see Student Affairs/Student Services as dealing with learning, student learning, when there's a ton of it going on around here.” Still others expressed hope that others, outside of Student Services, will see the value of their work, but are clear that serving and teaching students remain top priority, despite external perceptions: “We're hopeful that it will change some perspectives...but we're going to keep doing what we do, regardless of what people think. And we're going to keep educating students and playing our role, regardless if it changes anything college-wide.”

Theme Five: Ownership

Pre-Training

References or comments related to a sense of ownership, as it relates to teaching and learning as a core component of the work that is done in Student Services, were notably absent during pre-interviews. The substantive transformation from a non-existent to substantial sense of ownership represents the final theme identified in the qualitative data obtained from participant interviews.

Post-Training

It is at this critical juncture in the narrative that it is most compelling to note the 260% increase from pre- to post-interviews in the use of the term “learning” or a derivative thereof.

Participants used the term in the context of Student Services 33 times across all 15 participants during pre-interviews, whereas post-interviews yielded 86 references. A participant summed up her experience in saying, “It just kind of makes you feel like more a part of their [students’] experience and their learning.” A member of Student Services leadership echoed this sentiment, noting, “They [Student Services staff] feel more a part of what's going on, because they have contributed to it now.” It is reasonable to assume that a greater sense of ownership over student learning would result in increased use and elaboration of the term.

Referencing the *Student Services: 2016-17 Student Learning Outcomes* document, one administrator’s excitement was evident: “This document is amazing. It's going to be amazing when it's published, and for everyone to see it. It's something to move on. It's forward motion. It's progress, for sure. I love it!” This passage from another administrator demonstrates a clear sense of ownership; she acknowledges the supportive role of the training committee, but is comfortable assuming responsibility for the final product:

This whole process has been wonderful...[committee members] have provided us with the information, have guided us, yet we are still solely the ones responsible for what we're putting down. And, so, I just think this whole process has been wonderful for us.

In their responses, some participants provided examples of a specific situation in which a greater sense of ownership is experienced. In one case, a staff person reflected:

You know, when you see a student come back in the office here in Student Services to get something done or ask a question...and you feel like, “Okay, they’re serious about school.” So, could I have impacted that in some way by our first meeting, whenever that was? Yes!

During the post-interview, one participant shared how the advising staff worked together to establish the target success rate for one of the student learning outcomes they developed. The individual stated, “We definitely take it seriously...I mean, we have regular meetings together where we go over things that we’ve talked about [in the training program].” Further, he proudly shared that the target success rate of 80% for particular learning outcome was a group decision. This comment led to a discussion surrounding the data resulting from the student learning outcomes established for the advising unit. This staff person expressed a clear sense of ownership over what could be learned from the data and how the data would be used for program improvement, stating “I’d like to see that [sic] data...I’d like to play with it and hold on to it.” The staff person continued, “Where are we? You know, what are we doing? I want to see, monthly, how we did. That way, we can evaluate ourselves consistently.”

Summary of Themes

Five major themes developed during the course of data analysis: (1) awareness of student learning in Student Services, (2) responsibility for assessment of student learning, (3) confidence in the ability to assess student learning in a meaningful way, (4) value, both internal and external to the department, and (5) ownership of the practice of student learning assessment. The discussion now leads to an exploration of the relationship between these major themes, triangulated with results obtained from quantitative analysis and document review.

Quantitative Results

Knowledge

Participants' mean ratings in regards to perceived overall knowledge base improved from pre- to post-interview improved significantly (Table 3). This question was asked during both pre- and post-interviews.

Table 3

Participant Self-Reported Knowledge Base - Mean Ratings (N=15)
(1 = Not at all Strong to 5 = Very Strong)

	Interview Session		<i>t</i>	<i>df</i>
	Pre	Post		
How would you rate your current KNOWLEDGE BASE in terms of how to effectively assess student learning outcomes?	1.73 (0.68)	3.60 (0.74)	-7.73***	14

Note. *** = $p \leq .001$. Standard deviations appear in parentheses below means.

A comparison of participant pre- and post-ratings using side-by-side frequency distributions show the shift toward greater levels of perceived knowledge (Figure 7).

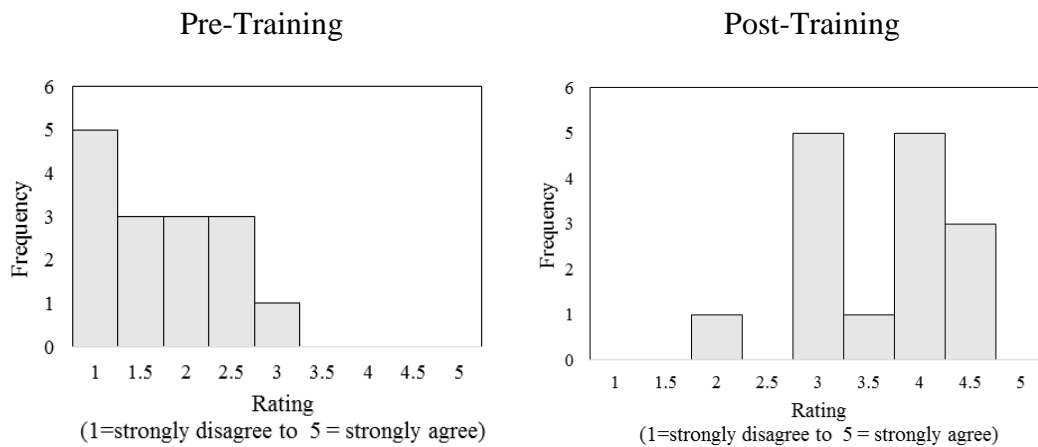


Figure 7. Frequency Distributions Reflecting Change in Self-Ratings of Knowledge

During the semi-structured interview, at both points in time, participants were asked to provide a rationale for their choice of knowledge rating. Figure 8 provides a summary of responses at both intervals. The numbers in parentheses represent the total number of participants who cited similar explanation. Some of these figures are duplicative, as some participants provided multiple explanations. Total may not equal sample size due to some individuals providing no rating explanation.

Pre-Workshop <i>M</i> = 1.73, <i>SD</i> = 0.68	Post-Workshop <i>M</i> = 3.60, <i>SD</i> = 0.74
<ul style="list-style-type: none"> • Little to no experience (3) • Do not understand (3) • Not a priority (2) • Little to no training on topic (2) • Not a concern in our department (2) • Not interested/do not enjoy 	<ul style="list-style-type: none"> • Learned a lot from the training (8) • Still room for more growth (5) • Have more experience (3) • Now have foundational knowledge (2) • Need more practical experience • It's important to know this material • Realized its importance • Missed the primary workshop

Figure 8. Summary of Participant Rationale for Choosing Knowledge Ratings

Following pre-and post-interviews, participants were asked to rate four additional knowledge-based items using a 7-point scale (Appendix D). These items were designed to capture indications of specific knowledge pertaining to the identification, development, and effective demonstration of student learning outcomes using the SMART philosophy. Table 4 summarizes the results, indicating a significant positive increase across all items.

Table 4

Participant Ratings on Knowledge Items (N=15)
(1 = Strongly Disagree to 7 = Strongly Agree)

	Training Program Participation			
	Pre	Post	<i>t</i>	<i>df</i>
<i>Knowledge</i>				
I can identify an outcome that is written using the SMART approach, as opposed to one that is not.	2.40 (0.86)	6.33 (1.76)	-9.38***	14
I understand the components that make an outcome SMART.	2.53 (1.85)	6.4 (0.99)	-7.64***	14
I know how to write a SMART outcome, either on my own or with others in my department.	2.67 (2.19)	6.27 (1.03)	-6.44*	14
I have the skills necessary to help my department demonstrate how it is uniquely contributing to the institution's mission.	3.07 (2.05)	6.13 (0.83)	-5.51***	14

Note. * = $p \leq .05$, *** = $p \leq .001$. Standard deviations appear in parentheses below means.

Attitude

Participants' mean ratings in regards to attitude toward the assessment of student learning in Student Services demonstrated a small change with a mean increase from pre- to post-training of 4.37 to 4.78 on a 5-point scale (Table 5). Although not statistically significant, it is worth noting the very high post-training rating. Additional discussion regarding these data and the potential implications of a high pre-training rating for attitude appear later in this chapter.

Table 5

Participant Self-Reported Attitude - Mean Ratings
(1 = Not at all Positive to 5 = Very Positive)

	Interview Session		<i>t</i>	<i>df</i>
	Pre	Post		
How would you rate your current ATTITUDE in terms of how to effectively assess student learning outcomes?	4.37 (0.97)	4.78 (0.56)	1.76	14

Just as with the knowledge questions, at both the pre-and post-interviews, participants were asked to provide a rationale for their choice of attitude rating. Figure 9 provides a summary of responses at both points in time. The numbers in parentheses represent the total number of participants who cited similar explanations. Some of these figures are duplicative, as some participants provided multiple explanations. The total may not equal sample size due to some individuals providing no rating explanation.

Pre-Workshop <i>M</i> = 4.37, <i>SD</i> = 0.96	Post-Workshop <i>M</i> = 4.78, <i>SD</i> = 0.56
<ul style="list-style-type: none"> • Another way to promote student success (4) • Hope of building credibility within the institution (3) • Wish to contribute to the department's work (3) • Would like tangible evidence of work done (2) • Too many other obligations • Not our responsibility 	<ul style="list-style-type: none"> • Another way to help students succeed (5) • Excited about contributing (4) • Have actual evidence of student learning (4) • It's important work (4) • Sense of teamwork (3) • The approach is convenient/simple (2) • It quantifies what we do

Figure 9. Summary of Participant Rationale for Choosing ATTITUDE Ratings

Specific attitude-related items did improve significantly (Table 6), most notably in the degree to which participants appreciated the importance of writing student learning outcomes that are measurable by design. These data lend further support to qualitative themes discussed above, as it is reasonable to conclude that an increased sense of ownership would lead to, or go hand-in-hand with, a greater degree of appreciation.

Table 6

Participant Ratings on Attitude Items
(1 = Strongly Disagree to 7 = Strongly Agree)

	Training Program Participation		<i>t</i>	<i>df</i>
	Pre	Post		
<i>Attitude</i>				
I appreciate the importance of writing outcomes that are measurable.	5.53 (1.60)	6.73 (0.70)	-3.15*	14
I believe that writing measurable outcomes will have a positive impact on my department's work.	6.00 (1.00)	6.67 (0.62)	-3.16*	14

Note. * = $p \leq .05$, *** = $p \leq .001$. Standard deviations appear in parentheses below means.

The instruments used to collect these two self-report ratings was different than the semi-structured interview protocol in which the global knowledge base question of Table 5 was asked. This variation, along with the use of non-standardized instruments and a high pre-training baseline rating for attitude may explain the inconsistencies between results data.

Ability to Demonstrate Productivity

Two weeks following the completion of the final follow-up support session, I evaluated both the quantity and quality of the student learning outcomes written by each of the five units within Student Services that participated in the study – admissions, advising, financial aid, student activities, and the SSS TRIO student support program. As a whole, the department had written 21 student learning outcomes. These were compiled in a comprehensive document, *Student Services: 2016-17 Student Learning Outcomes* (Appendix H), as well as in the WEAVEonline system. In addition to the comprehensive document, two of the units (advising and student support programs) provided evidence of a new process by which student learning outcomes data were being tracked, in the form of a simple rubric.

Using the SMART Outcomes Rubric (Appendix F), I evaluated the 21 learning outcomes to determine the degree to which each reflected the five components of the SMART approach. Results are displayed in Table 7. Every outcome was found to have a clearly defined date, at which time data would be calculated to determine if the target was met. There was great consistency across mean scores. All 21 items exceeded a mean of 3.75 on a 4-point scale, with 4 indicating “very specific, very measureable, etc.].” The collaborative nature of the participants’ work on this project was indicative in the consistency in how outcomes were written across the different units.

As indicated in the table, participants demonstrated keen skills in writing student learning outcomes (SLOs) that met all five components of the SMART philosophy. One example of a

Table 7

Evaluation of SMART Student Learning Outcomes – Mean Ratings (N=21)
(1 = Not at All Characteristic to 4 = Very Characteristic)

SMART Characteristics	Range	Mean	SD
<i>Specific</i>	2-4	3.76	0.62
<i>Measurable</i>	3-4	3.90	0.30
<i>Attainable</i>	3-4	3.90	0.30
<i>Relevant</i>	2-4	3.76	0.62
<i>Timebound</i>	n/a	4.00	0.00

particularly well-written SLO that was rated very high using the SMART Outcomes Rubric is as follows:

SLO #21: By 8/31/17, of those who complete the MBTI, at least 70% will attain a rating of 3 or higher (indicating a minimum level of “good”) on the *MBTI Personality Types Applied to Career Choices* rubric when asked to verbalize their understanding after completing the assessment.

Item #21 pertained to the goal of students understanding their specific personality type as it relates to career possibilities. It received a perfect score of 20 (i.e., 4 points for each of the 5 characteristics) when evaluated. Note the rubric referred to in the SMART outcome itself is one that was developed by one of the advisors with the assistance of the training program committee.

The SLO receiving the lowest overall rating (with a total of 15 of 20 possible points) is as follows:

SLO #12: By 4/30/17, a minimum of 50% of students who participate in a CAB-sponsored educational event will report a minimum 4-point improvement in their awareness of healthy behaviors. (CAB = Campus Activity Board)

Item #13 pertained to the stated goal of students knowing how to utilize optional campus resources to improve their opportunities for success. The specific SMART characteristics resulting in an overall score for this item were specificity and relevancy. The SLO did not specify an instrument to measure anticipated change or any indication of scale. Additionally, it is not necessarily clear how greater awareness of healthy behaviors relates to improved opportunities for success, particularly as a stand-alone measure.

Findings and Their Relationship to the Research Questions

In this section, triangulation of data from multiple sources (semi-structured interviews, self-report rating forms, and document review) provides a basis on which to respond to the study's overall research questions.

Research Question 1: How, and in what ways, does a customized assessment training and support program based on the SMART philosophy influence the following attributes among student affairs personnel of a small community college?

1a: Knowledge

The assessment training and support program, “*Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs*”, was found to have a positive influence on participants’ knowledge of how to assess student learning outcomes (SLOs).

Fourteen of 15 participants’ self-rating on knowledge pertaining to the topic increased from pre- to post-training. The self-rating remained unchanged for one participant. Overall, the mean rating from pre- to post-training increased from 1.73 to 3.60 on a 5-point scale, with 5 reflecting the greatest level of knowledge.

Affirmative statements from participants strengthen these results. An example of this change is reflected in the pre- and post- training responses of one particular participant when asked to provide a self-rating of knowledge in how to assess SLOs, as well as an explanation of why the rating was chosen:

Pre-Training: (Rating = 2.5) “I think it comes to the understanding of how we can contribute...that if you ask me to evaluate something else, I could probably say that I'm very strong in it. But, when it comes to student learning outcomes for Student Services, I think it'd be lower because I lack the understanding of how we actually *do* contribute. Even though I know we do, it's pinpointing exactly how you measure that.”

Post-Training: (Rating = 4.5) “I just think that with the training, I myself have a better understanding of it. And, in looking at what the staff has come up with in this department, it clicks.”

Several participants referred to the training program as the “missing piece” or “link” between concept and actual practice. Without prompting, during the post-interview, some participants recalled specific concepts and terminology related to SLO measurement and provided clear examples of how they are using what they learned in their work. Participants attributed the positive change in knowledge to the:

- Simplicity of the materials and examples used
- Focus on step-by-step procedures
- Mixed use of individual, small group, and large group training formats
- Repetitive nature of the training

- Follow-up support provided

Document review of the department's WEAVEonline entities further support this conclusion. The high evaluative ratings discussed in Table 7 are indicative of participant knowledge in how to effectively write SLOs that are meaningful and measurable.

1b: Attitude

The assessment training and support program was found to have a positive influence on participants' attitude of how to assess student learning outcomes (SLOs), however with somewhat less agreement across quantitative and qualitative results. Statistically, the global self-rating on attitude toward the assessment of SLOs in student affairs experienced a smaller change, as compared to knowledge, from pre- to post-training during the interview discussions. This is likely due to the impact of a high pre-training mean rating (4.37 on a 5-point scale) resulting in a ceiling effect during the analysis. Specific items referring to attitude measured immediately following both pre- and post-interviews, however, did show a statistically significant improvement (Table 6).

Participant responses relating to attitude toward the measurement of SLOs were generally quite positive, both prior to and following the training program. It became clear during pre-interviews that participants equated attitude toward SLO measurement with attitude toward providing high quality service to students in order to help them succeed. Despite attempts to clarify the question and redirect the focus to the particular concept of SLOs, the majority of participants continued to relate the two as synonymous with one another. This inability to distinguish between attitude toward SLO measurement and attitude toward supporting students

may be explained by low self-reports of knowledge in how to assess student learning outcomes.

We have drawn a connection between knowledge and awareness in a previous section of this chapter. Less awareness that student learning occurs within student affairs would reasonably lead to an inability to distinguish how one's attitude is impacted by the practice.

In this regard, positive change in attitude from pre- to post-interviews is intertwined with, and inseparable from, increased awareness of student learning taking place in Student Services and methods to capture this learning. This is one example of a post-interview response about attitude from an individual whose knowledge self-rating improved significantly from pre- to post-training:

I'm excited about it! I feel like we do have a lot to contribute. I think that being able to contribute, especially to student learning...it will give us some street cred with the faculty and administration, I think, because they don't necessarily see Student Affairs/Student Services as dealing with learning—student learning—when there's a ton of it going on around here.

Another participants' post-training reaction as to why she chose a high self-rating of attitude resonates a similar reaction:

I like being able to see measurable outcomes, so I like being able to see that what I do on a daily basis is actually making an impact on the student. So, being able to assess that and measure that, that's very positive for me.

1c: Demonstrated Productivity

The assessment training and support program was found to have a positive impact on both completed work products at the unit level, and plans for future change at the individual staff level. At the unit level (i.e., admissions department, SSS TRIO program, etc.), each of the five areas of Student Services that participated in the study submitted multiple student learning outcomes (SLOs) for inclusion into a department-wide annual assessment plan. The comprehensive plan includes 21 student learning outcomes (SLOs). Each of the SLOs were determined to be effectively written using the SMART approach (to varying degrees), as intended (Table 7). Prior to the assessment training and support program, no SLOs were in place within the Student Services department at the college.

During post-training interviews, several participants referenced assessment tasks that had already begun as a result of the workshop. These activities were notably absent prior to the training program. When asked to explain further the plan for monitoring the degree to which student learning is taking place following financial aid entrance loan counseling, one staff replied, “We’re already doing it. We’re capturing that!” To confirm understanding, the researcher followed up with, “So, you put it in place already?” to which the participant proudly replied, “Yes.”

Another participant, whose efforts include increasing time management skills of students who receive specialized services, was asked if her work tasks have changed over the course of the months since the start of the assessment training and support program. She responded:

It was something I was kind of doing before. You know, I had things available for students, and would just throw it out there, and it was optional. But now, it's more

intentional, if that makes sense. And, I can also track and measure the usefulness of it, and if it's being used. So, it was something that was an idea that's moved into an actual tool.

When asked on the workshop evaluation form what changes the person will make following participation in the training, participants' responses varied widely from the affective ("I won't be so afraid of assessment.") to attitudinal ("I will appreciate faculty more for the assessment they have to do."), with most responses reflecting planned behavioral changes in specific contributions to the department ("I will make sure my department's learning goals are SMART according to what we learned.")

Research Question 2: How might a community college consider utilizing such training to enhance the contributions of student affairs personnel in developing and sustaining its culture of assessment and evidence-based practices?

The results of this study strongly suggest that an assessment training and support program similar in content, approach, and format to *"Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs"* is an effective method to enhance the contribution of student affairs personnel in developing and sustaining its culture of assessment and evidence-based practice. The relationship between language and culture is well established in the humanities literature. Although this particular measure was not anticipated at the study's onset, it is noteworthy to consider the frequency in which participants used the terms "teaching", "learning", and "assessment" (and their derivatives) prior to and following their engagement in the training program (Table 8).

Table 8

Participant References to Teaching, Learning, and Assessment in the Context of Student Services, Totals

	Interview Session	
	Pre	Post
“Teach” and its derivatives (e.g., teaches, teaching, taught, etc.)	3	14
“Learn” and its derivatives (e.g., learns, learning, learned, etc.)	33	86
“Assess” and its derivatives/ related terms (e.g., assessing, assessed, assessment)	38	67

Participants referred to teaching in the context of Student Services nearly five times more during post-interviews; they referred to learning nearly three times more often and assessment nearly twice as often.

It is reasonable to conclude that, to some degree, greater exposure to, and emphasis on, the concepts of teaching, learning, and assessment would result in increased use of the terms by participants; however, this is unlikely to explain the totality of the increased use. Post-interviews took place 4-6 weeks following the primary workshop session (depending on the participant), allowing sufficient time to pass between immersion in the training material and the post-interviews. Additionally, it is important to note the same instrument was used for both pre- and post-interviews, eliminating any undue influence on the part of the interviewer in participants' choice of terminology in responding to the questions. For these reasons, the increase in reference to these concepts in the context of Student Services is attributed primarily to participation in the assessment training and support program.

As mentioned previously, the calculation of how often particular terms appeared in the transcripts was not an intended analysis when the study was originally designed. During pre-interviews, the researchers quickly noticed how infrequently the terms “teach/ing” and “learn/ing” were used, given the questions and overall discussion topic. It was at this point that the researcher decided to quantitatively test insight gained during qualitative data collection. Upon confirming the remarkable increase in use of these two terms from pre- to post-interviews, the researcher explored whether other key terms might have experienced a similar increase. Once again, the researcher returned to the qualitative data to determine if there was a quantitative change in the use of the word “assess” (or related terms). It is important to point out the intentionality of the researcher in exploring additional concepts using the interplay of these two methodological approaches.

How might a community college use such a training program to enhance student affairs contributions to the development of a culture of assessment and evidence-based practice? The study found different, yet complimentary, perspectives on how to accomplish this goal based on role within the institution, a summary of which follows.

Student Affairs Personnel Perspective

From the perspective of those who hold a position within student affairs, a community college can leverage a training and support program, such as that being evaluated here, by having its leadership redirect some of its efforts from “getting them [students] in the door” to taking time to “really communicate to students what they’ll get out of it.” One administrator suggested, in referring to how students are processed from admissions to course registration, “There’s so much more learning I feel that could happen if we changed our approach to working with

students.” Such a re-focus, she noted, would require buy-in from all Student Services staff and require strong leadership support.

In order for the college to move increasingly in the direction of living a culture of assessment, some respondents emphasized the need for the college to unite more strongly in its commitment to work together in promoting and capturing student learning, as noted in this response:

For the college as a whole, the training - I feel - needs to be stepped up significantly for its employees if they want them to truly understand what the goal is behind this whole shebang. You know, like how we are a part of the whole institution better...because I don't feel like that's ever really been done in the five years I've been here, not to the extent I feel like it should have been for everybody to understand.

Another personnel perspective on how to use such a training to enhance the culture of assessment pertains to the relationship between student affairs and faculty. Several respondents noted the importance of Student Services and Academics working together not only to assess student learning, but to develop opportunities for additional learning to occur. A few expressed optimism that the training program paved the path for greater understanding for both groups to work more cohesively in the future, such as:

I think it will have a positive impact, and it will help the rest of the institution kind of see what we do here in Student Services. Sometimes, we don't necessarily understand what the instructors are doing in the classroom and what we're doing here in Student Services...and we can see that it's actually kind of a team effort...but it's not just the

instructors teaching, but that here in Student Services, that we're also helping the students and helping them learn specific tangible goals and skills.

Leadership Perspective

The leadership perspective is based on those who hold leadership positions within Student Services (Dean and Assistant Dean) and the college's president. Leaders within Student Services noted the importance of a team approach in learning and in building an improved culture of assessment, noting, "We are truly seeing how we all work together to contribute to student learning." Leaders also noted the importance of providing adequate time for staff to learn and re-learn, through reinforcement training, the skills needed to actively contribute to the institution's assessment practices as key to cultural change. Finally, leaders placed heavy emphasis on the critical importance of avoiding excess burden on Student Services staff. They noted, as critical as it is for student affairs staff to play a role in assessment of student learning on campuses, student affairs departments are routinely considered understaffed in relation to the volume of students served. In order for student affairs staff to play a role in building a culture of assessment, the associated activities must be streamlined to insure efficiency and avoid any additional burden. Only then will student affairs staff have the ability to increase their capacity to contribute to a change in culture.

Recognizing the role of student affairs personnel in a student's learning and development, the president indicated, "In the two-year world [that is, community colleges], Student Services carries the lion's share of all the things that the student needs to know and do other than what's in the classroom. In our world, without Student Services, we're lost." From the presidential perspective, the way that a community college can utilize such a training and support program,

as evaluated here, is to fill in the knowledge and skill gaps left by the graduate education that student affairs' professionals complete. When asked if he sees values in the type of training program held with Student Services, he replied:

Absolutely. Because, first of all, even if they went through a significant graduate program in Student Services or something...I'm sure they get the theoretical part of this, but—I would think they do—but do they get the practical "so what" stuff? Do they get the "What are you going to do when you get out of Glen Oaks to improve student success through those things that you are engaged in, and your college are engaged in?" I'm not sure that that's part of what they're doing now, so we kind of have to train our own.

Inside Researcher's Perspective

From the insider researcher's perspective, a community college can utilize a training program, such as the one under study, to promote its culture of assessment and evidence-based practice in several ways. First, the training program provided a common framework on which all Student Services staff could build their understanding of the student learning that occurs in their unit and how to capture it for quality improvement. A common language around assessment is one component of this framework.

Second, the format, structure, and content of the training program and subsequent support sessions allowed Student Services staff to make assessment of student learning personal. Not only did the training focus on learning that occurred in Student Services (as opposed to the classroom, where it is traditionally thought to occur exclusively), the customized nature of the training material focused on the specific area of Student Services in which the staff worked. For instance, training sessions and follow-up meetings with financial aid staff included examples of

SMART and Not-so-SMART that were particularly relevant to financial aid. This increased sense of ownership and personal accountability, which are key to sustained efforts on the part of staff in culture building.

Third, from the insider researcher's perspective, the degree of teamwork that arose among the staff as a result of the training experience was an unintended, but positive, outcome that can only benefit the college as it experiences a cultural shift towards greater reliance on and appreciation for assessment of student learning. The close proximity of the student affairs units enhanced this level of teamwork, making this influence particularly applicable to smaller community colleges.

Finally, any training program (assessment or otherwise) intended to result in a cultural shift at a community college must be designed with sustainability in mind. Although the follow-up support that was provided to participants after the initial planning sessions and half-day workshop were included in the original program design, it became very clear to the researcher that this was a wise decision on the part of the committee. During post-interviews, numerous comments were made by participants regarding the importance of follow-up support by committee members. Not only did these follow-up sessions provide repetition of the material and reinforcement of what was learned in the workshop, they provided participants with an opportunity to share in their accomplishments and gain a sense of momentum in their work with student learning outcomes. Several cited experiences with "one shot" trainings that caused them to feel energized at the time, but then fizzled out when nothing tangible resulted from the experience.

In summary, assessment is not an intuitive skill for most, and developing a culture of assessment takes time. Community colleges can utilize an assessment training and support

program, such as that evaluated in this study, to enhance student affairs' contributions to building a culture of assessment by:

- Redirecting its efforts from gaining students to emphasizing what students will gain from attending
- Building relationships between Student Services and faculty around issues related to assessment of student learning
- Emphasizing a team approach to learning about the assessment of student learning
- Avoiding any excess burden on student affairs staff by finding ways to streamline processes related to assessment
- Using training to fill the assessment knowledge and skill gap that may be left by student affairs graduate programs
- Building a common framework on which new knowledge and skills can be built
- Personalizing the training

The perspectives of all three groups led to the recommendations outlined in Chapter V.

Summary

The results of this evaluation suggest the assessment training program, “*Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs*,” is a high quality program developed with significant input from key stakeholders. The program was found to (a) use high quality materials, (b) employ presenters with effective communication skills, and (c) be highly relevant to participants. Participants across all units of the student affairs department perceived the training experience as positive. We have shown that it had an

overwhelmingly positive impact on knowledge, attitude, and the ability to demonstrate productivity toward measurement of meaningful student learning outcomes in student affairs. The themes and categories in Figure 10 emerged as indication of the contributing factors leading to positive influences of the program.

Participant self-ratings reflected an increase in knowledge, both when asked for an overall assessment of the construct and at a more specific item level. Similar self-ratings reflected an increase in attitude at the item level, but smaller degree of change occurred at the broad level when participants were asked to assess one's attitude using a single rating. A high pre-training mean rating likely resulted in the item's ability to indicate significant change.

The study's results suggest a positive impact on work productivity. Prior to the training and support program, the Student Services department had no student learning outcomes (SLOs) identified, nor any means of tracking student learning within the department. Following the program's completion, the department had 21 SLOs. By use of an evaluative rubric, all were determined to effectively incorporate the five components of SMART outcomes.

The next chapter will discuss these results in further detail. The chapter will also provide recommendations for practice and future research.

Pre-Training	Post-Training
Theme One: AWARENESS	
<i>Learning occurs in the classroom, not Student Services.</i>	<i>Student Services contributes a great deal to student learning.</i>
<i>I know (or believe) learning occurs in Student Services, but I don't know what to do with it.</i>	<i>Students learn important life skills in Student Services</i>
Theme Two: RESPONSIBILITY	
<i>Our job is not to teach, but to serve.</i>	<i>It's my job to contribute to assessment efforts (and I'm enjoying it).</i>
<i>Our job involves supporting the faculty in their teaching.</i>	<i>It's not only student learning that we must assess, but our effectiveness in teaching.</i>
<i>Our job involves direct teaching, but I still don't know how to assess it.</i>	
Theme Three: CONFIDENCE	
<i>Confident that we do great work with students? YES! Confident I can show they've learned from it? Not so much.</i>	<i>There's still room for improvement, but I'm feeling more confident that I can do this.</i>
Theme Four: VALUE	
<i>We make a difference in students' lives, but we're not sure where we fit in.</i>	<i>We have internal confirmation of our value as teachers.</i>
	<i>We now have the tools necessary to gain external value as teachers.</i>
Theme Five: OWNERSHIP	
<i>Distinctly absent.</i>	<i>Pride of ownership.</i>

Figure 10. Summary of Emergent Themes and Categories

CHAPTER V

DISCUSSION

This chapter begins with a summary of the study's background, purpose, and research questions. It then integrates the study's findings within the context of capturing student learning in community college student affairs. Discussion of research findings within the larger literature leads to the development and explanation of a new model of change. The chapter continues by discussing contributions to the field of evaluation, measurement, and research (EMR). The chapter ends with recommendations for both practice in the field and future research.

Many student affairs departments struggle to find meaningful ways to contribute to an institution's evidence base of student learning, despite a clear mandate by accrediting agencies and growing expectations of the public at large. In part, this results from student affairs personnel not having adequate preparation or training in how to conduct meaningful assessment of student learning outside the classroom (Schuh & Gansemer-Topf, 2010; Schuh & Upcraft, 1998; Seagraves & Dean, 2010). Without ample and appropriate training in how to construct and assess measurable SLOs, student affairs professionals will not have the necessary skills to contribute to the integrated approach deemed necessary by leaders in the field to achieve a transformative educational environment for students. Additionally, the ability of student affairs departments to meet the increasing demands for accountability will remain hampered, placing institutions at risk for increased scrutiny and loss of state funding under a performance-based system. Small community colleges are in particular jeopardy, as individual units within student affairs (e.g., admissions or financial aid) often have as few as one or two employees.

The predominant model of assessment in the academy is based on the PDCA (plan-do-check-act) cycle. Despite the widespread use of this systematic approach, colleges and universities - student affairs departments, in particular - continue to struggle with documentation of student learning and development outcomes. The use of SMART outcomes (those that are smart, measurable, attainment, relevant, and time-bound) has been shown to increase performance in a variety of non-educational settings and is widely accepted as a strategy toward goal attainment. The purpose of this evaluation case study was to learn the influence of a SMART philosophy-based assessment training and support program on the knowledge, attitudes, and ability to demonstrate productivity of student affairs professionals and, in turn, how student affairs departments might consider utilizing such training to enhance the contributions of student affairs personnel in developing and sustaining its culture of assessment and evidence-based practices.

This mixed methods case study evaluation was both formative and summative in nature. The study evaluated program components in how they contributed to outcomes and for purposes of program improvement. It examined the degree to which the program was delivered as intended in order to address the issue of fidelity. Findings will be shared for program improvement. The study used mixed methods to answer the following research questions:

1. How, and in what ways, does a customized assessment training and support program based on the SMART philosophy influence the following attributes among student affairs personnel of a small community college?
 - a. *knowledge* in how to assess student learning
 - b. *attitude* toward assessment of student learning
 - c. *ability to demonstrate productivity* related to assessment of student learning

2. How might a community college consider utilizing such training to enhance the contributions of student affairs personnel in developing and sustaining its culture of assessment and evidence-based practices?

Integrating Findings in Context

The results of this study suggest the assessment training and support program, “*Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs*,” had a positive influence on participants’ knowledge, attitude, and ability to demonstrate productivity as related to the assessment of student learning in student affairs. These conclusions are based on the triangulation of data obtained using a mixed methods approach.

Five major themes developed during the course of data analysis: (1) awareness of student learning in Student Services, (2) responsibility for assessment of student learning, (3) confidence in the ability to assess student learning in a meaningful way, (4) value, both internal and external to the department, and (5) ownership of the practice of student learning assessment. As the data evolved, the five themes transformed into a hierarchical structure in which each subsequent theme built upon the one before it. Additionally, each of the first three themes aligned with the constructs of knowledge, attitude, and ability to demonstrate productivity, providing insight into how development occurred over the course of the training program. The model of change (Figure 11) of a staircase demonstrates these logical, coherent, and sequential relationships identified in data.

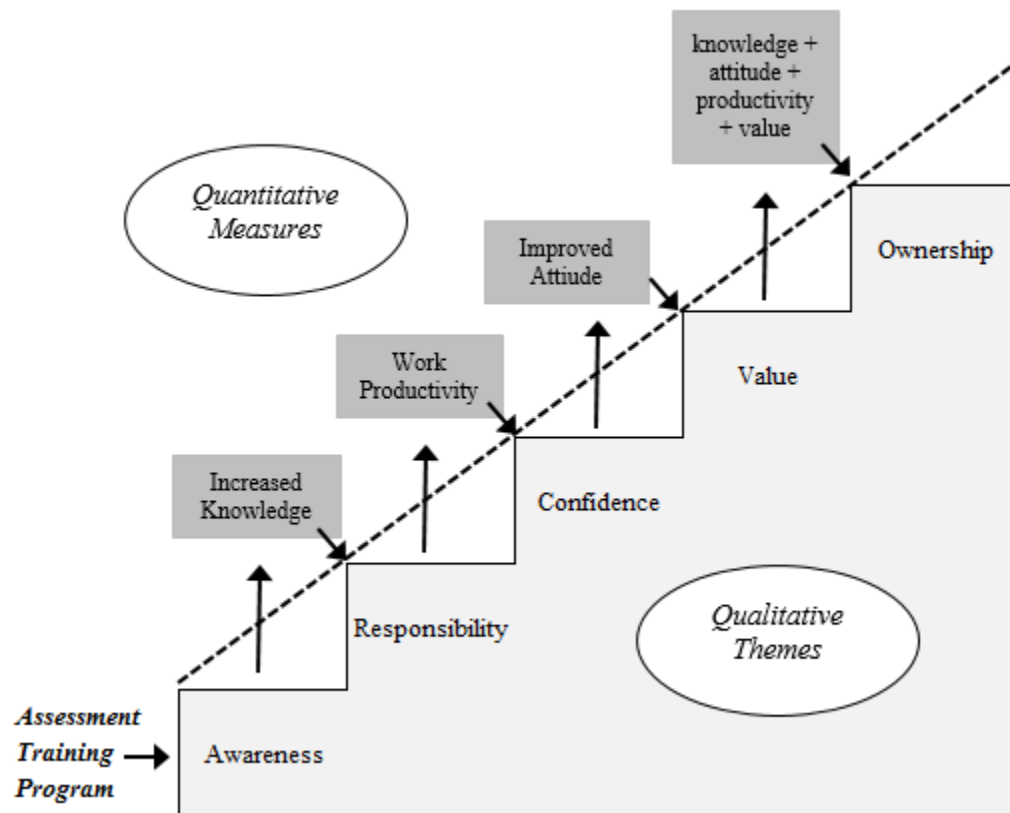


Figure 11. A Model of Change in Response to Assessment Training

The remainder of this section will discuss the model of change as it was developed step by step, from the data, focusing on the zigzag relationship between the emergent themes and quantifiable outcomes. The section concludes with a return to the staircase as a whole, discussing how qualitative themes and quantitative measures can interact and communicate with one another to deepen our understanding of the relationship between the two methods (Bamberger, 2014).

The first theme to emerge during qualitative data analysis related to the concept of awareness. Prior to the training program, some participants lacked consciousness that student learning within Student Services was not only a reasonable expectation, but also actually

happening all around them. This theme supports the proposition made by Keeling et al. (2008) indicating that many student affairs professional do not consider themselves as educators. The focus of many participants in this study was on providing high quality *services*, not teaching. It was simply not on the forefront of their mind as they fulfilled their role within the institution. Those who were aware that both teaching and learning were occurring, lacked awareness that it could be assessed, or captured (and with relative ease), outside the traditional classroom environment. Early in the course of the assessment training, participants' awareness began to increase, allowing for and inviting the receipt of new knowledge. The vast majority of participants, once they realized they could contribute in more meaningful ways to student success, were open to learning about how to assess student learning. Their knowledge increased, evidence of which appeared in all data sources used in the study. As noted in Chapter II, a lack of knowledge in how to assess learning outside the classroom has been shown to be a substantial obstacle to meaningful assessment (Seagraves & Dean, 2010; Upcraft & Schuh, 2002).

A passion for helping students was undeniably the driving force behind the daily efforts of those who participated in this study. Perhaps this is a contributing factor to the second theme that emerged from the data, responsibility. Once participants were more consciously aware that student learning was taking place in Student Services and this learning could be assessed for purposes of quality improvement, their sense of responsibility increased. Most of those who previously felt that assessment of student learning did not belong in Student Services positively changed in their sense of obligation to participate in assessment activities. Doing so became part of their job in helping students succeed, which they had already established was very important to them, both individually and as a department. This sense of responsibility, along with increased

knowledge in how to assessment student learning, led to tangible work products in the form of student learning outcomes (SLOs) written using the SMART approach.

The third theme that emerged from the data, confidence, arose as participants produced measurable and meaningful student learning outcomes (SLOs) and received positive feedback from training committee members for doing so. Feedback was immediate during interactive parts of the training program; it was also given during individual and small group support sessions that followed. Most participants expressed an increased sense of confidence, distinctly attributing this change to participating in the training program. This finding supports previous work in which professional development was shown to improve the confidence level of those engaging in assessment of student learning (Banta, Jones, & Black, 2009). The model of change in this study suggests that a rise in confidence led to improved attitude toward Student Services' role in assessing SLOs.

The next theme to emerge from the data was value. Internally, Student Services staff felt as though their work had more value because it could be captured, quantified, and discussed amongst themselves as contributing to the department's mission. Externally, this value came from knowing their work could now be demonstrated as contributing to the institution's mission. Specifically, they expressed a sense of pride in being able to substantiate (and to some degree, vindicate) their previous claims of playing a significant role in students' retention, completion, and overall success.

As noted on the top stair, the model suggests that increased knowledge, responsibility, and confidence – along with their underlying themes – combine to result in a sense of ownership, which is key to building and, perhaps most importantly, to sustaining a culture of assessment on community college campuses.

Returning to the model of change as a whole, note the crisscross pattern that develops as quantitative measures are developed and captured as a result of interaction with developing qualitative themes. The two sides, indicated by the dashed line, interact and actively communicate with one another in a logical, coherent, and sequential manner that allows us to better understand how one element contribute to and builds upon the next. The use of mixed methods allows us to produce more comprehensive evaluation findings through results obtained using different, yet complimentary methods, a benefit cited by Bamberger (2012). This is effectively demonstrated by the model and evidenced in the following two examples:

Example #1:

A participant was asked during her post-training interview how she would use the data that she collects on student learning. Note the brackets were added to identify potential elements of the model.

Researcher: “Hypothetically, at the end of the year, if you analyze your data, and say you've said that you hope that 70 percent of the students will achieve that outcome, and it turns out that only 45 percent do... How would you address that? What would be your thought process?”

Participant: “Well, if a measurement showed that what I was doing with my students wasn't working [*awareness/knowledge*], I would attempt to find out what it is I need to do that would be helpful to my students [*responsibility*]...I would be asking more questions about ‘What is useful?’ and ‘What did you take away from this?’...and doing the research to find out or come up with some possible ideas about how we can put another project or measurement in place [*work productivity*].

Example #2:

A participant was asked to explain the rating she would give herself in terms of attitude toward the assessment of student learning in student affairs. Again, brackets were added to identify potential elements of the model.

Researcher: “Can you explain why you chose that rating [5]?”

Participant: “I mean, I’m a pretty positive attitude person anyway, but I feel like we really are contributing [*confidence*]. It’s just that we didn’t know how to capture it before... but I’ve been pretty positive [*attitude*] that we’re doing some sort of roles in student learning [*value*].”

Toward Building a Culture of Assessment

Revisiting the writing of Hersh and Keeling (2013) for the National Institute for Learning Outcomes Assessment (NILOA), one recalls the proclamation that professional staff will adopt a commitment to rigorous assessment practices in teaching and learning under the following three conditions:

1. It helps them to do their work;
2. It improves student outcomes; and,
3. It is a rewarded activity.

These attributes provide a lens by which to evaluate whether any perceived changes that occur as the result of a training program are likely to have a sustainable impact on establishing a culture of assessment and evidence-based practice within an institution. Based on the model of change

proposed above, the training and support program, “*Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs,*” met (or are on their way to meeting, in the case of #2) these three criteria.

Drawing the reader’s attention back to the model of change (Figure 11), there are sufficient characteristics in the model to suggest the student affairs department has moved in the direction of being a learning organization. Senge (2006) defines a learning organization as one in which “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 (p. 3).” Learning organizations promote full employee involvement in collaborative change processes that lead to collective accountability and progress toward shared principles and values (Watkins & Marsick, 1992). Kerka (1995) suggests that most learning organizations draw from the assumption that “learning is valuable, continuous, and most effective when shared and that every experience is an opportunity to learn (p. 3)” and lists the following characteristics as being common perceptions of such organizations:

- Provide continuous learning opportunities
- Use learning to reach their goals
- Link individual performance with organizational performance
- Foster inquiry and dialogue, making it safe for people to share openly and take risks
- Embrace creative tension as a source of energy and renewal
- Are continuously aware of and interact with their environment

In his book, *The Fifth Discipline* (2006), Senge identifies five components that converge into his theory of collective learning: systems thinking, personal mastery, mental models, building shared vision, and team learning. Systems thinking, which Senge refers to as the “fifth discipline” is the conceptual cornerstone of the collective learning approach as it integrates the segments into an organized body of theory and practice. Although Senge’s approach was developed from a business management perspective, it has been applied to the assessment of student learning outcomes in postsecondary education (Hubert & Lewis, 2014; Benson & Dresdow, 1998). This study did not explore specific concepts related to learning organizations, however the themes that emerged provide ample rationale for future study to better understand if, and under what conditions, providing assessment training support to student affairs personnel can act as a catalyst to transform the learning culture within community colleges.

Recommendations

The following recommendations are based on feedback from participants, including those in leadership roles, as well as the experience of the inside researcher. Institutions seeking to replicate a similar approach to training student affairs personnel in the assessment of student learning outcomes should consider the following pragmatic suggestions:

1. Develop a broader department-level goal and its components with a small group of key stakeholders (including those in a leadership capacity) before holding a large group workshop.

Meeting with a large group in excess of 15 employees to discuss “big picture” goals for the department would have been overwhelming for both participants and committee members. Input should be sought from all staff, but this can be solicited by unit directors

and brought to the smaller group for discussion and incorporation. Having “big picture” goals prior to meeting as a large group encourages timely focus on the details associated with creation of SMART student learning outcomes for individual units.

2. During the primary workshop session, use unit-specific examples that focus on language and concepts familiar to student affairs professionals (avoid academic jargon).

Most, if not all, participants in this study had been exposed to the concept of student learning assessment in the context of the classroom (i.e., academic affairs), whether in all-college inservices, accreditation reports, etc. The training committee felt strongly that, in order for those to embrace the work ahead of them, it was important for the material to be presented to student affairs staff using examples from their own work. The committee realized that many perceived the assessment of student learning to be an academic venture; thus, to break down these barriers, all of the content of the workshop and follow-up sessions used only examples related to student affairs.

3. Provide numerous examples of both SMART and not-so-SMART student learning outcomes.

This tactic proved exceptionally helpful during the half-day workshop. The interactive nature of the session allowed the presenters to continuously modify the exercise based on participant responses. For example, if the group struggled to identify how a particular example met a SMART criteria, the use of a not-so-SMART example usually brought the confusion to light. As the presenters worked through a series of examples, participant responses came more quickly, resulting in an obvious increase in confidence.

4. Include a hands-on practice session during the workshop. Participants should leave the workshop with a tangible product that can act as the starting point in follow-up work sessions.

Participants are more likely to follow-through on a project that has required effort on their part. Leaving the workshop with a tangible product, even if not complete, encourages participants to remain committed. During pre-interviews, several participants referenced attending previous workshops or trainings with new knowledge, only to lose it after a period of not using it. Having a partially completed product in hand is likely to alleviate some of that loss.

5. Conduct prescheduled follow-up support sessions with small, related groups to monitor progress.

Nearly every participant commented during post-interviews how important it was to participate in follow-up sessions in order to ask questions, seek feedback, and illicit new ideas from the training committee. It is recommended that these follow-up meetings be pre-scheduled because schedules of college employees tend to difficult to coordinate and the timing is important. The sooner the follow-up, the more likely staff will remain engaged in the process.

6. Be prepared to provide assistance with tangential tasks that may be necessary for units to follow through on developed measures (e.g., how to create a rubric).

In order for some of the participants to have the tools necessary to track student learning outcomes in the least burdensome manner, it was necessary for the training committee to extend beyond the topic of SMART objectives and into the development of rubrics.

Student affairs staff are not as accustomed to creating and using rubrics as are faculty. It is important not to let this seemingly minor task prevent a student affairs unit from capturing student learning.

7. Follow the department's progress until a final product (e.g., a comprehensive plan, such as Appendix G) is completed, shared, and celebrated.

Perhaps a culmination of all previously cited recommendations, it is imperative that the training committee see the project through to its natural conclusion, the creation of a comprehensive student learning outcomes plan for the department. Dissemination of the plan is critical toward the promotion of student affairs as a place where teaching and learning takes place on campus. Finally, all accomplishments worth striving for are worthy of celebration. Encourage the institution's leadership to acknowledge and openly support the plan moving forward.

Contributions to Evaluation, Measurement, and Research (EMR)

Assessment of student learning outcomes (SLOs) is paramount to the purpose of institutions of higher education. The assessment of these outcomes provides some of the most critical evidence of institutional effectiveness. Those employed in offices of institutional research and effectiveness play a significant role in demonstrating that learning is taking place across the institution, including student affairs.

This study contributes to the fields of evaluation and research by providing insight to institutional researchers and assessment professionals into how an alternative approach to teaching assessment practices may prove more effective in moving the needle of SLOs in student affairs, particularly in small community college settings. It provides greater understanding into the factors that contribute to sustainable practices of assessment. Additionally, it contributes to the institutional researcher's toolbox in two ways: (a) it provides a platform for communication with others in the field about the role of student affairs in assessment, and (b) it provides an

example of how qualitative data can be used to complement the seemingly endless volume of quantitative data that is the mainstay of work in institutional research.

The study also contributes to the EMR field by providing an additional example of how the integration of quantitative and qualitative inquiry is an effective methodological approach to increase our understanding of complex phenomena. This is particularly the case in social sciences when it is better to explore human behavior from two or more perspectives (Miron, 1998). The conclusions drawn from this study are stronger based on the consistency of results across multiple data sources obtained using two different methodological approaches. As Miron (1998) writes, “Qualitative and quantitative methods can be used in a complementary manner in order to improve the validity of the information base as well as information processing, analysis, and reporting (p. 393).”

This study used mixed methods with intention. For example, immediately after being asked to provide a numeric rating to both knowledge and attitude, participants were asked to explain why they chose that particular rating. Combined, the two responses strengthened the researcher’s interpretation of meaning. Another example of intentional use is the word use data (Table 8). As the researcher recognized a pattern in the pre-interviews regarding word choice, quantitative data related to the idea was sought and analyzed as confirmation of what was occurring.

Researchers use mixed methods to extract the strengths of both quantitative and qualitative approaches, while lessening their weaknesses. In discussing the use of mixed methods in impact evaluations, Bamberger (2012) cites five main reasons for using a mixed design. This study lends support to three of these, the first of which is triangulation. As discussed previously, semi-structured interviews with participants, self-rating forms, and document review provided

the data for this study. Results across all sources corroborated the researcher's interpretation and findings. The second main reason is complementarity, defined by Bamberger (2012) as "extending the comprehensiveness of evaluation findings through results from different methods that broaden and deepen the understanding reached (p. 4)." The complementarity of the results of this study across data sources led to the development of a far greater model of change than any single form on inquiry would have produced. The third main reason for using a mixed design that applies to this study is value diversity. Different methods promote different values. Using multiple methods in a study increases the researcher's awareness of the value dimensions of an evaluation. This was true in the current study in regards to the value of reflexivity. Throughout the study, the researcher continuously reflected on the process and myself as the research. As an inside researcher, it was critical to remain aware of how my assumptions and any possible preconceptions would influence my research decisions. As quantitative data were collected and analyzed, the consistency across data sources provided me with a level of assurance that my position within the study had remained in check. For these reasons, the study herein provides further evidence to support to Bamberger's propositions as to the benefits of using a mixed methods approach in evaluations.

Future Research

Following are four recommendations for future research. First, this study was conducted in a small community college in which all student affairs personnel work in very close proximity to one another on a day-to-day basis, allowing for and encouraging a frequent and intense level of communication and collaboration. Additionally, the structure of the department is relatively simple in terms of its organizational chart. Future research may address the question of whether

such a training program is effective at a larger community college where units are not so close in proximity or where individual units and/or the organizational structures are more complex?

Second, additional research is needed in settings in which the mean baseline rating for attitude is not already high. The current research provided less evidence of the training program's influence on attitude, as compared to the other constructs. Given the critical importance of attitude in sustaining positive results, additional research is needed in student affairs departments that are struggling in this area.

The third recommendation relates to the duration of the training and support program. In most community colleges, neither the student affairs department, nor the institutional effectiveness/research and/or assessment staff, have the luxury of devoting time for individual, small group, and large group training and support sessions over the course of three months. Realistically, in order for such a program to be accessible to many community colleges, the program would need to be condensed into a much shorter period in a manner that does not compromise the benefits obtained.

The fourth recommendation returns to the earlier discussion regarding learning organizations. The themes that emerged during the study give indication that such a training and support program may lend itself to the development of a student affairs department in which staff continually learn how to learn together, for the benefit of student success. Future research may provide greater insight into this phenomenon.

Finally, future research is recommended with the community college in which this study took place to determine if the long-term outcomes identified on the logic model (Appendix A) are achieved, as improved student learning and development are truly the driving force behind any attempts at assessment in higher education. The study would benefit from expansion in a

new direction; that is, to gain insight into the students' experiences as they relate to the new processes used in the student affairs department to capture the learning that takes place.

Concluding Remarks

Community colleges play a critical role in the nation's landscape of higher education. In 2012 alone, the net total impact of community colleges on the United States economy was \$809 billion in added income, equivalent to 5.4% of the gross domestic product (EMSI, 2012). As evidence of the value of a two-year institutions and in recognizing the critical importance of providing students with postsecondary education options to meet the nation's needs for a complex and evolving workforce, President Obama called for free community college for every responsible student (White House, 2016). As open access institutions, community colleges serve disproportionate numbers of first-generation, minority, and low-income students, many of whom require remedial coursework prior to enrolling in college-level courses. Community colleges are therefore key players in improving career and life opportunities for scores of individuals.

Historically, the success of community colleges—and all institutions of higher education—have focused on completion. Graduation rates dominate the outcomes measures collected at both the state and federal levels. These rates serve as a means of ensuring accountability and meeting accreditation mandates, but fail to capture the true essence of higher education – student learning. If we, as a nation, are truly going to move the needle in meeting the educational needs of our communities, we must broaden our focus to include student learning when considering the success of our students and our institutions.

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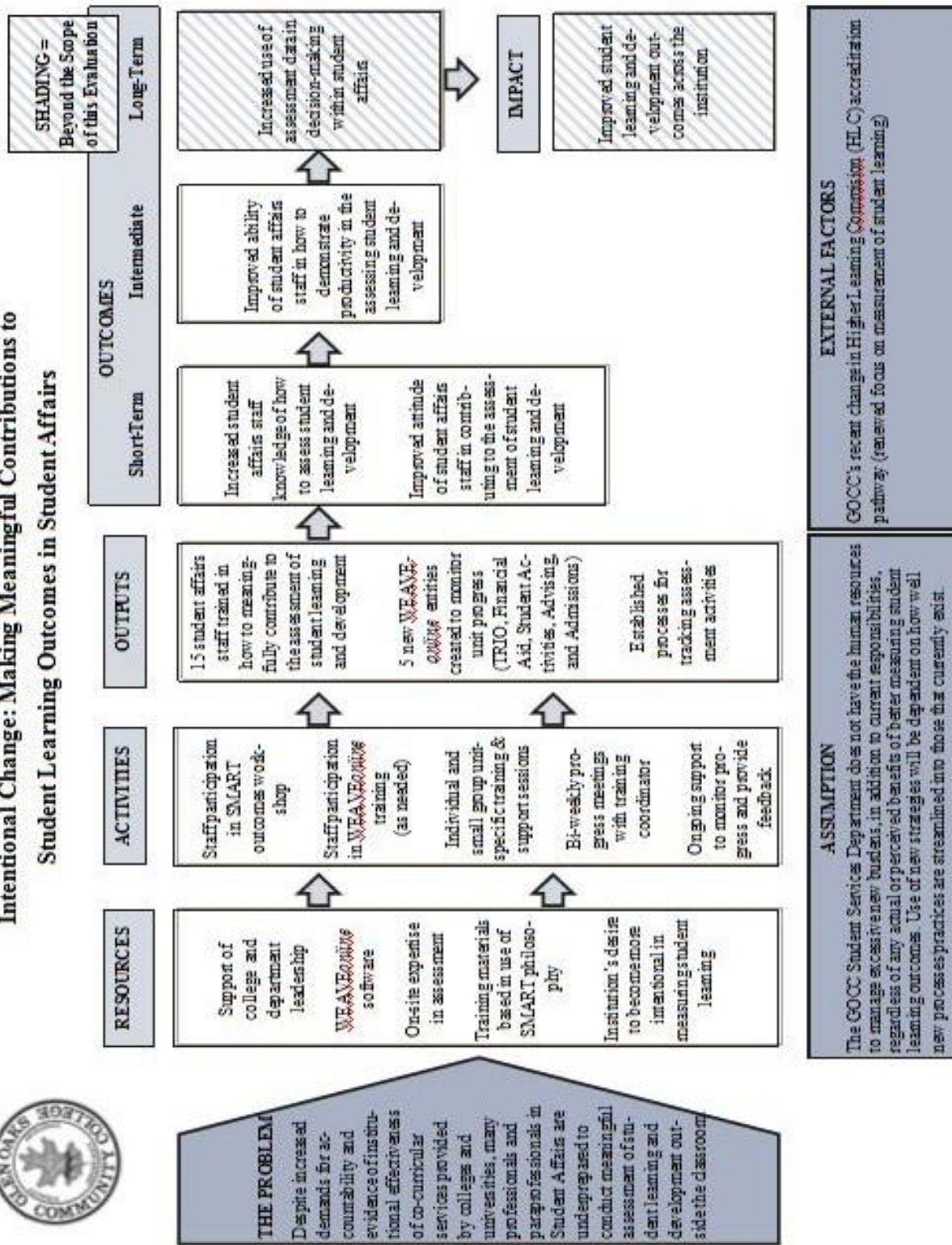
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APPENDIX A

Logic Model



Intentional Change: Making Meaningful Contributions to Student Learning Outcomes in Student Affairs



APPENDIX B

Semi-Structured Interview Protocol – Student Affairs

PARTICIPANT INTERVIEW PROTOCOL

Participant's Assigned Code		Location of Interview	
Participant's Job Title		Date of Interview	

1. In general, what are your thoughts on the role of student affairs in contributing to the assessment of student learning on college campuses?
2. Based on your current understanding, how would you describe your position's responsibility to the assessment of student learning?
3. How confident are you in contributing in a meaningful way to assessment of student learning at this institution? Why do you think you feel this way?
4. Please describe to me the actual work tasks that you perform on a regular basis that relate or contribute to the assessment of student learning. Have these tasks changed in the past year, in either volume or complexity? If so, how?
5. Tell me about any training you have received in the assessment of student learning? How effective do you feel it has been? What about any unmet training needs?
6. On a scale of 1-5 (with 1 = very weak and 5 = very strong), how would you rate your knowledge base in terms of how to effectively assess student learning outcomes? Why did you choose this rating?
7. Similarly, on a scale of 1-5 (with 1 = not at all positive and 5 = very positive), how would you rate your current attitude toward contributing to the assessment of student learning as a student services staff? Why?
8. Do you have any other thoughts on this topic that you feel are important for me to know as I try to better understand the role of student affairs in the assessment of student learning and how student affairs staff can better contribute to building a culture of evidence in community colleges?

APPENDIX C

Semi-Structured Interview Protocol – College President

PARTICIPANT INTERVIEW PROTOCOL – President

1. Please tell me your experience in community college leadership, particularly as it relates to the assessment of student learning.
2. From where you stand, what are the driving forces behind the accountability movement in public higher education, and other forces unique to community colleges as opposed to four-years?
3. Over the course of your career, what trends have you observed or experienced in regards to the assessment of student learning outcomes, and where do you see this issue going in the future?
4. Specifically, are there any trends that you can note in assessing student learning in Student Affairs?
5. The literature suggests that historically, Student Affairs departments across the nation have struggled with the assessment of student learning, despite clear mandates. Why do you think this is the case?
6. You're familiar with the training program that was provided by the committee. Do you see a benefit to such a training program, and if so, why, and in what sense?
7. If the community college wishes to develop and sustain its culture of and evidence-based practice, how might such a training enhance the ability of Student Affairs' personnel to do so?

APPENDIX D

Participant Item Ratings Form

PARTICIPANT INTERVIEW PROTOCOL – ITEM RATINGS

Participant's Assigned Code		Date of Interview		PRE / POST
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Please rate the following statements using the scale above.

#	Statement	Rating from 1-7
1	I can identify an outcome that is written using the SMART approach, as opposed to one that is not.	
2	I understand the components that make an outcome SMART.	
3	I appreciate the importance of writing outcomes that are measurable.	
4	I believe that writing measurable outcomes will have a positive impact on my department's work.	
5	I know how to write a SMART outcome, either on my own or with others in my department.	
6	I have the skills necessary to help my department demonstrate how it is uniquely contributing to the institution's mission.	

APPENDIX E

Participant Workshop Evaluation Form

PARTICIPANT WORKSHOP EVALUATION FORM

Participant's Assigned Code

Strongly
Disagree



Strongly
Agree



Please rate the following statements using the scale above.

#	Item	Rating from 1-7
1	The content of the workshop was relevant to the topic of capturing student learning that occurs within Student Affairs.	
2	The materials used in the workshop were of high quality.	
3	The workshop presenters were effective in communicating the information.	
4	The workshop increased my knowledge of SMART outcomes.	
5	The workshop increased my appreciation for the use of SMART outcomes.	
6	The workshop increased my level of preparation to write SMART outcomes.	

Please list 2 specific things that you will do, either new or differently, as a result of participating in this workshop. (Feel free to use the backside if you need additional space.)

1.

2.

APPENDIX F

SMART Outcomes Rubric

EVIDENCE OF SMART OUTCOMES

WEAVEonline Entity:

CRITERIA – Individual Components of a SMART Outcome

Outcome:					
S pecific	Outcomes should be written simply and in a way that clearly defines the desired achievement.	1 Not at all specific	2 Somewhat specific	3 Moderately specific	4 Very specific
M easurable	Outcomes should be measurable as to provide tangible evidence of accomplishment.	1 Not at all measurable	2 Somewhat measurable	3 Moderately measurable	4 Very measurable
A ttainable	Outcomes should be attainable; they should stretch involved parties slightly so there is a challenge to improve, but remain realistic.	1 Not at all attainable	2 Somewhat attainable	3 Moderately attainable	4 Very attainable
R elevant	Outcomes should apply to and align with broader goals or larger strategies.	1 Not at all relevant	2 Somewhat relevant	3 Moderately relevant	4 Very relevant
T ime Based	Outcomes should have a timeline in order to plan and evaluate success.	1 Not at all time based	2 Somewhat time based	3 Moderately time based	4 Very time based

CRITERIA – Individual Components of a SMART Outcome

Outcome:					
S pecific	Outcomes should be written simply and in a way that clearly defines the desired achievement.	1 Not at all specific	2 Somewhat specific	3 Moderately specific	4 Very specific
M easurabl e	Outcomes should be measurable as to provide tangible evidence of accomplishment.	1 Not at all measurable	2 Somewhat measurable	3 Moderately measurable	4 Very measurable
A ttainable	Outcomes should be attainable; they should stretch involved parties slightly so there is a challenge to improve, but remain realistic.	1 Not at all attainable	2 Somewhat attainable	3 Moderately attainable	4 Very attainable
R elevant	Outcomes should apply to and align with broader goals or larger strategies.	1 Not at all relevant	2 Somewhat relevant	3 Moderately relevant	4 Very relevant
T ime Based	Outcomes should have a timeline in order to plan and evaluate success.	1 Not at all time based	2 Somewhat time based	3 Moderately time based	4 Very time based

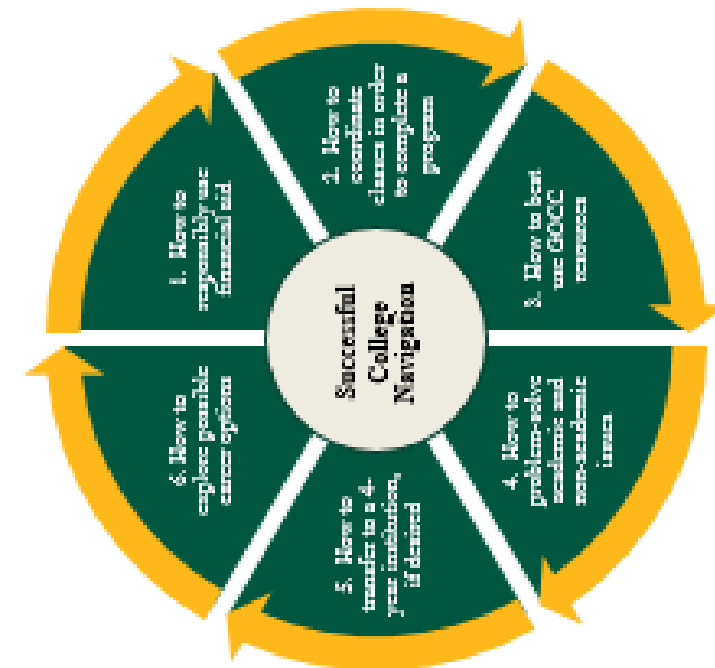
APPENDIX G

Assessment Workshop Project Sample

GOCC Student Services

2016-17 Student Learning Outcomes

Overall Goal: Students will learn how to [successfully navigate](#) their college experience.



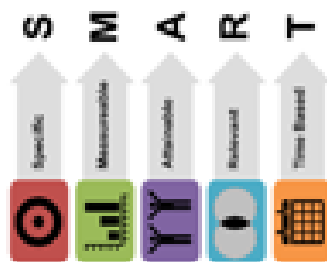
In 2004, ACBA and NASPA came together to produce *Learning Recentered*, a powerful report that argues for the integrated use of all of higher education's resources in the education and preparation of the whole student. *Learning Recentered* introduced new ways of understanding and supporting learning and development as intertwined, inseparable elements of the student experience. It promotes transformative education—a holistic process of learning that places the student at the center of the learning experience. This transformative nature explicitly acknowledges the role student services plays in connecting learning across the broader campus and community, and calls for a collaborative, systemic approach to promoting student learning. (Keepling, 2006) The student learning outcomes plan herein is [based](#) on this seminal work.

Applicability to Higher Learning Commission (HLC) Criteria –

[Core Component 4.B.1](#), "The institution has clearly stated goals for student learning and effective processes for assessment of student learning and achievement of learning goals."

[Core Component 4.B.2](#), "The institution ensures achievement of learning outcomes it claims for its curricular and non-curricular programs."

[Core Component 4.B.3](#), "The institution uses the information gained from assessment to improve student learning."



GOCC Student Services 2016-17 Student Learning Outcomes

Overall Goal: Students will learn how to successfully navigate their college experience.

ISLO – institutional student learning outcome

Learning Outcome	ISLO	Measure	Target & Timeline	Responsible Party
How to Responsibly Use Financial Aid				
1. Students will know how to problem-solve financial aid issues.	5	Mean difference on a scale of 1-7 (low to high) between students' retrospective pre- and post-orientation item, "Ask a financial aid question" on the <i>Near-Orientation Matters</i> survey	80% of students will indicate a positive increase of 2.5 or higher on the item by 3/31/17	Director of Student Success Advising & Counseling
2. Students will know how to remain eligible for financial aid.	5	The percentage of students who respond correctly to the question on the post-Orientation survey form: <i>To remain eligible for financial aid, students are responsible for which items?</i>	60% of students will answer the question correctly by 3/31/17	Director of Admissions
3. Students will know the three requirements to meet Satisfactory Academic Progress (SAP).	5	The percentage of students who respond correctly to the multiple choice question on the Federal Direct Loan Entrance Counseling Quiz: <i>Which of the following is part of GOCC's Satisfactory Academic Progress (SAP) standard?</i>	90% of students will answer the question correctly by 3/31/17	Director of Financial Aid

Learning Outcome	ISLO	Measure	Target & Timeline	Responsible Party
4. Students will know how to avoid student loan default.	5	The percentage of students who respond correctly to the following questions on the Federal Direct Loan Entrance Counseling Quiz: <i>A. You have to repay your student loans if you don't finish your program of study. True or False?</i> <i>B. My loan is considered in default at 90, 120, 180, or 270 days of delinquency?</i>	For each item, 90% of students will answer the question correctly by 3/31/17	Director of Financial Aid
	5	The percentage of students who respond correctly to the following questions on the Federal Direct Loan Entrance Counseling Quiz: <i>A. If I default on my student loan I can still use my Pell Grant. I can default my loans in bankruptcy. The law prohibits collection agencies from contacting me. None of the above?</i> <i>B. If I default on my student loan (My credit rating will be damaged, I will still be able to apply for more financial aid, I should then consider deferment options, The law prohibits collection agencies from contacting me)?</i>		
How to Coordinate Classes in Order to Complete a Program				
6. Students will know how to add/drop/change their course schedules.	1	Mean difference on a scale of 1-7 (low to high) between students' retrospective pre- and post-item, "Drop or add a class" from the "How well informed..." section on the Year Opinion Matters survey	80% of students will indicate a positive increase of 2.5 or higher on the item by 8/31/17	Director of Student Success Advising & Counseling
	1	Mean difference on a scale of 1-7 (low to high) between students' retrospective pre- and post-rating item, "Schedule classes" from the "How well informed..." section on the Year Opinion Matters survey		

Learning Outcome	ISLO	Measure	Target & Timeline	Responsible Party
7. Students will know the timeline regarding registration for a class for which they were waitlisted.	1	The percentage of students who respond correctly to the multiple choice question on the post-Orientation survey form: <i>If you are placed on a waitlist for class and a seat later becomes available, what do you do?</i>	60% of students will answer the identified question correctly by 3/31/17	Director of Admissions
8. Students will know that an additional orientation is required for online classes.	1	The percentage of students who respond correctly to the question on the post-Orientation survey form: <i>Students are to complete an additional orientation for online courses. True or False?</i>		
9. Students will know the deadline to withdraw with no academic or financial consequences.	1	The percentage of students who respond correctly to the multiple choice question on the post-Orientation survey form: <i>If you withdraw from a course within the first 10% of the course (usually the first two weeks of the semester), no grade appears on your transcript and you are refunded 100%. True or False?</i>		
10. Students will know the consequences of dropping classes after the semester drop date.	1	The percentage of students who respond correctly to the question on the post-Orientation survey form: <i>If you drop your class(es) after the semester drop date, what will happen?</i>		
How to Best Use GOCC Resources				
11. Students will understand how to manage their time to meet academic demands, as evidenced by demonstrated use of an academic planner.	4	The percentage of 2015-16 OSSP students whose academic planners meet the following qualities and are shared with the OSSP Coordinator (during a regular session) by the 8 th week of the semester: <ul style="list-style-type: none">Time blocked for tests/quizzes/projects/papers/study time according to their syllabusHas a legend that allows for interpretation	50% of target students will demonstrate use of an academic planner to the OSSP Coordinator by 3/31/16	Student Support Specialist/ OSSP Coordinator
12. Student will know how to utilize optional campus resources to improve their opportunities for success.	4	Students who participate in a C.A.B.-sponsored educational event will report a minimum 4-point improvement in their awareness of healthy behaviors.	50% of target students by 4/30/17	Student Activities Co-Directors

Learning Outcome	ISLO	Measure	Target & Timeline	Responsible Party
How to Problem-Solve Academic and Non-Academic Issues				
13. Students will be able to write a minimum of one academic goal.	1	The percentage of all TRIO students who successfully demonstrate the ability to write an academic goal when meeting with his/her assigned advisor	80% of students will write at least one academic goal by 8/31/17	Director of SSS-TRIO
14. Students will know how to problem-solve academic issues.	4, 5	Mean difference on a scale of 1-7 (low to high) between students' retrospective pre- and post-rating item, "Address an academic issue" from the "How well informed..." section on the <i>Near Opinion Matters</i> survey	80% of students will indicate a positive increase of 2.5 or higher on the item by 8/31/17	Director of Student Success Advising & Counseling
15. Students will know how to problem-solve non-academic issues.	4, 5	Mean difference on a scale of 1-7 (low to high) between students' retrospective pre- and post-rating item, "Address a personal issue" from the "How well informed..." section on the <i>Near Opinion Matters</i> survey		
16. Students will learn to identify strategies to improve self-management skills (sensitivity to stress, test anxiety, and academic self-efficacy)	4, 5	Of those students who interact with a Student Success Coach (a) at least 3 times during a single term and (b) test into the LOW range on one or more Success Navigator® Self-Management constructs, the percentage who are able to clearly verbalize to his/her coach at least 2 personalized strategies to improve in the identified areas of concern	50% of target students will achieve this objective by 8/31/17	SUCCESS® The Oaks! Coaches
17. Students will learn to identify strategies to improve commitment (commitment to college goals and institutional commitment).	1, 4, 5	Of those students who interact with a Student Success Coach (a) at least 3 times during a single term and (b) test into the LOW range on one or more Success Navigator® Commitment constructs, the percentage who are able to clearly verbalize to his/her coach at least 2 personalized strategies to improve in the identified areas of concern		

Learning Outcome	ISLO	Measure	Target & Timeline	Responsible Party
How to Transfer to a 4-Year Institution, if Desired				
18. Students will know how to problem-solve transfer issues.	1, 5	Mean difference on a scale of 1-7 (low to high) between students' retrospective pre- and post-rating item, "Ask a transfer question" from the "How well informed..." section on the <i>Year Option Matters</i> survey	80% of students will indicate a positive increase of 2.5 or higher on the item by 8/31/17	Director of Student Success Advising & Counseling
19. Students will know how to apply for transfer to a 4-year institution, as evidenced by successful submission of an application for admission.	1, 5	The percentage of current TRIO students with ≥ 30 completed credits who successfully submit an application for admission to a 4-year institution (monitored via College Greenlight and/or College Board)	25% of target students by 8/31/17	Director of SSS-TRIO
How to Explore Possible Career Options				
20. Students will learn how to explore possible career options.	1	Mean difference on a scale of 1-7 (low to high) between students' retrospective pre- and post-rating item, "Receive career counseling" from the "How well informed..." section on the <i>Year Option Matters</i> survey	80% of students will indicate a positive increase of 2.5 or higher on the item by 8/31/17	Director of Student Success Advising & Counseling
21. Students understand how their specific personality type relates to career(s) possibilities.	1, 4	Of those who complete the MBTI, the percentage of students who attain a rating of 3 or higher (indicating a minimum level of "good") on the <i>MBTI Personality Types Applied to Career Choices</i> rubric when asked to verbalize their understanding after completing the assessment.	70% of students completing the MBTI will meet the objective by 8/31/17	Student Support Specialist/ QSSP Coordinator

APPENDIX H

Human Subjects Institutional Review Board Letter of Approval