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Michael Bernard Schulte

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HOW CHIEF ACADEMIC OFFICERS AT PRIVATE HISPANIC-SERVING INSTITUTIONS USE THE NATIONAL SURVEY OF STUDENT ENGAGEMENT IN ASSESSING OUTCOMES

A Dissertation

by

Michael Bernard Schulte, M.A.A., B.S.

Presented to the School of Graduate Studies and Research of the University of the Incarnate Word in partial fulfillment for the degree of DOCTOR OF PHILOSOPHY

The University of the Incarnate Word

August 2012
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by

Michael Bernard Schulte
Acknowledgments

The participants in their role as Chief Academic Officers of Hispanic-Serving Institutions shared aspects of their complex lives in today’s higher education. And, in the midst of all this, each of them found time to accommodate this researcher, more than once. As a fledgling scholar, I will always value and appreciate their precious time and hope they and others find my research beneficial.

Dissertation committees may not be faced with the multitude of challenges that CAOs face, but nevertheless, they are comprised of scholars, faculty, and administrators, who have multifaceted and busy lives. The dissertation director (Dr. Dorothy Ettling), committee members (Dr. Glenn James, Dr. Susan Hall, and Dr. Noah Kasraie), and outside reader (Dr. Denise Barkis Richter) of my committee were no different. And like the chief academic officers who took their valuable time to participate in this research, my dissertation committee did as well and added equally important, but different, flight feathers to my scholarly journey.

Others contributed flight feathers—faculty, fellow students, scholars, and administrators; however, my institutional research flight feathers were the direct result of being engaged as a graduate research assistant under the tutelage of its director (Ms. Robin Logan) and senior programmer analyst (Mr. Roland Carrillo). This research assistant opportunity has been more rewarding and valued that what I ever imagined.
Dedication

To all undergraduates assessed: That you will know how outcomes assessment is used to improve the quality of your education.
ABSTRACT

HOW CHIEF ACADEMIC OFFICERS AT PRIVATE HISPANIC-SERVING INSTITUTIONS USE THE NATIONAL SURVEY OF STUDENT ENGAGEMENT IN ASSESSING OUTCOMES

by

Michael Bernard Schulte, M.A.A., B.S.

Dissertation Director: Dr. Dorothy H. Etting

University of the Incarnate Word, 2012

Five chief academic officers (CAOs) represented their institutions and served as a purposeful sample to qualitatively explore how they used National Survey of Student Engagement (NSSE) results to facilitate institutional effectiveness and promote undergraduate student success. All these private Hispanic-Serving Institutions (HSIs) participated in NSSE within a specified time frame and were located in one accrediting and geographical region. The two-phased grounded theory research established three axial relationships between the eight coded themes: Actioning (strategizing and prioritizing), analyzing (evidencing, benchmarking, and disaggregation), and culturing (institutionalizing, integrating, and participating). The grounded theory emerged as a synthesis pyramid operationalized within outcomes assessment.

Findings indicated that NSSE results are utilized by CAOs in a variety of ways. These included: benchmarking educational practices and peer institutions, linking accreditation and assessment via quality enhancement and strategic plans, formulating and making decisions collaboratively, and using other assessments and results with NSSE results.
Findings discovered that NSSE results were promoted more indirectly, than directly, to undergraduates while promoting and integrating NSSE survey results and that all participating CAOs would like to increase NSSE and other assessment participation rates. Also found was a lack of depth communicating what institutional or programmatic actions were taken based on NSSE results to undergraduates. This finding was used to hypothesize how survey participation rates are linked to undergraduate’s ability to make the connection between survey results and institutional actions taken based on those survey results. This linkage, if demonstrated, may inform institutional decision-making, assessment outcomes, and engagement in higher education. In need of further exploration is how other individuals and departments at levels equivalent or below chief academic officers use and make decisions based on the results. Also in need of further investigation is how lessons learned at HSIs can be applied internally and externally to other HSIs, minorities, and emerging populations.
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Chapter One: Introduction

Contemporary universities are no longer confined to their physical structures and landscape that Kolb (1981) described when framing and introducing his experiential learning theory. Colleges and universities are no longer just brick and mortar, nor are they all just private or public. They now include for profit and virtual colleges in addition to hybrid combinations. However, Kolb’s (1981) themes of differentiation and diversity still resonate in colleges and universities today.

Like the growing diversity of colleges and universities, undergraduate students reflect more diversity as well. To Dowd and Tong (2007), the “key problem facing higher education is how to educate large numbers of students with diverse levels of academic preparation (many significantly underprepared), speaking many different native languages, and often attending college part time while juggling home and work responsibilities” (p. 65). Kenechukwu, Newman, Kramer, and Pearson (2009) described distinguishing higher education factors and wrote, “higher education institutions focus on the advancement of institutional goals, education, and research for the greater good, and progression for all humankind”, attributes that “are ingrained in higher education and are the core of cultural organizational values” (p. 304). These well-intentioned factors can be a “hindrance to the change process” and possibly explain “higher education institutions’ inability to expeditiously address the needs of emerging populations” (p. 304) and diversity.
Context of the Study

**Student assessment.** New requirements emerged in all six regional accrediting agencies across the country when the U.S. Department of Education linked financial aid to student assessments efforts (Peterson, Einarson, Augustine, & Vaughan, 1999). In their literature review on institutional support for assessment, Peterson, Einarson et al. (1999) observe that the “impact of these federal policy actions suggests that the national domain has indirectly influenced institutions’ decisions to engage in assessment efforts. There is limited evidence of a direct relationship between national activities and institutions’ assessment efforts (p. 5-6).”

Peterson, Einarson et al. (1999) emphasized that:

> Administrators and faculty leaders have little credible and verifiable evidence to guide their planning and decision making regarding student assessment . . . There has been comparatively less consideration of how colleges and universities can develop an effective institutional strategy for assessment or of organizational and administrative practices that support internal engagement in assessment and enhance the use of student assessment data . . . but largely missing is any systematic examination of the relationships among various ways institutions have approached and supported student assessment and the likelihood of their reaping positive impacts from student assessment efforts . . . Furthermore, there has been little research focused specifically on student assessment within baccalaureate institutions. (p. 1)

Peterson, Augustine et al. (1999) focused on student assessment at baccalaureate institutions and observed:

> Most responding baccalaureate institutions report that regional accreditation requirements have increased their involvement with student assessment (84%). Many say that the requirements were an important reason to initiate a student assessment process (65%). Very few baccalaureate institutional respondents report that the regional accreditation requirements either are not a factor in (8%) or have a negative influence on (0.3%) their student assessment process. Regional accrediting associations may have a slightly greater effect on baccalaureate institutions than they do on all institutions. (p. 16)
Peterson, Augustine et al. (1999) summarized:

While both states and regional accrediting agencies have influenced baccalaureate institutions to engage in student assessment, accrediting associations are reported to have a greater influence than states in increasing involvement in student assessment . . . Despite the apparent influence of external bodies, institutions appear to be using their own resources to support their assessment activities. (p. 18)

Today’s rising costs, student indebtedness, and a demand for increased accountability have caused many to question the quality of today’s higher education and call for more oversight (Glenn, 2010). Likewise, the increasing number of for profit colleges is reflected in additional national initiatives and accreditation compliance requirements (Kelderman, 2010). These additional compliance requirements may affect how governance is shared (Birnbaum, 2004). Add assessment to the mix, and the concern increases.

Ewell (2005) defined assessment as a “program of locally designed and operated evaluation research intended to determine the effects of a college or university on its students, centered on learning outcomes, and engaged principally for the purpose of improving teaching and learning” (p. 105). Peterson, Augustine et al. (1999) refer to student assessment as “activities other than traditional end-of-course grading that are used to measure a diverse array of dimensions of student performance or development. . . Cognitive, affective, and behavioral dimensions of student performance and development may be assessed” (p. 2).

Dowd and Tong (2007) emphasized, “Assessment takes many forms” (p. 73). Bennett (2001) explained some of these forms such as value added, outcomes, inputs and reputation, experts, self-reports, and participation and engagement. However, the research here focused on participation and engagement which
asks students to report what they actually do while they are in college—what they engage in. Such an approach focuses, that is, on processes and participation rates . . . Rather than trying to measure value added directly for each student, the intent is to measure whether students are educated through processes that research has shown do in fact add value to students' attainments. (Bennett, 2001, p. 44)

**National Survey of Student Engagement.** When Peterson, Augustine et al. (1999) reported on their assessment survey at baccalaureate institutions, the National Survey of Student Engagement (NSSE), a premier example of the participation and engagement approach (Bennett, 2001), was only in its nascent stages. With the support of both The Pew Charitable Trusts and the Carnegie Foundation for the Advancement of Teaching, NSSE came into existence. The NSSE survey instrument is known as the College Student Report and includes demographic and non-demographic questions posed to undergraduates, specifically, first year freshmen and seniors. The majority of the questions are non-demographic. Of these 85 non-demographic questions currently used, 42 of them are coded as key questions related to the NSSE Benchmarks of Effective Educational Practice (2010). These benchmarks are summarized in Table 1 below along with the distribution of the benchmark related questions.
Table 1  

*NSSE Benchmarks of Effective Educational Practice*

<table>
<thead>
<tr>
<th>Benchmark and Code</th>
<th>Description</th>
<th>Number of questions</th>
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<tbody>
<tr>
<td>Level of Academic Challenge (LAC)</td>
<td>Challenging intellectual and creative work is central to student learning and quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance.</td>
<td>11</td>
</tr>
<tr>
<td>Active and Collaborative Learning (ACL)</td>
<td>Students learn more when they are intensely involved in their education and are asked to think about and apply what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students to deal with the messy, unscripted problems they will encounter daily during and after college.</td>
<td>7</td>
</tr>
<tr>
<td>Student-Faculty Interaction (SFI)</td>
<td>Students see first-hand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.</td>
<td>6</td>
</tr>
<tr>
<td>Enriching Educational Experiences (EEE)</td>
<td>Complementary learning opportunities inside and outside the classroom augment the academic program. Experiencing diversity teaches students valuable things about themselves and other cultures. Used appropriately, technology facilitates learning and promotes collaboration between peers and instructors. Internships, community service, and senior capstone courses provide students with opportunities to synthesize, integrate, and apply their knowledge. Such experiences make learning more meaningful and, ultimately, more useful because what students know becomes a part of who they are.</td>
<td>12</td>
</tr>
<tr>
<td>Supportive Campus Environment (SCE)</td>
<td>Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus.</td>
<td>6</td>
</tr>
</tbody>
</table>

The institutions can also plan and assess outcomes of student success and relate them back to educational programs and support services. They also have the opportunity to benchmark themselves against selected peer universities and colleges in the measurement and reporting phase. Aspects of institutional effectiveness and student success may be
incorporated into both the accrediting process, in general, and the Quality Enhancement Plan (QEP) specifically, within accreditation guidelines.

As the College Student Report evolved over the past 10 years, so has the sponsoring institution—Indiana University School of Education and its now self-supporting auxiliary unit within the Center for Postsecondary Research. An overview of the 2011 results (NSSE 2011 Overview, 2012) available to non-participating organizations reported that “almost two million first-year and senior students from 751 institutions in the United States and Canada were invited” and “537,605 students responded, including 109,532 students from Canadian institutions” (p. 1). The 2011 annual results (NSSE Annual Results, 2011) announced a new version, NSSE 2.0, coming in 2013. These surveys are administered on paper (NSSE English Paper Version, 2011) as well as on the web (NSSE Survey Instrument, 2011) and also in other languages. The NSSE (2012) web site also makes available resources to look up who is participating, how institutions are using NSSE, and a report builder for institutions to use.

In addition to the NSSE, studies and surveys now include several related student engagement surveys—Beginning College, Classroom, Community College, Faculty, High School, and Law School, assessments—College Student Experiences Questionnaire and National Institute for Learning Outcomes; and other projects—Academic Success and Strategic National Arts Alumni. Now supporting the entire endeavor, there is a NSSE Institute for Effective Educational Practice (2012) that offers regional accreditation tool kits, data and results guides, along with other guides, resources, and services.
Rhodes (2010) wrote, “One of the most widely recognized studies on student outcomes and the impact of pedagogies and practices on student learning is the National Survey of Student Engagement” (p. 4). The number of participating institutions and the number of years of collecting data “have allowed correlations to be made among the practices and pedagogies used in the curricula and the reported gains on measures of student success” (pp. 4-5). These high impact practices—undergraduate research, first year experiences, learning communities, internships, and others—are opportunities for students to be “more engaged in their learning” (p. 5) when participating early and often.

For many institutions, the NSSE is an important part of their assessment of student and institutional performance. The NSSE has been proactive in learning, disseminating, and seeking How Institutions Use NSSE (2011) in an effort to improve the quality of the undergraduate experience including lessons from the field, search tools for examples of NSSE and related surveys’ data use, report versions, searchable institutional examples, and institutional website displays, and resources. The NSSE Institute has also been proactive asking Chief Academic Officers at institutions belonging to The Council of Independent Colleges how they use NSSE results (Kinzie, 2007). The responses included “institutional task forces to assess student engagement, revisions in first-year students’ programs, accreditation self-studies organized around student engagement themes and faculty development initiatives” (Kinzie, 2007, p. 1).

**Southern Association of Colleges and Schools Commission on Colleges.** As one of six regional accrediting agencies for higher education in the United States, the Southern Association of Colleges and Schools Commission on Colleges (2011)...
encompasses 11 southern states. The geographic areas of responsibilities of all six agencies, arranged by number of member states, are shown in Table 2.

Table 2

*Accrediting Agencies’ Area of Responsibilities by Number of U.S. States*

<table>
<thead>
<tr>
<th>Accrediting Agency</th>
<th>Number of U.S. States</th>
<th>U.S. States</th>
<th>Extraterritorial members</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Central Association of Colleges and Schools-The Higher Learning Commission (2011)</td>
<td>19</td>
<td>Arkansas, Arizona, Colorado, Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, North Dakota, Nebraska, Ohio, Oklahoma, New Mexico, South Dakota, Wisconsin, West Virginia, and Wyoming</td>
<td>Mexico, Guatemala, Costa Rica, Canada, and Dubai</td>
</tr>
<tr>
<td>Southern Association of Colleges and Schools (2011)</td>
<td>11</td>
<td>Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia</td>
<td>Mexico, Guatemala, Costa Rica, Canada, and Dubai</td>
</tr>
<tr>
<td>Northwest Commission on Colleges and Universities (2011)</td>
<td>7</td>
<td>Alaska, Idaho, Montana, Oregon, Nevada, Utah, and Washington</td>
<td>Canada</td>
</tr>
<tr>
<td>Middle States Commission on Higher Education (2011)</td>
<td>5</td>
<td>Delaware, Maryland, New Jersey, New York, Pennsylvania</td>
<td>District of Columbia, Puerto Rico, Virgin Islands Europe, Africa, Asia, and Canada</td>
</tr>
<tr>
<td>Western Association of Schools and Colleges (2011)</td>
<td>2</td>
<td>Hawaii and California</td>
<td>Pacific Basin and East Asia</td>
</tr>
</tbody>
</table>
In some cases the above regional accrediting agencies have additional commissions for accreditation at levels below the undergraduate level, or in the case of the Western Association of Schools and Colleges (2011), where there are three commissions for colleges—senior, junior, and vocational. There is also another accrediting agency, the Council for Higher Education Accreditation (2011), an organization that seeks consensus on the future of accreditation.

Each of these accrediting agencies addresses institutional effectiveness, educational practices, and quality in different ways. The New England Association of Schools and Colleges (2011) punctuate each of their standards with how institutional effectiveness is applied. The Northwest Commission on Colleges and Universities (2011) combines effectiveness with improvement.

The Middle States Commission on Higher Education (2011) and the Western Association of Schools and Colleges (2011) each have sections addressing educational effectiveness. The North Central Association of Colleges and Schools (2011) addressed quality by conducting a pilot program for 2010-2011 and permit[ed] experienced AQIP [Academic Quality Improvement Program] institutions in four states (Illinois, Iowa, Michigan, and Wisconsin) to use a state or national Baldrige-type award application and review to replace portions of a traditional AQIP Systems Portfolio Appraisal. If the pilot works well, AQIP hopes to expand the program to all 19 states in which HLC-accredited institutions are located. (Academic Quality Improvement Program, 2011, p. 1)

The North Central Association of Colleges and Schools’ standards offer a way for their institutions to better align their accrediting with other quality efforts in the region while not ceding or giving up control in the process (Academic Quality Improvement Program, 2011).
The Southern Association of Colleges and Schools appears to take the most direct approach in defining institutional effectiveness, by first using a comprehensive standard that identifies outcomes, achievements toward these outcomes, and provides evidence. The core requirement requires institutions to show their effectiveness through planning and evaluation, systematic review, improvement, and accomplishment (Principles of Accreditation, 2010). The accrediting agency also requires a Quality Enhancement Plan in their accreditation standards developed by the institution which:

(1) includes a process identifying key issues emerging from institutional assessment, (2) focuses on learning outcomes and/or the environment supporting student learning and accomplishing the mission of the institution, (3) demonstrates institutional capability for the initiation, implementation, and completion of the QEP, (4) includes broad-based involvement of institutional constituencies in the development and proposed implementation of the QEP, and (5) identifies goals and a plan to assess their achievement. (Principles of Accreditation, 2010, p.7)

The call for increased accountability within higher education (Glenn, 2010) and from state and regional accrediting agencies (Astin & Lee, 2003) has raised questions about the quality of education and those providing it. Welsh and Metcalf (2003) described this situation as one of “colleges and universities attempt[ing] to respond to the demand for increased accountability” while campus support on the other hand for such responses “seems to be tenuous and shallow” (p. 34). This campus support may not be any support at all, but resistance to these additional requirements without being too vocal.

**Hispanic-Serving Institution (HSI).** Within minority serving institutions, HSIs have specific governmental programs defining and regulating their existence. The Division of Institutional Service (2012) administers HSI related programs, two of which are the Developing Hispanic-Serving Institutions Program – Title V (2012) and Promoting Postbaccalaureate Opportunities for Hispanic Americans Program (2012). The
Title V Program Statute found HSIs to be underfunded and under resourced in making academic improvements. Despite this, they still made some gains. The title’s purpose is to expand educational opportunities, improve academic attainment, and expand and enhance academic offerings, program quality, and institutional stability.

The Higher Education Opportunity Act and the Health Care and Education Reconciliation Act of 2010 addresses and resources increased capacity for minority-serving institutions (MSIs). Minority-Serving Institutions include Historically Black Colleges and Universities (HBCUs), American Indian Tribally Controlled Colleges and Universities, Alaska native, Native American, Hawaiian, and Asian and Pacific Islander (Minority-Serving Institutions, 2012) and others, in addition to Hispanic-Serving Institutions (HSIs). Since its first appropriation in 1995 ($10 million), the Developing Hispanic-Serving Institutions Program – Title V (2012) and Promoting Postbaccalaureate Opportunities for Hispanic Americans Program (2012) has increased to $217 million. This includes a prorated mandatory funding of $1 billion over 10 years to revise and expand the program (Santiago, Kienzl, Sponsler, & Bowles, 2010). Previous analysis by Excelencia in Education “has shown that some HSIs are very focused on serving their Latino students (not just enrolling). Unfortunately, policymakers cannot assume that all institutions with a concentrated enrollment of Latinos are identifying and investing in these students’ success by default” (Santiago et al., 2010, p. 10). However,

given that HSIs are predominately located in states with large Latino populations, and that more than half of Latino undergraduates are enrolled at HSIs, this increased investment in the institutions with high concentrations of Latinos has the potential to increase Latinos’ and the nation’s overall college completion levels. (Santiago et al., 2010, p. 10)
Despite these concentrations in certain states, national census demographics still indicate a growing number of Hispanics. In 2010, the Hispanic population is projected to 47.8 million—15.5% of the population, and by 2050, the projection will more than double to 102.6 million—24.4% of the population. California and Los Angeles County, Texas and Harris County, Florida and Miami-Dade County, Arizona and Maricopa County, and Illinois and Cook County are the top states and top counties respectively in Hispanic population growth as of 2006 (U.S. Census Bureau, 2010).

Being able to address educational needs in such a dynamic environment is challenging. Santiago (2010) stresses “increasing Latino educational attainment is crucial because their educational attainment is lower than other groups (only 19% of Latino adults have earned an associate or higher) and the Latino population is rapidly expanding” (p. 4). Santiago (2010) continued about the rapid growth of younger Latinos by writing, “By 2020 Latinos are projected to represent close to 25 percent of the U.S. 18-29 year-old population, up from 18 percent in 2008” concluding that “since Latinos will make up a greater percent of the U.S. population by 2020, increasing Latino college completion is critical for the U.S. to meet its future societal and workforce needs” (p. 4).

In terms of a national goal “to reach 51 percent college degree attainment and become the world leaders, the U.S. will need to produce an additional 13.3 million degrees by 2020” (Santiago, 2010, p. 4). To meet this national goal, “these data strongly suggest that the gap between the U.S. and the leading countries cannot be closed without closing the racial/ethnic gaps in degree attainment” (p. 5).
During the first three years of NSSE’s existence (2000-2002), only a few Historically Black Colleges and Universities (HBCUs) and Hispanic-Serving Institutions (HSIs) participated in NSSE and no tribal colleges participated (Bridges, Cambridge, Kuh, & Leegwater, 2005). In response, NSSE and the American Association of Higher Education (AAHE) initiated BEAMS—Building Engagement and Attainment for Minority Students—a program to foster education attainment through the use of institutional data. More than 100 four-year institutions were served by this program from 2003 to 2008 (Building Engagement and Attainment for Minority Students, 2010; Del Rios & Leegwater, 2008).

The research described in this study focused on how assessment, specifically the results of National Survey of Student Engagement, were used by chief academic officers at five Hispanic-Serving Institutions to influence both institutional effectiveness and student success. These institutions combined and integrated other assessment measures; however, how these other assessment measures were used is not the focus of this research.

**Statement of the Problem**

The National Survey of Student Engagement (NSSE) has been in existence for over 10 years with a total of 1,493 institutions and over 2.7 million students participating since 2000 (NSSE, 2012). Because of BEAMS and its initiatives more is known about Hispanic-Serving Institutions than other colleges/universities on how data and results are actually used (personal communication, J. Kinzie, NSSE, December 8, 2011; Building Engagement and Attainment for Minority Students, 2010; Del Rios & Leegwater, 2008). Knowing how to sustain these successes—not only applying them at other HSIs but at
institutions with increasing Hispanic student populations—remains even more important as Hispanic populations and demographics change. This study explored the process on how NSSE results were used. The study also explored the actions taken based on those results.

**Purpose Statement**

The purpose of this grounded theory qualitative research was to investigate how chief academic officers at five private Hispanic-Serving Institutions accredited by the Southern Association of Colleges and Schools use the National Survey of Student Engagement (NSSE) results to improve institutional effectiveness and promote undergraduate student success.

**Research Questions**

The following two questions guided the qualitative research:

1. How do chief academic officers disseminate NSSE results to facilitate institutional effectiveness?

2. How do chief academic officers promote undergraduate student success using NSSE results?

These questions were only the beginning of an interpretive and iterative process, a process described by Denzin and Lincoln (1998) where “interpretation[s] are constructed” (p. 29) and where iterative is “mak[ing] sense out of what he or she has learned” (p. 30). The interviews and analyses revealed many layers of complexity as deeper meanings and relationships were explored, constructed, and compared.
Theoretical Framework

The initial theoretical framework for the research was founded on relationships: between institutions and students, student engagement and learning (Pascarella & Terenzini, 2005), and student success and effective educational practices (Kuh, Kinzie, Shuh, Whitt, & Associates, 2005). Pictorially, the relationship is portrayed in Figure 1.

![Diagram of Theoretical Framework]

**Figure 1.** Theoretical Framework: Institutional Effectiveness to Students’ Success.

Institutions and students are partners in educational success. The complementary, or additive, nature of institutions and students can be expressed in terms of quality— institutions providing the resources and students utilizing those resources (Project on the Study of Quality in Undergraduate Education, 1984).

Institutions and students are not the only partners. Institutions of higher education have both external and internal influences. Accreditation is one of those external influences. Demands for increased accountability have accreditors asking for evidence.
Assessment can be both an external and internal influence. Assessment provides some of the means to meet these requirements, either directly, indirectly, or combinatory. Maki (2010) discussed direct and indirect assessment in the context of general education, and explained, “without direct evidence of students’ learning represented in their work or performance, we cannot know how effective our collective efforts are” (p. 48). However, indirect assessment “about how they [students] are experiencing . . . and making meaning of their course work and educational experience is an essential component of the assessment process as well” (p. 49). NSSE is an indirect assessment and by comparing direct and indirect results, “educators can gain a deeper understanding of patterns of student achievement” (Maki, 2010, p. 49).

Banta and Associates (2002) described outcomes assessment as “systematic” and explained it as an inquiry designed to deepen and extend the foundation of knowledge underlying assessment. It involves basing studies on relevant theory and/or practice, gathering evidence, developing a summary of findings, and sharing those findings with the growing community of assessment scholars and practitioners. (p. x)

It is more organizational, seeking to improve the institution based on actionable and credible information. Banta (2002) saw Patton’s (1997) utilization-focused program evaluation model as being the most useful in outcomes assessment. The model encourages users to use the findings. Patton (1997) recommended “putting knowledge to use . . . narrowing the gap between generating evaluation findings and actually using those findings for program decision making and improvements.” (p. 6). Patton’s model integrated well with the characteristics of outcomes assessment addressed by Banta (2002); however, Banta recommended more involvement by the stakeholders.
Using characteristics of outcomes assessment (Banta & Associates, 2002), the theoretical process is displayed in Figure 2. Outcomes assessment encompassed an iterative process of planning, implementation, and improving and sustaining.

![Figure 2. Outcomes Assessment Process.](image)

Results are used to decide actions, and lead to determining how effective those actions were (Banta & Associates, 2002; Patton, 1997). These analyses took many forms—question by question, educational and peer benchmarks, national results, and more—and set the stage for planning. Outcomes assessment actions (Banta & Associates, 2002) are evaluated by what the results were. This evaluation looked for improvement and how to document that improvement. The institution also looked for ways to sustain successful results. Even if the results were sub-standard or failing, there was still something to be learned in assessing outcomes. The institution used the process to
determine what credible evidence was available to document what they said they were going to do. Finding such evidence facilitated institutional effectiveness and efficiency.

This research explored how institutions utilize the NSSE results in an outcomes assessment process to influence institutional effectiveness and student success. The *idealized* context within one region—Southern Association of Colleges and Schools (SACS), was portrayed in Figure 3. The SACS accrediting principles defined institutional effectiveness and required a quality enhancement plan. Important to note is that SACS does not require institutions to participate in NSSE. That decision is up to the individual institutions. The study found that all participating institutions used NSSE results to influence institutional effectiveness and student success.

![Figure 3. Context—Use of NSSE Results and Outcomes in Southern Association.](image-url)
In this *idealized* context, institutions planned and assessed outcomes of student success relating them back to educational programs and support services. Institutions used NSSE Benchmarks of Effective educational Practice (Table 1) and peer benchmarks to evaluate themselves nationally and within their peers. Participating institutions also used individual NSSE questions at national and peer levels in their evaluation. Theoretically, these institutions also incorporated aspects of NSSE into other plans—quality enhancement, strategic, and others in one degree or another, in determining effectiveness and student success. The research found this context to be more nuanced and complex when other assessments and accreditations were integrated. However, how these other assessments and accreditations were used is not the focus of this research. This study focused on how institutions use NSEE results to influence institutional effectiveness and student success.

**Definitions of Terms**

*Chief Academic Officers*: Provosts, Vice Presidents for Academic Affairs, and other equivalent designations for senior administrators having responsibilities related to both academic and institution.

*Hispanic-Serving Institution*: Institution of higher education that (a) is an eligible institution; and (b) has an enrollment of undergraduate full-time equivalent students that is at least 25% Hispanic students at the end of the award year immediately preceding the date of application (Developing Hispanic-Serving Institutions program – Title V, 2012).
Institutional Effectiveness: The Southern Association of Colleges and Schools defines institutional effectiveness in two parts for the institutions to use. The first part or comprehensive standard

[Identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of improvement based on analysis of results in each of the following areas: educational programs, to include student learning outcomes; administrative support services; educational support services; research within its educational mission, if appropriate; and community/public service within its educational mission. (Principles of Accreditation, 2010, p. 25)

The second part or core requirements define how the institution shows it is effective:

[Engages in ongoing, integrated, and institution-wide research-based planning and evaluation processes that (1) incorporates a systematic review of institutional mission, goals, and outcomes; (2) result in continuing improvement in institutional quality; and (3) demonstrate the institution is effectively accomplishing its mission. (Principles of Accreditation, 2010, p. 16)

Outcomes Assessment: “Systematic inquiry designed to deepen and extend the foundation of knowledge underlying assessment basing studies on relevant theory and/or practice, gathering evidence, developing a summary of findings, and sharing those findings with the growing community of assessment scholars and practitioners” (Banta & Associates, 2002, p. x).

Student Assessment: “[A]ctivities focused on measuring dimensions of student performance other than traditional end-of course grading” (Peterson, Einarson et al., 1999, p. 1).

Student Engagement: The two components of student engagement are first, the “[A]mount of time and effort students put into their studies and other activities that lead to the experiences and outcomes that constitute student success” and second, the “[W]ays the institution allocates resources and organizes learning opportunities and services to induce students to participate in and benefit from such activities” (Kuh et al., 2005, p. 9).
Student Success: “[A]cademic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, attainment of educational objectives, and postcollege performance” (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006, p. 7).

Overview of Research Design

The research explored the outcomes assessment process (Figure 2) chief academic officers employed in using the results of the National Survey of Student Engagement to improve institutional effectiveness and promote undergraduate success. This process is ideally embedded in the context (Figure 3). This qualitative research detailed how NSSE results were used and what actions were taken based on those results by a very purposeful sample. But there is a need for fuller understanding of the process as Banta (2002) emphasized and wrote, “In outcomes assessment the primary focus must be on what we achieve—our outcomes . . . we also need information about the processes that have helped produce the outcomes” (p. 272).

The study employed grounded theory—“[D]iscovery of theory from data” (Glaser & Strauss, 1967, p. 1) to reveal “predictions, explanations, interpretations and applications,” and furthermore, as a “way of arriving at theory suited to its supposed uses” (p. 3). These predictions, explanations, interpretation, and applications represented what Rowlands (2005) referred to as types of evidence “requiring constant comparison . . . to control the conceptual level and scope of emerging theory” (p. 87). Additionally, Rowlands (2005) described grounded theory as iterative, “requiring a steady movement between concept and data” (p. 87).
Figure 4 depicted this comparative and iterative nature of the overall design.

![Comparative and Iterative Nature of Grounded Theory](image)

**Figure 4.** Comparative and Iterative Nature of Grounded Theory.

Not only is there a transfer between concept and data, but a constant comparison of concept, data, evidence, and emerging theory. As conceptualization, transfer between developing hypotheses, and collected and analyzed data found a common point, theory also found a congruent point and emerged.

Qualitative interviews and constant comparison were used in this design to explore the data. First stage interviews were coded. These codes and analysis set the stage for the second stage interviews where evidence, collected to that point, was further explored. Following the second interviews, the data were again coded and analyzed. Evidence was then compared between the two interview phases to determine any emerging theory.
Significance of Study

Hispanic graduation rates remain well below White graduation rates at the undergraduate level despite individual gains of respective students (Santiago, 2010). Combining a sample of data (2005 to 2009) from the American Community Survey with decennial census data, Richards (2011) reported a growing stratification of who has bachelor’s degrees in a county by county look. If anything, the country has become increasingly stratified over time where the 2009 census estimates “28 percent of Americans 25 and older had at least four-year degrees. But the rate for black Americans was just 17 percent, and for Hispanic Americans only 13 percent” (p. A24). This gap between national attainment and Hispanic attainment varied by location—the gap in Florida’s Miami-Dade county “is smaller than nearly anywhere else, bucking a national trend. . . an estimated 23 percent versus 26 percent overall. . . a much smaller gap than in Los Angeles, Phoenix (Maricopa County) or Houston (Harris County), where the Hispanic college degree rate doesn’t even crack 10 percent” (p. A24). The population composition “may account for some of the difference . . . Concentrations are particularly high in border states like California, Arizona, and Texas, where educational attainment among Hispanics is lower than the national average” whereas the “largest components of Miami’s Hispanics in 2009—Cubans, Colombians, and Nicaraguans—had, on average, completed 12 or more years of school” (p. A24) as compared to Mexico.

The National Center for Postsecondary Improvement along with the Office of Educational Research & Improvement (U.S. Department of Education) last surveyed student assessment in 1999 (Peterson, Einarson et al., 1999; Peterson, Augustine et al., 1999). Participation and engagement surveys, like the National Survey of Student
Engagement, were not included in these national surveys since the first NSSE was first piloted in 1999 and inaugurated in early 2000. This research on how chief academic officers used the National Survey of Student Engagement results to facilitate institutional effectiveness and promote student success contributed and increased what was known about NSSE and outcomes assessment. The research benefited higher education on how institutional and student engagement is perceived at private Hispanic-Serving Institutions and other institutions with growing Hispanic populations.
Chapter Two: Review of the Literature

Introduction

The review concentrated on three areas, beginning with (a) student assessment, then (b) student success, and ending with (c) institutional effectiveness. Primary sources for the review included peer-reviewed journal articles mostly within the last 10 years using the Education Resources Information Center (ERIC) databases, funded educational projects, the Association for the Study of Higher Education (ASHE)-ERIC educational reports, books, and newspapers. The review was broadly mapped in Figure 5.

![Figure 5. Literature Review Map.](image)

The National Survey of Student Engagement (NSSE) is positioned within student assessment and represents only one element of student assessment in general. Likewise, student engagement is positioned within the larger category of student success as is Hispanic-serving within institutional effectiveness of colleges and universities in general.
**Student Assessment**

Peterson, Einarson et al. (1999) defined student assessment as “those activities focused on measuring dimensions of student performance other than traditional end-of course grading” (p. 1) in their second stage of research—design, implementation, and analysis of a national survey. Highlighting the research significance, Peterson, Einarson et al. (1999) wrote,

To date there has been little systematic examination of the institutional responses to external demands, the institutional approaches to student assessment, and the organizational and administrative patterns that are formulated to promote and implement student assessment. Even less available is evidence regarding the institutional use and impact of student assessment. (p. 1)

Peterson, Einarson et al. (1999) recalled the revisions to the Department of Education’s Criteria for Recognition of Accrediting Agencies, and reported that as a result of these two actions (revising the Department of Education’s accrediting agencies criteria and linking financial aid eligibility to student assessment), “all six regional accreditation agencies now require institutions to conduct student assessment” (p. 5).

Whether federal, state, or regionally influenced, Peterson, Einarson et al. (1999) continued that “scholars debate whether state mandates have promoted institutional support for and use of student assessment or have mainly evoked a compliance response on the part of institutions” (p. 6).

Whether mandated at the state or federal level, or required by accrediting agencies, the scholarship of assessment (Banta & Associates, 2002) has developed and there are now recent examples on how assessment is being used at institutions of higher education. One example is how Coker College approached its reaffirmation of accreditation within the Southern Association of Colleges and Schools, and developed their Faculty Assessment of Core Skills (FACS)—“analytical and creative thinking and
effective writing and speaking” (Eubanks, 2010, p. 54). “[A]fter a semester of trying things out and getting faculty input, we converged on a successful model” with faculty involved in deciding which of the skills they “should or could assess (not necessarily teach—an important distinction) for each class” (p. 54). A rubric was developed for each class which standardized the ratings as: “remedial, freshman or sophomore-related performance, junior- or senior-level performance, and ready to graduate” (p. 54). Faculty simply logged on at the end of the semester and entered their ratings. FACS “took on a life of its own” (p. 54) and how to use the wealth of data became problematic. First reported out in descriptive terms, the move to nonparametric terms “was the difference between night and day” (Eubanks, 2010, p. 55) and

Instead of reporting that the art programs creative thinking average was 2.9, or .4 better than the college average, I could show them that one of their seniors consistently scored at least one ‘remedial’ in that skill each semester and had never scored high that ‘freshman- or sophomore-level performance’. The only time I’ve heard gasps in an assessment presentation was when I showed that a small portion of the graduating seniors were still scoring at least one ‘remedial’ in analytical thinking in their final year. (p. 55)

Eubanks (2010) continued, “But this is really an account of assessment from a faculty perspective, and it is as a faculty member that I finally came to see the value of assessing . . . Because of FACS, we at least had the four liberal arts outcomes embedded in courses across the curriculum” (p. 55). “The act of creating rubrics for the thinking skills was the beginning of a revelation—the most important thing I’ve learned about teaching math” (p. 55). Eubanks observed about assessing learning outcomes in the classroom: “Simply setting some goals and really thinking about them, inviting dialogue with students and colleagues, can be an engine for positive change; the most powerful and discerning assessment tools anywhere are the minds of the classroom teachers. (p. 57). Eubanks has
applied FACS successfully at another institution as well (D. A. Eubanks, personal communication, May 11, 2012).

In a state by state survey, Zis, Boeke, and Ewell (2010) reported on what states required undergraduate education learning outcomes, a methodology similar to what was used by the National Center for Higher Education Management Systems (NCHEMS) in 2006. The approaches included cognitive testing (required by 5 states), standardized testing for development placement (15 states requiring common placement tests with or without mandated cut scores), and institution-centered assessment (required by 21 states). Though the majority of states do not currently have assessment policies in place, at least twenty states reported that new policies or changes in policies are being planned within the next couple of years. Many of these states are reviewing policies with regard to accreditation, assessment, remediation, and program review. Several states also noted that even though changes and reviews were not formally planned, student learning outcomes assessment is becoming an important topic of conversation and is definitely on the state policy agenda. (Zis, Boeke, & Ewell, 2010, p. 14)

Peterson, Einarson et al. (1999) emphasized that “the ultimate criterion of the effectiveness of a student assessment approach is whether it results in changes that improve student learning and development. Overall, the literature offers limited evidence of this type of impact” (p. 24). But “multi-institutional research consistently reveals curriculum development and revision as the most common institutional impact of student assessment” (p. 25). Changes in the culture and climate associated with student assessment were noted with “some institutions hav[ing] witnessed a shift in the perception of student assessment from that of a tolerated practice to an integrated part of the educational process” (Peterson, Einarson et al., 1999, p. 26).
Previously Ewell (2005) stated the purpose of an assessment program as “[I]mproving teaching and learning” (p. 105). Bennett (2001) outlined several forms of assessment, the last being participation and engagement which asks students to report what they actually do [emphasis in the original] while they are in college what they engage in. Such an approach focuses, that is, on processes and participation rates . . . Rather than trying to measure value added directly for each student, the intent is to measure whether students are educated through processes that research has shown do in fact add value to students’ attainments. (p. 44)

The premier example of this type of approach is the National Student Survey of Engagement (NSSE).

**National Survey of Student Engagement.** Spies and Plake (2005) wrote that the NSSE survey instrument was developed by reviewing some “25 years worth of educational practices” to determine what was effective “in helping students learn” (p. 671). Currently derived from 42 key NSSE questions, the NSSE Benchmarks of Effective Educational Practice (2010) detailed in Table 1 identified five categories: Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction, Enriching Educational Experiences, and Supportive Campus Environment.

Spies and Plake (2005) wrote, “Reliability data show the NSSE to provide scores that are consistent” and “discussion of validity analyses are equally thorough . . . Overall, the psychometric evidence presented indicates the NSSE can accomplish its purpose—to assess student engagement along several dimensions” (p. 673). Spies and Plake (2005) reported the Cronbach ‘s alpha coefficient at .82 for college activities and other subscales above .75. Kuh (2002) explained the origins and psychometric properties of the survey itself.
The survey and administration are focused on a sampling of freshmen and seniors, that analyzes the data and provides benchmarks to other institutions. Though the NSSE provided data and analysis in the form of results for each year the survey is administered, participating institutions make their own determinations on interpreting, communicating, and applying them, separately or in conjunction with other assessments. In some cases, these institutions have accrued multiple years of data.

Questioning the predictive value of the NSSE, Pascarella, Seifert, and Blaich (2010) used their analysis of the longitudinal (pre-test-post-test design) Wabash National Study of Liberal Arts Education (2010a, 2010b) to investigate five outcomes: (a) Effective reasoning and problem solving, (b) Moral character, (c) Inclination to inquire and lifelong learning, (d) Intercultural effectiveness, and (e) Personal well-being. Without a precollege measure of an individual student's receptiveness to educational experiences, it is difficult—if not impossible—to distinguish how much of that student's “gain” on some outcome is due to the added value of college from how much is simply due to his or her disproportionate openness and receptivity to the college experience. (Pascarella et al., 2010, p. 18)

However, the analysis found support for the “claim that the NSSE results regarding educational practices and student experiences are good proxy measures for growth in important educational outcomes such as critical thinking, moral reasoning, intercultural effectiveness, personal well-being, and a positive orientation toward literacy activities” (p. 21). Regarding NSSE benchmark scales, their findings suggested that:

Institutions using the NSSE can have reasonable confidence that the benchmark scales do, in fact, measure exposure to experiences that predict student progress on important educational outcomes, independent of the level on these outcomes at which an institution's student body enters college. (Pascarella et al., 2010, p. 21)
Stressing quality and effectiveness of undergraduate education as opposed to resources and academic selectivity [read rankings], Pascarella et al. (2010) concluded “it probably makes more sense to focus on implementing practices and experiences measured by the NSSE benchmarks than on those factors measured by U.S. News” (p. 21).

Because of self-reporting, Spies and Plake (2005) noted the College Student Report “was intentionally designed to meet five conditions for validity,” followed by “extensive pilot testing”...item analyses, reliability studies, and validity studies” (p. 671). These steps were taken “to assess the accuracy of the self-report data provided” (p. 673).

Bowman (2010) described an advantage of self-reports and wrote, “Many constituencies within and outside of higher education are concerned with the learning and development of college students” (p. 466), setting the stage to ask how “students benefit from their (rather expensive) years spent in college” and “how student outcomes are effectively and accurately measured” (p. 467). Bowman continued:

Compared with conducting longitudinal assessments with objective measures, asking students to report how much they have gained during college is relatively inexpensive, requires minimal financial and human resources, and provides results in a short period of time...self-reports constitute a useful proxy, but not a substitute, for objective measures. (p. 467)

However, biases may exist as Bowman (2011) pointed out and “may substantially diminish the construct validity of self-reported gains” and more importantly, “lead to systemic errors in predictors of relationships between independent variables and self-reported gains only under certain circumstances” (p. 8). Bowman (2011) added that “women are more susceptible than men to social desirability bias” (p. 8). One of the largest sources of bias is “students’ inability to introspect accurately on their own learning and development” and what people think they possess, and “confidently report” (Bowman, 2011, p. 8) may be two different things. Consequently, “they ‘fill in the
blanks’ with their own lay theories of mental processes and lifespan development” (Bowman, 2011, p. 8). Bowman noted, “Because people often base their self-perception of growth on lay theories of change (as opposed to true introspective knowledge), their self-reported gains are accurate only to the extent that they align with objective reality” (p. 9). This does not mean alignment never happens. Bowman (2011) used two studies, one his own, where no significant difference was found between studies using self-reported gain and longitudinal assessments, and the other one by Pike where undergraduate major types and self-reports aligned. Two additional studies reported by Bowman (2011) illustrated systematic biases and showed significant non-alignment using longitudinal gains. Bowman’s (2011) most recent study was limited to only first year college students, and “focused specifically on demographics (that is, race and ethnicity, gender, socioeconomic status, and age, and academic achievement) and institutional characteristics (institutional type and institutional control)” which are “commonly used predictors of college student learning and development” (p. 10). What bears significance in Bowman’s study to this research of private and liberal arts colleges is:

Students at liberal arts colleges generally have greater self-reported gains than do students at universities and community colleges. In contrast, no such significant differences occur for predicting longitudinal growth, and community colleges are actually associated with greater longitudinal growth on noncognitive outcomes than are liberal arts colleges. Similar findings are present for institutional control: attending a private institution—whether religiously affiliated or secular—is associated with greater self-reported gains than attending a public institution. However, no significant differences in longitudinal growth are observed between private and public institutions. These longitudinal results are consistent with Pascarella and Terenzini’s comprehensive review (2005), which showed that institutional type, control, and size have very little effect (if any) on student learning and development. Thus it seems self-reported gains overestimate the growth that occurs at private institutions and liberal arts colleges. (pp. 15-16)
Bowman (2011) explained that the individualized nature at private institutions and liberal arts colleges causes students to think their self-improvement is a result of “this individualized attention” (p. 16) and related satisfaction causes them to report larger gains. Students who attend more expensive private institutions “may think they have gained a great deal simply because they have attended a type of school that they perceive to be educationally effective” (p. 17). Bowman (2011) indicated “only one independent variable differs consistently”—precollege test scores being smaller “for self-reported gains than for longitudinal gains” (p. 17). Bowman (2011) explained this in part and wrote, “college students who have lower standardized test scores are likely to provide inflated self-reported test scores, which suggests that social desirability plays a role in these students’ responses” (p. 18). Bowman (2011) cautioned “the use of self-reported gains as a proxy for longitudinal assessments seems questionable in many circumstances” (p. 18). Claiming to be the first study “to demonstrate that the use of self-reported gains for measuring student growth may result in consistent institution-level biases” (p. 18), Bowman (2011) emphasized more accurate assessment, or ‘value-added’, as both “student learning outcomes and institutional improvement” (p. 18) accreditation roles increased.

Bowman has conducted previous studies, as related in the literature review, on self-report assessments and has indicated the mixed literature regarding objective versus subjective and cautioned about how accurate student self-reported gains are over time. As noted in this literature review, NSSE has taken continued steps in overcoming self-report bias—focus groups, etc.
Focusing on input bias and encouraging more “longitudinal rather than cross-sectional assessments” (p. 658), Astin and Lee (2003) compared the National Survey of Student Engagement (NSSE) and the College Student Survey (CSS). The CSS is primarily used longitudinally whereas the NSSE is used cross-sectionally. Twenty-two items between the CSS and NSSE were found by Astin and Lee (2003) to be similar and aggregation resulted in a sample of 21,366 students from 222 institutions. Because of its (CSS) longitudinal nature, it was possible to project expected values in addition to actual values, related to student engagement, specifically the average number of hours spent per week studying and doing homework. Comparing actual versus expected allowed for an analyses similar to one Astin (1997) previously used in retention rates. However, in the more current Astin and Lee (2003), the comparison focused on cross-sectional (NSSE) versus longitudinal (CSS) where the results “make it clear that one-shot cross sectional assessments of enrolled college students are very difficult to interpret unless the institution also has access to relevant information about the same students when they first entered college” (p. 669). Collecting information from students when they first matriculated and continuing to do so “comes much closer to assessing institutional quality or effectiveness that a one-shot cross sectional assessment of enrolled undergraduates” (p. 670).

Pike (2006) contextualized assessment in terms of disaggregating results from large scale surveys and studies, and then used scalelets (mini-assessments) to assess programs at the department level. The more common use of NSSE data involved disaggregation to the program level and then used subsets of questions within the NSSE benchmarks to focus on improvements. Scalelets are analyzed to see how benefits can be
derived from the survey. Effective use of disaggregated data pointed toward “small numbers of highly related questions that suggest specific improvement actions” (Pike, 2006, p. 178). To disaggregate the results, Pike (2006) observed, “frequently requires that a survey be administered to a very large number of students in order to produce dependable measures (p. 178). Scalelets provided a way to focus on program improvement without a large scale survey, offer a new assessment approach, and “important because it reminds higher education professionals that groups, not individuals, are the appropriate units of analysis in many assessment studies” (Pike, 2006, p. 180).

National surveys of student engagement are not limited to North America as Trowler (2010) explained in a review of literature. Australia and New Zealand Asia have their own survey known as the Australasian Survey of Student Engagement (AUSSE) with over 40 institutions participating in 2011 (Australasian Survey of Student Engagement, 2012). Trowler differentiated the historic rooting of student engagement—North America and Australasia in student involvement, and the United Kingdom in student feedback, representation, and approaches to learning; however, expanding the review would go beyond the intended scope.

Banta and Associates (2002) stressed the need to understand “what assessment is and understand its purpose” (p. 58). For some, assessment is testing and measuring. For others, assessment is a process. “Student learning outcomes assessment is described as a form of systematic inquiry with the following elements: learning as hypothesis, educational practices and experiences as context, evaluation as information gathering, and decision making as direction for improvement” (Banta & Associates, 2002, p. 58).
**Survey research.** Porter (2004) reviewed survey research literature. When looking at why people respond to surveys, reciprocity (something in return for), legitimate authority, and being characterized as part of a select group influenced survey responses. In this day of technology, surveys have become web based as well and comparing paper to web yields some contradictory results, and could be related to sample and survey design. Incentives, deadlines, multiple contacts, salience (relevancy), length, confidentiality, and other factors all come into play. Incentives had more effect if paid in conjunction with receiving the survey than afterwards.

As Porter and Whitcomb (2004) pointed out, the literature “shows that post-payment of incentives in general and lotteries in particular has little or no impact on survey response, use of such lottery incentives appears to be common in institutional research” (p. 58). Porter, Whitcomb, and Weitzer (2004) indicated “little research examines the impact of survey fatigue on response rates” and wrote, “Multiple surveys do appear to suppress response rates” (p. 72).

How technology is used in institutions of higher education presented both challenges and opportunities when addressing factors of enrollment, communication, and student success. Salas and Alexander (2008) wrote, “College students are calling for more personalization that brings them into the campus’s virtual community” (p. 104), and added that, “Student engagement pedagogies change with the changing needs of college students. In order to increase the level of meaningful interaction in and out of the classroom, institutions have an opportunity to use technology to enhance the student experience” with one obvious advantage being “easier access to course content” (Salas & Alexander, 2008, p. 108).
Course and faculty evaluations have also shifted to web based in some institutions. Though not specified—web based or paper based, Arum and Roska (2011) pointed the significance of course evaluations to faculty and wrote,

the only form of instructional assessment that more than one in eight faculty considered as critical for tenure was student course evaluations; 25 percent of four-year college faculty reported these instruments as very important for tenure decision. To the extent that teaching mattered in tenure decisions at all, student satisfaction with course was the primary measure that faculty considered relevant: a measure that partially encourages individual faculty to game the system by replacing rigorous and demanding classroom instruction with entertaining classroom activities, lower academic standards, and a generous distribution of high course marks. (pp. 6-7)

Medina (2011) reported on the growing emphasis on student evaluations and how professors encourage and seek feedback, responding by making changes. Increased accountability is one reason to solicit feedback, but improvement is another reason. But even with course evaluations, students may not be able to discern or connect what they observed or recommended in the course evaluation since, unless a repeat of the course is required, to the actual changes made. There is also the continuing concern of protecting human subjects as in the students from being identified. Emerging technologies to enhance student engagement discussed in Junco and Timm (2008) were more oriented to inputs (survey administration), not outputs (using results).

**Student Success**

Kuh et al. (2006) reviewed student success literature for both the National Postsecondary Education Cooperative and National Center for Education Statistics. In their report, student success was defined “as academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, attainment of educational objectives, and postcollege
Kuh, Kinzie, Buckley, Bridges, and Hayek (2007) in a later ASHE report, stated their purpose as “provid[ing] an informed perspective on policies, programs, and practices that can make a difference to satisfactory student performance in postsecondary education” (p. 4). However, in this later 2007 ASHE report, student success was “defined as academic achievement; engagement in educationally purposeful activities; satisfaction; acquisition of desired knowledge, skills, and competencies; persistence; and attainment of educational objectives” (Kuh et al., 2007, p. 10). Though similar in many ways, this definition did not include the postcollege performance included in their previous 2006 report. Perna and Thomas (2008) reported on the theoretical perspectives of student success in a later ASHE report providing an overarching conceptual framework. In combination, these three ASHE reports covered the continuum of theory to practice in student success.

Feldman, Smart, and Ethington (2008) identified “two broad categories of theories or models that have guided most research on how college students grow or change” (p. 366). The first category or cluster is developmental (“what changes in college students”) and the second is college-impact (“how these changes come about”) (p. 367). Feldman et al. (2008) noted five impact models/theories—Astin’s I-E-O [Input-Environment-Output] model, Astin’s theory of involvement, Tinto’s theory of student departure, Pascarella’s model of learning and cognitive development; and Weidman’s model of undergraduate socialization. The “research on student success based upon these ‘college-impact’ models has not been grounded in full-fledged theory... [and] compounded by an absence of psychometrically sound measures for the constructs embedded in them” (Feldman et al., 2008, p. 368). Consequently, the lack of theoretical
grounding and measurements has focused “primary attention . . . to the characteristics and behaviors of college students” (p. 368), and not concomitantly on the college environment.

**Holland’s theory.** Using Holland’s theory added perspective to the focus on college students’ behaviors and characteristics. Using this theory opened pathways for viewing student success by focusing on two properties of the person-environment fit theory of Holland: “(1) its usefulness in tracking alternative kinds of student success; and (2) the strength of the sociological potentials and implications embedded within it” (Feldman et al., 2008, p. 329). Holland assumed that choosing a vocation or major is dependent on personality and classifies six personality types—realistic, investigative, social, enterprising, and conventional (individual/psychological component). Six analogous environments, one for each personality type, comprised the environmental / sociological component of the theory. The last component is congruence between the personalities and environments. Three assumptions paired with the three components premised the theory—self-selection (students choose environments compatible with their personality), socialization (model environments pair up with dominant personalities in the environment), and congruence (“vocational and educational stability, satisfaction, and achievement are a function of the ‘fit’ or congruence between individuals and their environments” (p. 335). Two patterns of student success are delineated—“more peaked and highly differentiated profile of student learning” (p. 337) based on congruence, and “more balanced or less peaked profile of student learning” (Feldman et al., 2008, p. 338) (both emphases in the original) based on socialization.
In the first pattern, students developed their prominent characteristics while staying stable or perhaps declining in other interests or abilities. But, as Feldman, Smart, and Ethington (2004) wrote earlier, “The emphasis on the congruence assumption and the criteria used to judge “success” in explaining vocational behaviors and interests, while sensible or appropriate in vocational contexts, becomes problematic when the focus is on educational behaviors and interests”, problematic “because colleges and universities have historically sought to promote student growth and development. . .regardless of the initially prominent characteristics of their entering freshman” (p. 531).

In the second pattern, students developed within their chosen environment despite the fit or congruence. Personality traits are not immutable (Feldman et al., 2008; Feldman et al., 2004) and socialization allowed for alternative pattern of success seen from a group perspective. Here the emphasis is on where “students acquire the distinctive cluster of abilities, interests, and values that are required, reinforced, and rewarded” (Feldman et al., 2008, p. 344).

The congruence versus socialization perspectives above and alternative patterns of student success in Holland’s theory (Feldman et al., 2008) were representative of the contrast between “the more traditional liberal arts perspective of student success grounded in the pursuit of knowledge” and the “more contemporary perspective of student success reflected in ‘market-based utilitarianism’” (p. 360). Likewise, there were implications for assessing student outcomes, primarily in the “variability in student success or performance measures associated with their [students’] chosen academic environments” (p. 365).
Retention. Berger and Lyon (2005) defined retention as the “ability of a particular college or university to successfully graduate the students that initially enroll at that institution” (p. 3). Other terms like mortality, dropout, attrition, and persistence “are closely related” but “are not synonymous” (p. 7). Case in point is how they defined persistence as the “desire and action of a student to stay within the system of higher education from beginning year through degree completion” (Berger & Lyon, 2005, p. 3).

Astin (1997) took issue with the implication “that the higher the retention rate, the better” (pp. 647-648) and in a longitudinal based study of 52,898 students at 365 baccalaureate granting institutions provided a way for institutions to “evaluate their own retention rates,” comparing expected and actual rates. If the two rates are close, then the “institutions’ effectiveness in retaining students is on a par with other institutions nationwide” (p. 648). Institutions with higher actual rates are doing better in this comparison as opposed to those having actual rates well below the expected. Indicating recent research about environmental factors which influence actual retention rates “over and above the influence of student input characteristics” (p. 657). Astin (1997) indicated two of these environmental factors: major field and living on campus during the freshman year and highlighted how the size of the institution and number of residential facilities affect actual retention rates. Small size/available facilities “do not necessarily create actual retention rates that are higher than expected, not do large size or lack of residential facilities necessarily cause the institutions’ actual rate to be lower than expected” (pp. 654-655). The institutions had a “stake in knowing how closely its actual rate approximates its expected rate” (Astin, 1997, p. 655). A similar problem (actual versus
expected) is time to degree where expected rates may be significantly higher than actual rates possibly indicating problems in course scheduling or available financial aid.

Braxton (2006) delineated a range of college success indicators and arrayed these indicators of college student success into eight categories: academic attainment, acquisition of general education, development of academic competence, development of cognitive skills and intellectual dispositions, occupational attainment, preparation for adulthood and citizenship, personal accomplishments, and personal development. (p. 2)

Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008) noted that none of these categories included persistence or baccalaureate degree attainment as contained in other studies.

**Tinto’s model and theory.** Tinto’s (1993) model of institutional departure and theory (Figure 6) has been critiqued by others and even adapted by the author.

![Figure 6. Tinto’s Model for Institutional Departure.](image-url)

Two key theoretical pieces are academic and social integration.

Berger and Lyon (2005) identified the 1970s as the building theory era in their historical look at retention. The era began with Spady’s literature review on dropouts and “asking for future research to focus on the interaction between student attributes and the university environment” (p. 19). Berger and Lyon (2005) continued by writing, “Not long after, Tinto built upon and enhanced Spady’s model” and “Tinto’s interactional theory of student departure became one of the best known, and most often cited, theories relating to student departure” (p. 19). Student characteristics and commitments to institution and graduation “influence student departure decisions” and “suggests that early and continued institutional commitment will impact both academic and social integration within the university, both important factors in college student retention” (Berger & Lyon, 2005, p. 19).

Braxton, Hirschy, and McClendon (2004) “offered a revision of Tinto’s theory” (p. 80) based on a more multidisciplinary approach and relocate Tinto’s theory from the grand or paradigmatic scale. Their theories were more middle range in nature and addressed student departure from commuter colleges and from residential colleges from a more multidisciplinary perspective. “The roles of academic and social dimensions in student departure differ substantially between these two types [residential and commuter] of colleges and universities” (p. 80) and the theories offered in revision “depict such a contrast.” More specifically, “the academic dimension plays a significant role in the departure process in commuter institutions, whereas in residential college and universities, the social dimension performs a predominant role” (p. 80). The revision addressing student departure in residential colleges and the student departure theory
“meet three criteria for a good theory” (Braxton et al., 2004, p.80)—accounting for research findings, empirically testing propositions can be empirically tested, and being parsimonious.

Tinto (2006-2007) outlined three lessons (institutional action, program implementation, and student income) in moving theory to action: The first “lesson of institutional action” was broadly stated as follows: “It is one thing to understand why students leave; it is another to know what institutions can do to help students stay and succeed” (p. 6) and translated as, “Leaving is not the mirror image of staying. Knowing why students leave does not tell us directly, why students persist” (p. 6). Concepts of academic and social integration are better known in theory, than in practice; however, much has been done to operationalize the concept of academic and social integration in ways that can be reasonably measured and in turn used for institutional assessment, it does not yet tell institutions how they can enhance integration or what is now referred to as engagement. (Tinto, 2006-2007, p. 6)

Linkages between institutional characteristics and student learning/development were researched by Pike, Kuh and Gonyea (2003) who found that “academic and social involvements have virtually the same positive effects on integration and gains” (p. 258); however, integration of these experiences to increased levels of learning and development is still difficult even with strong interventions. Braxton, Milem, and Sullivan (2000) added active learning as a catalyst for academic and social integration. Bean and Eaton (2001-2002) moved away from psychological theories explaining social and academic integration to recommending that “institutions. . .develop programs to help students develop self-efficacy, internal locus of control, approach academic and social work, and develop positive attitudes toward attending the school” (p. 85).
Pike and Kuh (2005) examined first and second generation engagement and intellectual development. The conceptual model accurately represented the relationships among the engagement variables, perceptions of the college environment, integration of diverse experiences, and learning and intellectual development gains. (p. 289).

And the results showed a direct relationship between “gains in student learning” and the “integration of diverse experiences and perceptions of the college environment” (pp. 289-290). An indirect relationship was shown between “gains in learning” and the “academic and social engagement” (p. 290).

The second lesson from Tinto (2006-2007) “that of program implementation”, was broadly stated as follows:

It is one thing to identify effective action; it is another to implement it in ways that significantly enhance student retention over time. This lesson can be broken down into two corollary lessons. First, it is one thing to identify effective action; it is another to implement it fully. Second, it is one thing to begin a program; it is another to see it endure. (p. 8)

And, the third lesson, “the lesson of student income” (p.10), has to do with the critical issue of equity. It can be stated as follows: “Though access to higher education for low-income students has increased and gaps in access between high- and low-income students decreased, the gap between well-to-do and poor students in four-year degree completion remains” (Tinto, 2006-2007, pp. 10-11).

Kuh (2001-2002) articulated a cultural perspective to student departure focusing on peer groups and the classroom as key areas to disseminate the institutional culture. Though the first year transition may be successful, keeping the remaining years involved is important.

Braxton and Mundy (2001-2002) analyzed and compiled institutional recommendations on student departure from all the published articles in a special issue of
the *Journal of College Student Retention* which Braxton (2001-2002) edited and introduced. Braxton and Mundy wrote, “Because retention is an ill structured problem, a “single approach seldom solves” (p. 116) the problem. Consequently, some 47 recommendations are proffered, most of which have some empirical bases.

**Student engagement.** The concept of student engagement is not new to the literature as Kuh (2009) and founding director of NSSE explained, “The engagement premise has been in the literature for more than seventy years” (p. 6). The “meaning of the construct” (p. 6) has changed beginning with Tyler’s time on task on learning, Pace’s quality of effort, Astin’s theory of involvement and student achievement, and Chickering and Gamson’s good practices in undergraduate education (Kuh, 2009). These constructs are now part of the conceptual and empirical foundations of the National Survey of Student Engagement (Kuh, 2009).

Pace’s defined quality of effort in a very succinct way. Key to this definition was understanding quality in a college education has two sides: “what the college provides” and “what the students do with what the college offers” (Project on the Study of Quality in Undergraduate Education, 1984, p. 1). Chickering and Gamson’s seven principles are: “student-faculty contact, cooperation among students, active learning, prompt feedback, time on task, high expectations, and respect for diverse talents and ways of learning” (Kuh et al., 2005, p. 8).

Different dimensions and desired outcomes were focused on by Pascarella and Terenzini (outcomes and learning), Pike, and Tinto (social and academic integration). Later, Kuh (2009), along with others, focused on engagement. The NSSE and the Community College Survey of Student Engagement “helped cement student engagement
in the higher education lexicon” by demonstrating that “engagement can be reliably measured . . . and that engagement data can be used almost immediately by to faculty and staff to improve the undergraduate experience” (Kuh, 2009, pp. 5-6). Continuing, Kuh (2009) wrote, the

Spellings Commission and other groups [emphasizing assessment, accountability, and transparency] further highlighted the relevance of engagement as an indicator of student and institutional performance and underscoring the role that institutions have in inducing students to take part in educationally purposeful activities. (p. 7)

Gordon, Ludlum, and Hoey (2008) studied the linkages between the National Survey of Student Engagement’s responses and student outcomes. Linking multiple years of NSSE surveys to the student outcomes of freshman retention, grade point average, pursuit of graduate education, and employment following degree award, they found “minimal explanatory power in the NSSE benchmarks for these outcomes” (p. 19).

Gordon et al. (2008) struck a cautionary note to institutions on how they use the NSSE data and what goals they want to achieve. And, one of these goals should not be “to achieve higher NSSE benchmark scores for the sake of doing so, but rather to gain keener insight into the relationship between student engagement (as measured by NSSE) and the desired outcomes the institution has for its students” (p. 20). Stressing that “success has different meaning for different institutions, and the means by which success may be measured will vary as well,” success “

can also be defined by whether or not a graduate is able to pursue a meaningful career . . . or if the graduate reports satisfaction with their college experience. Success . . . may not even include graduation, but rather the attainment of marketable skills. (Gordon et al., 2008, p. 20)

This definition did not hinge on graduation, similar to the one used in the previous chapter, and defined student success in terms of achievement, engagement, acquisition, attainment of educational objectives, and postcollege performance (Kuh et al., 2006).
Kuh (2009) defined today’s engagement as the “term usually used to represent constructs such as quality of effort (emphasis added) and involvement in productive learning activities” (p. 6). “The engagement premise is deceptively simple, even self evident” as Kuh (2003) further explained:

The more students study a subject, the more they learn about it… That is, students who are involved in educationally productive activities in college are developing habits of the mind and heart that enlarge their capacity for continuous learning and personal development. (p. 25)

Pascarella and Terenzini’s (2005) research indicated the strong links between engagement and learning.

Gonyea and Kuh (2009) identified the “ascendance of student engagement and other process indicators that serve as both proxy measures for institutional quality and actionable information to inform improvement efforts” (p. 1) as a higher education trend related to institutional research. With actionable information, you can assess or measure, and thereby demonstrate evidence of what you achieved or did not.

In a 2009 special issue of *New Directions for Institutional Research* on NSSE, the use of engagement data in accreditation, planning, and assessment (Banta, Pike, & Hansen, 2009), analyzing and interpreting NSSE data (Chen et al., 2009), role of precollege data in assessing and understanding engagement in college (Cole, Kennedy, & Ben-Avie, 2009), converting engagement results into action (Kinzie & Pennipede, 2009), and effectively involving faculty in the assessment of student engagement (Laird, Smallwood, Niskodé-Dossett, & Garver, 2009) were reported on exclusively.

Referring to the National Survey of Student Engagement, Shulman (2002) argued
that engagement is not solely a proxy; it can also be an end in itself. Our institutions of higher education are settings where students can encounter a range of people and ideas and human experiences that they have never been exposed to before. Engagement, in this sense, is not just a proxy for learning, but a fundamental purpose of education. (p. 40)

Brill and Park (2008) addressed how emerging technologies can be used to keep students engaged in learning despite the many opportunities to become dis-engaged. Innovation is addressed and how both learning and research are impacted upon by these emerging technologies. Dis-engagement was also the focus of a study by Hu and Kuh (2002) with the purpose of learning more on why disengagement occurs.

**Institutional Effectiveness**

Colleges and universities shared many characteristics with other organizations outside of academe—mission, vision, values, strategy, structure, and technology (Cummins & Worley, 2005). How these characteristics are used and developed may define and distinguish them from other organizations in undergraduate education. In many organizations, the product may be the defining feature. In others, it may be the process. For undergraduate institutions, one could consider the students as the product, and teaching and learning as the processes. But there is much more that goes into the dynamic of undergraduate education. Students are developing in many more ways than what just the classroom and academics influence. Likewise, it is much more than just teaching and learning, considering what happens outside of the classroom also influences the student as a product. One could take the perspective that all of the above is acculturation, not just for the students but also for the institution, as these two entities strive for success—one for a degree and the other for institutional effectiveness in the landscape of higher education. As noted previously, in this perspective, graduation and retention rates appear to be primary outcomes being assessed.
Cummings and Worley (2005) placed their organizational level within a more comprehensive model situated in both a general environment, or open system, and an industry structure, or profession. This environment and structure are the first inputs into the organization. The design components come next: strategy, technology, structure, measurement systems, and human resource systems. The final design feature is culture itself defined as the “basic assumptions, values, and norms shared by organizational members” (Cummings & Worley, 2005, p. 92) as outlined in Figure 7. Organizational effectiveness is viewed in terms of performance, productivity, and stakeholder satisfaction.

Though comprehensive, a feedback process from the results or the outputs is missing.

Institutional effectiveness, a term more prominent in the Southern Association of Colleges and Schools, may differ in terminology but not in purpose from the other five institutional accrediting agencies and many of the program accrediting agencies in the USA. Institutional effectiveness typically encompasses activities such as student learning outcomes assessment, academic program review, strategic planning, performance scorecards, performance benchmarking and quality measurement, each of which has numerous manifestations in academia. (Welsh & Metcalf, 2003, p. 34)

State governments and regional accrediting associates pressured higher education institutions “to become more accountable” (Astin & Lee, 2003, p. 657). As a result, various undergraduate assessments are being used and based on the results of these assessments judgments “about the quality of educational programs” are being made.

Banta and Associates (2002) defined and differentiated between scholarly assessment and the scholarship of assessment in articulating a framework for the scholarship itself. In doing so, they described the external and internal nature of assessment, and how the impetus for assessment came from more external sources. These external sources included the federal government, accreditors, and other reporting agencies asking for more accountability. This search for accountability is not limited to external sources as many internal sources are also asking for more accountability in the process of higher education. Though colleges in general agreed with more formal assessment, many have not taken specific actions to implement it. Gonyea and Kuh (2009) related two trends, the first trend extended from the above where, “unabated appetite for more evidence, accountability, and transparency of student and institutional performance”, is followed by “increased visibility and importance of institutional research offices staffed by highly skilled and competent professionals who can provide
campus leaders with objective, trustworthy data about student and institutional performance” (p. 1).

Also revealing from Peterson, Einarson et al. (1999) was the “relatively low level of institutional use of student assessment information in institutional decision-making and the very limited attempts by institutions to monitor assessment impacts” (p. 250).

Consequently, the recommendation made was based on the extensive claims made for the value of student assessment and the substantial human and financial resources invested in student assessment activities, institutions need to give greater priority to examining how student assessment data is used, and how it impacts the performance of individual students and the institution itself. (Peterson, Einarson et al., 1999, p. 251)

As far as using NSSE benchmarks “to identify institutional strengths and opportunities for improvement, not all institutions report they have used the survey results for decision making” (Pike, 2006, p. 180), echoed by Peterson, Einarson et al. (1999) who found in a broader sense, that the relatively low level of institutional use of student assessment information in institutional decision-making and the very limited attempts by institutions to monitor assessment impacts suggests the need for greater efforts in this domain of organizational and administrative support for assessment. (pp. 250-251)

Peterson, Einarson et al. (1999) also emphasized that “. . . institutions need to give greater priority to examining how student assessment data is used, and how it impacts the performance of individual students and the institution itself” (p. 251).

“Observing that assessment is intimately linked” to Boyer’s “concept of the scholarship of application”, Pike (2002) continued “that there is no greater problem in assessment than our inability to influence academic decision making with assessment results” (p.147). Ewell (2005) aided the understanding of assessment as a “program of locally designed and operated evaluation research intended to determine the effects of a
college or university on its students, centered on learning outcomes, and engaged principally for the purpose of improving teaching and learning” (p. 105).

Kezar and Eckel (2002) based their case study approach on Bergquist’s four academic cultures and Tierney’s individual institutional culture framework to examine how institutional culture and change are related. Because of the complexity of culture as a phenomenon, the combined nature of cultures and framework in the study exposed more culturally sensitive ways to make changes while changing the culture as well. Two links in the literature between higher education’s culture and change were noted: (a) “[I]nstitutions need to have a ‘culture’ that encourages change” (p. 438) and (b) “[C]ulture or key institutional elements that shape culture, i.e., vision or mission, are modified as a result of the change process” (Kezar & Eckel, 2002, p. 438). Kezar and Eckel’s research proposed a “third path, investigating the ways in which culture shapes an institution's change processes or strategies. It is the modifying element rather than the subject of the modification” (2002, p. 438). This more informed and culturally sensitive approach may be useful in inculcating student assessment, and using student assessment in decision-making into the higher education culture as reported and recommended by Peterson, Einarson et al. (1999), emphasized in Daniel and Pooles’ (2009) ecological approach, and used in Weaver-Hightower’s (2008) ecological metaphor.

Astin (1997) considered the Federal Student Right-to-Know and Campus Security Act of 1991 unprecedented. The act requires “institutions of higher education to publish data on the ‘quality’ of their educational programs” (p. 647). Specifically, institutions are required to disclose graduation rates that provide consumers—“presumably students,
parents, and college counselors—with information that would help them in making choices about postsecondary education” (Astin, 1997, p. 647).

The more general problem “is to require institutions to produce performance data . . . outcome measures, by themselves [which] tell us little about institutional performance or effectiveness” (Astin, 1997, p. 656). This accountability approach may result in negative incentives—not enrolling underprepared students. “By contrast, being able to compare actual outcomes measures with expected measures based on student input characteristics provides a much more valid and useful basis for assessing institutional performance” (Astin, 1997, p. 658).

Ruben, Russ, Smulowitz, and Connaughton’s (2007) Excellence in Higher Education model is based on the well-documented Baldrige National Quality model and award for organizational excellence. The framework depicted in Figure 8 offered the following benefits to higher education (p. 234):

1. Applies accepted standards of organizational excellence;
2. Is appropriate for an entire institution and for specific departments, programs, and advisory or governing groups;
3. Can be adapted to academic, student service, and business units;
4. Highlights strengths and priorities for improvement;
5. Creates baseline measures;
6. Provides a framework for sharing effective practices;
7. Broadens participation in leadership and problem solving; and
8. Complements new accrediting models

In addressing the implications, Ruben et al. (2007) stressed that enhancing our understanding of the relationship between knowledge acquisition and change is one of the most fundamental and enduring pursuits of social science. And, from the perspective of the fields of organizational communication, organizational development, and human resource management the issue has particular relevance as it relates to enhancing the effectiveness interventions designed to increase organizational performance. (p. 245)

**Hispanic-Serving institutions (HSIs).** The literature review now turns its focus on more specific types of organizations in higher education. One of these types is the Hispanic-Serving Institution, more commonly referred as an HSI, and is directly related to this research. Laden (2001) accounted for four significant factors regarding the growth of HSIs: (a) Civil Rights Movement circa 1960 and various outreach programs accompanied by grants and loans, (b) Hispanic immigration to the United States over the
past 30 years, (c) Hispanic demographic shifts in larger urban and areas of less population, and (d) HSIs emerging, as expected, where the population is more Hispanic. Laden (2001) exposed myths about HSIs and stereotypes in general to include the perception that Hispanics do not pursue a college education because their parents did not attend college.

Oseguera, Locks, and Vega (2009) added the Chicano and Puerto Rican civil rights movements, “el movimiento en higher education” (p. 26), and context for the 1960s. Though funding expanded and campuses wanted to enroll more Latinas/os along with even culturally specific programs appearing, “campuses at the time were not prepared to deal with the needs of increasingly diverse student populations” (p. 26).

Brown, Santiago, and Lopez (2003) wrote,

The fastest growing ethnic group in the nation, Latinos have become a force that higher education must consider with more overt attention . . . the college-going rate for Hispanics between the ages of 18 and 22 has increased to 35 percent and their enrollments in undergraduate education by over 200 percent in the last 25 years. (p. 41)

Those numbers continued to climb. Latinos in general “are a highly heterogeneous group that defy easy generalizations” (p. 54) and

There are no ‘cookie-cutter’ approaches to increase access and retention rates of the Latino community . . . It is also important to recognize that Latino college student retention begins well before students enter postsecondary education, and is further influenced after enrolling in college. (Brown et al, 2003, p. 55)

Vaquera and Maestas (2008-2009) emphasized these pre-college factors and stressed that previous retention studies have only been done at predominantly white colleges. After enrolling, engagement is very important to first generation students. Vaquera and Maestas found “that low levels of engagement are an indirect result of being the first in
one’s family to go to college and are more directly a function of lower educational aspirations and living off campus” (2008-2009, p. 290).

Nora, Barlow, and Crisp (2005) first studied persistence past the first year in college and then, assessment of Hispanic students at four year institutions. They describe persistence past the first year in college, by writing, “During the thirty-year period of the persistence literature, numerous quantitative and qualitative studies have contributed to the literature base on student persistence” (p. 130). Nora et al., (2005) summarized how multiple authors “have modified and added an array of factors all found to impact the decisions of college students to remain enrolled in college or to drop out, temporarily or permanently” (p. 130).

Arbona and Nora (2007) reviewed theoretical frameworks related to persistence and Tinto’s models and how multi-institutional and single-institutional approaches supported the influence of academic integration on institutional commitment and student departure decisions. As part of that review, Arbona and Nora (2007) noted that

Nora and Cabrera’s (1996) Student Adjustment Model, based on both Tinto’s (1975) Student Integration Model and Bean’s (1980) Student Attrition Model, regarded persistence as an interwoven set of interactions, acknowledged the importance of precollege characteristics, and extended the argument that persistence was influenced by the level of fit between the student and the institution . . . The model displayed how the experiences of college students are represented by a social sphere of influence and an academic realm involving experiences with faculty student, and other academic staff. These collective experiences enhance the student’s academic, cognitive, and intellectual development, increased allegiance to an institution, and stronger commitment to obtaining a college degree. (p. 249)

Nora et al. (2005) summarized this “culmination of those efforts has led to the conceptualization of the student engagement model” (p. 130). Nora first proposed the model in 2003, and then expanded on Nora and Cabrera’s (1996) model. This newer model in Figure 9 emphasized the “unique interaction between the student and the
institution. This interaction, influenced by a variety of elements, produces a connection (i.e., engagement) between the student and the institution that leads to persistence” (Arbona & Nora, 2007, p. 250).

Nora, Barlow, and Crisp (2006) used the same model in providing an assessment of Hispanic students at four-year institutions. In that assessment, the authors evaluated quantitative and qualitative studies contributing to the literature pertaining to student persistence. The model began with pre-college and pull factors and progresses to initial commitments, experiences—academic and social, outcomes—cognitive and non-cognitive, then final commitments and persistence—re-enrollment in higher education.
institution. Initially identifying eight major constructs (educational aspirations, finances and financial aid, academic and social campus experience, institutional commitment, academic ability, pre-college psychosocial factors, undergraduate academic performance, and student persistence) from meaningful studies—those not derived from information including both minority and non-minority students—aspects of educational aspirations, financial aid, social interactions, institutional commitment/fit, and precollege factors were developed (Nora et al., 2006). Calling for more data, data that is directly related to Hispanic students, and perhaps even more importantly, the data sets need to “from single-and like-institution studies that are designed to capture the persistence process over time within the unique context of an institution” (Nora et al., 2006, p. 75). In many ways, the growing diversity of higher education institutions is a barrier to collecting such data.

The model incorporated not just aspects of academic and social experiences, but details cognitive and non-cognitive outcomes and final commitments leading to persistence. These final commitments combined educational goals and institutional commitment. In the institutional commitment, the components are sense of belonging and worthwhile experience.

**Governance.** Birnbaum (2004) defined governance as a way of describing or “achiev[ing] an effective balance between the claims of two different, but equally valid, systems for organizational control and influence” (p. 5). The role of trustees and the administration is based on legal authority and the role of faculty is based on professional authority (Birnbaum, 2004). A joint statement by the AAUP—American Association of University Professors (2010)—in 1967 and now in its 10th edition, outlined two basic principles now known as shared governance:
Although the variety of such approaches may be wide, at least two general conclusions regarding joint effort seem clearly warranted: (1) important areas of action involve at one time or another the initiating capacity and decision-making participation of all the institutional components, and (2) differences in the weight of each voice, from one point to the next, should be determined by reference to the responsibility of each component for the particular matter at hand, as developed hereinafter. (p. 138)

Tierney and Lechuga (2004) wrote, “Shared governance has been a hallmark of higher education in the United States. Since the inception of the idea, faculty, administrators, trustees, and other interested parties have either bemoaned or celebrated it (p. 1). Tierney and Lechuga referred to critics such as Association of Governing Boards of Universities and Colleges that “have written of the lethargic pace of decision-making brought on by the involvement of academics” and the Kellogg Commission on the Future of State and Land-Grant Colleges who noted “that shared governance may have worked well at some point, but so did dinosaurs” (2004, p. 1).

Kenechukwu et al. (2009) noted earlier, that these ingrained attributes and deep organizational histories can be a “hindrance to the change process” (p. 394). Kezar (2004) elevated this organizational culture to a larger role than actual governance and recommended building trust and understanding its implications. Lingenfelter (2004) portrayed a more current landscape of higher education by first writing, “the idea of institutional autonomy seems entirely at odds with equally compelling idea of accountability to the public agenda for higher education” (p. 51), but concluded by recommending that institutions of higher education reform themselves, or at least take part in the process—otherwise, they will be subject to reform.

Voicing a concern about the possibly changing nature of the academic department, Mallon (2004) wrote about disjointed decision-making and disjointedness of centers and institutes. The disjointedness “has allowed the university to be flexible and
adaptive in expanding its research enterprise, and therefore, responsive in meeting the
demands and expectations of society”; however, “at the same time, the stability and focus
of departments have ensured the university’s commitment to its core ideals” (p. 69).
Maintaining the balance is important if the academic departments are to remain academic
building blocks (Mallon, 2004).

Schoorman and Acker-Hocevar (2010) related that the teaching of social justice
should not be confined to the classroom, but be applied as well to faculty governance and
democratic decision-making. “Scholarship at the more micro level is needed to guide
campus leaders in re-thinking their approaches to governance, particularly through the
lens of diversity and social justice on faculty governance” (p. 311) as a grassroots
unveiled this gap in the literature and articulate a seeming clash between the environment
and interactions, strikingly similar to the ecological “reciprocal interactions among
people and environments” (Daniel & Poole, 2009, p. 91). Decisions are becoming more
immediate and strategic, while faculty participation is waning, requiring more of an open
systems framework (Kezar & Eckel, 2004).

Conclusion

Six primary conclusions are drawn from the literature review:

1. Academic institutions no longer have full control on how students are assessed
[outside of the classroom] and how outcomes are reported (Peterson, Einarson et al.,
1999). Accrediting agencies, federal agencies, and others have increasingly added
reporting requirements to make accountability more transparent.
2. Student success can mean different things to the student and the institution (Kuh et al., 2006). Though the primary outcomes are graduation and retention, students’ educational objectives may differ from the institutional objectives.

3. Assessment data are not being consistently used in decision making to improve student learning and performance (Ewell, 2005; Peterson, Einarson et al., 1999; Pike, 2006; Pike, 2002); however, these data are used toward curriculum development and revision.

4. There is more to be learned from the students (Tinto, 2006-2007).

5. Integrating academic and social environments remains difficult (Pike & Kuh, 2005; Tinto, 2006-2007). Diversity, technology, and not knowing more about students deters a more successful integration of these two environments.

6. Impact models used in student success research lack sufficient theory and psychometrics (Feldman et al., 2008) and present unbalanced perspectives on characteristics / behaviors and environment.

   Based on the literature review, the grounded theory methodology used National Survey of Student Engagement results, assessment outcomes and the scholarship of assessment (Banta & Associates, 2002), and an ecological conceptualization (Daniel & Poole, 2009) “of the environment and reciprocal interactions among people and environments” (p. 91).
Chapter Three: Methodology

Introduction

The design to explore how NSSE results are used needed to showcase the reason why the research was required, capitalize on the methodology selected, and retain flexibility. The grounded theory methodology selected was both a product of inquiry and a process of inquiry using Charmaz’s (2006) description. Marshall and Rossman (2006) indicated the argument of the proposal and the flexibility of the design as being integral to the process as a whole. Bogdan and Biklen (2007) wrote,

> Qualitative researchers proceed as if they know very little about the people and the places they will visit. . .to state exactly how to accomplish their work and what specific questions they will pursue would be presumptuous. . .a detailed set of procedures is usually not formed prior to data collection. . .The study structures the research. Their work is inductive. (p. 54)

Bogdan and Biklen (2007) continued, “Qualitative researchers have a design; to suggest otherwise would be misleading” and the “design is flexible” (p. 55). How they proceed is what makes the research different.

The purpose of this grounded theory qualitative research was to initially investigate how chief academic officers at seven private Hispanic-Serving Institutions accredited by the Southern Association of Colleges and Schools utilize the National Survey of Student Engagement results to improve institutional effectiveness and promote undergraduate student success.

The following two questions guided the qualitative research:

1. How do chief academic officers disseminate NSSE results to facilitate institutional effectiveness?
2. How do chief academic officers promote undergraduate student success using NSSE results?
Rationale for Research Design

The orientation for this research flowed from the guiding research questions and how CAOs facilitated institutional effectiveness and promoted undergraduate student success. These two questions sought out an interactive process of how CAOs use NSSE results. The researcher’s constructivist perspective influenced this investigative process as best described by Creswell (2009) where “individuals seek understanding of the world in which they live” and “develop subjective meanings of their experiences . . . rely as much as possible on the participants’ views” . . . and how they “construct the meaning of a situation” (p. 8). Interaction is integral—interaction among individuals in the process being studied and where researchers “position themselves in the research to acknowledge how their interpretation flows from their personal, cultural, and historical experiences” (p. 8). And the intent is “to make sense (or interpret) the meaning others have about the world. Rather than starting with a theory (as in postpositivism), inquirers generate or inductively develop a theory or pattern of meaning” (Creswell, 2009, p. 8).

Patton (1990) “advocate[d] a paradigm of choices” as opposed to “align[ing] with one paradigm or the other” and focused on “whether one has made sensible methods of decisions given the purpose of the inquiry, the questions being investigated, and the resources available” (p. 39). Presenting themes “in terms of research strategies (emphasis in original) rather than paradigms” . . . help[s] convey the idea that there are really a wide range of possibilities when selecting methods” and that “qualitative inquiry strategy emphasizes and builds on several interconnected themes” (p. 39). Table 3 identifies and describes current themes (Patton, 2002) by strategy categories.
Table 3

*Patton’s Themes of Qualitative Inquiry (2002)*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Description</th>
<th>Strategies</th>
</tr>
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<tbody>
<tr>
<td>Naturalistic inquiry</td>
<td>Real world situations unfolding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(naturally)</td>
<td></td>
</tr>
<tr>
<td>Emergent design flexibility</td>
<td>Openness to adapting inquiry</td>
<td>Design</td>
</tr>
<tr>
<td>Purposeful sampling</td>
<td>Cases for study</td>
<td></td>
</tr>
<tr>
<td>Qualitative data</td>
<td>Detailed and thick descriptions</td>
<td></td>
</tr>
<tr>
<td>Personal experience and</td>
<td>Direct contact including the researcher</td>
<td>Data collection and fieldwork</td>
</tr>
<tr>
<td>engagement</td>
<td>experiences/insights</td>
<td></td>
</tr>
<tr>
<td>Empathic neutrality and</td>
<td>Seeking understanding without</td>
<td></td>
</tr>
<tr>
<td>mindfulness</td>
<td>judgment, being fully present</td>
<td></td>
</tr>
<tr>
<td>Dynamic systems</td>
<td>Attention to process and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>constant change</td>
<td></td>
</tr>
<tr>
<td>Unique case orientation</td>
<td>Each case is unique and special</td>
<td></td>
</tr>
<tr>
<td>Inductive analysis and</td>
<td>Immersion in details and</td>
<td></td>
</tr>
<tr>
<td>creative synthesis</td>
<td>specifics</td>
<td></td>
</tr>
<tr>
<td>Holistic perspective</td>
<td>Whole phenomenon as a complex system</td>
<td>Analysis</td>
</tr>
<tr>
<td>Context sensitivity</td>
<td>Places findings in context</td>
<td></td>
</tr>
<tr>
<td>Voice, perspective, and</td>
<td>Analyst [read researcher] reflects and</td>
<td></td>
</tr>
<tr>
<td>reflexivity</td>
<td>balances focus—authenticity and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>consciousness</td>
<td></td>
</tr>
</tbody>
</table>

These themes and other considerations were used throughout this research beginning with the design, the actual data collection, and the analyses.

For this design, grounded theory was selected to make meaning of the process of how senior academic administrators use the results of a national survey based on effective educational practices to improving performance—institutional and student. The rationale stemmed from the chief academic officers “who have all experienced an action, interaction, or process” (Creswell, 2005, p. 52) in one way or another when deciding to use the National Survey of Student Engagement, participating in the administration, receiving the results, and then taking action on those results.
As Bryant and Charmaz (2007a) initially explained, “Strictly speaking a Grounded Theory is exactly that: A theory that has resulted from the use of the GTM [Grounded Theory Method]” (p. 3). However, that strict sense has translated to Grounded Theory “resonating with both meanings: the method and the resulting theory” (p. 3).

Even before gaining final approval from the institutional review board, the researcher became and remained more concerned with the concept of theoretical sensitivity. Further defined by Kelle in a glossary of terms by Bryant and Charmaz (2007b), theoretical sensitivity is the “ability to see ‘relevant data’ and to reflect upon empirical data material with the help of theoretical terms” (p. 611). Bryant and Charmaz (2007a) comment “that is an acquired skill that does not come easily or naturally” (p. 17) and that it “is thus a problematic concept.”

Certainly, some researchers have more developed theoretical proclivities than others . . . Being able to entertain a range of theoretical possibilities to account for a surprising finding gives the researcher material for making systematic theoretical comparisons in relation to the particular finding. Making theoretical comparisons not only means knowing something about the theory, and at least intuitively understanding how to go about theorizing, but also means being able to play with theoretical ideas before becoming committed to a single theoretical interpretation. (Bryant & Charmaz, 2007a, p. 17)

Though appealing to novice researchers “because it encourages them to develop their own theories rather than merely fine-tuning existing ones”, using grounded theory “only develops with experience (Bryant & Charmaz, 2007a, p. 17).

GTM [grounded theory method] is based around heuristics and guidelines rather than rules and prescriptions. Moreover researchers need to be familiar with GTM, in all its major forms, in order to be able to understand how they might adapt it in use or revise it into new forms and variations (Bryant & Charmaz, 2007a, p. 17). Because of this concern over theoretical sensitivity, the researcher strove to develop a more informed sensitivity, and add to the credibility of the study reflexively.
Schwandt (2007) defined theory as “unified, systematic causal explanation [bolded in original] of a diverse range of social phenomenona” (p. 292). Glaser and Strauss (1967) “believe that the discovery of theory from data—which we call grounded theory. . .works—provides us with relevant predictions, explanations, interpretations and applications” (p. 1). Their basic position is that “generating grounded theory is a way of arriving at theory suited to its supposed uses” (p. 3). They emphasized that the “adequacy of a theory. . .cannot be divorced from the process by which it is generated” (p. 5). This method and resulting theory contextualized a more complete understanding of Grounded Theory (Bryant & Charmaz (2007b).

As Creswell (2005) delineated, “Grounded theory generates a theory when existing theories do not address your problems or the participants you plan to study. Because a theory is ‘grounded’ in the data, it provides a better explanation than a theory borrowed ‘off-the-shelf’. . . “ (Creswell, 2005, p. 396). Grounded theory is systematic in its analysis, adds rigor, self-corrects, and allows the researcher to build “categories . . . from incident to incident and from incident to category. In this way, the researcher stays close to the data at all times in the analysis” (p. 396).

Grounded theory has a genealogy which Morse et al. (2009) depicted by way of major milestones in the figure below. Beginning with the collaboration of Glaser and Strauss, the lineage showed the later split of the developers, and then how other evolutions and growth have occurred.
Corbin continued to update and publish after Strauss’s death. Glaser is still alive.

Schatzman and Clarke have published on dimensional and situational analyses. The genealogy can be used along with Tan’s (2010) comprehensive review of grounded theory and issues for new qualitative researchers. Tan (2010) differentiated GT (grounded theory) perspectives (emergent, systematic, and constructivist), identified unique elements of the GT approach based on the literature, and elaborated on the coding process. This research used a combination of all the three major perspectives of the grounded theory and the strategies explained in Tan (2010).
This design acknowledged what Daniel and Poole (2009) described as ecology, a “multilevel conceptualization of the environment and reciprocal interactions among people and environments” (p. 91). Because these “interactions between people and their environments are so pervasive,” they recommend that “researchers should anticipate them and build their research designs to find them” (p. 91). This research sought to find these interactions and the processes associated with them.

**Grounded Theory Specific Definitions**

Though some introductory terms were defined in the beginning chapter, some more specific definitions are included which are peculiar to grounded theory.

*Grounded Theory:* “A method of conducting qualitative research that focuses on creating conceptual frameworks or theories through building inductive analysis from the data” (Bryant & Charmaz, 2007b, p. 608).

*Axial Coding:* “A type of coding that treats a category as an axis around which the analyst delineates relationships and specifies dimensions of this category” (Bryant & Charmaz, 2007b, p. 603).

*Sensitivity:* “The ability to pick up on subtle nuances and cues in the data that infer or point to meaning” (p. 19) and, “in contrast to objectivity. It requires that a researcher put him- or herself into the research” (Strauss & Corbin, 2008, p. 32).

*Theoretical Sampling:* A type of grounded theory sampling in which the research aims to develop the properties of his or her developing categories or theory, not to sample of randomly selected populations or to sample representative distributions of a particular population (Bryant & Charmaz, 2007b, p. 611).
Abduction: “A type of reasoning that begins by examining data and after scrutiny of these data, entertains all possible explanations for the observed data, and then forms hypotheses to confirm or disconfirm until the researcher arrives at a most plausible interpretation of the observed data (Bryant & Charmaz, 2007b, p. 603). Dey (2004) added, “Though it involves elements of both deductive and inductive inference, grounded theory clearly privileges neither form of inquiry. It is perhaps more appropriate to see it as a form of abduction” (p. 91).

Purposeful Sample

Identification of the purpose sample began by requesting from NSSE a list of participating institutions identified as HSIs for the years 2009-2010 (A. Lambert, personal communication, NSSE, September 17, 2010). The original list contained over 40 institutions in nearly 10 states and Puerto Rico. Refining the list to institutions accredited by the Southern Association of Colleges and Schools yielded nearly 20 institutions. Selecting only private institutions identified 7 institutions. All 7 chief academic officers representing these institutions were invited to participate; however, two declined, resulting in a purposeful sample of 5 chief academic officers.

In the words of Patton (2002), the “purpose of purposeful sampling is to select information-rich cases whose study will illuminate the questions under study” (p. 46). Patton articulated how “logic and power of purposeful sampling derive from the emphasis on in-depth understanding” (p. 46).
**Data Collection**

As Creswell (2005) emphasized, “research designs are the specific procedures involved in the last three steps of the research process: data collection, data analysis, and report writing” (p. 51). Merriam and Associates (2002) wrote,

There are three major sources of data for a qualitative research study—interviews, observations, and documents. The data collection strategy used is determined by the question of the study and by determining which source(s) of data will yield the best information with which to answer the question. (p. 12)

**First phase data collection.** In the first phase, the invitation letter (Appendix A) was priority mailed to ask the identified sample to participate and accompanied by the informed consent (Appendix B) and the demographic/background survey (Appendix C). The demographic/background survey gathered context and basic information about the institution and its participation in NSSE. Follow up was done by phone or email. These procedures and sources are shown in Figure 11.

![Research Design—First Phase](image)

*Figure 11. Research Design—First Phase.*
At this point, the researcher made individual contact by phone to set up the time and place convenient to the interviewee for the actual interview. In coordinating the interview, other arrangements were made about who to include and the particulars of the interview time and place.

At the end of the first phase of the research design above, the first interviews were conducted. In this research, interviews were the primary means of collecting data. However, due to time constraints and overlapping responsibilities, the chief academic officers could have referred the researcher to other administrators. This did not happen in this research even though such a referral may have added more understanding and context to the process.

**Second phase data collection.** The second phase analysis began with the first interviews depicted in Figure 12.

*Figure 12. Research Design—Second Phase.*
During these second interviews, specific themes and relationships were further explored along with the developing framework. Though all interviews were planned to be in person, one interview from the second phase had to be conducted over the phone as also indicated in the findings. Again, the second round of interviews was analyzed along with member checks and any needed follow up. Initial research results were documented as the data collection and analysis continued. As the results, findings, and conclusions were drawn, the report was finalized along with incorporating any other changes to the previous chapters.

**Protection of Human Subjects**

The researcher’s role is to seek a position within the study to best interpret and make meaning of the results recognizing that personal experiences and assumptions are part of that position as described above in the social constructivist assumptions. In making meaning, the qualitative researcher faces issues of subjectivity and objectivity. Patton (2002) recommended “avoid[ing] . . . either word and to stay out of futile debates . . . preferring such language as *trustworthiness* and *authenticity*” (p. 51), and adopt a “stance of *neutrality*” (p. 51) (emphases in the original).

Patton (2002) continued,

> 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 predispositions. However, neutrality does not mean detachment. It is on this point that qualitative inquiry makes a special contribution. Qualitative inquiry depends on, uses, and enhances the researcher’s direct experiences in the world and insights about those experiences. (p. 51)

In this case, the researcher has recent graduate assistant experience working in an institutional research office entering multiple years of National Survey of Student Engagement and Faculty Survey of Student Engagement (FSSE) data into Microsoft
Excel. This data was then imported into a more interactive Tableau (2012) format by the institutional research director.

The researcher played a very important role in protecting human subjects in the entire research process as Marshall and Rossman (2011) recommended that the researcher not leave the issue of ethics in the institutional review board, but carry it forward throughout the research, and “attend to deeper relational matters” (p. 48) and addressed intercultural aspects. In this research, proprietary or sensitive data related to specific institutions and accreditation needed to remain confidential (if shared) in the interviewing and analysis, and during the entire research process. Specific care was taken with the all the data collected and analyzed. To preclude any ethical breach, the chief academic officers were queried at multiple times if any of the information collected fell into such categories as part of the interview protocols.

The process only began with submitting (and gaining approval) the required Institutional Research Board request (Appendix D) after completing the Collaborative Institutional Training Initiative (CITI) Social and Behavioral Sciences RCR Course for The Unaffiliated Learner, Basic Course (Appendix E). The researcher maintained the ethical commitment to those who decided to participate and to those who did not throughout the process—in invite (Appendix A), informed consent (Appendix B), and demographic/background survey (Appendix C)—and in making ethical decisions along the way to protect the participants.

Confidentiality assurances were made to all the participants with respect to their personal and contact information, and any recorded documents will be destroyed as indicated in the IRB approval. Participants were given the opportunity to select their own
pseudonyms, giving them anonymity, along with their institutions, to preclude identification—individual and institution. Participants were also given and reminded of the opportunity to identify any proprietary information so that the researcher could redact and protect that information from outside sources.

This commitment was also articulated in the Informed Consent Form (Appendix B) and each participant was provided with their own personal copy of the consent they signed with one signed by the researcher. In presenting and discussing the research prior to defending the dissertation, the researcher was adamant in maintaining, and continues to maintain both the confidentiality and anonymity of the research participants.

**Interview Protocols**

The interviews—first and second phase—were guided by the above two research questions and further detailed in the respective protocols at Appendix F and Appendix G. The protocols were not intended to be structured but loosely designed and again, flexible, to follow and make meaning of the process as the interviews proceed, and to lead into the analysis.

**Data Analysis**

In qualitative research, “data analysis is simultaneous with data collection” which “allows the researcher to make adjustments along the way” (Merriam & Associates, 2002, p. 14). In prefacing the constant comparative method, Glaser and Strauss (1967) outlined two general approaches: (a) Coding qualitative data into a quantifiable form to rest a hypothesis, and (b) Not coding or not being confined to coding in “generat[ing] theoretical ideas” (p. 101). As the interviews were conducted, a constant comparison method—joint coding and analysis was utilized. This suggested method by Glaser and
Strauss (1967) is a combination of the “explicit coding procedure” in the first approach and “style of theory development” (p. 102) in the second approach. This third approach “generate[s] theory more systematically than allowed by the second approach, by using explicit coding and analytic procedures” (p. 102) (emphasis in the original). There are four stages of this method described by Glaser and Strauss (1967): “(1) comparing incidents applicable to each category, (2) integrating categories and their properties, (3) delimiting the theory, and (4) writing the theory” (p. 105).

First phase data analysis. All of the chief academic officers were initially interviewed, the data was analyzed and coded for the first level of abstraction (open coding—content analysis). When saturation was reached, the next levels of abstraction were pursued in the analysis (Rowlands, 2005; Strauss & Corbin, 1998) and the second round of interviewing was begun to deepen the understanding of the abstractions. This second round was also analyzed and coded until saturation building on the previous analysis.

Glaser and Strauss (1967) described saturation as a way of delimiting the list of categories:

After the analyst has coded incidents for the same category a number of times, he learns to see quickly whether or not the next applicable incident points to a new aspect. If yes, then the incident is coded and compared. If no, the incident is not coded, since it only adds bulk to the coded data and nothing to the theory. (p. 111)

Second phase analysis. The first interviews were analyzed using open coding based on content analysis, axial coding for themes and relationships, and selective coding in building the framework (Rowlands, 2005). This initial analysis was best described as open coding or content analysis (Rowlands, 2005; Strauss & Corbin, 1998). Once the open coding was accomplished, then themes and relationships were identified (axial
coding), along with the beginnings of an overall framework (selective coding). In the interim, member checks were made for any corrections, revisions, and additions. When saturation was reached, the second interviews were coordinated and conducted.

When designing the methodology, the researcher anticipated that both phases would yield axial relationships, and possibly even more using selective coding. In executing, that did not occur as planned. In reflecting, that did not occur because the results of the first phase were used more prominently in the second phase than what had been expected. Also reflecting, the axial relationships started to develop late in the first phase, but did not coalesce until the beginning of the second phase. The researcher was cognizant of what was happening and employed reflexivity, in making decisions in the second phase as discussed below, to insure the continuing trustworthiness, credibility, and effectiveness of the adapted design.

Though each individual phase was analyzed, coded, and reported on, both phases were used in conjunction, and sometimes in opposition, in making meaning of the research in the final analyses and reporting. The dynamics of the second phase came into play during this phase depicted in Figure 13 with the analyses arrows.
Figure 13. Analysis Second Phase.

Though representative with the constant comparison found in grounded theory, this second phase constant comparison was more than anticipated. The combination of analyzing both phases and relationships at the same time was more than demanding. Then the demand increased with additional coding, again at the same time. The rigor of this analysis was instructive and strengthened the second phase analysis because it caused the researcher to re-think, re-analyze, and re-apply what had been learned from the research, what the researcher knew, and what needed further investigation.

The constant comparison was even more demanding because of all the concepts, data, evidence, and possible theory emerging—aspects occurring simultaneously. This instructive aspect involved the sensitivity, theoretical sampling, and abduction. Writing
on reflection as in “making sense, going meta . . . even thinking about one’s thinking” (p.88), Bruner (1996) wrote

A theory that works is altogether a miracle: it idealizes our varying observations of the world in a form so stripped down as to be kept easily in mind, permitting us to see the grubby particulars as exemplars of the general case. Explanatory theories work, moreover, however you feel about them, or (at least presumably) whatever your personal perspective toward the word. (pp. 99-89)

This variance between explanatory theory and personal perspective may continue to exist (Argyris & Schön, 1974). The researcher proceeded with this in mind, thinking through what was personal perspective from what was explanatory. This situation can be likened to what Schön (1987) best described as a state of flux as reflection-in-action which “has a critical function, questioning the assumptioinal structure of knowing-in-action” (p. 28) when writing about the scholar-practitioner. “All human beings—not only professional practitioners—need to become competent in taking action and simultaneously reflecting on this action to learn from it” (Argyris & Schön, 1974, p. 4).

Lastly, the process strengthened and added resilience the research, not only in the aspects described above, but in the benefits of sharing with all the respondents, the preliminary results of the first phase when interviewing them once again in the second phase. These preliminary results provided bases of discussion and an opportunity, along with the member checks, to construct and verify meaning in the research. In many ways, the sharing of these preliminary results also generated additional insights to the research when conversing on what was collected in the first phase and how it was analyzed.

Confirmability means the “data and their interpretation are not figments of the researcher’s imagination. Qualitative data can be tracked to their source, and the logic that is used to interpret the data should be made explicit” (Mertens, 2009, p. 260).
Confirmability can be considered “as the qualitative parallel to [quantitative] objectivity” (p. 260) and was very prominent in this second phase.

**Abduction in data analysis.** Wodak (2004) described “[The] constant movement back and forth between theory and empirical data is necessary” (p. 200). It proved to be instructive to gain a better understanding of the distinctions between abduction, deduction, and induction in constant comparison.

Atkinson and Delamont (2008) wrote about analytic perspectives and rea[d] that grounded theory does not refer to some special order of theorizing per se. Rather, it seeks to capture some general principles of analysis, describing heuristic strategies that apply to any social inquiry independent of the particular kinds of data. (p. 300) be it quantitative or qualitative, and exposing the “pragmatist roots of interactionism.”

It [grounded theory] captures the abductive logic through which the analysts explore the social or natural world through practical engagements with it, derive working models and provisional understandings, and use such emergent ideas to guide further empirical explorations. (p. 300)

“Too often, however, grounded theory is construed as a justification for the inductive retrospective inspection of volumes of field data” (Atkinson & Delmont, 2008, p. 301) rather than for its abductive qualities. Pierce’s term abduction and pragmatism “has some affinity with the practical priorities of grounded theory” (Dey, 2004, p. 91).

In grounded theory, Bryant and Charmaz (2007a) related the “very acts of defining and generating data place the researcher in the realm of meaning” and “the relationship between data, however defined and grasped, and the researcher is one founded on action, interaction, and interpretation” (p. 15). The “importance of ‘the data’” in early grounded theory development is such
that researchers will over-emphasize the role of data at the expense of other facets of the method. Hence, a number of contributors to the [Sage] *Handbook* [of Grounded Theory] meticulously locate the role for imagination, serendipity, ‘abduction’, and reflexivity in GTM. (Bryant & Charmaz, 2007a, p. 15)

**Other analyses and coding.** The analyses and coding were not limited to just the interviews. Data collection included observations and documents, the other two major sources of qualitative data (Merriam & Associates, 2002). Observations were continually made—prior to interviewing, during the interviewing, afterwards, and in any follow-up with the participants. These observations were not limited and included sensing demeanor and overall atmosphere of the setting. Documents were primarily reviewed from those available at the respective university websites and any documents provided by the participants. The website review searched for items and documents related to institutional effectiveness, student success, accreditation, and culture/environment. Institutional Research offices (or like names) were also searched for items and documents relating to the same issues.

Prior to finalizing the research, available executive summaries and participation rates were reviewed. One summary was found on the institutional web site. Another summary was reviewed, but not retained intentionally, in the office of one of the participants. Emails to participants resulted in a report of two more participation rates, but not as detailed. The final participation rate report was not available since it was part of digitized program now used at that university. Participation rates are further detailed in the next chapter.
Validity and Trustworthiness

Lincoln and Guba (1985) focused on credibility, transferability, dependability, and confirmability when they asked: “How can the naturalist meet these trustworthiness criteria?” (p. 301). Marshall and Rossman (2011) explained how Lincoln and Guba (1985) modernized the “older terms—reliability, validity, objectivity, and generalizability” (p. 41) stemming from quantitative research to “credibility, dependability, confirmability, and transferability” (emphasis in the original) in qualitative research. These last four terms “tend to focus on design-stage considerations . . . forecast what the researcher intends to do during implementation of the study, thereby demonstrating how the study design will likely ensure that the data and their interpretations will be strong and credible” (p. 41). Marshall and Rossman (2011) pointed out that “the debate on validity rages on” (p. 41) with validity being further differentiated as transactional, transformational, transgressive, or crystallized. This discourse offered the researcher “alternatives for developing arguments to convince the reader” (p.44) about conceptualization and rigorous conduct.

Drawing on Denzin and Lincoln (2000), Marshall and Rossman (2011), Merriam and Associates (2002), Patton (2002, 1990), Schram (2006), and Schwandt (2007), the following strategies were used to validate the validity and trustworthiness in executing the research design shown in figures 11 and 12, and the analysis in figure 13.

**Triangulation.** Schwandt (2007) defined triangulation as means of checking the integrity of the inferences one draws. It can involve the use of multiple data sources, multiple investigators, multiple theoretical perspectives, and/or multiple methods. The central point of the procedure is to examine a conclusion (assertion, claims, etc.) from more than one vantage point. (p. 298)
The constant comparison and analyses of the sequential qualitative interviewing—first and second interviews (all levels of abstraction up to saturation), combined with observations and documents were triangulated. This triangulation included both institutional and national level websites like the Integrated Postsecondary Education Data System (IPEDS), NSSE, NSSE Institute, and others and moved the research into “crystallization” (Marshall & Rossman, 2011), basically using more than three sources.

**Member checks.** Member checks involved “ask[ing] the participants to comment on your interpretation of the data. That is, you take your tentative findings back to some of the participants . . .and ask whether your interpretation ‘rings true’” (Merriam & Associates, 2002, p. 26). All the participants were briefed on the preliminary findings at the start of the second phase, asked during the interviews and during the review if any of the data is sensitive and should not be identified as such, and afforded the opportunity to review all the transcripts as part of the member checking.

**Reflexivity.** Sometimes labeled as researcher’s position, reflexivity involved self-questioning reminding the “qualitative inquirer that making perspectives and assumptions explicit serves to inform, not undermine, the study’s credibility” (Schram, 2006, p. 9). As Merriam and Associates (2002) emphasized, “Such a clarification allows the reader to better understand how the individual researcher might have arrived at the particular interpretation of the data” (p. 26). The researcher used this introspection in relaying the findings, analyses, and conclusions so that the reader could follow the logic and how the theory was generated.
Reflexivity was one of the critical factors in establishing trustworthiness and validity in this qualitative research. Reflexivity can be explained of how decisions were made along the way to preserve the integrity of the research. Reflexivity was evident in the member checking and changes made, in the briefing of the first phase results to all the participants (though not all in the same form), and in how much richer the contextualization of both the accreditation and institutional designations like HSIs became. Reflexivity was a constant factor and concern in theoretical sensitivity and theoretical sampling in the grounded theory methodology utilized. The researcher recognized sensitivity and sampling as being deficits in the quest to construct meaning and allow themes to emerge. The contrast between majority group theories—Tinto’s student departure, Astin’s EOE, Chickering and Reiser’s identity, and others—facilitated understanding. Reflexivity involved keeping the promise of confidentiality as part of preserving the integrity of the research.

**Audit trail.** “The audit trail in a qualitative study described in detail how data were collected, how categories were derived, and how decisions were made throughout the inquiry” (Merriam & Associates, 2002, p. 27). The researcher used detailed transcription and comprehensive coding and notes, along with other methods, to provide an audit trail to the conclusions and facilitate reflexivity.

**Rich, thick descriptions.** As one of Patton’s (2002) identified themes, “thick, rich descriptions provides the foundation for qualitative analysis and reporting. Good description takes the reader into the setting described” (p. 437).

**Adequate engagement in the data collection.** Merriam and Associates (2002) described this process as becoming “saturated”, not in the sense of grounded theory but
as “adequate time spent collecting data” (p. 31). In the sequential interviewing, coding, and constant comparison, the researcher became enmeshed in the data, making meaning, and theorizing.

**Transferability.** Additionally, the further delimitation of the sample to one smaller geographical region—not by design, but by participation—decreasing from seven to five institutions as a result of two respondents declining, added to the transferability of findings to similar institutions in similar situations. The ending purposeful sample located all institutions in the same geographical region and same governance. Also, the participating CAOs and their institutions belonged to similar associations representing their interests. All these factors contributed to the transferability of the findings to other similar institutions.

Comparing and contrasting was also a consideration in designing the research when considering a mix of public and private institutions; however, both the difficulty of obtaining access at these larger institutions and the increase in overall sample size were not advantageous, nor feasible.

**Transcriptions.** Transcriptions were done solely by the researcher using a naturalized transcription—“detailed and less filtered” including “breaks in speech, laughter, mumbling, involuntary sounds, gestures, body languages, etc.” (Mero-Jaffe, 2011, p. 232). Denaturalized transcription “removes the slightest socio-cultural characteristics of the data . . . that could shed light on the results of the study” (Mero-Jaffe, p. 232). As Skukauskaite (2012) concluded:

Given that there is no single way on transcribing, making transparent transcribing decisions and theories guiding those decisions, can provide grounded warrants for claims researchers make about observed (and recorded) human actions and interactions. (p. 66)
Deciding to use naturalized transcriptions, discussed above, and to personally do all the transcriptions, further precluded any ethical breaches in reporting and redacting information that could be compiled, or surmised, in identifying the participants and their institutions.

**Limitations**

The results and findings are primarily limited in how and what the chief academic officers or delegates communicate while being interviewed. A second limitation is how the results are understood and interpreted by the researcher “at a particular time and in a particular context” (Merriam & Associates, 2002. p. 4).

**Delimitation**

The research was delimited to chief academic officers of 2009-2010 NSSE participating private universities, universities who are also designated as HSIs and accredited by the Southern Association of Colleges and Schools (2011).
Chapter 4: Findings

Introduction

The original purposeful sample included chief academic officers at seven private Hispanic-Serving Institutions participating in the National Survey of Student Engagement (NSSE) between 2009 and 2011, and all regionally accredited by the Southern Association of Colleges and Schools (2011), but geographically located in two areas. Following Institutional Review Board (IRB) approval, letters inviting (Appendix A) these seven chief academic officers along with informed consents (Appendix B) and demographic/background surveys (Appendix C) were priority mailed. Two chief academic officers declined to participate, both from the same geographical region, leaving five participants within one geographical region.

The following two questions guided the qualitative research using grounded theory methodology:

1. How do chief academic officers disseminate NSSE results to facilitate institutional effectiveness?
2. How do chief academic officers promote undergraduate student success using NSSE results?

Purposeful Sample

Based on the background survey, the sample represented a wealth of experience and education in the five chief academic officers. A span of nearly two decades separated the longest serving chief academic officer from the youngest serving chief academic officer. Three had served in previous positions at their institution prior to becoming the chief academic officer.
The private institutions represented by these participants are all located in metropolitan areas, some nearer to the city center than others, and all experiencing some difficulty in expanding the size of their main campuses. Some have extension centers, not just in the metropolitan area they are situated in but in other U.S. cities, and overseas campuses. The difference between the founding dates of the oldest and the youngest is almost 100 years. And, the difference in undergraduate enrollment is just over 4900 between the largest and the smallest, with all universities having less than 10,000 students enrolled. Overall graduation rates fall between 30 to 70 percent. Total numbers of full time faculty fall between 50 to 250 members and minority percentages of faculty between 0 and 50 (Diversity in Academe, 2011). All have graduate and professional programs. All five institutions belong to the Council of Independent Colleges, the Hispanic Association of Colleges and Universities, the American Council on Education, and various state associations. Four out of the five institutions belong to the National Association of Independent Colleges and Universities and the Association of American Colleges and Universities. Four out of the five institutions have McNair Scholar Programs (McNair Scholars, 2012). The first regional accreditation was awarded nearly 90 years ago and the most recent regional reaffirmation was in 2007. All the institutions will be coming into their reaffirmation years between 2012 and 2017.

Since the year 2000, the five institutions have participated in the NSSE a total of 30 times and the Faculty Survey of Student Engagement (FSSE) 7 times (NSSE Participating Institution Search, 2012). Some of the institutions have also participated in the Law School Survey of Student Engagement (LSSSE) and the Beginning College Survey of Student Engagement (BCSSE) as well (NSSE Participating Institution Search,
Four of the five institutions also participated in Building Engagement and Attainment for Minority Students (BEAMS) initiative, an initiative “established to support the important role MSIs [Minority Serving Institutions] play in facilitating minority students’ participation in and completion of higher education” (Del Rios & Leegwater, 2008, p. 3).

The participants are identified by their own self-selected pseudonyms in the findings. Initially, the CAOs are introduced as CAO Veracity, CAO Katherine, CAO Facilitator, CAO Sir Arthur, and CAO Mr. Jones in the order that they appear. After that, the individual pseudonym is primarily used. In the discussion and recommendations, the CAO title along with the pseudonym is used once again for emphasis.

First Phase Data Collection and Analysis

As with most qualitative research, data collection began simultaneously with developing the proposal but was limited to public information available on the intended institutions, like websites, journals, and institution-specific publications. Upon gaining IRB, data collection began more in earnest. In this research, websites for IPEDS, or the Integrated Postsecondary Education Data System (2012) and College Navigator [part of the National Center for Education Statistics (NCES) in the U.S. Department of Education], National Survey of Student Engagement Institute for Effective Educational Practice, NSSE, and the Common Data Set or CDS (Common Data Set Initiative, 2012) were used extensively in defining and reporting on the purposeful sample. First phase interviews were conducted in August 2011 with transcriptions, member checking, analysis and coding. Actual visits to the institutions added more visual and physical data while touring the campuses and the surrounding environments.
Emerging Themes From First Phase Analysis

The eight themes in Figure 11 emerged from the initial and selective coding for the first phase interviews on how NSSE results are used to facilitate institutional effectiveness and promote undergraduate student success:

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**Figure 14. Emerging Themes.**

**Strategizing.** Strategizing for how the current NSSE results would be used began with dissemination of those results. Results were reviewed in executive councils and meetings based on analysis, reports and presentations by the academic assessment or institutional research officer in the same forums. Presidents received the published NSSE results first for the most part but shortly thereafter sent them to their Chief Academic Officers. The CAOs would review these results but then forward the published results to Institutional Research for further analysis, and then again review that analysis. At university-level meetings, the analyzed results would be reviewed and discussed to see what, if any, actions needed to be taken.
The research participants described what resulted from some of these discussions. Some of these results were even surprising as CAO Veracity describes the results on writing assignments and comparing to peer groups, by saying, “It was astoundingly low which shocked us . . . we immediately went back and looked again at all of our, every place where we’re doing writing in any systematic way . . . we also reactivated a committee of the faculty . . . called writing in the disciplines” (personal communication, August 15, 2011). Veracity continues, “We’ll see what happens with the next NSSE to see if it moved” referring to the results. Not articulated as a surprise, but Veracity tells of how a new course, a freshman symposium, was developed based directly on NSSE results: “NSSE findings . . . found that students were unfamiliar with our mission, or not as familiar as we hoped. And . . . we are very mission driven.” In announcing this new course to students, Veracity related that the president of the university “had the NSSE data in his hand” (personal communication, August 15, 2011).

In reviewing NSSE results internally, CAO Katherine articulated that, “We talk about how they’ll be using them in their units. I’m not as successful on having the deans share with me how their various departments have used them” and that is an “overriding challenge” (personal communication, August, 11, 2011). Continuing, Katherine differentiates between undergraduate and graduate faculty—graduate faculty are not as concerned with NSSE—noting that “not all faculty embrace the idea that freshman is where you, where the rubber hits the road” and graduate faculty say, “Why should I want to be engaged in quality enhancement at the freshman level (personal communication, August 11, 2011). On the other hand, CAO Facilitator relates how general education
considers “NSSE’s almost their Bible” (personal communication, August 25, 2011) in using NSSE results.

Another aspect of reviewing the NSSE results can lead to digging deeper into the results as Mr. Jones related, “The numbers are kind of disturbing...so they’ll [faculty and administration] want to get a hold of the written commentary (personal communication, August 10, 2011).

CAO Sir Arthur described the review of NSSE results, specifically faculty and student interaction, in a committee forum this way:

So in other words, we just don’t say, ‘Oh look at this, we’re better here than what we thought or worse here than we thought.’ We just use that as the jumping off point to strategize about how we want to increase...improve in this area. (personal communication, August 18, 2011)

In one case, the results have been piloted and then digitized on an access-controlled portal. Sir Arthur tells how “Now, this has all been so automated and so laid out into table that really shows the development of the data. It has taken us into the 21st century of data” (personal communication, August 18, 2011).

Based on what the CAOs related, the reviews and discussions above resulted in strategizing about how to continue, improve, or correct, alone, or in conjunction with other assessments. Once the published results were analyzed, reviewed, discussed, and actions taken, institutional research offices then continued to manage and report on the NSSE, along with other reporting. For the most part, CAOs did not specifically assign requirements to institutional research, academic assessment, or other departments.
**Documenting.** NSSE results were used to document actions the universities said they were doing as a result of planning and executing. In some cases the results were used specifically in the regional accreditation process or other accreditation processes, e.g. business, nursing, social work.

In discussing the linkage between assessment and accreditation, Sir Arthur summarized what accreditation is really about by saying, “Accreditation is always asking us essentially this question. What are you doing, what do you say you’re doing, and how do you know you’re doing it, and how do you make improvements? . . .” (personal communication, August 18, 2011). CAO Mr. Jones says, “Accreditation is always seen as the nuisance . . . and, to my way of thinking, it’s no, no, no, that’s the wrong way to look at it” (personal communication, August 10, 2011) and continues by saying,

> [Y]ou really shouldn’t be going out saying anything at all about your institution or your program, or your teaching ability, that you don’t have something that you can use to back it up . . .you’re always evaluated in terms of your mission. (personal communication, August 10, 2011)

Facilitator described how the institution’s capstone program “is really the assessment of general education” (personal communication, August 25, 2011).

Using NSSE data in conjunction with associated capstone rubrics allowed the institution to document progress and facilitated reaffirmation. Sir Arthur relates how “we went to our NSSE data to show how students feel about service” when the regional accrediting agency asked, “Do you assess your service component of your mission? How do you do that?” (personal communication, August 18, 2011).

In this case, NSSE also had research data. “So, it has proven to be of more value to us than just the quality enhancement plan” (Sir Arthur, personal communication, August 18, 2011).
Several respondents mentioned how other accreditation processes—program, discipline specific, licensure, or accreditation-related—informed the regional accreditation process on how to measure, articulate, and assess outcomes.

**Benchmarking.** Institutions benchmarked externally and internally. NSSE results benchmarked individual institutions against peer universities; however, for the most part, the benchmark lists were generated from NSSE. Katherine expressed the importance of peer benchmarking by noting,

> One of the things that is does for us, is that it gives us the idea, the opportunity to benchmark ourselves against our peers and it’s always important to not live in a silo, to think that whatever happens here is, you know, uniquely, different from what other people do. But it is important to say, where do we measure up in terms of our expectations? (personal communication, August 11, 2011)

In one case, the NSSE results were used in a consortium fashion where some of the peer institutions met and discussed results as Mr. Jones related by saying,

> We’re supposed to do it as a group . . . and we meet to discuss common themes . . . and things that we want to kind of tackle, or address with a unified voice . . . we will compare you know NSSE results between schools to see if there’s any kind of, like a difference . . . . (personal communication, August 10, 2011)

Benchmarks of effective educational practice, specifically five, in the NSSE were used in a variety of ways, both externally and internally. Those benchmarks were Level of Academic Challenge, Active and Collaborative Learning, Student Faculty Interaction, Enriching Educational Experiences, and Supportive Campus Environment, each with individual items but accounting for some 42 questions of the survey.
Sir Arthur described how NSSE’s five Benchmarks of Effective Educational Practice were utilized in writing a Quality Enhancement Plan (QEP) on student engagement and “using data from the NSSE, we were able to prove to SACS that we were in fact, accomplishing this” (personal communication, August 18, 2011).

Institutionalizing. Respondents acknowledged that faculty perceive assessment in many ways—threat, unnecessary, extra time and work. Facilitator outlines a change from teaching from the basis of “what I know” to

...what is it that the students need to learn? That’s a different focus. It’s also harder to assess. So I think that you have to do with accreditation is to get, actually I would say, I now have a culture of learning that does understand—do some disciplines do it better than others, yes but do I have a situation where the faculty fight accreditation. No, not any longer. (personal communication, August 25, 2011)

Veracity defined it further by asking, “knowing that faculty are suspicious of, or resistant of assessment, is how can we help faculty understand that this assessment is not just an end in itself, but it really is for attaining a culture of improvement” and concluding “anything that is externally driven is not going to be powerful, it [assessment] has to be internalized. You know assessment has to be embraced as part of a culture of improvement” (personal communication, August 15, 2011).

Facilitator emphasized that assessment “has to be respectful” and that it is really quite simple, “What are you trying to [do], how well did you do it, and what’s your documentation for it, and what are you going to do about it, which is what are you going to do for the next iteration?” (personal communication, August 25, 2011).

In some cases, respondents related that faculty have been doing assessment all along and it’s a matter of understanding how outcomes assessment is related. Veracity described assessment being a “mystery” to some faculty (personal communication,
August 15, 2011). Katherine related when using the term assessment in some departments “their [faculty] brow furrows because it’s a headache to them to think, although I told them in a million ways, you know, you do a senior performance requirement. . . You’re doing an assessment” (personal communication, August 11 2011). However, when using the term assessment in other departments where programs are specifically accredited, “they [faculty] have deeply invested in, in assessment, because they won’t be in business if they don’t.” (Katherine, personal communication, August 11, 2011).

Some of the participants explained how they use software programs and other electronic tracking mechanisms for assessment. Katherine indicated the need to regularize the review process to make the assessment process effective (personal communication, August 18, 2011). Facilitator, explaining their software package, still emphasized that, “every major in the academic area has to have learning outcomes by program and has to do annual assessment on those” (personal communication, August 25, 2011).

Facilitator made a distinctions between institutional research and assessment, institutional research having more a “research mentality . . . and they have compliance at some level” and institutional assessment needing more of a faculty orientation, being able “to say to the faculty—the only reason for doing this is for you [faculty]” and based on what the faculty provides, “how to talk assessment language” (personal communication, August 25, 2011) referring to outcomes assessment.
Institutionalizing is dependent on how individuals understand and define it. Institutional effectiveness and student success can be part of that definition to include decision making. The respondents gave their own definitions, beginning with student success.

From the standpoint that “student success has a variety of measures,” Katherine related,

First it’s the idea, it’s the simple one, it’s graduation. But, you can’t get to graduation without progression, so we monitor very, very rigorously our annual performance rates—how many students have gotten out of the freshman year into the sophomore year, how many of our sophomores have gotten to the junior year, how many of our transfer students are here a year into it, how many of our transfer students have gone on to succeed. We also look at four-year, five-year, and six-year graduation rates. So you know why is it taking somebody four, five and six years? So then it’s important to drill down and ask the question, so why is it taking most of our students six years, so we go back and look at things like course plans, we look at stop outs, uh, so we examine all those and try to get a better sense of those. The short answer to student success is graduation [emphasis added]. But it goes beyond that because in my unit we also have the responsibility for student performance and career. You know, we have the responsibility [knowing] how many of them passed their certification exams, how many of them are employed within six months, how many of them have been able to advance in their chosen fields of study. Because many of our adult students come to us in the field—so they’re in their field, I don’t have to worry about them having a job—they have a job. But one of the measures of the student of their success is, have they been able to move from the position when they came to us—a new position, so we monitor all those. (personal communication, August 18, 2011)

When asked about how institutional effectiveness and student success are combined and how do they work together, participants described the complexity in today’s higher education.

Katherine indicated that the paradigm “really needs to be regularization and accountability for following the model that one develops for tracking the success of a variety of elements” (personal communication, August 18, 2011). Instead,
. . . something will drive us to look at the Fact Book [or some other piece of information] and somebody will go, . . . we only graduated six students in X and then we start the core down. And, you know, that, the problem with that is that it really, it really engenders a sense of suspicion and distrust . . . Because people think you're fishing for something. When you're not, when at least in my case, it's not about fishing, it's serendipitously that I saw some information and said . . . how did this slip through the cracks and that's imminently important because our students' success comes with a high price tag. And because we're the kind of institution we are, and the families put so very much into it, the cost is extraordinary and I mean the real, the very real tangible dollars, and so that if we're not paying attention all the time to the quality of what it is that we're delivering, and achieving that outcome, then I'm not sure somebody's getting a good bargain for their dollar. (personal communication, August 18, 2011)

Expanding on effectiveness in higher education, Katherine related

I think that higher education does a tremendous disservice when we don't pay attention to how effective we are on a daily basis, when we don't pay attention to what we identify as student success, when we don't have. . . because we think often provincially, we think about what's best for me in my department right now, what's best for me and my division right now, we don't think about what's best for the people that we're educating 5 years from now. . . And how do we monitor that quality all along? And again, it's not the quality of what happens in the instructional exchange, because I don't think there are very many faculty who don't believe that they're providing a quality experience in the instructional exchange, and the teaching and learning environment. But it's larger than that—it would be like saying birthing the baby is all I have to do, there's more to it than that. . . So, you know the paradigm, or the model, should always be in a much larger context for societal good. What's the contribution we're making? Because the student success and our own looking inward is all about whether or not we're contributing to the community, to the larger societal needs. (personal communication, August 18, 2011)

Katherine portrayed how politics influences actions by saying,

The politics in colleges and university is one which often is driven by the immediacy of an answer to a small problem. Instead of, staying focused on the larger issues, those being issues like are we providing a high-quality education and if we say we are, what does that mean? Because I think that, you know, we--I laugh about this when somebody says, you know, what’s your brand? We provide high quality education and I say yes, so do we. And so do they, and so do they. What does it mean to provide a high-quality education? Those are the kind of conversations that I’d like to get in a room and have with people, because if you don't have those conversations, then you're doing nothing more than throwing a bunch of words around, and so what does that high-quality. . . We should be able put a definition to that, to what that is. . . where the numbers? How do the numbers demonstrate that? And, the anecdotal stories or the, the transformational stories
are important, but they're supporting data for me, because if we have 40 graduates in a program and we have one inspirational story, but we have 25 students who don't have jobs a year after they graduated, that inspirational story is a herring—it's not, it's not regular, a regular experience. (personal communication, August 18, 2011)

For Katherine, institutional effectiveness was “very near and dear to my heart” (personal communication, August 18, 2011). In keeping with the regularization theme expressed earlier institutional effectiveness, “if it’s done right” is really a university wide quality, a quality improvement plan, where each unit sets its own goals on an annual basis, they come back and review those goals, progress on those goals, modify those goals midyear, and then write a summative report at the end of the year, and then that is done on a cycle, so that of course, every departments is not reviewed every year but maybe there’s a cycle that may be this year we do student life, and then next year we do institutional advancement. So, that on a sequence, each unit within the major unit is reviewed and those repeating patterns are synthesized, analyzed, and responded to both budgetarily, as well as operationally. (personal communication, August 18, 2011)

Veracity articulated student success in terms of institutional effectiveness through the strategic plan. In his words,

We do through the strategic plan . . . and we’re looking at some key indicators. We go from the plan, to the goals, to the annual action plans. And so, that is our governing rubric—what fits into that, what other data do we need to create measures of effectiveness . . . like everybody else we’re always concerned with are we really measuring what we hope and think we are measuring. So, that in itself is an exercise. But that’s, institutional effectiveness . . . But, as I mentioned, student success is measured how? The two numbers that almost everyone sees right away is graduation rates and retention rates. So, those are the two numbers that were working on very, very hard. (personal communication, August 15, 2011)

Institutional effectiveness “is a step toward student success. Everything is about the students” (Veracity, personal communication, August 15, 2011). And applying the institution’s resources as aptly described when Veracity emphasized,
You know, we cannot change what a biologist needs to know when they graduate, but we can sure as hell can make sure that we use every pedagogy and modality and, and whatever assistance we can provide in terms of tutoring, counseling, whatever it is to make that student successful. So to me, I mean student effectiveness success is the ultimate goal. (personal communication, August 15, 2011)

Ultimately,

student success would be, as I said, a mastery of the discipline and the standards by that are some of the tests we've taken, students’ grades, their ability to get into graduate schools or professional schools such as they like, and you know feeling as they immediately become alumni they have some way to show the appreciation back to the institution for what it is they’ve achieved here. A loyal and active alumni, I think, are the fruit of doing our work well. So if students succeed, uh, you know, they will be very grateful to the institution. (personal communication, August 15, 2011)

In relating decisions about student success and institutional effectiveness,

Facilitator immediately linked the two by saying, “I think they're one and the same. I think you can’t make student success decisions without knowing what you are doing” (personal communication, August 25, 2011). Further clarifying, Facilitator expanded to outcomes by saying, “Student outcomes and institutional outcomes are simply, it seems to me, the back-and-forth of the same thing. You know, if you're not succeeding in the student outcomes, you are not succeeding as an institution. And when asked how to define both institutional effectiveness and student success, Facilitator continued with the same line of reasoning, “I still think they’re the same. Either we succeed in our students or why are we here?” (personal communication, August 25, 2011).

Mr. Jones defined institutional effectiveness as “basically achieving your mission” (personal communication, August 10, 2011). Student success is more difficult to shortly define, but beginning, Mr. Jones says, “We all know graduation, attainment of a career that is satisfying for the students, and the production of a student who is a lifetime contributor to society in a positive fashion. That’s success” (personal communication,
Continuing, much in the same vein as Veracity, Mr. Jones referred to alumni, by observing, “We know success when we have alumni come back and say, we’re going to help you in this or that endeavor. . . So . . . if you ask me in the short term view, do you want to create people that have an impact?” (personal communication, August 10, 2011).

Including the mission, Sir Arthur began by saying, “we often talk here about access” and “our institution is one which tries to be an inclusive university, that gives students access” (personal communication, August 18, 2011). Using a metaphor of positioning a bar that students need to get over, Sir Arthur explained,

So, you bring the student in, and you challenge them, but you help them, you help them to get over the bar, you challenge them by setting the bar at the right place, you help them to get over if they need it, by tutoring, by advising, by mentoring, by spending time with them but you don’t put your hand down and boost them over, because then they’re not getting over the bar on their own accord, you help them. (personal communication, August 18, 2011)

Expanding further in institutional effectiveness, Sir Arthur delineated how the institution had demonstrated effectiveness in retention and that now, “We no longer judge ourselves in that regard . . . But now, our paradigm has changed to graduation, how well are we achieving, how well are we accomplishing what we say we will do for our students. Our whole focus has shifted to graduation” (personal communication, August 18, 2011).

Integrating. Recent NSSE results were reported as being integrated with previous NSSE results in the all of the institutions. These previous results were not limited to just the last administration of the NSSE. Assessment like the Collegiate Learning Assessment (CLA), Cooperative Institutional Research Program (CIRP) Freshman Survey, Collegiate Assessment of Academic Proficiency (CAAP), and others were used at the participating institutions. It is not known on how integrated these assessments were with NSSE results.
Though all but one institution had participated in the FSSE at one point in time, no mention of any integration of the cross-walked items (NSSE-FSSE) was made.

In some cases, NSSE results had been integrated into the regional accreditation’s Quality Enhancement Plan (QEP). All agreed about the inter-relationship between accreditation and assessment in general, one indicating that it is a sign of the times, and another articulating how it is a benefit to the entire process, another saying how accreditation drives assessment. Two interviewees articulated what accreditation is really asking for: How do you show what you are actually doing?

**Prioritizing.** New assessments or recurring assessments were judged on their merit and how they would fit in the family of assessments including next iterations of NSSE. This may result in one assessment being scheduled later or earlier to not denigrate the effectiveness of other scheduled surveys. Prioritizing is very much a part of de-conflicting when making decisions about what assessments to use and when. In making these decisions about possible assessments, Sir Arthur used this rubric: “It has to be sufficiently easy in some ways, to get the data, in order for me to be convinced that we should pay the price, or make the effort, to go in that direction” (personal communication, August 18, 2011).

Katherine related how “we take all those pieces of information into account” (personal communication, August 11, 2011); however, sometimes, “it doesn’t get down to the level of faculty in the degree and saturation that I would like to see it” (personal communication, August 11, 2011). Prioritizing is not confined to the types of assessments and how they are used.
**Participating.** Student participation in NSSE focused on how to incentivize the survey to increase participation for the best results. Low participation rates were also discussed a part of other assessments efforts and perhaps, best expressed by Sir Arthur when expressing,

> We have spent a lot of time devising ways to get the students to take the NSSE. One of the major hurdles for every university using NSSE or College Learning Assessment of SSI or any of those things, it to get the students to do the survey. So, normally you not only have to pay a fortune to get these surveys, you’ve got to pay money to incentivize the students to take the surveys. (personal communication, August 18, 2011)

In discussing CLA, not NSSE, Katherine saw the need “to infuse in our seniors the commitment that they should have to the institution” (personal communication, August 11, 2011) as a way of incentivizing along with a little quid pro quo “you know, help us out here” since the difference between family contribution and scholarship investment is demonstrable. Veracity related, again on CLA, is how “we’re looking into is embedding the CLA into our freshman year experience as part of that” (personal communication, August 15, 2011). Otherwise, “incentivizing you know is a gift or a drawing for an iPad, or something like that . . . and the students are surveyed to death” (Veracity, personal communication, August 15, 2011).

Other than NSSE general results being reported on university websites, newspapers, and other forums, feedback to students was only indirect. As Sir Arthur explained, “Most of our feedback in the loop has been through programmatic changes” (personal communication, August 18, 2011). In some cases, the actions to correct problems identified in NSSE, were more direct and tied specifically to results as Veracity related on how the president announced a new course. Other surveys, like satisfaction or
employee survey, were discussed in terms of providing more direct feedback of the results to the participants.

**Disaggregating.** The first protocol asked a question about tracking students. In these results and the final analysis, this theme was better described as disaggregating. None of the institutions related that they used NSSE results for any individual tracking of students; however, and when the “results of the NSSE show improvement . . .our students are improving and we as an institution are improving” (Sir Arthur, personal communication, August 18, 2011). Facilitator related that tracking is “on a much broader level” (personal communication, August 25, 2011) but how one department is using NSSE results like a bible. Because “we are capable of disaggregating the [NSSE] information to the level of male-female, Hispanic, African-American, White . . . we review this to see the differences” (Sir Arthur, personal communication, August 18, 2011) referring to how NSSE results are applied to minority student success.

. . . what we find is that is Hispanic students spend less time socializing on campus because concomitant with that, they have more responsibilities work-related or family-related. So it shows us, and it helps us to understand our campus more when we’re creating those strategies, we understand who we’re dealing with most. As a Hispanic-Serving Institution, we know more thoroughly who our students are and what they’re up against than we did 10 years ago. (Sir Arthur, personal communication, August 18, 2011)

Veracity articulated how one of things we discovered, in part from the NSSE data . . . was that we as a Hispanic serving, more, and more of our students do not have English as their native language. An so again, we factored that in to our revamping of our writing programs . . .we cannot just apply a template or rubric and say we don’t care whether or not English was your first or second language. (personal communication, August 15, 2011)
The tracking theme can include knowing the student population whether it be from surveys, demographics, academics, and other means. Participants described in detail how they have come to know their student population—satisfaction and opinion surveys, students seeking admission and their orientations, evaluations like CIRP (Cooperative Institutional Research Program), CAAP (Collegiate Assessment of Academic Proficiency), and CLA (Collegiate Learning Assessment), communities, grants, and the NSSE. Katherine explained how students seek out the institution because of its service orientation and how many, not only earn their undergraduate degrees, but remain to complete their graduate work. Facilitator emphasized how “graduation rates are dependent upon a lot of what I said in the ‘how do we assess’ student learning outcomes” and adding, “we are an incredibly data-driven institution” (personal communication, August 25, 2011). Sir Arthur and Facilitator both articulated how remaining accessible was a distinguishing factor despite other factors. Despite many descriptions, Hispanic students were described as having more responsibilities, be it job or family related, that deterred more social and academic engagement on campus. Hispanic students were also viewed as more educationally disadvantaged, again not intellectually disadvantaged.

The following question was asked in the first phase, “How do you apply the NSSE results to minority students and their success?” Respondents in general replied that they did not specifically apply results to minorities but to educating in general. Mr. Jones was more specific and said, “They’re all minorities here” and added, “It’s like that whole thing when you become not the minority, are you starting to engage in the same thing that you accuse the majority. Are you engaged in exclusion?” (Mr. Jones, personal communication, August 10, 2011).
Regardless, the ability to disaggregate allowed respondents to review differences and take action as needed. The disaggregation also facilitated and engendered discussion at lower levels, similar to Pike (2006) and his use of scalelets and what Sir Arthur emphasized above. Tracking can relate back to documenting as well, similar to what was reported in institutionalizing relating back to documenting.

**Summary of First Phase Results**

The first phase results are summarized below.

- Eight themes emerged—strategizing, documenting, benchmarking, institutionalizing, integrating, prioritizing, participating, and disaggregating—and initial relationships.
- Assessment and accreditation were linked. Accreditation influenced how institutions incorporated assessment and used NSSE results.
- NSSE results were consistently incorporated and used in regional accrediting, quality enhancement plans, strategic plans, and other plans to document actions.
- NSSE benchmarks were important—peer and effective educational practice—to all participating CAOs.
- The use of NSSE results at the dean/department level was not evident.
- NSSE results were more meaningful than Faculty Survey of Engagement (FSSE) results.
- Students received only indirect feedback of NSSE results.
- NSSE results were integrated and reviewed, at times, with other assessments.
- NSSE and other assessment participation rates remained low and problematic.
- Results were disaggregated to better understand student populations.
Second Phase Data Collection and Analysis

Based on the first phase analysis and preliminary results, a second phase protocol was developed (Appendix G) using the participation and disaggregation themes found from the first phase analysis and its protocol (Appendix F).

Prior to the second phase data collection, the constructs and validity of the NSSE and its sister survey, the Community College Survey of Student Engagement (CCSSE), were scrutinized and reported on in Association for the Study of Higher Education’s (ASHE) *The Review of Higher Education*. Schmidt (2011) reported in *The Chronicle of Higher Education* on ASHE’s president’s decision to cancel an upcoming association scheduled session focusing on the NSSE construct and validity. The rationale expressed by the association president was that the session was not needed since the literature had been published. During its more than 10 year existence, NSSE has been criticized before; however, the special edition of *The Review of Higher Education* focused on NSSE and CCSSE (Campbell & Cabrera, 2011; Dowd, Olivas, 2011; Porter, 2011; Sawatsky, & Korn, 2011). The founder of NSSE and new director also responded on the NSSE Institute website. About the same time, in another journal, *Assessment & Evaluation of Higher Education*, an article discussed if the NSSE, specifically in the area of benchmarks, can be a predictor of undergraduate GPA (Fuller & Tobin, 2011). The above literature informed the second phase data collection in fully developing the protocol specifically in the areas of survey validity, prediction, and continued use of NSSE.
The initial part of the protocol informed participants on what was found in the first phase, and asked if they had any questions or if they would like to provide any additional examples or information. This engagement with the participants was part of the validity and trustworthiness, specifically reflexivity. During the second phase protocol participants were also queried on any changes they would like to make in the member check process.

Three of the second phase interviews were conducted in December of that same year, and the remaining two interviews conducted in early February 2012. Due to time constraints, one remaining interview was conducted over the phone. Following these interviews, transcription, member checking, analysis and coding followed. In these last two interviews of this phase, a summary of those results was provided in advance via email to the participants. This was done for two reasons, the first generated by one participant not being able to interview in a face-to-face setting, and second promulgated in the interest of time either on the phone or in a face-to-face interview. Both of the last two interviewees in the second phase were experiencing increased workloads and travel requirements causing more than one change in scheduling the interviews.

Participants were briefed on the first phase initial results and asked if they had any questions. Once any questions were answered, the participants were asked, hypothetically, on whether the NSSE would continue to be used if its construct and reliability were proven to be false. Veracity answered after a short hesitation that if the premise were faulty, it would have to be discontinued. Others like Sir Arthur, took a different approach replying that the results accrued could still be utilized in the overall schema. One of the first phase protocol questions and responses were used again [How
NSSE results are used to promote minority success?] leading into asking: How do you perceive your institution as being Hispanic serving?

Another focus question in the second phase that followed up on incentivizing surveys, asked: Besides incentivizing, how would you increase this participation rate? and also asked How should students be informed of the results? This question stemmed from findings in the first phase that most students only learned about NSSE results indirectly.

**Developing Relationships from the Second Phase**

The initial relationships between prioritizing and strategizing; documenting, tracking, and benchmarking; and institutionalizing, participating, and integrating were more evident in the second phase. These axial relationships of the themes can be portrayed in Figure 15.

*Figure 15. Axial Coding and Themes.*
Actioning was described as the process of making the strategies and priorities a reality, or actionable. This would include how the individual items are measured, assessed, and reviewed. Analyzing was described as showing both proof and accountability, not just for improvement, but for all results. Culturing was described as developing, nurturing, maintaining, and sustaining shared norms.

**Actioning.** NSSE results, once reviewed and discussed in executive council, were not followed up on for actions or further review decided upon as Mr. Jones articulated. Consequently, the momentum diminished on how NSSE results could continue to be used, or capitalized on after the council and committee reviews. Also, after some time, other assessments and actions took precedence. Decisions on administering the NSSE in consequent years and whether to include the FSSE were more deliberate. In some cases, the FSSE was not viewed as being useful in the overall assessment scenario. Deciding on which assessment would, or would not be used, became a matter of funding and what value does the assessment have. Another consideration was its impact on other assessments. This mix of assessments was best categorized by Katherine who stated that “having enough triangulated assessment to make sure you getting what you want” (personal communication, February 14, 2012)

Using NSSE results in the regional accreditation QEP was one area where all the CAOs said they would continue as a resource, to include the strategic plan as well. Despite questions of validity and construct, none of the CAOs would discontinue NSSE, unless of course it was found to be totally unreliable. The respondents all saw NSSE as having valuable data to consider in making decisions, data which has amassed over the years for their institutions.
Sir Arthur recollected the “same players all the time, working this stuff” (personal communication, December 20, 2011) when referring to NSSE related actions and student engagement issues.

We talked about how to build the faculty development so that we could address where these issues are showing that we’re not doing that well, how to build the student initiatives, so it was always a team of people or peoples, two teams, team or teams of people, analyzing the data, strategizing on how to address the data especially in the weaker areas. That was the kind of the stuff that we would then take to the university planning commission to explain here's what we’re doing. Here's what we’re doing to address these weaknesses. So it was measuring each time, are we seeing improvement? . . . but I was always involved with the team of people who, you know, who had their fingers on the pulse of the students and the faculty, those were the ways that we did it. (personal communication, December 20, 2011)

Realizing that “we don't have to invent what student engagement means” (personal communication, December 20, 2011) and referring to how NSSE defined it in the five benchmarks for effective educational practices, was a breakthrough for Sir Arthur and others.

The questions under those five benchmarks were more the analysis part that we had to do as part of a team. But we had to keep those five benchmarks in front of us. I think to kind of inspire people because you know, faculty would kind of say, I'm here to teach English, I'm here to teach biology I'm here to teach business. What we had to do was energize faculty to get behind the idea that sort of, in addition to your teaching, integrated with your teaching. You know the whole environment of the university has to focus in on engaging these students. And I think that NSSE was the language, it was the picture that we needed to engage the faculty. That’s what we needed and they were available to us. (Sir Arthur, personal communication, December 20, 2011)

Summarizing, Sir Arthur continued,

I think, that faculty had to sort of get it clear in their minds that we—it wasn't just students sitting there learning what you teach them, it's the interaction, it's the dynamic that we needed to focus more on and I think we’ve been successful. (personal communication, December 20, 2011)
One historical note is added to the QEP context in SACS. These quality enhancement plans became a requirement at about the same time that NSSE came into existence. As a consequence, some of the initial plans have already been published, some institutions are working on their new QEPs, and others are somewhere in between. As Mr. Jones recollected

We had we had a quality improvement enhancement plan for the first time in connection with the 2000 reaffirmation. And that was the first time they required it of institutions. We were in the first class, or maybe we were in the second class. (personal communication, August 19, 2011)

Mr. Jones, like Sir Arthur, continued that their initial QEP “would never be approved if proposed today” (personal communication, August 19, 2011) because it was too broad. Actioning for 2013 when NSSE 2.0 is scheduled for release did not yield too much discussion. Some respondents were more aware than others on this. Some concern was expressed on how existing and new data would be merged.

Analyzing. CAOs saw NSSE—results and actions taken on those results—as a way to document effectiveness at both the institutional and student level. Along with evidencing, a deeper analysis ensued on what the results actually meant. This same approach was taken with other assessments, in conjunction with NSSE, or more separated. These issues were partially addressed in the integration theme of the first phase.

Assessments require a balance of commitment, value, and funding. If you are not using the results, “why continue to have it administered to the students?” (Katherine, personal communication, February 14, 2012). In comparing other assessments, Katherine said, “the one really strong driver for us in NSSE is that it is both the freshmen and senior measure” (personal communication, February 14, 2012). Katherine, like Sir Arthur,
summarized assessments, in general, in this fashion, “They’re all, they’re all important financial decisions, even if you have a lot of money, because you’re always trying to decide what data you’re going to spend money on” (personal communication, February 14, 2012). However, assessments and evidence from those assessments, at the dean and department levels, can result in some apprehension and dismay.

Katherine perhaps expressed it best, repeating the need for triangulation, when saying

> discovering that many of them [departments] were not assessing content knowledge. They really weren’t sure of what they were assessing . . .[I]n terms of interrelated reliability, recognizing the need to make sure you have good content analysis . . [and] having enough triangulated assessment to make sure you are getting what you want. (personal communication, February 14, 2012)

As Katherine emphasized, good content analyses for internal and external options be they validated instruments, rubrics, and others.

> Katherine related, “The real challenge in using NSSE is not for me, because I find it very important and useful. The real challenge is to get the deans to use it, to work with the faculty, to change behavior” (personal communication, February 14, 2012). Recalling that concern from the first phase, Katherine continued, “And, it hasn’t changed. I mean, I just said to them a couple of weeks ago, how are we in using these data? Oh, and they say: Oh, we told the faculty. No, that’s not what I mean by using, you know” (personal communication, February 14, 2012).

In addressing the nationally normed instruments, such as NSSE, and even the College Board’s SAT (Standard Achievement Test), Katherine stated they all have “challenges in terms of what the referent group is to achieve its reliability” (personal communication, February 14, 2012). If talking about ethnicities, SAT may be flawed in terms of Black Americans. Again, Katherine reiterates triangulation by stating,
I think that at least until we have a significant amount of data on unique populations, it's not fair to say that it's not useful. I think that we have to use any data that we use always in a triangulated way to see whether or not there are other measures that validate what it is we're seeing. (personal communication, February 14, 2012)

Katherine cautioned,

I mean there will always be, and there always should be, a relative disease with generalized normed materials, because there is no such thing as average. [Right]. There's group averages, there's subset averages, there's norms but there's not—there is no such thing as an American. (personal communication, February 14, 2012)

Continuing, Katherine related, “So to try to norm something and say everything is important, or to say that this set of things is important, you'll always find the exception. And that's not going to change. So I think that’s true with our instruments” (personal communication, February 14, 2012).

When asked about a hypothetical faulty NSSE question posed in the second protocol, Veracity observed, “I mean there are always people who, you know, that raise questions about any study, any kind of scientifically document or purported scientific document, you know from drug tests, medical, clinical trials, the CLA for liberal arts education. . .(personal communication, February 7, 2012). Veracity continued, “. . . assuming it [NSSE] is valid and reliable then it is a very useful document, in fact we use it, some parts of it, as metrics to guide our own performance against our own strategic objectives” (personal communication, February 5, 2012).

Redirecting, Sir Arthur related,

The importance is not with NSSE itself, it’s not the analysis of NSSE that has been important to us, it is the actions that NSSE has inspired us to take, that have been that productive for us” (personal communication, December 20, 2011). To improve student engagement, Sir Arthur recounts, “[W]e have gone from one action to the next action in kind of an organic fashion. And we have seen concomitantly that our retention rate has increased—our retention of our first-year students and now our focus
has even gone further to retention of the second year students . . . [We] never used NSSE as the way that we’re defining ourselves or our satisfaction in getting higher scores in NSSE. Our real goal always was to improve the interaction we have with first-year students, so that, they will continue in school . . . (personal communication, December 20, 2011)

Continuing, Sir Arthur characterized what NSSE was, a “tool. NSSE was a way of organizing ourselves primarily around those benchmarks. It was a jumping off point and it became a kind of measurement over the years that we did it, which was very good for us in terms of our QEP” (personal communication, December 20, 2011).

By way of an example, Sir Arthur told of the nature of self-report surveys, NSSE being one of them, using one of the effective educational practice benchmarks within the NSSE, namely the level of academic challenge.

If you asked students, do you think the level of academic challenge here is what you expected? Is it greater than what you expected, is it less than what you expected? Well, again students may answer, but we don't know objectively if the level of challenge is greater than or less than other institutions comparable to our own. . . What does the student learn in four years? There is that way that says, let's measure you here as a freshman—how are your reading skills, how are your writing skill, how are your analyzing skills, mathematical, etc., etc.?, and then we measure you at the end, four years later, how are your very same skills—reading writing analytical, mathematical. Those are objectively like standardized tests. So, that's kind of the hard concrete data that I think most universities would like to have. NSSE only tells you what you think you've improved in, what you think you know more of. It's not objective. So, that is probably the biggest weakness with NSSE is that it is a self-reported. (personal communication, December 20, 2011)

Recognizing that, Sir Arthur related how the NSSE was used by saying,

We were perhaps more interested in things that: Do students feel that that they work with their fellow students in teamwork, do students feel that they interact with their faculty outside the classroom, do students feel that they have opportunity to discuss within the classroom? Now, those things are a little bit more objective . . . But, you know, we wanted to know, do our students feel that they have access to the faculty and that they have opportunity to have meaningful interaction with the faculty. Do the faculty help them by talking about the major? Does the faculty have time for them, to help them with problems? Those were things that we felt we
could work from. One of the biggest areas that we felt our freshman students were lacking in, according to their own self-report again, as opposed to our senior students, according to their self-report, was that seniors worked more collaboratively with other students—freshmen did not. And that’s largely we felt that freshman often—they come into class, they are new into university, you’re kind of laying the foundation to be able for them to be able to work more independently or in teams. But we did try, through a series of workshops that we had with our faculty, to—they were workshops on collaborative learning, models of collaborative teaching and learning—so that we did try to promote among the faculty through faculty development, more interactive ways to work with freshman—so that the students kind of were talking and participating and working, not just listening. (personal communication, December 20, 2011).

“When it came to student engagement,” Sir Arthur stated unequivocally, “the primary focus has to be the classroom…because that is something for sure, that we know all students do” (personal communication, December 20, 2011). Concluding on this point, Sir Arthur said, “Therefore the focus has to be on the teaching faculty and improving their understanding and their ability to teach effectively students today” (personal communication, December 20, 2011). Cautioning, Sir Arthur appended a comment on distance learning by articulating, “if we are going to add components of distance into our blended learning environment, they, it can't be at the risk of losing something, it has to be with the belief that we’re adding something into the students’ learning experience” (personal communication, December 20, 2011).

Conversing on the frequency of administering the NSSE, Sir Arthur said, “We think that NSSE has been a good instrument for us. First of all you don't do it every year. You do it every three years or whatever we decide to do it. We didn't want to do it so often that there wasn't time to make improvements, or to take some action on the basis of what we learned from NSSE” (personal communication, December 20, 2011). Also relating a longitudinal look, not on the students, but “on the actions that we have taken,”
Sir Arthur echoed some of what Katherine related as to the results, value, and financial cost, concluding “We've got a lot of good information from it” (personal communication, December 20, 2011). This information was obtained without the auspices of a test and, as Sir Arthur described, “students do tend to like the NSSE because it's like they're being asked to describe their experiences in school—they are not being tested as to what they've learned. So that's why it's helped us. That’s why we stuck with NSSE” (personal communication, December 20, 2011).

As to the Faculty Survey of Student Engagement, Sir Arthur, like Katherine, replied, “we have seen very little action off of it” and “we have actually worked more off the NSSE than we did the FSSE” (personal communication, December 20, 2011).

Katherine concern was more focused on freshmen faculty but still observed, 

... we don’t have an end large enough to make it meaningful ... I’m not convinced you’re getting a whole lot ... Now, if I was able to aggregate several years’ worth of faculty responses and do it against one data point in NSSE, that would make sense to me ... I didn't find a lot a utility in it. (personal communication, February 14, 2012)

The CAOs and their institutions are in varying stages of the overall accreditation process, some preparing for reaffirmation, others beginning the development of Quality Enhancement Plans. Some of these stages are coincidental to strategic plans. Most see the continued use of NSSE results in some fashion or form in the QEP as well as other evidencing actions; however, the degree of use may change as new QEPs are developed and executed.

**Culturing.** Culture at its basic level can be defined as a sharing of beliefs, norms, and ethnicity between people that affects behavior. However, that understanding of culture may change in organizational settings. Still, people have different ideas of culture. Some see it as a refinement, higher ordering, or perhaps worldly when referring to
activities as going to the opera, or being widely educated. Cultured may also mean a coming of age, maturing, or ripening as in cultured pearls. Culturing, used as a verb, can take on a very direct approach, as in planned change, or in varying degrees, more nuanced applications.

Hofstede (1997) used the terms “mental software” to begin understanding the word culture, a word of many meanings and “all derived from its Latin sources, which refers to the tilling of the soil” (pp. 4-5). He defined culture as “culture one” (civilization and refinement) and “culture two” (collective phenomenon) (p. 5). “But culture two deals with much more fundamental human processes than culture one; it deals with the things that hurt” (p. 5).

Culture (two) is always a collective phenomenon, because it is at least partly shared with people who live or lived within the same social environment, which is where it was learned. It is the collective programming of the mind which distinguishes the members of one group or category of people from another (emphasis in the original). Culture is learned, not inherited. (Hofstede, 1997, p. 5)

Schein (2010), on the other hand, defined the culture of a group in a more organizational sense as

a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems Culture by this definition tends toward patterning and integration. (p. 18)

The meanings of culture and culturing in this research are more in an organizational sense as defined more by Schein (2010), than Hofstede’s (1997) intercultural identification.

Katherine expressed how well the institution scores on service, pointing out that others explain that by the demographic of the students matriculating at the institution. And, perhaps that is “because they’re [Mexican-American population] is much more dedicated to service” (personal communication, February 14, 2012). But,
we have to look at it in the context of value added. So did it change because they came here? Did we engender some additional sense of service in them? Likely not. They came with it. We may have enhanced it. We may have broadened it. We may have shared with them other opportunities within the service area, but they come to us with an inherent sense of service. (personal communication, February 14, 2012)

Continuing, Katherine related

So we always have to look at whatever measures we use within the context of the populations we serve and within a larger demographic. What are the data saying to us? And if we’re using them well, we’re having both the skeptics at the table and the gospel singers at the table. We have to have both groups that are constantly challenging us to think about the way that it is. (personal communication, February 14, 2012)

The second protocol asks the participants what it means to be a CAO of a Hispanic-Serving Institution. The responses ranged—some more personal and others relating commitment and change.

Katherine expressed what it means in terms of change.

And so that although I've not walked the path of the students that are here, I know the difference in education makes . . . I know that the opportunities to change a family forever are one degree away. So we have to get them through bachelor’s degree. Once they’ve achieved the bachelor’s degree, we changed them forever. (personal communication, February 14, 2012)

Adding context to those who go on to graduate school, Katherine emphasized the importance.

Well, and it's important because it's Hispanic. It’s a Mexican-American population that for the most part, not incredibly knowledgeable [of college culture] about the college culture, college going. So, that once we get them here, we seem to instill in them the value of going beyond the bachelor’s degree and that's an important piece for us. I don't think we’ve talked about it quite enough, but. It is my privilege to serve here, and as we talk around here, it is really it’s really providential that I'm here. I have said to more people, you know, I get up in the morning and I look in the mirror and I am very clear about the fact that I don't look like everybody else here. It doesn't change my passion for what I do—I'm here for a reason. (personal communication, February 14, 2012)
The difference in what it means to be Hispanic serving, in Katherine’s words, is a difference in the way we attend to the population, and I think there's a lot to be learned among those of us that who serve . . . significantly different populations, whether we’re talking about HBCUs, or whether were talking about Hispanic-Serving Institutions, whether we’re talking about Tribal Colleges. . . We’re different because of our critical mass that allows us to pay attention to our populations in a way that a traditional university [cannot]. . . So, what's going to be important moving forward is how to we begin to help our peers, our brother/sister institutions learn what it means to serve a population that for the most part . . . a population that has not really come into its own. (personal communication, February 14, 2012)

Veracity related how being a Hispanic-Serving Institution CAO totally comports with my own vocation as an academic administrator. And, it coincides with the mission of the [institution, redacted for identification purposes] . . . And in as much as Hispanics [who] tend to be first-generation college students, perhaps second generation sons of folks who just came to America [again referring to the institution and redacted], I feel it is a moral responsibility to provide an education of quality that helps them all to succeed. (personal communication, February 7, 2012)

Veracity’s experience included seeing how these first generations “were educated, and now have taken their place responsibly in American society. And the same applies for Hispanics” (personal communication, February 7, 2012).

Referring further to Hispanic-Serving Institutions and whether they need to prove they are Hispanic serving, Veracity observed,

There is attached to it certain metrics that you have to prove. And I think those metrics are useful but I think they're more, what I would call input metrics. I would like to see a cluster of output metrics that says, you know, we’re not, our student body is not just some percentage of Hispanics, but in fact, here are our metrics for how we help Hispanics attending, graduate at a rate six year, five year, four year rate, here’s how our rate of success with placing Hispanics in medical school, law schools, in the professions, in graduate school, so I would like to see a cluster of whatever they are—output metrics, not just input metrics. (personal communication, February 7, 2012)
In trying to outline a more defined category for Hispanic-Serving Institutions, Veracity used an example beginning by saying,

not only are we serving Hispanics who are first generation or Hispanics, but we have [referring to the location and ethnicity who are] often second generation, first-generation, mostly first-generation college attendees. And I don't want to feel like I am doing anything differently for [them, as above] than I am for the Hispanic population. And I can imagine that there will be other waves, you know, as other kinds of immigration patterns emerge—the mission holds. Whoever comes to America in need of the educational resources that are necessary to prosper and thrive and flourish, is [type of university that ] I'm interested in. (personal communication, February 7, 2012)

A somewhat different approach was taken by Sir Arthur responding to what it means to be a CAO of a Hispanic-Serving Institution, and began with,

I think because so many of our students are Hispanic and so many of those Hispanics, but not all of them, but so many of them are first-generation, that we tend to build our whole first year engagement around the idea that these students are all first generation, even if they're not. . . the things that you know to be good for first-generation students—lots of education, lots of interaction with their parents, presuming that they don't know really what they're doing, presuming that they don't know the difference between a major and a minor, a concentration; presuming they don’t know where to go and find a catalog, presuming that they that they are really unclear about what financial aid is—presuming that they need their hands held at least for the first year, that's how we built our whole program. (personal communication, December 20, 2011)

Encapsulating, Sir Arthur stated, “I think that we don't tend to isolate the idea of minorities in our school, we treat all students as if they're my minorities” (personal communication, December 20, 2011).

Mr. Jones related how being Hispanic-serving is supposed to be intentional; however, posturing, says, “I’m not sure if that is merely a byproduct” (personal communication, December 11, 2011). Further explaining, Mr. Jones continues putting the answer more in both demographic and mission related terms,
And as the neighborhood changed, who we were serving changed. And so it should have a development of a kind of predominantly Hispanic clientele as a result of who you are. You have to kind of adapt your orientation somewhat; but I don't think the basics of that changed because you still maintain the same issues of quality and rigor that you had when you first started. It's just that now, it's of benefit to a different population. The reason why I say byproduct, is because we didn't go . . . and chase down Hispanics students, they tend to come to us because of the awareness of the institution . . . that's been here providing quality education all those years. (personal communication, December 11, 2011)

Any changes or additional support systems would occur over time, say for instance, language. Looking into the future, Mr. Jones expressed

I keep wondering when are we not going to be here and that is part of the story about Hispanic people and African-American people that I’m the first one from my family to go to college. You would think that over time, you should hear fewer and fewer of those stories. That shouldn’t be part of the narrative . . . at some point. . . . I think that we've adapted. I would say that we've done it gradually as we kind of looked at the clientele that we’re serving changing.

(personal communication, December 11, 2011)

Incorporating more of the institution’s mission, Mr. Jones first pointed out, “But Hispanics [the word] are not in the mission [referring to the mission statement]”

(personal communication, December 11, 2011) and then discussed more of an inclusive community role.

Facilitator responded by saying,

I think what it says is that we are an institution that really, at some level, reflects the world we live in . . . I’m very proud of the fact that we’re an Hispanic-Serving Institution, but I'm also happy that it's an institution that has a balance . . . that’s got a strong population of Hispanic students but also has Caucasian students, Asian students, African-American students—I think we've got to keep that piece.

(personal communication, December 21, 2011)

**Participation Rates.**

The participating theme was identified in the first phase. Along with institutionalizing and integrating, participating was part of the axial relationship found as culturing. Because of its recurring nature, it is discussed here as a separate section. All
the respondents encountered varying degrees of participation in not just the NSSE but other assessments that were being done at the institution. Parallels were discussed between NSSE and other assessments to include student satisfaction, employee satisfaction, and course evaluations.

For Katherine, “NSSE is not a problem for us. Right now the struggle for us is CLA” (personal communication, February 14, 2012) referring to the Collegiate Learning Assessment. Continuing, Katherine related how to increase that participation rate,

You’ve got to embed it into classes. You’ve got to have a faculty member and one what we’ve tried to do is a cross-section of classes across campus, recognizing that most of our seniors classes are majors. We try to do a cross-section of our majors in order to get a good sampling. But it’s not easy. (personal communication, February 14, 2012)

Some of the participants were under the assumption that the students participating in NSSE received some form of a report as evidenced from both phases of the result. However, the research points that no such report exists, at least coming from the NSSE as an organization. How students find out about the results was varied to say the least.

Katherine’s articulated that
certainly in terms of our QEP [Quality Enhancement Plan] our students know more about NSSE than what they knew about NSSE before, because we use so much NSSE data in the QEP. So I think—has it been important to them?—only in shining the apple and saying, look how good we are. (personal communication, February 14, 2012)

Katherine analogized between the SAT and NSSE and said,

we’ve institutionalized SATs. . .there is a value added to the SAT because if you get a good SAT, you get into a good school. Right now, there's no identifiable value to what NSSE tells me. So if that got linked to something, you know, I don't have to do a service learning program if I score high in the service section of the NSSE, it may become more important to them. (personal communication, February 14, 2012)
When asked how students see the NSSE results being used, Katherine explained, “The only place that they would see that, I would say to you, is one of the places they may see that would be in the freshman year experience course” (personal communication, February 14, 2012). But this was dependent on previous students talking with current students and comparing the course itself. Concluding, Katherine observed, “So no, I don't think the students know at all what we do with those data” (personal communication, February 14, 2012).

Addressing participation rates, Veracity stated the parameters and said,

This is a matter of great discussions, and it doesn’t only apply to NSSE and students’ serious, thoughtful student participation is the crux of the matter. And so we’re were actually beginning discussions in some sectors on campus of actually including it as part of a course requirement, some sort of credit bearing that this is, this is part of a grade somewhere. (personal communication, February 7, 2012)

Continuing, Veracity emphasized that, “If it's an important instrument that we use its metrics to tell the world what we’re doing, it ought to count for something. Publicizing the results, in Veracity’s mind, included a “presentation to student government, and in the best of all possible worlds even a website that not only tells what NSSE is, but also the CLA data. Because we’re a [type of institution] liberal arts institution and we ought to be able to demonstrate that we do what we say we do” (personal communication, February 7, 2012).

How to publicize and inform, as Veracity explained, “I think that would probably be a part of encouraging students to participate. I mean it naturally, whenever you ask anyone to do anything, whatever they do, shouldn’t go into a black hole. They should know, well, you did this survey, you performed this function and here's the result of it. So it encourages you to keep doing it” (personal communication, February 7, 2012).
Comparing efforts to increase participation on a student satisfaction survey and course evaluations, Sir Arthur described how we tried to boost the involvement of students in this [student satisfaction survey], as we sort of press down hard on different groups. So we go to the coaches and get their athletes to do it, go to faculty and administrative office and get their work studies to do it, go to student life and get sororities, get residence halls. So you kind of tried to segment it and encourage groups to get the students that they're actively touching and involved with, get them involved and to do things. With our current course evaluations, which are also a digitized survey, we are sometimes asking faculty to give their students ten minutes in class to use mobile devices to respond to these things. Now, NSSE is not short. So it's really hard to use class time and that is one of the problems with NSSE is—students run out of interest. (personal communication, December 20, 2011)

Responding on how to publicize NSSE results and the use of those results, Sir Arthur recalled how NSSE encourages institutions, that is to say, not to talk about the whole survey, but perhaps to highlight two or three things. You might go to the... the newspaper, and you might highlight two or three things that really stand out, you might then do a little article about how we've actually increased that number by the involvement in faculty in certain types of workshops, say. You would try to make a little bit of publicity around—Hey, we're really doing this well. You know, that's the headline and then the article might be saying: Well this is really the result of work that we've done on this, this, and this. Their [students] interest may be limited in that. You might have posters around the campus that say: Here's something that we do really well. And, that's you know, that's about as much as I can see—just giving all the results, students would not be interested. (personal communication, December 20, 2011)

Addressing belonging, Sir Arthur recounted in terms of engagement, we did make a kind of correlation that if student engagement increases so would their sense of belonging, their sense of being at home in the classroom or being at home on the campus feeling like this is their place. I do think that there are a lot of things that we do on this campus for better or for worse that I think, you know the administrators of the university meet every semester with the students and answer their questions and hear their complaints. And, so there is as much transparency as I would say, you know, many universities, many students feel that they have access to the president, they have access to the provost, much more than what I would expect in a big university. It's very common. (personal communication, December 20, 2011)
But, “On the other hand, there is also very little understanding on the part of the students as to how a university works (Sir Arthur, personal communication, December 20, 2011).

In responding to how students should be informed, Facilitator said, “I doubt if we do any in terms of direct feedback to the students. Now, I think there’s a lot of feedback they get because of how we use it and how we understand ourselves” and asked: “Do we change things because of that [NSSE and other results]?” (personal communication, December 21, 2012). Answering yes in part, Facilitator continued, “But usually it is because of an integration of things” (personal communication, December 21, 2012).

Like others, Facilitator explained how working together with the faculty increased participation rates by saying,

But the NSSE, what we did was, we went through and identified faculty that we felt could encourage them and not jeopardize it, not threaten or anything, you still have the the right to do it or not to it. But tell them that, you know, we use these data, they’re important to our understanding, where we need to go etc. and we went back to the faculty and asked them to ask the students to do it. And it worked. (Facilitator, personal communication, December 21, 2011)

Mr. Jones started by saying, “they need to understand and you got to communicate to them, what is the value of this enterprise for you?” (personal communication, December 21, 2011). In addition to using the school newspaper, Mr. Jones continued,

. . . And I think you really have to co-opt student leadership on something like that. I think you have to be talking to the different heads of the student organizations and have them understand what is the purpose behind all this meticulous record keeping and surveys. And what it is basically is you are trying to get them to understand, it's a mechanism that we use to improve customer service. So what we want to know from you as the customers, how can we make the product better for those who you’re? (personal communication, December 21, 2011)
In discussing survey participation rates and how to increase those rates, participants were asked, in essence, “How does involvement and knowledge of results impact on those rates?” As expected, the responses varied.

Katherine, addressing the value of students’ opinions, expressed the situation by starting with,

Yes, but we have to remember in our dialogue with our students, that they live within a context that they do not fully understand. College is a transition place. . . As long as we are providing that safe context for them to learn the rules of society, we have a value beyond educating them. It would take someone much longer to learn the skills of critical thinking or problem solving or group participation or teambuilding or analytical thinking, if they were out doing it themselves. So what we do with them, we give them this cultural climate in which to develop that set of necessary knowledge skills that they’ll need to succeed. So do we do need to ask what they think? Yes. But we always need to value that in the context of what we know as the people who have crossed over to the other side and live in this place. I think that they have some wonderful insights. . . They asked questions that are more harder than what the faculty at the table or in the business department. Because they're naïve. So they can ask questions because we wouldn’t think of asking because we think we already know the answers. (personal communication, February 14, 2012)

However, as Katherine continued,

I think it should be seasoned with all sorts of different inputs. I think that when we take a position that we know what's best--that's not a good position. Or when we give it over to them, and they say that they know what’s best, that’s not a good position. We need to season all of this depending on what it is that we are addressing. So I have to step out of my box . . . to understand that their box is informed in multidimensional ways of learning that didn't exist when I was in school. (personal communication, February 14, 2012)

Raising participation rates are further discussed in the implications of the study for higher education in the next chapter.
Summary of Second Phase Results

- Three interrelationships were identified and supported—actioning, culturing, and analyzing.

- Efforts to raise NSSE undergraduate participation rates included: embedding into credit courses, allowing time during class to complete surveys using available mobile devices and computers, using faculty to promote completion, and increased advertising. This was in addition to incentivizing monetarily or giving gifts. In general, these efforts did not raise rates to levels that all CAOs were satisfied with.

- Evidence of direct feedback of NSSE results to undergraduates was not found.

- Providing educational access and a quality education still remains a challenge while serving minority populations, and student populations in general.
Chapter Five: Discussion and Recommendations

Introduction

The National Survey of Student Engagement initiative was conceived in 1998 and initially supported by the Pew Charitable Trusts. The impetus behind the initiative was that “quality’ has been centered on the wrong things” (Our Origins and Potential, 2012). At that time accreditation and government requirements were largely process and compliance measures. Other third party judgments of quality used selectivity and credential measures. An undergraduate survey to assess undergraduate quality was deemed to be a better measure than measures of reputation, like the U.S. News and World Report (USN&WR). The alternative, The College Student Report, a survey of undergraduate educational practices, was successfully piloted by NSSE in 1999 with 75 selected colleges and universities, and in the spring of 2000, inaugurated with some 275 colleges and universities participating (Our Origins and Potential, 2012). Now, in its twelfth year, the survey involves over 750 institutions and 500,000 students in the United States and Canada (NSSE 2011 Overview, 2012). A major revision entitled NSSE 2.0 was announced in 2012 for implementation in 2013 (About NSSE, 2012).

The better measure of undergraduate quality, now the NSSE, has not replaced the U.S. News and World Report (USN&WR, 2012) survey which has also grown in scope. That survey still ranks colleges and now rates online programs, world universities, hospitals, vacations, and even cars and trucks and offers a guide, the U.S. News College Compass, in finding and selecting colleges. The USN&WR has been joined by other rankings, surveys, and guides: The College Board (2012), Peterson’s (2012), Wintergreen Orchard House (2012), and the University College and Accountability Network (UCAN,
The Common Data Set Initiative (2012) states its purpose as a “collaborative effort among data providers in the higher education community and publishers,” and has “represent[ation] by the College Board, Peterson’s, and U.S. News & World Report.” The U.S. Department of Education’s Integrated Postsecondary Education and Data System (2012) offered its own college guide, the College Navigator, at the National Center for Education Statistics (NCES) in the federal government.

All five institutions represented in this research have participated in NSSE for a number of years, some almost from when NSSE itself began. The institutions, and consequently the research participants, were identified by using a selective process. Institutions had to be private, Hispanic-Serving Institutions (HSIs), participated in NSSE from 2009 to 2011, and be accredited by the same regional accrediting agency—Southern Association of Colleges and Schools. And, most of the institutions represented also participated in a co-sponsored initiative by NSSE and the American Association of Higher Education entitled Building Engagement and Attainment for Minority Students (2010) fostering education attainment through the use of institutional data.

The purpose of this grounded theory qualitative research was to investigate how chief academic officers at these five institutions utilize the National Survey of Student Engagement (NSSE) results to improve institutional effectiveness and promote undergraduate student success. The focus of this study was on undergraduate education. The rationale was to identify an elite, purposeful sample, for maximum transferability of the findings using grounded theory—a method and a product (Charmaz, 2006), in the qualitative paradigm.
Discussion of Findings

The discussion focuses on the two guiding research questions:

1. **How do chief academic officers disseminate NSSE results to facilitate institutional effectiveness?**

2. **How do chief academic officers promote undergraduate student success using NSSE results?**

The emerging grounded theory, implications for higher education, and recommendations for future research follow this discussion of findings.

**Research question 1: How do chief academic officers disseminate NSSE results to facilitate institutional effectiveness?** Disseminating is not just a matter of distributing. The act is more of communicating, not just the results, but what actions are needed. Responding CAOs participated actively in receiving, reviewing, digesting the data, and taking action on what was learned from the NSSE results. All research participants did not receive the published results directly. The published results usually went to either the university president’s office or institutional research office. The published results, executive summaries, and analyses were soon available to the CAOs and others at the university and followed by councils, committee meetings, and presentations discussing the results and actions needed.

These reviews had a short life cycle unless something major was found. One example of this type of finding was learning that students did not know the institutional mission. CAO Veracity detailed how a new course was developed and executed to rectify this finding. Other issues received notice in the review process but took some time in getting back on the agenda. An example of this was a difference between Whites and
Hispanics on student support related by CAO Jones. The responding CAOs also stayed more involved with NSSE related actions when results were integrated with other benchmarks, quality enhancement plans (QEPs), and strategic plans. All participants related linkages between some individual NSSE questions/results and their respective QEP. Changing missions, strategies, and newer QEPs may result in less integration of NSSE results. CAO Facilitator provided an example of this where the mission had become more global. Otherwise, once NSSE results were reviewed discussed, and actions identified, CAOs seemed to lose sight of what was being done with the results. Most participants did have dashboards on which the published results were loaded. Some of these dashboards operated on purchased software. One dashboard was locally constructed. If discussed in executive councils and other forums, departments and units were expected to take their own actions if the deficiency was found in their purview. The CAOs did not specifically task institutional research departments or other departments. When the NSSE review cycle concluded, institutional research retained management control.

The responding CAOs continued these discussions with their deans and departments. These discussions did not necessarily result in more discussion on how to use NSSE results, as hoped for, by some of the research participants. One of the reported reasons was that graduate faculty were not concerned with NSSE and its results since it is an undergraduate assessment. This finding was generally true, even though some respondents indicated high percentages of undergraduates going on to graduate studies at the same institution.
Chief Academic Officers did not, from what they communicated, overtly control the entire dissemination process. They appeared more to participate more when it came to reviewing, analyzing, and actioning, and then re-entered the process when needed.

The current NSSE results were communicated in varying degrees and modes. Specific results were identified and published on websites and school newspapers. These results advertised, in general, how well the university did in comparison to other institutions of higher education. The analyses (executive summaries) of results for both the current and previous NSSE administration were found on one of the institution’s websites. Another executive summary was only found and reviewed by arrangement. All of the respondents related the need to better communicate specific public results, but did not agree on how decisions and actions taken based on those results should be communicated to undergraduates participating in the survey.

Finding the right mix of university-level assessments is not an easy task. Nor is it easy to adjust the mix of assessments. Research participants identified a variety of assessments in addition to NSSE including Collegiate Learning Assessment (CLA), Cooperative Institutional Research Program (CIRP), Faculty Survey of Student Engagement (FSSE), other NSSE related surveys, student satisfaction, and course evaluations. CAO Katherine emphasized the need to triangulate assessments, using several assessments, not just NSSE, in conjunction with each other, to know more about undergraduates and what actions and decisions need to be made. The NSSE assessment is a self-report survey whereas CLA and CIRP are more cognitive. Course evaluations and satisfaction surveys are self-report. CAO Sir Arthur expressed how students are more likely to answer surveys which ask how they feel, versus feeling that they are being
tested. It was also deemed difficult to decide when and how often to administer these surveys. Administering too frequently does not allow time in between to make reasoned decisions. Even NSSE limits the number of follow-ups when administering its survey. Administering it in conjunction with too many other surveys and assessments may not only decrease NSSE expected outcomes, but decrease other outcomes as well.

Administering other surveys and assessments, not related to undergraduates, may also impact on when student surveys are conducted. Some of these surveys are not always administered under the CAO’s purview. For instance, surveys as part of class assignments that may involve other students and not require any institutional review board approval. Other departments may survey individuals. The research participants may not be aware of how many surveys were out there when making decisions about major surveys.

Though some of the institutions represented have conducted the NSSE in successive years, most elected to wait two to three years in between. This allowed time to analyze, take needed action, and see the results of the actions taken. All of the participating CAOs reported comparisons of current results to previous results, not confined to just the previous year. This way, the institution used the results longitudinally. The NSSE results cannot be used longitudinally to indicate individual student assessment. The same students are not responding in successive years. The possible exception would be seniors responding in one year may have been the same freshman in previous years. This does not mean that the actual NSSE results are not meaningful over time. Comparisons to previous years and benchmarking—educational practices and peers—are prime examples. Also meaningful is the progression of
decisions, improvements, and failures relating to NSSE. CAO Katherine related how one attempt at learning communities failed. CAO Sir Arthur described how the NSSE results were more of a validation of programmatic decisions and actions taken to administrators.

This research explored how the NSSE results were used. It did not ask specifically why institutions decided to participate in NSSE, and for that matter, other assessments. However, assessing institutional effectiveness can be surmised from the data collected. NSSE is a self-report as are other surveys like student satisfaction, employee satisfaction, and course evaluations. Individuals are being asked how they feel about things and not being tested and as CAO Sir Arthur expressed earlier, self-reporting in NSSE can be more user-friendly to participants.

In higher education workplaces, satisfaction surveys and other surveys are administered to better understand employees and the environment. Some of these surveys may even result in significant institutional recognition. The results of those surveys and actions taken based on those results are often shared with administrators, supervisors, and employees even if the institution is not recognized. These discussions often allow the workforce to better understand why or why not certain things happen.

The research prompted additional discussion on three major points centering on accreditation, defining success, and learning more about Hispanic-Serving Institutions. The first was that CAOs reported a deeper understanding of accreditation by using NSSE results. Other accrediting processes, licensures, professional examinations, and related processes were found to inform, and likewise, be informed by the regional accrediting process in outcomes assessment. These processes, either in conjunction with, or separately, contextualized regional accreditation to a greater degree along with
assessments and surveys. The idealized context of the study related in the first chapter was found to be more nuanced and complex. Though regional accreditation is prevalent, there are other accreditation or validating processes that can be synergistic for accreditation and assessment in general.

A second point was that through the use of NSSE results, CAOs seemed to discover a broader and more extensive meaning of student success besides graduation and retention rates. Student success can be an equal partner in institutional success. In defining institutional effectiveness, CAOs, for the most part, integrated the notion of student success. In essence, institutions were effective if their students were successful. Institutional effectiveness was defined in terms of student success. Other definitions of student success included contributing to society, making an impact, and contributing back to the alma mater.

A third major point was the growing awareness of what was being learned at Hispanic-Serving Institutions could be applied, not just within the institution but with other like institutions, but also other Minority-Serving Institutions (2012). A way of making this point is to ask: How are Hispanics being served and abstracting that to how other minorities and emerging populations can be served? When asked what it means to be a Hispanic-serving CAO, participants initially reverted to the federal HSI definition. But, as the research found, these participants were passionate in how they viewed their responsibilities, personal and professional. Being a Hispanic-Serving Institution was more than just the federal definition. Hispanic-Serving Institutions are not permanently designated like Historically Black Colleges and Universities (HBCUs) and different funding equations are used. Once an institution has a certain percentage of Hispanics, it
can apply for grants and other funding. Katherine is most succinct about this first stage saying, “because you achieve the 25% you get to be in the club” (personal communication, February 14, 2012). Important to note, all these institutions did not begin as Hispanic-Serving Institutions but now fully identify with the designation and in some cases, have additional grants based on that designation. Some have more Hispanic students than others, the percentages differing by 40 percentage points, as well as Hispanic graduation rates equaling or surpassing White graduation rates.

Nora et al. (2005) noted that it is important to extend what is learned about first year retention at Hispanic-Serving Institutions into the second year and beyond. Surveys like the NSSE, offer

an opportunity for many institutions to benchmark their student’s experiences in these areas, but institutions need to develop their own instruments to fully capture the unique interactions between student and institutions, from student interactions with other students and faculty, to student finances, to student engagement with campus support systems. (Nora, Barlow, & Crisp, p. 150)

In a personal communication, (A. Nora, May 3, 2012), Nora stressed that it is key to develop institution specific instruments designed to better measure that unique interaction between students and institutions. Nora believed the construct and validity of NSSE was faulty and, also, was one of the authors cited in developing the second protocol on this issue.

Nora et al. (2005) continued by writing,

Institution-specific experiences play a larger role in student persistence as time passes, so that a more fruitful understanding of the nature of these experiences and how institutions may influence them must be drawn not from data sets that combine data from many types of institutions, but from single-institution and like-institution studies that are designed to capture the persistence process over time within the unique context of an institution. (p. 150)
Though not institution specific, one sanctioned adaptation of the NSSE entitled the CLASSE (Classroom Survey of Student Engagement), previously discussed in the literature review, localized and compared both faculty and student expectations. Comprised of two instruments, the assessment results “can help pinpoint engaging pedagogical practices, shape teaching and learning experiences, and inform faculty development activities” and “help focus campus efforts to improve student engagement” (Classroom Survey of Student Engagement, 2012).

Some parallels were drawn in the literature review to Nora et al.’s (2005) student/institution engagement model using the Tinto and Pusser (2006) model commissioned by National Postsecondary Education Cooperative. One parallel is institutional commitment being voiced in terms of student success. Feedback is more prominent in the Tinto and Pusser model. However, the main difference between the two models is persistence versus institutional action. This institutional action is delineated in the title of Tinto and Pusser’s study—*Moving from theory to action*.

**Research question 2: How do chief academic officers promote undergraduate student success using NSSE results?** Most evident in promoting student success was how CAOs characterized their use of NSSE results to make programmatic decisions, collaboratively as CAO Veracity observed, and respectfully as CAO Facilitator noted. If the actions taken based on these decisions are successful, then student success and institutional success are promoted. But, as seen in the previous discussion, the information used to make those decisions was based on a lower percentage of student responses than what the CAOs expected or desired. Admittedly, 100 % participation was not possible. However, more than 30 to 40 % was feasible and as learned from the
literature, possible. As was seen in the research, undergraduates were surveyed in many ways and forms. The frequency of these surveys can be higher than imagined. For instance, when NSSE is administered, that same undergraduate respondent may also be surveyed multiple times on course evaluations or perhaps another major assessment like CIRP or CLA. NSSE is not a short and condensed survey. It does take time, time faculty and administrators see as available, but students may not. Also seen in the research, the administration may reach out to the faculty in making time available to take surveys and assessments during class and on mobile devices. Another time related issue is how many follow-ups occur reminding students to take the measurement. Depending on course loads, the student could have four, five, or more course evaluations. The final results of all these measurements may be communicated in targeted points, but again, as all the research respondents indicated, actions taken based on those results are indirect, not direct. Changes made to a course by the instructor would not be known to the student responding that semester unless they repeated the course or heard secondhand from another student taking the course after them.

All institutions had publicized in varying degrees the NSSE results of their most recent administration. Some of these results were on institutional web sites, others were reported on in school newspapers. Some committees, such as assessment committees, were more active in the continued use of NSSE results. The actions taken as a result of participating in NSSE were not evident as far as a web presence or other modes. These actions were programmatic in nature, and the participants related how some of these actions came about. But, students were not able to connect any programmatic actions to
advertised results, as best as can be determined, with regard to both student success and institutional effectiveness.

Programmatic decision makers viewed NSSE results as an evaluation of how good their decision was. Was it successful or was it not? Or, how successful was it? CAO Katherine related on the unsuccessful attempt to sustain a learning community.

The major discussion point here is how CAOs can use NSSE results more effectively in a disaggregated form. In the first protocol, the term tracking was actually used in asking how CAOs made use of NSSE data. Though the research collected data using that term, the more appropriate term is disaggregation. Breaking down the aggregate results into pieces that can be used by others is both useful and effective. This disaggregation can add meaning and understanding at many levels. The student data used by NSSE is regulated by the U.S. Family Educational Rights and Privacy Act (FERPA). The participating institutions provide first and last name, ID number (not social security number), email address, class level, enrollment status, and sex. Options include ACT/SAT scores, race/ethnicity, and other selected data decided on by the institution (Institutional Participation Agreements, 2012). Consequently, the published results and associated data can be further analyzed and organized, either internally or externally through the use of contracted software. Referring back to the issue in student support described by CAO Mr. Jones, levels of support were different between two ethnicities. Being able to disaggregate the NSSE results was a benefit noted by several of the research participants. The benefits of disaggregation can also extend, as Pike (2006) related in the literature review, to using scalelets and mini-assessments to focus on specific improvements.
The value of administering and using the Faculty Survey of Student Engagement as an additional instrument was questioned by some research participants. In one case the FSSE had been administered on several occasions and in the other case only once. The main concerns focused on relating results—faculty to student, student to faculty—and differences in findings. One common example is the difference between what students answer on the length of papers assigned as compared to what instructors say they assign.

Discussion points common to both research questions. Some research issues relate to both institutional effectiveness and student success. One such discussion point is participation rates. Raising rates of participation is one such point. Participating CAOs all indicated that they wanted higher participation rates not just in NSSE but in other specified surveys and assessments. Higher rates not only provide more information, but may provide better information. These same rates indicate that more students are engaging in the assessment. This additional information may come with biases as Bowman (2011) indicated and associated with self-report surveys like NSSE. This point is further stressed in the implications of the study for higher education.

Emergence of Theory

Convergence was offered in the beginning chapter as one perspective in describing how theory emerges. Another perspective can be portrayed using Strübing’s (2007) pragmatist perspective. The grounded theory design elements in Figure 16 are used to describe the theory that emerged in more of a non-linear fashion.
The constant comparison between the developing theory and process, and hypotheses and data along with using induction, deduction, and abduction over time allowed the grounded theory to develop and emerge.

This emergent grounded theory—eight themes and three relationships—is characterized by the synthesis pyramid in Figure 17.
The eight themes derived from the first phase provided the bases for the three relationships—actioning, evidencing, and culturing. These relationships all support synthesis of success—for students and institutions—at the apex of the triangle. This synthesis, articulated in this fashion, also resonates what was found about using NSSE results guided by the two research questions.

**Applying and integrating the synthesis pyramid.** The pyramid is a synthesis of applying the methodology—grounded theory using constant comparison analysis—and constructed meaning from the data collected and analyzed using the protocols and other sources. The eight emergent themes (first phase) and developed relationships (second
phase) coalesce into success—students, chief academic officers, and their institutions—providing a “causal explanation” (Schwandt, 2007) or theory generated from data. This type of theory, called grounded theory, and espoused by Glaser and Strauss (1967) “provides us with relevant predictions, explanations, interpretations and applications” (p. 1) and “is a way of arriving at theory suited to its supposed uses” (p. 3). This symbiotic nature—adequacy and process (Glaser & Strauss, 1967), and method and resulting theory (Bryant & Charmaz, 2007b)—contextualized this research and is further discussed below.

The synthesis pyramid is a way of unifying the findings of this research. The initial theoretical framework espoused in the first chapter used the addition of institutional effectiveness and engaged students to result in educational success. However, it lacks an environment in which to operate. Ecology, described in the first chapter, was a “multilevel conceptualization of the environment and reciprocal interactions among people and environments” (Daniel & Poole, 2009, p. 91). Daniel and Poole (2009) recommended ecological considerations be taken into account, and more to the point, “anticipate them and build their research designs to find them” (p. 91). To give the synthesis pyramid a more ecological environment to operate in and also to add more meaning to the process—under investigation and already in play—the pyramid is embedded within the first chapter’s outcomes assessment process (Figure 2) and operationalized in Figure 18.
The grounded theory above appears in alignment with outcomes assessment—action to actioning and analyze to analyzing. This is not an intentional or forced result in the research. Culturing and assessing outcomes do not have such an alignment but in many respects, share elements. Outcomes assessment entailed reviewing the result from the action taken and determining how efficient and effective those processes were. In taking these actions, some culturing occurs, specifically how certain actions become more normalized in the institutional. Non alignment is not theorized as failure, but one requiring different decisions, actions, and resources.
**Further conceptualization and integration.** The discussion so far has been primarily based on the actual research combined with the literature. This research also points to an apparent gap in the literature relating survey research to participation rates, more specifically on how outcomes and results are communicated to participants in such a way that makes the connection more clear between their responses and programmatic actions taken by the institution.

Tinto (2010) revealed another gap, by exposing what we don’t know about institutional action.

Though the process of student retention is not the mirror image of student institutional departure, we now know more than ever about the forces shaping student retention and graduation. The same cannot be said, however, for our understanding of institutional practice to promote greater institutional retention and graduation. Though we are increasingly able to explain why some students leave and others persist within an institution and have been able to point out some types of action that institutions can take to improve student retention, we have not yet been able to develop a comprehensive model of institutional action that would help intuitions make substantial progress in helping students continue and complete their degree programs within an institution. (p. 51)

Tinto’s gap can be related to this research via institutional effectiveness and student success. In outlining the conditions for student retention, Tinto (2010) included expectations, know what to do to succeed, expectations for effort, support, academic support, self-efficacy and student success, social support, financial support, assessment and feedback, involvement, and involvement, meaning, and sense of belonging. Belonging is a generalized sense of involvement, and “involvement, or better yet the quality of involvement” and “depends on the degree to which individuals see their involvement at [as] ‘relevant’ or ‘meaningful’” (Tinto, 2010, p. 72).
Belonging is a part of Nora, Barlow, and Crisp’s (2005) student/institutional model in the literature review and Strayhorn’s (2008) analysis of Latino/a belonging added to what we know about Hispanic persistence and belonging. Strayhorn (2008) wrote, “Latino students may find it difficult to develop a sense of belonging on campus. This is troublesome as this sense of belonging has been shown to be related to academic achievement, retention, and persistence to degree attainment (p. 303). Strayhorn defined belonging “as their [Latinos’] perceived sense of integration” (p. 303) when comparing results of two racial/ethnic samples. Support was found for Tinto’s (1993) model on how belonging is understood—“academic and social factors were important for predicting Latino students’ sense of belonging” (pp. 314-315)—and “background, academic, and social factors proved important for White students” (Strayhorn, 2008, p. 315). Strayhorn’s findings add to the rationale articulated by other scholars (Rendon, Jalomo, Nora, and Tierney) “who have argued for the need to revise and/or fully rework traditional theories that were based largely on White student samples” (p. 315).

Belonging was an area explored in this research but the findings were inconclusive.

Implications of the Study for Higher Education

This is not the first time that chief academic officers have been surveyed. *Inside Higher Ed* (Green, Jaschik, & Lederman, 2011) surveyed in 2011, and in 2009 the National Institute of Learning Outcomes (Kuh & Ikenberry, 2009) surveyed CAOs. How NSSE data is used for academic programs was also a topic for chief academic officers and chief advancement officers belonging to the Council of Independent Colleges (Kinze, Hartley, & Sigman 2011) and further supported in Making the Case (2012). This research
is more distinct since it only focused on chief academic officers at Hispanic-Serving Institutions.

Four implications of the study on higher education are detailed beginning with finding the right assessment mix to assess what you want to assess, followed by raising participation rates, transitioning to NSSE 2.0, and preventing further controls by being accountable.

1. Chief academic officers need reliable data to make informed decisions. Finding the right mix of assessments is critical in obtaining that data. Also critical is determining what you want to assess and if the assessment selected assesses that. As seen in this research, NSSE was not the sole instrument used in assessing. Other types of assessment were used in addition to NSSE. Some assessment mixes were more cognitive as in CLA or CIRP, other mixes were more self-report like the NSSE survey and course evaluations. Not all the assessments were academic. They included satisfaction surveys from students and employees. Determining when and how this mix of assessment occurs is also crucial in capitalizing the effectiveness of the assessments. In some case, as reported in this research, scheduling needs to be de-conflicted for better results.

Though not identified as a concern in this research, the possibility of biases and inflated self-reporting recently reported by Bowman (2011) should be a concern, especially in this study. Bowman (2011) wrote, “Most of the systemic differences by type of outcome measurement occur for institutional predictors. Students at liberal arts colleges generally have greater self-reported gains that do students at universities and community colleges” (p. 15). Continuing, Bowman wrote, “Similar findings are present for institutional control: attending a private institution—whether religiously affiliated or
secular—is associated with greater self-reported gains that attending a public institution” (p. 16). Using these self-reported gains, “for assessing student growth may lead to systematic errors in determining institutional effectiveness” (Bownman, 2011, p. 17). All of the institutions represented in this study were private and offered liberal arts curriculums.

2. Raising participation rates is essential to obtaining more reliable data. The highest NSSE participation rate noted in this study was still less than 50%. Actions and decisions are being taken and made with less than 50% of the freshmen and seniors being represented. CAOs all reported that they wanted higher participation rates. Low participation rates are not just in the NSSE but in other surveys as indicated by the CAOs. In some cases, these assessments are only for freshmen whereas NSSE is for both freshmen and seniors. CAOs reported using most of the measures identified in the literature to raise participation rates, the primary one being incentivizing. Other examples of how to raise participation rates were found on the NSSE website and reported in NSSE’s Lessons From the Field (2012). One case where material incentives were not used was at Spelman College and resulted in “improv[ing] their response rate from 28% in 2007 to 70% in 2010” (NSSE Lessons from the Field, 2012, p. 13). What was missing from these examples is how actions taken based on NSSE results were communicated more directly to respondents.

The NSSE results were communicated indirectly to students as all of the CAOs reported. Actions taken as a consequence of NSSE results were reportedly not communicated directly as well. One exception was where a new course was initiated and directly related to NSSE findings. Results were shared on university websites,
newspapers, and other forums. Making a more direct connection between NSSE survey responses and actions taken based on those results may be a way to increase participation rates. There appears to be a gap in the survey research literature in communicating actions such as these to raise participation rates. It also appears that with existing and emerging communication technologies on wired campuses today, there could be a way to communicate more directly and efficiently with undergraduate students. Students in general are more tech savvy and even more social networked. Salas and Alexander’s (2008) observations about college students from the literature review are descriptive—“calling for more personalization that brings them into the campus’s virtual community” and “student engagement pedagogies chang[ing]” based on “changing needs” of students” (p. 104). But even more significantly, “institutions have an opportunity to use technology to enhance the student experience” (p. 108). Taking advantage of this opportunity may bridge multiple learning gaps and facilitate success.

The current literature, both on surveys and NSSE, provided examples on how to raise the rates of participation during the administration of the survey. If links can be established between how institutions communicated actions taken on results, and how this influenced, and hopefully raised participation rates, then programmatic and institutional decisions would be better informed.

3. Transitioning to NSSE 2.0 will be more difficult if planning does not occur now. Benchmarks of Effective Educational Practice will change (J. Kinzie, personal communication, March 6, 2012) along with the questions. Institutions participating in NSSE 2.0 may find it more difficult to compare previous administrations of the NSSE to a current administration. This may present a problem in determining whether the newer
results are significant or not. Other problems may arise in the family of assessments that NSSE belongs to, e.g., FSSE, LSSE, BCSSE, and others. How will they correlate and analyze the results from previous years to the newer NSSE 2.0 version? This integration will require more outcomes assessment planning in how NSSE results are used for accrediting and strategic purposes.

4. How quality is measured in higher education is taking on new value-added dimensions as institutions are confronted by new versions of accountability, and not just in the form of the federal government. The voluntary nature of accreditation, an element deemed critical by many, is at risk. The recent American Council on Education report, Assuring Academic Quality in the 21st Century: Self-Regulation in a New Era (2012), details national task force results and recommendations to maintain this voluntary nature. Greenberg (2012) makes the case of preserving voluntary accreditation and getting the faculty involved. Because “we have universalized American higher education so as to make it available to more people than ever before,” the result “has been expanding government control, which has only grown in intensity lately as state and federal governments have demanded that accreditors pay more attention to institutional accountability” (Greenberg, 2012). Continuing, Greenberg emphasized the value of faculty involvement in accreditation is not just institutional. Academic leaders have failed to make clear to the faculty the role that accreditation plays, not just in quality assurance but in the preservation of a self-governed system of higher education—a unique American phenomenon . . . to preserve, in the face of sweeping and political changes, such core values as academic freedom and institutional independence . . . jointly making the case for our enterprise as a national treasure.
Engagement is not limited to just students. Engagement includes faculty, administrators, and others in keeping and meeting high quality standards. As found in this research, accreditation and institutional assessment are definitely linked. Hutchings, Huber, and Ciccone (2011) wrote,

the scholarship of teaching and learning and institutional assessment clearly share some DNA, but they have their differences as well. Both put a spotlight on student learning and on bringing a more systematic, evidence-based approach to questions of educational quality. (p. 69)

Both “are dedicated as well to being more public about the learning that happens (or does not) in college and university classrooms, and to making that learning visible” (Hutchings et al., 2011, p. 69), but the audiences differ. The scholarship of teaching and learning is about the faculty whereas assessment expands to “trustees, policymakers, parents, and others who want to know if higher education is meeting its promises to students and society” (p. 69). The two multidimensional movements “can fairly be seen as mirror images, both shining a powerful light on student learning” and “may belong to the same extended family . . .” (p. 70). Hutchings et al. (2011) argued “that the two movements stand to gain from the work of the other, but also, and more important, that higher education needs [emphasis in the original] their combined strengths” (p. 71).

Recommendations for Future Research

The scholarship of assessment (Banta & Associates, 2002), the scholarship of teaching and learning (Hutchings, Huber, & Ciccone, 2011), and the field of survey research continue to develop, as does the literature on diversity and culture. These six recommendations for future research are made in the form of research questions.
1. How do deans, departments, faculty, and other units use and engage with NSSE results? Understanding and facilitating how NSSE results and decisions made based on those results at levels below (deans, directors, and faculty) the chief academic officers is not only necessary to determine the value of administering the survey again, but in learning how the results can be capitalized on and communicated. Disaggregation, mini surveys, scalelets, digitization, technologies, and other possibilities exist in this venture. And, perhaps even more significant, the scholarship of assessment (Banta & Associates, 2002) and the scholarship of teaching and learning (Hutchings et al., 2011) “can gain from the work of the other, but also, and more important, that higher education needs [emphasis in original] their combined strengths” (p. 71).

2. How do chief academic officers at public Hispanic-Serving Institutions use NSSE results as compared to chief academic officers at private HSIs? This research could be done in the same accrediting region or even expanded to other accrediting regions. This research could also retain its focus on private HSIs but in different geographical regions where there would be a country of origin difference in the Hispanic student population.

3. What surveys assessments are currently being used by institutions of higher education and why? This inquiry could be patterned after the studies by Peterson, Einarson, Augustine, and Vaughan (1999) and Peterson, Augustine, Einarson, and Vaughan (1999), executed prior to NSSE’s inception. The Teagle report by Steiner, Hassel, and Tepper (2004) details what assessments are available but is not comprehensive, nor does it identify, using institutions.
4. How could the use of qualitative software analysis reinforce or change the findings of this grounded theory research? Though this research intended to use a form of qualitative analysis software, NVivo (2012), the availability and adequately learning the software and application did not come to fruition. Rademaker, Grace, and Curda (2012) used Qualitative Data Analysis Software (CAQDAS), one of many softwares, in extending and re-examining traditional analyzed data, the type of data and coding used in this research. The authors found CAQDAS “unique” in the “ability of the program to create visual representations of the data” (p. 6) helping both the researchers and readers of the research. They also found that “it was easy to move things around and try coding categories and groupings” (p. 7) as opposed to hand coding. Another finding was the “ability of three diverse researchers . . . to be able to work together to come to a group understanding of the issues found within the data” (p. 7). A related finding to this one was “being able to easily utilize multiple researchers in a single project” (p. 9). Though this research—exploring how CAOs use NSSE results—was done by one researcher, using qualitative data analysis software on the data collected may prove both enlightening and disruptive in what was found.

5. How do Hispanic-Serving Institutions learn to serve, apply, inform, and model on what they do for current and emerging populations? This question suggests other questions: Do we really know our undergraduates of today learn? As found in this research, the participating CAOs viewed keeping access to education vital. But as student populations changed demographically and ethnically how do institutions of higher learning adjust? A more concise question is what happens when the majority [read white] student population becomes the minority? Or another question is what happens when the
majority [again read white] faculty become the minority? All things being equal, the answer would be nothing. But different learning styles exist as do different styles in teaching, leading, and administrating. One of the participating CAOs was articulate and on point when describing that institution’s faculty. In essence, CAO Mr. Jones expressed that the faculty did not care what color or type the student was, just give them a student and they will apply their art and skill in teaching in any diverse population. Hispanic-Serving Institutions are at the forefront of diversity in many ways. The organizational learning associated with the institutions represented in this research runs deep. They did not begin as Hispanic-serving but as private institutions. Learning and applying how these and other similar institutions confront and accommodate diversity is essential. These lessons can be applied to other emerging populations on how education in a diverse world is assessed. These same lessons may also facilitate reducing self-report bias, bringing what students think they know, more in line with what they really know.

6. How can institutions of higher education better understand, research, and attain diversity? Using a pending U.S. Supreme Court Case and reporting on the current U.S. administration’s higher education agenda, Wood (2012) uses Fisher v. University of Texas in developing a line of reasoning by observing “[T]he university is in the awkward spot of claiming that overall diversity is not good enough. It needs racial preferences in admissions on the top of the top-ten percent rule in order to achieve racial diversity in every single case.” More research is needed to understand and apply diversity—research that is categorized by Green, Creswell, Shope, and Plano Clark (2007) at the primary importance level in conceptualization. This research could be categorized by these authors as complementary—“[D]iversity does not drive the entire research enterprise but
serves to enhance the study at various points and complements its conceptualization” (p. 475), though not conceived at the complementary level. Green et al. (2007) point out that

In higher education, for example, prominent college student development theories, retention models, and college choice models that were formulated based on the experiences of solely white men, white students, or samples of college going students that included very few persons of color continue to be seminal works in the field. It goes without saying that these theories, models, and supporting literature are inclusive of diverse populations and their experiences. (p. 477)

Specifically related to grounded theory, the authors recommended to interested researchers to “move beyond the seminal works and introduce themselves to contemporary work and debates in the field” to “increase sensitivity to diversity concerns” and “maintain a balance between sensitivity and objectivity” (Green et al., 2007, p. 477). This recommendation can apply to other methods and methodologies as well.

**Conclusion**

Institutions of higher education are faced with many challenges and opportunities in today’s landscape of accountability, assessment, and accreditation. The chief academic officers and the institutions they represented in this research related their challenges and opportunities and how they go about addressing them.

Though aspects of organizational learning have found their way into higher education, more aspects could be beneficial in making students not just academically and co-curricular engaged, but also institutionally engaged. As students near graduation, institutional advancement offices seem to become more interested in encouraging students to contribute back. This also occurs after graduation. Promoting institutional engagement when students first enroll could increase and enhance student involvement at all levels, and make students, not only paying clients, but also engaged clients. Students
could possibly be viewed as more integral elements, than just transients seeking a quality education at a quality institution. Student success is more than just graduation.

Admittedly, institutions of higher education face many challenges to today’s world, one of which is accountability along with rising costs. Most institutions would want a vibrant and nurturing organizational culture intertwined with their institutional mission and values. This type of culture is enhanced by a stable workforce at all levels in the institution. This culture is also enhanced by the students who attend and the surrounding community; however, students in some ways of thinking, are only transient to the organizational learning aspects of the institution, as evidenced by how they are integrated into fabric of the university. What if students could see or connect improvements or changes at the institution as a result of the feedback they provided or the feedback they received? How does an institution target and focus feedback and results for success—for both the institution and student?

The participants in their role as Chief Academic Officers of Hispanic-Serving Institutions shared aspects of their complex lives in today’s higher education. Most, if not all, of their decisions are made collaboratively and informed by a wealth of data, some data more useful than not. As Chief Academic Officers, they approach outcomes assessments in different ways. As senior executives of the higher education institutions they represent, they facilitate and communicate the strategy, mission, and vision, externally and internally. In many ways, they take on roles of being cultural standard bearers, in fulfilling their duties and responsibilities. How do they shape and sustain a culture encouraging improvement through assessment?
References


Associates, (Eds.), *The modern American college: Responding to the new realities
of diverse students and a changing society* (pp. 232-255). San Francisco, CA:

Kuh, G. D. (2001-2002). Organizational culture and student persistence: Prospects and

and overview of psychometric properties*. Indiana University Center for
Postsecondary Research and Planning. Retrieved from

Kuh, G. D. (2003). What we’re learning about student engagement from NSSE:

Kuh, G. D. (2009). The National Survey of Student Engagement: Conceptual and
empirical foundations. *New Directions for Institutional Research, 141*, 5-20.
doi:10.1002/ir

effects of student engagement on first-year college grades and persistence. *The

student success: A review of the literature*. Final report for the National
Postsecondary Education Cooperative and National Center for Education


Pike, G. R. (2006). The dependability of NSSE scalelets for college and department level
assessment. Research in Higher Education 47(2), 177-195. doi:10.1007/s1162-
005-8885-3.

comparison of their engagement and intellectual development. Journal of Higher
Education, 76(3), 276–300.

mission and students’ involvement and educational outcomes. Research in Higher
Education, 44(2), 243–263.

Overcoming survey research problems, New Directions for Institutional Research,

Education 35(1), 45-76.

Directions for Institutional Research, 121, (pp. 51-62). San Francisco, CA:

and survey fatigue. In S. R. Porter, (Ed.), Overcoming survey research problems,
New Directions for Institutional Research, 121, (pp. 63-73). San Francisco, CA:
Southern Association of Colleges and Schools Commission on Colleges.


Promoting Postbaccalaureate Opportunities for Hispanic Americans Program. (2012).


Appendix A: Participation Invitation Letter

Dear Chief Academic Officer.

My name is Michael Schulte, a doctoral candidate at the University of the Incarnate Word in San Antonio, Texas. I cordially invite you and would value your participation in my dissertation research, a qualitative study investigating how chief academic officers of private Hispanic-Serving Institutions in the Southern Association of Colleges and Schools use the National Survey of Student Engagement results to improve institutional effectiveness and promote undergraduate student success. In addition, this study seeks to understand how assessment information and outcomes are used in decision-making.

The results of this research may be of benefit to you and your institution in transferability and credibility of findings among the purposeful sample. The purposeful sample was the result of delimiting to private Hispanic-serving institutions participating in the National Survey of Student Engagement (2009-2010). Additionally, all these universities are accredited by the Southern Association of Colleges and Schools.

The research will use a grounded theory methodology which will entail two sets of interviews being conducted with you as the Chief Academic Officer. After the first interviews, I will complete the coding and analysis and based upon those initial results, will conduct a second round of interviewing in which I will be sharing portions of the first results. After the second round of interviewing, I will again code and analyze. After both of these rounds of interviewing, I will assure you have the opportunity to review transcripts and make any corrections and additions. You will also have the opportunity to indicate any sensitive or proprietary areas which required safeguarding.

Your participation is voluntary and I thank you in advance, hoping you will participate. In addition to the qualitative interviewing, there is a demographic/background survey intended to add another layer of context to the qualitative study. I am attaching the informed consent letter and the demographic/background survey to this invitation study.

If you agree to participate, please return the signed copies of the informed consent and survey at your earliest opportunity.

Thank you.

Sincerely,

Michael Schulte

Enclosures
Appendix B: Informed Consent Form

1. Title: HOW CHIEF ACADEMIC OFFICERS AT PRIVATE HISPANIC-SERVING INSTITUTIONS USE THE NATIONAL SURVEY OF STUDENT ENGAGEMENT IN ASSESSING OUTCOMES

2. Conducted By:
   Researcher: Michael Schulte, Doctoral Program in Higher Education, Dreeben School of Education, University of the Incarnate Word, 210-829-3937
   Advisor: Dr. Dorothy Ettling, Dissertation Director, Doctoral Faculty, Dreeben School of Education, University of the Incarnate Word, 210-829-2764

   You are being asked to participate in a qualitative research study. This form provides you with important information about the study. Please read the information below and ask questions about anything you don’t understand before deciding whether or not to take part in the study. Your participation is entirely voluntary. In addition, you can stop your participation at any time by simply telling the researcher.

3. Purpose
   The purpose of this qualitative study using grounded theory methodology is to investigate how chief academic officers use the National Survey of Student Engagement results to improve institutional effectiveness and promote undergraduate success. In addition, this study seeks to understand how assessment information and outcomes are used in decision-making.

   Guiding Research Questions for the study:
   How do chief academic officers disseminate NSSE results to facilitate institutional effectiveness?
   How do chief academic officers promote undergraduate student success using NSSE results?

4. If you agree to be in the study, you will be asked to do the following things:
   Participate in interviews with the researcher to be scheduled at your institution.

5. Time:
   Interviews will require approximately 60 minutes per person. Any follow up interviews will require 30 minutes per person. The demographic/background survey should take no longer than 5 minutes per person.
6. Risks and Benefits:

There are no risks associated with this study. All possible efforts will be taken to insure your confidentiality.

The potential benefits of the study include deriving a better understanding of assessment and decision making, integration of academic and social environments, and improving institutional effectiveness and student success.

7. Confidentiality:

Interviews will be recorded and transcribed. You will have the opportunity to review your portion of the transcription and correct or amend responses. You will also have the opportunity to identify any sensitive or proprietary documentation that may have been discussed during the interview so that it can be safeguarded. After the study has been completed, this recorded data will be destroyed.

The results of the study will be aggregated, further protecting the anonymity of your institution. All publications will exclude any information that will make it possible to identify you as a participant.

Compensation: No compensation will be provided.

Contacts and Questions:

If you have any questions about the study please ask. If you have questions later or want additional information, please call:

Michael Schulte; Phone: 210-658-2898
Emails:mschulte@student.uiwtx.edu or 114schulte@sbcglobal.net

If you have questions about your rights as a research participant, please contact:

School of Graduate Studies and Research, University of the Incarnate Word,
Phone: 210-829-3157

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information and have sufficient information to make a decision about participating in this study. I consent to participate in the study.

Signature of Participant: ___________________________ Date: __________

Signature of Researcher: ___________________________ Date: __________
Appendix C: Demographic/Background Survey

Please answer the questions that are applicable to you.

1. Education

   Ph.D.  Institution/Country ________________________________
   Masters Institution/County_________________________________
   Undergraduate Institution/County_________________________________

2. How long (years/months) have you been the Chief Academic Officer___________________________________________________________

3. How many times has the NSSE been administered while you have been the Chief Academic Officer __________________________________________________

4. When was the first time your institution participated in the NSSE?__________________

5. What other NSSE related surveys/projects has your institution participated in________________________________________________________________

6. Did your institution participate in Building Engagement and Attainment for Minority Students (BEAMS)? _________________________________________

7. What positions did you serve in at your institution prior to becoming the Chief Academic Officer? (Last five years) ____________________________________________________________

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

8. What positions did you serve in prior to coming to your institution? (Last five years prior to arrival

   ____________________________________________________________
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Appendix D: Application for Institutional Review Board

APPLICATION FOR INSTITUTIONAL REVIEW BOARD APPROVAL FORM
University of the Incarnate Word

1. Title of Study: How chief academic officers at private Hispanic-Serving Institutions use the National Survey of Student Engagement in assessing outcomes

2. Principal Investigator (type name, telephone number, e-mail address and mailing address):
Name: Michael Schulte
Telephone number: 210-658-2898
E-mail: mschulte@student.uiwtx.edu, or 114schulte@sbcglobal.net
Address: 114 Deerglen Avenue, Universal City, TX 78148-4031

3. Co-Investigator; Faculty Supervisor; Thesis or Dissertation Chair: Dr. Dorothy Ettling

4. Division/Discipline: Education


6. Purpose of Study: To investigate how chief academic officers at Hispanic-Serving Institutions use the National Survey of Student Engagement to improve institutional effectiveness and promote undergraduate success.

7. Number of Subjects: 7 Controls: 

8. Does this research involve any of the following:

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<tr>
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<th>YES</th>
<th>NO</th>
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</thead>
<tbody>
<tr>
<td>Inmates of penal institutions</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Institutionalized mentally retarded</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Institutionalized mentally disabled</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Committed patients</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Mentally retarded outpatient</td>
<td></td>
<td>X</td>
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<tr>
<td>Mentally disabled outpatient</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Pregnant women</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Fetus in utero</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Viable fetus</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Nonviable fetus</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Dead fetus</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>In vitro fertilization</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Minors (under 18)</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

For each "Yes", state what precautions you will use to obtain informed consent.

9. Duration of study: 1 Year

10. How is information obtained? (Include instruments used): Interviews

11. Confidentiality – Are data recorded anonymously? (_____ Yes  _X_ No)

12. If #11 is answered “No”, how will the study subjects’ confidentiality be maintained? The recorded data will be kept under lock and key for protection. The completed study will not use any information that could possibly identify any participants. After the study has been completed, this recorded data will be destroyed.

13. Benefit of research: The research may benefit minority serving institutions specifically, and colleges and universities in general with regards to acculturation, engagement, accountability, assessment, and institutional research.

14. Possible risk to subjects: None
Appendix E: Collaborative Institutional Training Initiative (CITI) Certification

Michael Schulte (Member ID: 1712509)

CITI Collaborative Institutional Training Initiative

Main Menu

- This is the email address we have for you: 114schulte@abcglobal.net. If this is not correct, click here to edit your email address and other account information including your security question and answer.
- You are affiliated with 1 participating institution(s) on the CITI website. You will have at least one grade book per institution to track your progress in meeting the institution's coursework requirements (see below).

Affiliate with another institution | Change login information | Click here to Apply for CME/CEU Credits

Public Access

You have enrolled for the following courses:

1. My Courses
   - Social and Behavioral Sciences RCR Course For The Unaffiliated Learner, Basic Course
   - Passed - 09/10/10
   - Completion Reports
   - Print
   - CME/CEU Credits
   - Completed

2. Add a course or update your learner groups for Public Access

Public Access Learner Utilities

- Optional Modules (completion is completely voluntary and will not count toward a completed course)
- Update my profile information for Public Access
- See a list of all modules that you have completed (goes back to approximately May 2005)
- Click here to see your previously completed coursework for Public Access
- Remove my affiliation from Public Access

Appendix F: Interview Protocol—First Phase

Guiding research questions

How do you use NSSE results to evaluate effective educational practices and improve institutional effectiveness?

How do you promote and facilitate student success using NSSE results?

Possible Sub questions

How assessment data is used in decision-making?

How can the academic and social environments related to student success be integrated better?

Lead in questions based on demographic and background survey submitted

Protocol questions

What forms of outcomes assessments do you currently use?

What forms of outcomes assessments are you considering?

What other NSSE related outcomes assessments do you use (e.g. FSSE, CLSSE, etc.)?

In what specific ways do you use the benchmarks of effective educational practices in the NSSE?

In what specific ways do you utilize the peer rankings and other rankings in the NSSE results?

Are the NSSE results combined with any other assessments and plans?

After the NSSE results are received, how are they analyzed and disseminated?

If you have multiple year’s worth of NSSE or other related data, how are they analyzed and tracked?

How is this data used in your decision making?

How do you relate the NSSE results to student success?

How do you improve low performance or low rankings in the NSSE for your institution?

How do you sustain good performance and rankings?

How are the NSSE results disaggregated to the schools and colleges in your institution?

First Phase Protocol continued
First Phase Protocol continued

Who has the specific responsibility to manage and report on the NSSE—administration and results?

How do you track performance of students and the institution using NSSE results?

How do you apply the NSSE results to minority students and their success?

Do you use any other cognitive assessments in your overall assessment plan and what types do you use?

How is taking the NSSE survey incentivized?

How do students receive feedback on the NSSE results?

How do faculty and administration receive feedback on the NSSE results?

Are NSSE results used in any self-evaluation of the institution or accreditation related actions? What is the process?

What specific programs are used for first year and senior year students respectively to improve social and academic integration?

How are the NSSE results linked to retention efforts?

How do you define student success?

How has the regional accrediting agency affected or influenced the ways you use the NSSE results?

If you participated in BEAMS, how did it affect your processes related to minority students?

Have you attended or received assistance from NSSE in the form of workshops and specifically how?

How do you insure the NSSE results are credible once analyzed?

Do you feel comfortable making decisions based on NSSE results?

Is there anything in your responses that is proprietary or sensitive that I, as a researcher, need to know about and safeguard?
Appendix G: Interview Protocol—Second Phase

Guiding research questions

How do you use NSSE results to evaluate effective educational practices and improve institutional effectiveness?

How do you promote and facilitate student success using NSSE results?

Chronology and Possible Sub questions

Introduction and sharing preliminary results from the first phase data collection and analyses.

If [hypothetically] the construct and validity of the NSSE was proven as faulty, how would you or institution proceed?

How is the decision made to participate in NSSE in following years? Or with other NSSE related products like the Faculty Survey of Student Engagements and others.

How are your NSSE results related or integrated into your regional QEP under SACS?

How will that change as you near reaffirmation and changes in the QEP (including NSSE 2.0 scheduled in 2013)?

Your institution has participated in the FSSE at one point or another. How has FSSE been integrated into NSSE results?

How would you evaluate the form and content of the NSSE results and analysis that you receive?

How would you evaluate on how your deans and departments use NSSE results in the context of what they receive and what they can do with it?

Would it be possible to see the form in which you receive the results?

Once the NSSE results have been reviewed and actions taken, how is planning for the next iteration or other uses of the data managed?

The NSSE Institute as part of the overall organization administering the NSSE, FSSE, and other surveys offers both accreditation toolkits and NSSE report builders on its website: How does your institution use those tools?

Second Phase Protocol continued
All of the CAOs interviewed were from Hispanic-Serving Institutions, including you of course. One of the first phase interview questions asked, “How do you apply the NSSE results to minority students and their success?” Respondents in general replied that they did not specifically apply results to minorities but to educating in general. Some respondents also told of programs educating families and elementary children about going to college. Other respondents emphasized their McNair Scholars programs. I have read of programs where all first generation students are housed together. How do you perceive your institution as being Hispanic serving?

All of the respondents indicated that increasing student participation in NSSE was a challenge. They also indicated that students only learned of NSSE results indirectly. Besides incentivizing, how would you increase this participation rate?

How should students be informed of the results? Or maybe the question is really how much should the students be informed of the results and what is done with the results?

In more recent literature, belonging or a sense of belonging has been included relating to diversity and standing theories of retention, persistence, and student development. How do you see this relating to participation?

Can you relate to me a time or circumstance where the process of using NSSE results, assessing, and maybe accrediting, came as a clear understanding, almost like an “aha” moment, on how to maximize the use NSSE results?