Assessment of Student Learning in a Business Department with an Entrepreneurial Focus

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ASSESSMENT OF STUDENT LEARNING IN A BUSINESS DEPARTMENT

WITH AN ENTREPRENEURIAL FOCUS

A Dissertation

Presented to

The Faculty of Lynchburg College

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education (Ed.D.)

by

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Master of Industrial Management, and Master of Education

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APPROVAL OF THE DISSERTATION

The dissertation, *Assessment of a Business Department with an Entrepreneurial Focus*, has been approved by the Ed.D. Faculty of Lynchburg College in partial fulfillment of the requirements for the Ed.D. degree.

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1/15/2015
Date
Dedication

I would like to thank my family for their encouragement and support throughout this process. I will always appreciate my son’s encouragement to finish the dissertation. I am also thankful for the quiet and always present support demonstrated by my husband. He was a dad and a mom for months and months, thank you.

Friends like PJ and Ruthann are rare. I could not have completed this project without you. Thank you to my fellow department members (Toms) for catching me, listening to my seemingly endless whining and providing me with your honest feedback. This is a better document with your input.

Thank you to my chair and committee members for your time, suggestions and recommendations. Finally, a thank you to the faculty members at Lynchburg College who always had time to listen and often kept me sane. It got a little nutty at times, and I remain tethered because of you.
Table of Contents

Dedication ........................................................................................................................................ iv
Table of Contents .................................................................................................................................. v
List of Tables .......................................................................................................................................... vii
List of Figures ......................................................................................................................................... viii
Abstract ...................................................................................................................................................... x

Chapter 1 Introduction ....................................................................................................................... 1
  Statement of the Problem .................................................................................................................. 4
  Statement of the Research Question ............................................................................................... 6
  Limitations of the Proposed Research ........................................................................................... 6
  Conceptual Framework ....................................................................................................................... 6
  Key Terms ............................................................................................................................................... 7

Chapter 2 Literature Review ............................................................................................................ 11
  Introduction .......................................................................................................................................... 11
  Assessment in Higher Education ..................................................................................................... 12
  Department or Program Assessments ............................................................................................ 17
  Assessing Learning at the Department Level ............................................................................... 20
  Methods of Assessment ................................................................................................................... 24
  Entrepreneurship Programs ............................................................................................................. 25
  Conclusion ........................................................................................................................................... 31

Chapter 3 Methodology ................................................................................................................... 32
  Identifying the Problem .................................................................................................................... 36
  Planning the Intervention Using What was Known ....................................................................... 37
  Category I: Exemplary and Snowball Samples ............................................................................ 41
  Category II: Institutions Similar in Demographics ....................................................................... 41
  Category III: Critical Case Sample .................................................................................................. 41
  Strategy for Collecting the Data ........................................................................................................ 42
Interview Protocol ................................................................. 42
Technology .............................................................................. 43
Analyses .................................................................................. 44
Reflection and Revision .......................................................... 45
Summary .................................................................................. 45

Chapter 4 Results .................................................................... 47

Part 1: Analysis of the Home Department’s Interview and Assessment Plan .......... 48
Finding 1.1: The business department set goals ........................................ 50
Finding 1.2: The business department goals supported the institutional mission. ....... 50
Finding 1.3: The business department established student-learning outcomes. ........ 51
Finding 1.4: The business department used multiple measures to determine if goals were met. ................................................................. 51
Finding 1.5: Multiple measures yielded negligible follow-up results. ................. 52
Finding 1.6: No action on assessment findings ............................................. 52

Part 2: Analysis of Assessment Practices at Selected Institutions ....................... 54
Finding 2.1: Profiles and responses of large/influential institutions ................. 56
Finding 2.2: Snowball sampling (also in Category I) yielded two interviews. ......... 59
Finding 2.3: Profiles and responses from peer institutions .............................. 61
Finding 2.4: Profile and responses from the expert interviewed. ......................... 63

Part 3: Using Best Practices in Assessment, Common Themes from Interviewed Institutions. 65
Finding 3.1: Goals or purposes were identified ......................................... 65
Finding 3.2: Measurements identified ...................................................... 67
Finding 3.3: Student-learning outcomes identified ........................................ 69
Finding 3.4: Utility – how results from assessment are used .......................... 71
Finding 3.5: How and why departments collaborate ..................................... 73
Summary .................................................................................. 74

Chapter 5 Discussion and Conclusion ................................................... 76
Introduction ................................................................................ 76
The Research Question Central to this Study .......................................................... 76
Recommendations for Improvements ........................................................................ 77
Assessment Purpose .................................................................................................. 78
Assessment Components ........................................................................................... 79
Assessment Process .................................................................................................. 80
Action Plan ............................................................................................................... 80
Limitations of the Study ............................................................................................ 86
Future studies ............................................................................................................. 86
References .................................................................................................................. 88
Appendix A Description of Best Practices Purpose, Components, Process ................. 96
Appendix B Interview Questions ................................................................................. 98
Appendix C Research form used prior to interview contact ....................................... 100
Appendix D Home Department 12-13 Assessment Plan ............................................ 101
Appendix E General Description of Institutions Represented in the Study ................. 107
Appendix F National Rankings of top 10 undergraduate entrepreneurial programs ....... 108
Appendix G Excerpt from Home Department Mapping Matrix .................................... 110
Appendix H Rubrics used for the Senior Seminar Capstone Presentation .................. 111
Appendix I Collective responses from home department interview ............................ 116
Appendix J Summary of Interviewed Institutions ....................................................... 118
Appendix K Permission Granting use of Illustrations ................................................ 137
Appendix L IRB Letter Granting Permission .............................................................. 139
List of Tables

Table 2.1 AACSB Assessment Planning Model ................................................................. 22
Table 2.2 The NCGE Entrepreneurial Learning Outcomes Framework .......................... 28
Table 3.1 Steps in One Cycle of Action Research .......................................................... 34
Table 4.1 Summary of home department adherence to best practices ............................. 53
Table 4.2 Role of 11 Interviewees by sampling category ............................................... 55
Table 4.3 Comparison of goals identified by more than one institution or expert recommendation ........................................................................................................ 66
Table 4.4 Comparison of measurements used .................................................................. 68
Table 4.5 Comparison of student-learning outcomes among institutions ..................... 70
Table 4.6 Comparison of uses of assessment data ............................................................ 72
Table 4.7 Comparison of collaboration efforts .................................................................. 73
Table 5.1 Summary of recommendations for the home institution ................................ 81
List of Figures

Figure 3.1 Conceptual Model for Getting Started on Action Research  ........................................... 35
Abstract

Dr. John Walker, Advisor

This multi-faceted, action-research project utilized researched assessment practices and current practices acquired through case study research. The research question of this study was: How could a department in a small liberal arts college best measure and evaluate the student-learning outcomes to inform the business department with an entrepreneurial focus? The researcher answered this question by comparing assessment best practices to the home-institution department assessment plan and conducting case study analyses of assessment practices utilized by similar departments of other selected institutions. An action plan was developed and focused on home departmental collaboration and use of data.
Chapter 1

Introduction

Entrepreneurial education is offered in over 2,000 business programs of higher education (Murray, 2013). Entrepreneurship is a growing specialty in the business education field (Kuratko, 2005, Kauffman Institute, 2014). The most widely used approach for teaching entrepreneurial education is through an “about” process which teaches traditional business content (Pittaway & Edwards, 2012). One may question what entrepreneurial skills are necessary and how student learning can be measured. Methods used to assess entrepreneurial education are needed (Pittaway & Edwards, 2012). The focus of this research is the assessment of student learning in entrepreneurial education. Pittaway and Cope’s (2007) study suggested “there is a need to begin to assess and understand more carefully what has worked and why and to begin to move from an operational implementation to a strategic one” (Pittaway & Cope, 2007, p. 479).

Entrepreneurship programs (EPs) in higher education are often simply a specialized field of study imbedded in business programs. EPs are a fast growing and a financially significant course of study at many schools (Kaufman Foundation, 2013). Often EPs differ from traditional business programs which offer specific areas of study, such as accounting or marketing. EPs are an amalgam of the traditional business courses of study, and typically offer more specialized entrepreneurial focused skills such as exploring market opportunities and growth strategies (Elmuti, Khoury & Oman, 2012).
Much controversy and research have been documented, addressing the question, “Can entrepreneurship be taught?” In a recent article by Dr. Wasserman, a Harvard professor, he convincingly contended that it is the tools, such as analyzing data, taught in entrepreneurial programs which prepare entrepreneurs for success (Wasserman & Hwang, 2012). Others suggested that entrepreneurship is rooted in personality and risk-aversion tendencies (Wasserman & Hwang, 2012). This study took the approach that entrepreneurship can be taught. The purpose of this research is to determine the best practices to assess student learning outcomes in an entrepreneurship program.

The focus of this study is entrepreneurial programs which are departmental in nature. They are often housed in a business department or represent standalone departments within colleges and universities. Using departmental assessment best practices is appropriate. The use of departmental best practices may improve an existing EP. Suskie (2009) and Walvoord (2004) recommended the practice of articulating the goals of the department through student-learning outcomes, gathering evidence of learning, and using data collected for the improvement of the program (Suskie, 2009; Walvoord, 2004). The benefits of an accurate assessment included improvements in pedagogy, curriculum, and staffing (Walvoord, 2004).

The department is the unit of measure. Prominent assessment scholars such as Linda Suskie and Barbara Walvoord recommended best practices and identified a formula for good department assessment (Suskie, 2004; Walvoord, 2009). A useful sequence for assessing departments is to identify the goals of a department, understand the measures implemented, and understand the measures used to improve the student-learning outcomes (Suskie, 2004; Walvoord, 2009).
Assessment methods for higher education are well researched (Banta & Black, 2009; Suskie, 2009; Walvoord, 2004). Assessment of student learning in higher education may be defined in many ways. Grades, institutional effectiveness, attaining department goals, and content evaluation comprise the many different examples of assessment. Steps in the assessment of student learning may include setting goals, collecting information and using the information for improvement (Banta & Black, 2009; Suskie, 2009; Walvoord, 2004). Student-learning assessment was based on predetermined learning outcomes, which were based on department goals/program improvement (Suskie, 2009). Using the results from student-learning outcomes, department members adjusted programs to improve their effectiveness (Blaich & Wise, 2011; Walvoord, 2009). The final stage of program assessment, using the information for change, was the basis for making informed decisions (Walvoord, 2012).

The current movement in assessment is to provide students, faculty, administration, and external stakeholders with information about student learning (Walvoord, 2012). Using data acquired from the assessment for improvement is a significant, but elusive piece (Blaich & Wise, 2011; Suskie, 2009; Walvoord, 2004). Assessment of student learning has been distilled into steps; however, the known attributes of assessment of student-learning outcomes has not flowed to the discipline of entrepreneurial education (Pittaway, Hannon, Gibb & Thompson, 2009).

Ewell, Paulson, and Kinzie, (2011) reported that departments assess student-learning outcomes for program improvement. With continuous assessment, continuous improvement may follow. Ralph Tyler’s Curriculum Development Theory approach to learning suggested that learning may be enhanced by offering rigorous courses that are
under perpetual evaluation (Tyler, 1969). Walvoord (2004) and Suskie’s (2009) approach to assessment was much like Tyler’s purposeful curriculum (1969). Tyler challenged educational institutions to seek purpose (goals), to define educational experiences the student will attain to meet the purposes (student-learning outcomes), and to measure and evaluate goals. A final critical step in program assessment is the use of data from assessments, but this step is the most neglected step in the assessment process (Blaich & Wise, 2011; Walvoord 2004). This research sought to improve student learning through assessment and use the data to enrich an entrepreneurial program at a small liberal arts college.

**Statement of the Problem**

Program-level assessment practices have been “neglected as a subject in entrepreneurial education” (Pittaway, Hannon, Gibbs & Thompson, 2009, p. 72). This action research project proposed to appraise one institution’s entrepreneurial program using research-based assessment methods applied to an entrepreneurial program. Measuring student learning was needed to determine if students had developed the skills and knowledge targeted through an entrepreneurship program (Pittaway, et al., 2009; Wasserman & Hwang, 2012).

It is difficult to determine why EPs at colleges and universities were considered superior. A standard for successful EPs is not clear or commonly agreed upon. Many business people and educators believe that students meeting predetermined learning outcomes predict their success as entrepreneurs. Others believe that success is defined as quantifiable enrollment numbers, increasing percentage of majors, job placement,
business openings, or graduate school admission. Measuring success is part of goal setting that a department must agree upon (Suskie, 2009; Walvoord, 2004).

With significant gaps in entrepreneurial education assessment practices, entrepreneurial programs seeking to improve student learning need methods grounded in assessment practices and entrepreneurship. Acquiring student-learning information and using the information was the lynch pin of this project. Understanding assessments of various entrepreneurial programs provides the researcher with insight into similarities and differences in assessment practices.

Using action research, the researcher reviewed the most current assessment plan from the home institution’s department and information on assessment practices from similar departments at other institutions. This action research report was primarily concerned with assessment practices in an entrepreneurial program. Data collected resulted in recommended changes to the current assessment plan of the home institution’s department.

The researcher also collected data from selected and diverse institutions. Programs studied were separated into three categories: (1) institutions which had exemplary entrepreneurial programs, (2) institutions which were similar in size and characteristics, and (3) critical case sources. This project included analyses of data involving goal setting, student-learning outcomes, measurement of outcomes, and recommendations to use data for program improvement.
Statement of the Research Question

How could a small liberal arts college best measure and evaluate student-learning outcomes to inform and support decisions for improved learning in a business program with an entrepreneurial focus?

The researcher contacted and interviewed representatives from diverse institutions that offered entrepreneurial programs. The study analyzed 11 interviews to identify assessment best practices and their frequency. The results from the interview were used to make recommendations to the home institution’s department regarding assessment practices.

Limitations of the Proposed Research

This study was designed for local decision making. Selected sampling methods were used to identify high-profile institutions and peer institutions. The results were practical for a small business department in a small, private, undergraduate liberal arts college. The intent of this study was to provide information on which to base local decisions with verified assessment methods and selected entrepreneurial program practices.

Conceptual Framework

The importance of outcome-based education has been documented throughout the years (Driscoll & Wood, 2007). Robert Mager (1962) made a case for outcome-based education through intentional teaching in his book *Preparing Instructional Objectives*. Simple course descriptions did not define student learning outcomes at the completion of the course. Most importantly, more students achieved a deeper level of learning when students were aware of expectations (Biggs, 1999).
Department assessment is a four-step cycle which includes (1) establishing goals, (2) providing opportunities for learning, (3) assessing, and (4) using the results of learning (Suskie, 2009). Assessment for this report was primarily concerned with student-learning outcomes as “assessment vocabulary is not yet standardized” (Suskie, 2009, p. 3).

Chapter one discussed the growth and issues facing entrepreneurial programs. Assessment as a concept and as a method of appraisal was considered. Chapter two offers the literature review supporting the idea that assessment and entrepreneurial education as two seemingly unrelated topics. The evolution of assessment and reasons for its importance to higher education add meaning to this study. A review of entrepreneurial education’s history and curricula was also significant to this study. The lack of available information relating to the blend of assessment and entrepreneurial education was discussed. Chapters three and four discuss further research on entrepreneurial assessment and the research results. The researcher drew conclusions from the data, noting similarities and implications for the home institution’s department. Finally, areas of future study were discussed.

**Key Terms**

Accreditation – External organizations that certify educational institutions have adequate funding and operations to achieve their undertakings (Allen, 2004, p. 18). For example, Southern Association of Colleges and School Commission on Colleges (SACSCOC) is a regional accrediting body for degree-granting public and private institutions of higher learning in the southeast.
AACSB – Association to Advance Collegiate Schools of Business is an external accreditation board for business programs in higher education which uses research as a primary factor (Martell, 2005).

ACBSP – Accrediting Council for Business Schools Programs is an external accreditation board for business programs at the higher education level.

Assessment – The ongoing process of setting clear, measurable, student learning outcomes and using resulting information for improved student learning (Suskie, 2009).

Benchmarking – A set of empirical standards used for comparison of data (Allen, 2004, p. 166). For example, a benchmark could be from an external test.

Capstone Experiences – Holistic activities designed to integrate learning from a field of study (Suskie, 2009). An example is a comprehensive senior project.

Collaboration – Conversations, sharing and reflecting on learning goals, results of research, and articulation of existing common ground (Suskie, 2009).

Course Mapping – A planning tool designed for curriculum review to ensure goals are met through curriculum/courses offered in a program (Suskie, 2009).

Direct Assessment – An instructor’s direct measure of students’ work (Walvoord, 2004, p. 13). For example, a test or essay evaluated by the instructor is a direct assessment. Ideally, the instructor compares the test or essay to the student-learning outcomes.

Entrepreneur – An innovative, competitive, and decisive business person (Pittaway, 2011, p. 33).
Formative Assessment – Assessment data provide feedback to improve what is being assessed (Allen, 2004, p. 9). For example, a paper with corrections included by the instructor explains errors. The student would then be expected to resubmit the paper.

Indirect Assessment – Others (or students) report on student learning (Allen, 2004). For example, a survey is an indirect measure.

Learning Outcomes – A stated expectation of the subject to be learned (Driscoll and Wood, 2007, p. 5). Student learning outcomes “clearly state the expected knowledge, skills, attitudes and competencies that students are expected to acquire” (NILOA). Walvoord explained learning cannot be limited to what is objectively tested. “It need not be a reductive exercise. Rather, a department can state its highest goals” (Walvoord, 2004, p. 2). Goals are conceptual frameworks to guide a department. Student learning outcomes are specific and measurable, and support the goals of the department.

NILOA – National Institute for Learning Outcomes Assessment is a foundation-funded organization which studies assessment and student-learning outcomes in higher education.

Program Assessment – A systematic collection of data to support department decisions regarding curriculum, pedagogy, staffing, and goals (Walvoord, 2004).

Standardized Achievement Tests – Standardized, “presenting the same stimulus to all participants” (Johnson & Christensen, 2011, p. 595); achievement tests, “designed to measure the degree of learning that has taken place after a person has been exposed to a specific learning experience” (Johnson & Christensen, 2011, p. 581).
Summative Assessment – A collection of data which provides an executive summary (Allen, 2004, p. 172). For example, a final numerical score on a test is a summative assessment.
Chapter 2

Literature Review

The literature review contains two focal points. Assessment in higher education is discussed at length. Much has been studied and documented, providing a rich background of assessment information. Entrepreneurial education is discussed not as a secondary issue, but as one of equal importance to this study. The variances in entrepreneurial education were discussed. Also, the lack of entrepreneurial assessment information is highlighted.

Introduction

It is important for a department to demonstrate that a student has learned material. Identifying content or communicating grades is not enough information to suggest student learning (Walvoord, 2004). The material learned, communicated through the assessment process to stakeholders, is an affirmation of goals set by the department. Walvoord stated, “The most important audience is the department itself” (Walvoord, 2004, p. 51). Walvoord also stated “an issue that is crucial to any assessment effort is how to use assessment data for change” (Walvoord, 2004, p. 21).

The goal of current assessment practices is for students to achieve recognized competencies or student-learning outcomes (Suskie, 2009). The student-learning outcome assessment method deviates from traditional methods which were simply to evaluate content, rather than learning. Using assessment best practices, departmental goals are centered on the student-learning outcomes (Suskie, 2009, p. 13). Furthermore, departmental goals should support institutional goals (Walvoord, 2004, p. 38).
Entrepreneurial programs in higher education are diverse and plentiful, ranging from an undergraduate minor to a doctoral degree (Krier & O’Toole, 2013; Murray, 2013). The multitude of undergraduate programs is a testimony to the interest and need for this business specialty in higher education. In 2013, over 2000 entrepreneurial centers and programs were associated with colleges and universities (Murray, 2013). The growing numbers of entrepreneurial programs provide a significant financial incentive for colleges and universities to enter the business specialty of entrepreneurship (Murray, 2013).

Regardless of the number and financial strength of entrepreneurial programs, little research is available supporting their assessment. Assessment of entrepreneurial programs has not kept pace with the popularity and growth of the new business specialty (Fayolle, Gailly & Lassas-Clerc, 2006). In the current political environment of accountability and assessment, business educators are expected to support the legitimacy of the entrepreneurship program using strong and proven assessment tools (Kuratko, 2005). Stakeholders and accrediting boards are increasingly sensitive to learning outcomes: the student’s performance as a result of completing a program (The Principles of Accreditation, 2012).

**Assessment in Higher Education**

Alverno College first attempted assessment in higher education in the mid-1970s; this assessment continues today in all higher education institutions (Ewell, 2007). The federal government first became involved in higher education assessment with the passage of the Higher Education Act of 1965 and later with the Spellings Commissions which was issued in September 2006 (Ewell, 2007).
A Test of Leadership; Charting the Future of United States Higher Education is often referred to as The Spellings Report (Zemsky, 2011). The central tenets of the report were higher education’s accessibility, affordability, and accountability (Kuh, 2007). Also, a national clearinghouse of data from higher education was to be coordinated and reported to the public (Kuh, 2007). The accountability portion of the report referenced the importance of providing evidence of student learning. According to Robert Zemsky (2011), a member of the commission, the original intent of the commission was to produce a report that would draw attention to higher-educational issues of student learning. The federal government’s role in assessment and benchmarking for higher education did not end when Congress discontinued funding in 1995 (Ewell, 2007).

As a reaction to the Spelling Commissions, the Voluntary System of Accountability (VSA) was created in an effort to address the concerns about general education in higher education (Hawthorne, 2008). The VSA was a product of the National Association of State Universities and Land-Grant Colleges and the American Association of State Colleges and Universities (Ewell, 2007). The climate for accountability was zealous, and the passage of VSA in 2006 placed pressure on higher education which continues today (Walvoord, 2012).

The VSA used standardized test scores, such as the Collegiate Learning Assessment for general education and national discipline specific tests, a basis for comparing institutions of higher learning (Hawthorne, 2008). The VSA measures student growth derived from summative scores resulting from standardized tests (Hawthorne, 2008). Summative scores, however, could misrepresent and inaccurately depict a school.
For example, one test score does not represent the entire population. Hawthorn stated, “a primary measure of comparability and accountability, such tests must be deeply suspect” (Hawthorne, 2008, p. 26). Peter Ewell stated, “the assessment pendulum has swung strongly in the direction of the accountability paradigm” (Ewell, 2007, p. 12). In Ewell’s (2009) subsequent report, Revisiting the Tension, Ewell concluded the tension between accountability and assessment in higher education has not diminished.

The Spelling Commissions via the VSA is rooted in the concern that the general public be informed. The intention of the VSA was to report the cost of higher education and the evidence of learning by using a “consumer–friendly information database” (Kuh, 2007, p. 31). Identified intentional learning outcomes provide a measureable base (accountability) on which to improve teaching and learning (Kuh & Ewell, 2010). Educators must clarify specific outcomes so expectations are understood.

Many believe the provocative notion that higher education is at a credibility tipping-point. The need to assess programs accurately and appropriately in higher education is becoming increasingly critical (Walvoord, 2012). Reliable and relevant program assessment is needed for better decision making and should become an integral part of “doing business” for a department in higher education (p. 64).

Dr. Barbara Walvoord (2012) recommended that faculty continue with assessments. Furthermore, she encouraged faculty and administration to make curriculum improvements based on data obtained from student assessment. She warned higher-education faculty and officials to monitor assessment closely, or others would.
Unfortunately, “others” refer to a national movement that uses summative evaluation and standardized tests to judge student learning (Walvoord, 2012).

The National Institute of Learning Outcomes Assessment (NILOA) conducted a study in 2009 of higher education chief academic officers and provosts (Kuh & Ikenberry, 2009). Kuh and Ikenberry (2009) entitled the study *More than You Think, Less Than We Need*. The intent of the study was to determine the level of assessment activity in higher education from the chief academic officer’s perspective (Kuh & Ikenberry, 2009). The study invited institutions of higher education granting doctorate, graduate, 4- and 2-year degrees to respond to an online survey. The survey (n=2,809 with a 53% response rate) provided valuable information (Kuh & Ikenberry, 2009).

A key finding revealed that the “most common use of student learning data was for preparing for institution and program accreditation “ (Kuhn & Ewell, 2009, p. 19). Unfortunately, most institutions did not *use* assessment information for program improvement or student learning, but used the information to satisfy accreditation requirements. Using a four-point scale (1=not at all, 4=very much), officials were asked to score the most common use of assessment information. Institutions that used assessment information for accreditation scored 3.27 for institutions and 3.24 for programs. Unfortunately, the theme of collecting data for uses other than reflection and improvement was frequently reported (Kuh & Ikenberry, 2009; Blaich & Wise, 2011; Walvoord, 2012). Beneficial uses of assessment information involved identifying achievement of goals, adjusting pedagogy, and measuring student-learning outcomes.
Kuh and Ikenberry’s (2009) study also indicated most schools had identified student-learning outcomes and continued assessment programs despite the lack of dedicated resources. Another interesting finding from the study was that schools considered more competitive (more selective enrollment procedures) used locally developed instruments for measurement, while schools less competitive used standardized instruments for measuring assessment. The competitive schools were also less likely to “use assessment for data for improvement or accountability” (Kuh & Ikenberry, 2009, p. 26).

The Kuh and Ikenberry (2009) report also noted that “gaining faculty involvement remains a major challenge” (p. 3). Conversely, Peter Ewell discovered in his study, *Down and In*, that faculty need more substantive information concerning assessment (Ewell, Paulson, and Kinzie, 2011). The solution for engaging faculty may simply lie in communication. An informed faculty may become more involved, and lessen the challenge noted in the Kuh and Ikenberry (2009) report.

Kuh and Ikenberry (2009) considered the obvious question: “why would a school not assess student learning?” The study noted that some selective institutions simply did not recognize the need to document the known, thus gaining little from assessment. The suggestion implied grades and syllabi tell all and assessment was not needed. Less competitive schools expressed suspicion of comparisons and proving their worth. Of schools surveyed, 90% used at least one assessment tool for institutional assessment and at least one tool for program assessment. A large variety of tests were given for both institutional and local testing (Kuh & Ikenberry, 2009).
The study’s title, *More Than You Think, Less Than We Need*, embodied the limitation of the study. As determined from the study, higher education was more involved in assessment and student learning than previously thought. Kuh and Ikenberry (2009) concluded that higher education’s use of the data was insufficient. His recommendations were audience specific. For example, presidents and school leaders should “champion productive use of (assessment) results” (p. 28). He left no audience out, including faculty, parents, students, and foundations.

**Department or Program Assessments**

Unlike institutional assessment for a college or university that attempts to address general concerns, a program or department assessment is specific to the department, but should support the institution’s mission (Walvoord, 2004). The department assessment plan is a working document laden with possibilities. Departments in higher education have unique faculty, students, and specific curriculum needs. The objective of departmental goals is “to articulate learning goals, what we want them to be able to do” (Walvoord, 2012, p. 1).

As a follow-up to Kuh’s 2009 institutional survey of chief academic officers, Peter Ewell of the NILOA distributed a second survey to program chairs. Having an institutional perspective as a base, the NILOA needed a deeper perspective from departments. In a subsequent study in 2010, Ewell, Paulson, and Kinzie published the report entitled *Down and In: Assessment Practices at the Program Level* (2011) for the NILOA. Ewell sent the survey to program or department chairs in the same schools Kuh surveyed in 2009 (n=2,719). A response rate of 30% was reported. The study reported
“range of response rates was representative of actual programs across the country—except business, which was underrepresented” (Ewell, et al., 2011, p. 7).

Ewell (2011) reported there was a significant difference between academic officers’ understanding and program chairs’ understanding of program level assessment (Ewell, et al., 2011). The authors believed that to truly understand the level of program assessment, one must survey the program chairs, “the horse’s mouth” (p. 3). Major findings from department chairs included department-specific assessment information. The report concluded that departments did assess for program improvement; however, more assessment for program improvement was needed. Department chairs also noted that accreditation was often the driver for assessment. Accreditation played an important role in the frequency of assessment, faculty involvement in assessment, and use of assessment results (Ewell, et al., 2011).

The report further noted that assessment was discipline-sensitive (Ewell, et al., 2011). The department’s discipline significantly affected the type of assessment, the frequency of the assessment, and the use of the results. For example, education and health science assessed often, used the assessment data, and often used standardized tests (Ewell, et al., 2011). Education and health sciences programs required “specialized accreditation, which surely has a substantial influence on assessment practices” (p. 18). As an example, in Ewell’s (2011) study, he describes nursing students who are licensed based on requirements set by the licensing agency.

Student learning outcomes, established at 80% of the schools surveyed, were measured through a variety of methods (Ewell, et al., 2011). Furthermore, the report
noted program chairs believed there was a “gap” between actual assessment practices at the program level and chief academic officers’ perception of assessment practices at the program level (Ewell, et al., 2011).

Ewell, et al. (2011) noted several similarities between institutional officers and department heads. Both groups noted that program assessment was active and underfunded. In addition, both parties believed faculty involvement would advance assessment practices at the program and institutional level.

Much like institutional assessment, departmental assessment sought to improve the student experience. Both assessments considered student-learning outcomes in relation to their goals, institutional or departmental. The department goals should support the institution’s goals. Both institutional and departmental assessment procedures were similar in process and may have used parallel methods (Ewell, et al., 2011). Considering the interdependence of departmental and institutional goals, accurate assessment is critical for the advancement of the student and the institution.

Assessment scholar, Barbara Walvoord, suggested that a department assessment should be well-planned (Walvoord, 2004). To begin, the department must clearly understand the purpose for the department assessment. Understanding why the assessment is needed and who will use the assessment are critical in the planning process (Walvoord, 2004). The reason for the assessment may include a review of existing assessments to improve pedagogy, curriculum, or the creation of new program goals (Walvoord, 2004). The audience may be external parties such as The Southern Association of Colleges and Schools Commission on Colleges (SACSOC) or The
Association to Advance Collegiate Schools of Business (AACSB). An internal audience would involve only department members.

A second issue influencing the effectiveness of a department assessment is the degree of discussion and collaboration among the department members (Walvoord, 2004). A member of the department is typically the assessment-point person. Careful planning of assessment conversations contributes to the faculty support of the assessment. Walvoord (2004) stated, “The challenge is to manage your departmental culture so as to achieve desired outcomes” (p. 51). The next section reviews best practices in departmental assessment.

**Assessing Learning at the Department Level**

Sequential steps are practical and guide a successful department assessment. In Walvoord’s (2004) book, *Assessment Clear and Simple*, she recommended the following steps:

1. Articulating learning goals.

2. Conducting an assessment audit. Walvoord recommended a review of current practices within the department. The audit would begin with a profile of the department, learning goals, assessment measures and recommendations for change based on current assessment practices.

3. Using information from the assessment audit, recommendations could be made to refine current assessment practices and shape future assessment recommendations.

4. Using data provided from the assessment to make informed decisions.
In this study, best practices in departmental assessment were used as a standard for quality assessments. The home-institution’s department and comparison-institutions’ departments were judged by their adherence to best practices.

There are no definitive lists of best practices. However, practices are recognized by assessment scholars. This study used recognized practices advocated by Walvoord (2012), and Suskie (2004). The best practices that were included in this study were setting department goals that support the institution, knowing the audience of your assessment (the department being the most important), establishing student-learning outcomes, using multiple measures, using the results of the measures, and collaborating among department members.

Assessment has growing support among discipline-specific external accrediting boards. Theories and practices required by the Association to Advance Collegiate Schools of Business (AACSB) reiterated the importance of program assessment (Martel & Calderon, 2005). In 2005, the AACSB placed substantial emphasis on assessment, previously known as “curriculum evaluation” (p. 15). Currently, the lack of assessment procedures may create barriers for schools to receive AACSB accreditation. The AACSB requires that results from key learning goals be reported for each program (p. 16).

The AACSB handbook is clear that it “does not require specific levels of performance” or benchmarking (p. 16). Assurances of learning (AOL) according to the AACSB are goals and objectives (Martell & Caldron, 2005). Just as Walvoord recommended (2004), the AACSB defines effective assessment as “systematic and
carefully planned” (Martell & Caldron, 2005, p. 18). Martell and Caldron (2005), stated “Assessment activities focus on a coherent portfolio of shared learning outcomes that align with mission, goals, and objectives of the program” (p. 18).

The AACSB recommended an assessment plan format for business programs. An example of an Assessment Plan was provided (Martell & Caldron, 2005, p. 15):

Table 2.1

AACSB Assessment Planning Model

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Measure method/Metric</th>
<th>Expectations</th>
<th>Procedures</th>
<th>Summary of Results</th>
<th>Future Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The students will be able to . . .</td>
<td>Method: Multiple choice tests</td>
<td>Satisfactory Raw Score</td>
<td>Description: Sample: When: Where: Incentive:</td>
<td>Results are summarized by . . .</td>
<td>How faculty directly related results submit student learning . . .</td>
</tr>
<tr>
<td>Metric: Number of correct</td>
<td>Satisfactory performance on . . .</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The AACSB provided a model for constructing a department assessment. Each column was self-explanatory and was easily followed. Other models were available, and schools could choose the most practical and most mechanically applicable model.

Another model, the Nichols five-column model, has been frequently used to provide a structure for department assessment (Nichols, 2001). The model/format is especially helpful to complete the assessment cycle systematically and tie departmental goals to the institutional goals.

First, the institution must establish goals and a mission statement. Then the department must align their goals with the institution’s goal. Nichols (2001)
recommended a department focus on three to five goals. Nichols (2001) recommended that the department goals be broad and conceptual in nature. The goals should also be practical and applicable to the entire department, rather than to one course. The goals should be measureable, which may be difficult for some departments. However, as Nichols (2001) warned, student measurement is not faculty measurement, and the two should remain separate.

The next step is to provide a means of assessment. The measurements should discuss the advantages and disadvantages of specific testing procedures (Nichols, 2001). Other externally developed measurements could be useful for comparisons. However, external measures may not reveal the department’s intended goals. Internally developed documents may be relevant, but lack the credibility and comparability of externally developed tests. Nichols (2001) and other assessment scholars recommend using multiple measurements such as rubrics and surveys (Nichols, 2001; Suskie, 2009; Walvoord, 2004).

The next step is to summarize the results of the measurements. The final step is to demonstrate how the department uses the results of the measurements. In closing the loop, a department uses the summary data to make improvements in the program (Nichols, 2001; Blaich & Wise, 2011; Suskie, 2009; Walvoord, 2004).

Both the AACSB and the Nichols (2001) require articulated student outcomes, measurements, and data collection. It is important that student-learning outcomes support the goals of the program (Nichols, 2005; Walvoord, 2004 and 2012). Again, the goals of a program should support the institution’s goals, and a unified vision must be
presented (Nichols, 2001). Goals must be set, measurements must be in place, and ultimately the use of the data for program improvement must be the aim (Blaich & Wise, 2008; Nichols, 2005; Suskie, 2009; Walvoord, 2004).

Regardless of the method used to structure assessment, program assessment can be used to provide information related to student learning. Information gathered from multiple measures affords department members an opportunity for departmental improvement. The paramount purpose of assessment is to focus and measure student learning and use the data to improve student learning (Blaich & Wise, 2008; Suskie, 2009; Walvoord, 2004).

**Methods of Assessment**

Two classic approaches to assessment of student learning are formative and summative. The formative approach to assessment is accomplished by “discovering student’s strengths and weaknesses, diagnostic in nature” (Sternberg & Williams, 2010, p. 510). Using formative assessment, improvement can be measured by noting growth trends over time (Ewell, 2007).

Summative or accountability assessment relies on standardized student test scores and final outcomes for comparison to “fixed or arbitrary standards” (Ewell, 1997, p. 10). A final test is used to measure student learning (Sternberg & Williams, 2010). Both formative and summative methods are effective measurement methods used for assessment (Sternberg & Williams, 2010). The difference between the two methods lies in the intent of the assessment (Sternberg & Williams, 2010).
Assessment of many programs is often at the end of a program during the culminating capstone (core) courses. Using formative assessment, the student is consistently coached and encouraged to improve. Often a final course requires the students to synthesize and reflect on new and prior learning (Hundley & Moore, 2012). The students’ ability to perform and synthesize may reflect on strengths and weakness in a program. Assessment of student learning provides data for program improvement (Blaich & Wise, 2006).

Entrepreneurship Programs

In the United States, 80% of aspiring entrepreneurs are between the ages of 18 and 34 (Kuratko, 2005). Currently, the entrepreneurial generation is the strongest and most populated generation since the Industrial Revolution (Kuratko, 2005). With the large number and the strong interest in entrepreneurship, a need exists to train future entrepreneurs properly. An empirical study over a 10-year period suggested that “entrepreneurship can be taught, or at least encouraged by entrepreneurship education” (Gorman, Hanlon & King, 1997, p. 63).

In 1945 Harvard Business School was the first to offer an entrepreneurship course, but it was later dropped because Harvard’s academic community did not support the topic (Vespers & Gartner, 1997). Between 1945 and 1970, the number of colleges and universities offering entrepreneurship courses grew from 16 in 1970, to over 400 by 1995, and to over 1,400 colleges and universities by 2001 (Kauffman Center for Entrepreneurial Leadership, 2001). Currently there are over 2000 business programs offered nationally (Murray, 2013).
In addition to entrepreneurship courses, entrepreneurship centers have become increasingly popular across the United States. The centers, affiliated with a specific college or university, benefit from extensive funding in pursuit of entrepreneurial endeavors. For example, 60 million dollars was given to University of Virginia for the Batten Institute of Entrepreneurship (Kauffman, 2001).

Curricula for entrepreneurship programs are varied; typically the intent is to develop a well-rounded business student. However, the execution of entrepreneurial education assessment is scarce (Pittaway, et al., 2009).

Entrepreneurial programs maintain different approaches to content and learning. The *U.S. News and World* (2013) report ranked Babson the best school for entrepreneurship for 15 consecutive years. Babson’s entrepreneurial undergraduate degree began with a non-traditional business program in the first year (Babson, 2014). A Foundation of Management and Entrepreneurship course was required. This course immersed the student in experiential learning and business, while completing other liberal arts courses. The second-year traditional business courses were completed (accounting, management and business law). The third and fourth year students concentrated on career options and pursued courses that supported their professional goals.

Gartner and Vesper (1994), in a seminal study, surveyed 750 business school deans with the purpose of identifying successful, innovative educational practices in entrepreneurial classrooms. The response rate to the mail survey was 24%, with 177 responding. The study was limited in that responses were subjective and based on respondent’s “speculation” (p. 181). The study suggests that the “basics of
entrepreneurship are fundamentally different from the basics of management” (p. 183). Other key findings from the survey related to pedagogy (Gartner & Vesper, 1994). Experiential learning or hands-on learning was noted as effective in the entrepreneurship classroom (Gartner & Vesper, 1994). The profile of entrepreneurial learning emerged from the study. Entrepreneurs were traditionally “action oriented, and not introverted thinkers” (p. 185).

Karl Vesper and William Gartner (1997) conducted a second study to collect data to “make a first cut at exploring criteria for evaluating entrepreneurship programs (p. 415). Of the 941 mail surveys sent to United States Business School Deans, 311 (33%) replies were returned. Surveys were also sent to 312 international schools and 78 (25%) were returned. Based upon responses, the authors developed seven indicators of a quality entrepreneurship program. The indicators included: courses offered, faculty publications, impact on the community, alumni start-up companies, alumni innovations, and outreach to scholars. A limitation of the survey was that survey respondents did not identify the criteria they used to base judgments on the seven quality indicators. The deans did not report the weight of each criteria or their expertise in the area (Vesper & Gartner, 1997). The authors chose to abandon the criteria given by the respondents as “public relations efforts” and “redirect the evaluation of entrepreneurship programs” (p. 405).

Vesper and Gartner (1997) recommended using the Malcolm Baldrige National Quality Award (MBNQA) criteria to provide reliable data for evaluation of an entrepreneurship program. The MBNQA criteria included a total of 28 requirements merged into seven categories: leadership, information analysis, strategic and operational
planning, human resources development and management, educational and business process management, school performance results, student focus, and student and stakeholder satisfaction (Vesper & Gartner, 1997). The authors believed that using the MBNQA was a “higher road” to improving entrepreneurship program valuation than “ratings games” (p. 420).

The National Council for Graduate Entrepreneurship (NCGE) conducted another study which saw value in broad concepts for entrepreneurship learning. The NCGE is a British organization which researched and promoted entrepreneurship. The NCGE identified eight learning outcomes for entrepreneurship programs based on empirical research by Reuber and Fischer, 1993 (as cited in Pittaway, 2009). The eight learning outcomes included broad categories such as entrepreneurs’ attitudes and specific minimum business competencies.

Table 2.2

*The NCGE Entrepreneurial Learning Outcomes Framework*

<table>
<thead>
<tr>
<th><strong>A - Entrepreneurial behaviour, attitude and skill development</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Key entrepreneurial behaviours, skills and attitudes have been developed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>B - Creating empathy with the entrepreneurial life world</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students clearly empathize with, understand and 'feel' the life-world of the entrepreneur</td>
</tr>
</tbody>
</table>
### C - Key entrepreneurial values

Key entrepreneurial values have been inculcated.  
To what degree does the programme seek to inculcate and create empathy with key entrepreneurial values: for example, strong sense of independence; distrust of bureaucracy and its values; strong sense of ownership.

### D - Motivation to entrepreneurship career

Motivation towards a career in entrepreneurship has been built and students clearly understand the comparative benefits.  
To what degree does the programme help students to: understand the benefits from an entrepreneurship career?; compare with employee career; have some entrepreneurial 'hero's' as friend's acquaintances; and, have images of entrepreneurial people 'just like them'.

### E - Understanding of processes of business entry and tasks

Students understand the process (stages) of setting up an organization, the associated tasks and learning needs.  
To what degree does the programme take students through: the total process of setting up an organization from idea to survival and provide understanding of what challenges will arise at each stage; and, helping students how to handle them.

### F - Generic entrepreneurship competencies

Students have the key generic competencies associated with entrepreneurship (generic 'how to's').  
To what degree does the programme build capacity, for example, to find an idea; appraise an idea; see problems as opportunities; identify the key people to be influenced in any development.

### G - Key minimum business how to's

Students have a grasp of key business how to's associated with the startup process.  
To what degree does the programme help students to develop knowledge about how to start businesses: for example, see products and services as combinations of benefits; develop a total service package; price a product service; identify and approach good customers.
### H - Managing relationships

Students understand the nature of the relationships they need to develop with key stakeholders and are familiarised with them. How does the programme help students learn how to manage relationships: for example, identify all key stakeholders impacting upon any venture; understand the needs of all key stakeholders at the start-up and survival stage; know how to educate stakeholders?

National Council for Graduate Education—Entrepreneurial learning outcome framework

Pittaway (2009) conducted a study based on the findings of the NCGE. A panel was organized to reflect the findings of seven of the eight entrepreneurship learning outcomes the NCGE identified. Item E from the NCGE was omitted because there were an insufficient number of panel members to cover the topic. The panel, composed of over 40 entrepreneurs and small business academics, evaluated the seven NCGE assessment criteria. The panel concluded that traditional methods of assessments such as essays and reports did not have a significant effect on behavioral learning outcomes, suggesting that innovative methods for assessment were needed. The study was limited because the data were not codified. However, the author defended the outcomes as reliable because they “represented over 200 years of experience in enterprise education” (Pittaway, et al., 2009, p. 78).

Pittaway (2009) demonstrated in his study that traditional forms of learning (essays, papers) were inferior to innovative methods which are reflective and are active in nature. The content of entrepreneurial courses lends itself to creative projects. The results of this study were consistent with previous studies that showed that experiential learning in Ray and Carswell (2000) (as cited in Pittaway, 2009), doing and reflection in Cope and Watts (2000) (as cited in Pittaway, 2009), problem solving, opportunity taking, and mistake making were important in Gibbs (1997) (as cited by Pittaway). The
researchers of this report recognized the need for further research on assessment regarding entrepreneurial education.

**Conclusion**

Assessment of entrepreneurial education is a complex issue, (Gartner & Vesper, 1994) but assessment research is reliable, and provides a resource for the novice entrepreneurial educator (Banta & Black, 2009; Suskie, 2009; Walvoord, 2004). Procedures and advice from assessment scholars such as Barbara Walvoord (2004, 2012) and Linda Suskie (2009) are consistent. The assessment piece is solid and dependable. The reoccurring concern with assessment is not in data collection practices but in the use of data to make changes in the institution or program based on findings from the assessment (Blaich & Wise, 2011; Walvoord, 2004, 2012). The Wabash Study authors were clear in their explanation of higher education’s blatant disregard for the use of collected data (Blaich & Wise, 2011).

Entrepreneurial education is not easily categorized. Departments take many different approaches to teaching entrepreneurship; however, common themes emerge from the entrepreneurial education literature. Students and faculty value experiential learning (Gartner & Vesper, 1994; Kauffman, 2001; Pittaway, 2009). Entrepreneurs are risk takers and their personalities and attitudes cannot be ignored (Wadhwa, Aggarwal, Holly & Salkever, 2009). On the other hand, there is little literature on best practices used for assessing entrepreneurial education.
Chapter 3
Methodology

This study of entrepreneurial education used action research to examine the methods departments use to assess their programs. The purpose of this research was to develop a method grounded in reputable assessment practices that accurately evaluated student learning in an undergraduate business program with an entrepreneurial focus at a small liberal arts college in the Southeast. Before the home institution’s department can be improved, the researcher must understand the best practices in assessment. Interviews with 11 representatives from business programs with entrepreneurial components provided additional information. In conclusion, this action-research project revealed modifications in the home institution’s department assessment plan that would improve the department.

Kurt Lewin is credited as the originator of action research (Adelman, 1991). Adelman quoted Kurt Lewin, “Action research must include the active participation by those who have to carry out the work in the exploration of problems that they identify and anticipate” (Adelman, 1991, p. 9). Assessment experts Barbara Walvoord (2004) and Linda Suskie (2009) recommended collaboration among department members as an integral part of assessment best practices. Using Lewin’s theory, the active collaboration of department members and a system of assessment provided methods to improve entrepreneurial education at a small liberal arts college.
Several models of action research were available. Each of the models drew on basic steps as shown in the table below. In their book Koshy, Koshy and Waterman (2011) recommended several generic steps to use action research. Koshy, et al. (2011) suggested one method would not fit all scenarios. Rather, action research should reflect the specific needs of a program and be tailored to the specific need. Juliet Monet (2012) developed a model for action research for educators similar to that of Koshy. Margaret Riel (2010) at the Center for Collaborative Action Research at Pepperdine University described essentially the same steps as Koshy and Monet. Table 3 compares the steps used by Koshy, et al. (2011), Monet (2012) and Riel (2010) and demonstrates their similarity. Monet’s model was selected for this study because the model used analysis and reflection and did not require a revision. Koshy’s, Monet’s and Riel’s steps are compared below:
Table 3.1  
*Steps in One Cycle of Action Research*

<table>
<thead>
<tr>
<th>Source</th>
<th>Koshy (1)</th>
<th>Monet (2) Conceptual Model</th>
<th>Riel - Center for Collaborative Action Research (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify an idea or problem</td>
<td>Step 1</td>
<td>Step 1</td>
<td>Step 1</td>
</tr>
<tr>
<td>Observe, fact finding, collect data</td>
<td>Step 2</td>
<td>Step 3</td>
<td>Step 3</td>
</tr>
<tr>
<td>Plan a strategic intervention</td>
<td>Step 3</td>
<td>Step 2**</td>
<td>Step 2</td>
</tr>
<tr>
<td>Act or implement intervention</td>
<td>Step 4</td>
<td>Step 4</td>
<td>Step 4</td>
</tr>
<tr>
<td>Reflect/observe/make changes/analyze</td>
<td>Step 5</td>
<td>Step 5 Analyze and Reflect</td>
<td>Step 5</td>
</tr>
<tr>
<td>Revise original strategic plan</td>
<td>Step 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Adapted from (1), E. Koshy, V. Koshy, and H. Waterman (2011); (2) J. Monet (2012); and (3) M. Riel (2010).

Each model stressed the importance of observation and fact finding, planning, and implementation of an intervention and reflection. Julie Monet’s (2012) conceptual model for action research is similar to Koshy. The starting point was to identify the problem, create a plan that addresses the problem (for Monet), and collect data relating to the plan and correction of the problem. Monet (2012) recommended analyzing the data and then reflecting on its use. Monet’s theory proposed that the researcher consider necessary changes; however, the revisions were not tested because they would entail a second cycle. Monet’s (2012) conceptual model was a blueprint for improving the current assessment plan used in a business department at a small liberal arts college with an entrepreneurial focus.
Using Monet’s (2012) model, this research project intended to address authentic assessment problems within an undergraduate business program with an entrepreneurial focus, even though the institution accepts its current assessment practices. The researcher was motivated to improve existing department assessment practices. The essence of this action-research project was to provide a methodical and reliable structure that enabled the department to make decisions using relevant data. As the literature indicated, assessment

Figure 3.1. Monet’s Conceptual Model for Action Research, J. Monet, 2012.
information concerning entrepreneurial programs was scant. The desire to improve student learning through assessment practices coupled with the lack of entrepreneurial assessment information formed a basis for this action research.

Using action research and employing respected assessment practices, this study sought to develop recommendations to enhance the assessment of student learning relative to the department’s intended learning goals. Furthermore, this study used other reputable programs’ assessment practices to further enhance the study. The action research followed Monet’s (2012) recommended steps:

1. Identifying the problem
2. Planning the intervention using what is known
3. Observing and collecting data
4. Analyzing the data
5. Reflecting on the data

**Identifying the Problem**

The home department needed information to make decisions regarding the assessment of student learning. The researcher sought to make positive changes in the department’s collection and use of assessment data. Action research was an effective method for identifying, understanding, and advancing informed decisions relating to student learning in the business department.
Planning the Intervention Using What was Known

This study began with the researcher understanding the literature regarding best practices in department assessment. Walvoord (2004) and Suskie (2009) consistently recommended establishing clear goals and understanding the assessment’s purpose. Kurt Lewin noted that lasting change must involve collaboration (Adelman, 1993). Similar to Walvoord (2004) and Suskie (2009), Lewin recommended the department’s active participation for effective, lasting adjustments (Adelman, 1993).

Using best practices, the researcher examined the home department assessment plan (see Appendix D). The researcher then conducted an audit to determine if the department goals were supported by student-learning outcomes (see Appendix G).

The next planning step entailed the researcher identifying other undergraduate entrepreneurial programs in order to determine their department’s assessment practices; thus, the researcher needed multiple case studies. Yin (1989) recommended a logical sequence to implement a multiple-case design which is especially helpful if the research question is “why” or “how”. Also, the research should be exploratory, using the department as the unit of analysis.

The use of case-study design began with an analysis of the study’s question (Yin, 1989) which involved a series of queries supporting the research question: How does a small liberal arts college best measure and evaluate student-learning in a business program with an entrepreneurial focus? Using assessment best practices and common themes from identified institutions, the researcher methodically evaluated the responses to the research questions. Using Yin (1989), the researcher identified the unit of analysis
as the department for the multiple case studies. The next question involved the “linking of data to propositions” (Yin, 1989, p. 29). Yin (1989) recommended developing criteria for interpreting the data. The researcher looked for common themes regarding assessment goals, student-learning outcomes, measurements, utility, and collaborative efforts across departmental practices as collected through the case studies methodology.

Using a qualitative approach, the researcher needed to understand the purpose, components, and process in other institutions’ departments to identify patterns across their assessment practices. The three broad conceptual assessment groupings (purpose, components, and process) provided the outline necessary to gather information from other institutions’ departments in a structured and thorough method. Purpose questions addressed the goals of the department; component questions addressed student-learning outcomes and multiple measures; and process questions addressed department collaboration and use of the assessment data. Framing questions under these basic best practices allowed the researcher to accumulate information from the interviewee. The three areas also provided a basis for effectively coding interview transcripts. The researcher sought to identify what other successful undergraduate entrepreneurial programs do and why. The results will be discussed later in chapter four.

The use of telephone interviews was the primary method of data collection for the study (Johnson & Christensen, 2011). The researcher selected individuals at entrepreneurial programs, asking specific best-practices assessment questions (see Appendix B). To further develop an understanding of the interviewed institution’s department, the researcher used their websites. Enrollment information, acceptance rates, course offerings, contact information, and some assessment information were located on
the website. The researcher addressed the primary assessment components outlined in Appendix A. The researcher’s rationale for interviewing a representative from the selected institutions was to secure information about their programs that was later analyzed: (1) Are best practices used? (2) What common assessment practices were used by the departments? (3) How did departments use assessment data?

The researcher established interview protocol: prior to the interview the researcher determined the appropriate contact person, the type of business program offered, and other relevant information from each institution (see Appendix C). During recorded telephone interviews, the researcher first verified the participants’ receiving the informed consent agreement, and then collected data. To maximize responses and to clarify answers, the researcher utilized a script of open-ended questions as well as probing questions.

The scripted interview included four primary questions with additional probes. Suskie (2009) and Walvoord (2004, 2012) stated best practices for assessment must include goals, the student-learning outcomes must support the goals, and the department must use multiple methods of measurements (Walvoord, 2004, 2009). Department collaboration is essential, and another best practice is the use of assessment results to make changes. The script used to gather information from the interviews was based on best practices in department assessment (see Appendix B).

The researcher purposely selected only nine institutions to ensure a balanced representation of sources. Three categories of interviewees were established. The categories were based on large or influential (nationally recognized for entrepreneurial
education) institutions (Category I), peer institutions (Category II), and an expert in the field of entrepreneurial assessment (Category III). A variety of sampling techniques were based on Johnson and Christensen (2011) who offered methods for identifying specific types of samples. Snowball sampling led to two additional interviews ("participants are asked to identify other potential research participants") which provided useful information to this study (Johnson & Christensen, 2011, p. 595). Because the snowball sample institutions were most similar to Category I institutions, the results were included in Category I. Category I was comprised of information from three targeted large or influential institutions and two snowball sample institutions. Category II was comprised of five peer institutions. Independent from Categories I and II, an individual expert comprised Category III.

Using a homogeneous sampling technique, the researcher interviewed representatives from large nationally recognized entrepreneurial programs because they had exemplary entrepreneurial programs (Category I). Also included in Category I was snowball-sampling results. The second sampling technique, purposive sampling, was comprised of institutions demographically similar to the home institution. These were small liberal arts colleges that had entrepreneurial components in their business programs (Category II). The third sampling technique, critical case sampling, selected an individual with significant expertise, thus contributing valuable information to this study (Category III). Using guidelines for sampling, the researcher established sample categories (Johnson & Christensen, 2011).
**Category I: Exemplary and Snowball Samples**

The interviewer selected three institutions based on their standing in nationally recognized periodicals. The researcher used reputable sources such as *The Princeton Review*, Entrepreneurial.com, and *US News and World Report* (see Appendix F). Also included in this category were the snowball sample data. The two additional institution’s (snowball sample) data were included in this category because the institution size and demographics were similar to those of the large and influential institutions. A total of five representatives were interviewed for Category I.

**Category II: Institutions Similar in Demographics**

Category II was comprised of institutions against which the home institution consistently evaluates its performance. The first criterion for Category II institution was its similarity to the home institution’s mission, which promotes liberal arts. Using this peer group, the researcher further refined the category to include institutions with similar student enrollments, institutional expenses, and endowments. Further refining distilled the category to a final list of six institutions that offer a business program with an entrepreneurial component. The researcher interviewed representatives from five of the six institutions.

**Category III: Critical Case Sample**

The researcher chose an individual for an interview based on his extensive scholarly research on assessment of entrepreneurial education. In addition to serving on international entrepreneurial educational panels, and publishing extensively, the individual currently serves as the director of an entrepreneurial center.
A table is offered in Appendix E as a summary of the three categories. The table provides descriptions including enrollment data, approximate geographical location, general description of the program offered, and other pertinent information concerning the institutions and their category.

**Strategy for Collecting the Data**

The researcher referred to the colleges’ or universities’ home webpage to secure names. The researcher first secured the name and contact telephone numbers of the institutional research individual or the business department chair. The researcher then made initial contact with the institutional research director (if available), entrepreneurial center director (if applicable), or department chair. The first telephone contact was made to identify the most knowledgeable person to interview. The appropriate name was vital to the quality of the interview because the contact must be knowledgeable about department content/operations and the assessment process (see Appendix E).

**Interview Protocol**

The researcher prepared for each interview by acquiring information regarding school enrollment, acceptance rate, program description, entrepreneurial offerings, acronyms unique to the school, key faculty names, any assessment data, student-learning outcomes, and entrepreneurial center information (see Appendix C).

Each designated interviewee received an email which contained information confirming date, time, and Google voice telephone number to be called and brief instructions. The researcher included an attachment containing interview questions and an Informed Consent Agreement.
The researcher asked the following questions: (1) What are the goals/purposes of your program? (2) What are the student-learning outcomes? (3) How is student-learning measured? (4) How is assessment data used? The questions are more thoroughly covered in Appendices A and B.

Technology

The researcher used Google Voice and rev.com to record and transcribe the interviews:

1. Researcher made the initial call to the participant and explained the Google Voice process.
2. Participant called back using Google Voice
   a. Researcher must press 1 to accept
   b. Researcher must press 4 to record
3. The researcher asked introductory questions.
   a. Verified voice recognition
   b. Asked if the participant wanted a copy of the interview transcription
   c. Clarified person and position
   d. Verified acceptance of Informed Consent document
4. Asked questions from the script of approved (IRB) questions. (Appendix B.)
5. Ended conversation.
6. Using Google Voice, the researcher saved the audio file on the hard drive under a designated file name and downloaded it to rev.com.
7. Rev.com transcribed and emailed the copy of the transcript to the researcher. To verify the accuracy of the transcription, spot checks were made. The researcher listened to the audio while comparing to the transcription. Also, the researcher emailed a copy of the transcription to interested interviewees for their review. The researcher received no discrepancies from the interviewees.
8. The researcher coded the transcript and notes from the conversation.

In addition to the interviews, the researcher collected data from the home institution’s current assessment plan. The researcher examined the 2012-2013
assessment plan to determine the extent of the use of best-practice procedures. The researcher used a curriculum map to reveal how the learning outcomes supported the departments established goals (see Appendix G).

**Analyses**

To begin, the researcher compared recommendations for best practices in assessment from the literature to the home institution’s department assessment plan to determine strengths and weaknesses in the assessment practices (see Appendix D). The home institution department members verified the analysis, unanimously agreeing with the researcher’s conclusions. The researcher analyzed the interviewed representatives from Category I, II, or III institutions’ answers, looking for adherence to best practices in assessment. The purpose for analyzing responses was to observe whether the interviewed institutions followed basic best practices in assessment (see Appendix I).

Next, the researcher used data collected from interviewed institution’s representative (listed above in Categories I, II, and III) to determine the commonalities among programs. To analyze the data, the researcher systematically segmented information into categories (see Appendix B). Johnson and Christensen (2011) offered recommendations for organizing data by categorizing and coding information. Prior to the interview, the researcher established codes which included: purpose, student-learning outcomes, measurement, and utility (or use of the data). Upon completion of the interview, the researcher added the following inductive codes: collaboration, pragmatic ideas (take away), and other valuable suggestions. One researcher coded the interview data to identify common themes.
Reflection and Revision

In the final step, the researcher shared the findings with the home department and gathered its input to shape the assessment plan. The researcher communicated a comprehensive list of findings to the home department. The researcher provided the home department with a thorough explanation of what the literature recommended, what other institutions were doing, and how the home department compared.

Based upon the analyses, the researcher recommended modifications to the home department’s assessment plan. In the future, the home institution’s department should determine if modifications are appropriate, and if the modifications will improve the current assessment plan at a small liberal arts college.

Summary

Monet’s (2012) model of action research involved five steps. The problem was identified; the home department often made decisions regarding student learning based on limited information. The department required a systematic method of gathering information.

Monet’s (2012) second step in the model was to plan an intervention, as illustrated in her model. Since assessments are strengthened by using best practices, the researchers plan involved applying best practices in assessment to the home department’s assessment approach. The researcher determined which best practices were lacking, what other business programs with entrepreneurial components did, and why. The researcher used this information to advise the home department about improving their assessment plan and practices.
Monet’s (2012) third step in her model was to collect and summarize the data. Following Monet’s model the researcher collected data from the home department and interviewed institutions’ representatives. The home department faculty emails regarding assessment communication and collaboration were not available for review or publishing. Minutes of department meetings discussing assessment were unavailable; therefore, the home department’s 2012-2013 authentic assessment plan was the only evidence offered to prove the home department’s assessment strengths and weaknesses.

To collect data from other institutions, the researcher used a multiple case study approach. The researcher established sampling techniques to determine the most relevant institutions to be interviewed; and provided a technology discussion to determine the process of collecting and organizing the interviews.

Monet’s (2012) fourth step was to analyze the data. Monet (2012) recommended looking for patterns, improvement and clear supporting evidence (Monet, 2012). The researcher analyzed the home department assessment plan through the lens of best practices. The researcher analyzed the interviews based on established codes, looking for common responses across interviewees.

Monet’s (2012) final step for one round of the action research cycle was to reflect on the data. She recommended that the researcher reflect on the findings to ensure their usefulness. The researcher shared the analysis of the assessment data as well as the interview data with the department.
Chapter 4

Results

This multi-faceted, action-research project utilized researched assessment practices and current practices acquired through case study research. The research question of this study was: How could a department in a small liberal arts college best measure and evaluate the student-learning outcomes to inform the business department with an entrepreneurial focus? The researcher answered this question by comparing assessment best practices to the home-institution department assessment plan and conducting case study analyses of assessment practices utilized by similar departments of other selected institutions.

Following Monet’s (2012) model, this action research begins with the home department assessment plan and best practices as described in the literature. Assessment experts such as Suskie (2009), Walvoord (2004) and Banta (2009) agreed that best practices include program goals and multiple measures.

Continuing with Monet’s (2012) model, the researcher completed interviews with selected individuals from chosen colleges or universities from the three categories discussed. The interviews were transcribed. The researcher coded the transcriptions, looking for repetitive answers across the interviews. The researcher based the studies’ findings on the interviews’ analysis. The results were based on 11 completed interviews (using three categories) with colleges and universities whose enrollment ranged from large enrollments over 40,000 to those less than a 1,000. The length of time of each
telephone interview ranged from 17 minutes to 45 minutes; 32 minutes was the average length of the interview.

Chapter four is organized into three parts. Part 1 included the findings from an analysis of the home department’s assessment plan. Part 1 included six findings, a summary table and recommendations. Part 2 reports the findings from interviews with department representatives from the sampled institutions. The four findings are organized by groupings (large, snowball, peer and expert) previously discussed. The institution’s profile and the interviewees’ responses to interview questions are provided. Part 3 reports themes generated from the interviews with selected institutions’ representatives. The themes are organized into six findings using best-practices.

Part 1: Analysis of the Home Department’s Interview and Assessment Plan

An annual assessment plan is produced by the home department and submitted to their institution’s assessment committee for review and approval. The home department members collaborated to establish goals which supported the assessment plan. The goals also supported the college mission, and the department used multiple measures to assess the goals. Much like Kuh and Ikenberry’s (2009) report, the home department reported using best practices, but fewer than needed. Missing from the home department’s assessment plan was the home department’s demonstration of the data’s use. The practice is consistent with the Wabash Study (Blaich & Wise, 2011), which concluded that most institutions did not make the effort to use assessment data to make informed decisions.
The home department’s responses to interview questions and assessment plan yielded the following responses:

Goals or purpose – The programs’ guiding objectives:

- Students communicate effectively in both written and oral form
- Students make decisions based on social repercussions
- Students have an understanding of fundamental business practices
- Students demonstrate the ability to analyze quantitate data
- Students can research business information effectively

Measurement – Methods used in measuring goals and learning outcomes:

- Rubrics
- Survey
- Pre-post test

Student Learning Outcomes: The department has goals; the individual course student-learning outcomes are extensive and an excerpt is listed on the department mapping document (Appendix G). The course mapping document is instructor/course driven; however, the instructors responded that the student-learning outcomes support the home institution and department mission.
Utility – The data is used to improve the program:

- The department notes showed reflection in the “use of results” column of the assessment plan.
- Student deficiency identification resulted in the “use” of results. For example, if the measurements for (the goal) “communication” are not meet, the department discussed what the department could do to help students improve.

Collaboration:

- The department did discuss the assessment plan, goals, and results as evidenced by their listing and identification.

**Finding 1.1: The business department set goals.**

According to scholars Suskie (2009), and Walvoord (2004, 2012), a department should set goals. Suskie stated that goals should reflect “what the student is to learn and why” (Suskie, 2009, p. 115). The home department set five goals and elaborated on what was to be learned and why. To ensure the home department goals reflect what is to be learned and why, the goals established by the home department included: the students will gain a greater awareness of stakeholders and entrepreneurship; the students will gain fundamentals of business; the students will manage information and demonstrate quantitative skills in a business setting; the students will communicate effectively; and students will prepare for further studies or the commercial world (see Appendix D).

**Finding 1.2: The business department goals supported the institutional mission.**

The home department provided evidence of goals that supported the institution’s mission statement in the assessment plan. For example, as specified in the college mission, the student will be “responsible members of a world community”. The supporting goal of the department was “students will have a greater knowledge of the
positive economic role that entrepreneurship plays” (see Appendix D). Department goals should support institution goals (Walvoord, 2004, p. 38).

Finding 1.3: The business department established student-learning outcomes.

Student-learning outcomes are considered best practices of assessment (Ewell, et al., 2011; Walvoord 2004; Suskie, 2009). The department reported student-learning outcomes in the assessment plan’s goals and in the course mapping (see Appendices D and G). The department did use a systematic process of identifying goals and aligning student-learning outcomes to reach the home department goals. For example, Goal 1 was for students “to understand the positive role of entrepreneurship”. This goal was reinforced in three courses, but measured in only one. (Appendix G illustrates the excerpt from the home-department mapping.)

Finding 1.4: The business department used multiple measures to determine if goals were met.

The home department used pre- and post-tests, surveys, rubrics, and course-embedded measures to evaluate goals and student outcomes. Multiple measures involved more than one method to measure goals. According to best practices, multiple measures also refer to using direct and indirect measures of assessment. The pre- and post-tests are examples of direct measures; the student survey is an example of an indirect measure. An example of the pre- and post-test used by the home department is in Appendix H. The home department did use multiple measures. Student-learning outcomes did support department goals. Multiple measures are considered best practices of assessment (Ewell et al., 2011; Walvoord 2004; Suskie, 2009). See examples in Appendix H.
Finding 1.5: Multiple measures yielded negligible follow-up results.

The department should use assessment data to make informed decisions about curriculum and pedagogy (Walvoord, 2004; Suskie, 2009). No member of the home department provided examples or demonstrated changes from assessment results. As found in the Wabash Study (Blaich & Wise, 2011), schools frequently do not utilize the findings of their assessment process.

Finding 1.6: No action on assessment findings.

In the assessment plan (Appendix D) the “use of results” column was not engaged to make changes in the department. Casual conversations stemming from assessment did not produce evidence of change or action. Collaboration among department members is a best practice. Effective collaboration includes discussing and implementing changes resulting from assessment data, as well as sharing and implementing ideas among department members. “Assessment can be thought provoking for the department, helping the department to be clearer about its aims” (Walvoord, 2004, p. 21).
Table 4.1  
*Summary of home department adherence to best practices*

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Home Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>The department set goals</td>
<td>yes</td>
</tr>
<tr>
<td>The department identifies goals that support the institution</td>
<td>yes</td>
</tr>
<tr>
<td>The department develops student-learning outcomes</td>
<td>yes</td>
</tr>
<tr>
<td>The department uses multiple measures to determine if goals were met</td>
<td>yes</td>
</tr>
<tr>
<td>The department uses multiple measures for improvement</td>
<td>no</td>
</tr>
<tr>
<td>The department implements changes discussed</td>
<td>no</td>
</tr>
</tbody>
</table>

*Discussion.* As shown in table 4.1, the home department’s practices were consistent with four of the six practices.

In many instances, the home department did follow best practices. The department set goals which supported the institution (Appendix D). The assessment plan identified student-learning outcomes and multiple measurements. Significant pieces of assessment were in place and functioning. The department collaborated on setting and measuring goals. All department members were aware of assessment-plan process and the assessment committee’s evaluation of the plan.

The department did not follow two key best practices. Collaboration was weak within the home-school department. Strong collaboration would involve using assessment information to improve the curriculum, sequential learning opportunities and courses for students, and using course mapping to support recognized departmental goals. Answers from the home department interview (Appendix I) reported responses indicative of a department that does not act on assessment results. For example: Are student
learning outcomes used for curriculum development, goal setting or staff appointment (no). Another response example: Is the assessment plan used annually (no)? Consequently, the home department did not use data from the assessment to make informed decisions. Walvoord stated, “Use the information for improvement” (Walvoord, 2004, p. 3). Blaich and Wise (2011) suggested in their study, The Wabash Report that schools spend energy and resources collecting data, yet often do not use the data. The home department, like many other departments, does not use assessment results. The phenomenon of why departments do not use assessment data is a topic for another study.

Part 2: Analysis of Assessment Practices at Selected Institutions

The sampling strategy was to interview participants in three distinctly different categories. The unit of measure was the department in higher education. These 11 institutions were characterized by enrollment sizes, acceptance rates, geography, and control as in either public institutions or private, or not-for-profit institutions (see Appendix E).

The position/assignment held by the interviewee was important to the research. The interviewee needed to be involved with assessment practice at the institution level, in the business or entrepreneurial department, in the Entrepreneurial Center associated with their institution, or a combination of duties. Table 4.2 summarizes the interviewees and their positions.
Table 4.2

Role of 11 interviewees by sampling category

<table>
<thead>
<tr>
<th>Assessment only</th>
<th>Department Chair-Assessment Point Person</th>
<th>Faculty</th>
<th>Entrepreneurial Center</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/11=18%</td>
<td>6/11=54%</td>
<td>9/11=82%</td>
<td>2/11=18%</td>
<td></td>
</tr>
</tbody>
</table>

**Category I – Large/Influential Snowball Schools**

1 1

2 1 1 Also taught classes within the E-Center

3 1 Considered herself assessment point person

4 1

5 1 1 Associate Dean of Business School/assessment point person

**Category II – Peer Schools**

P1 1 1

P2 1 1

P3 1 1 Was involved with E-Center administration

P4 1 1 E-Center Chair & assessment point person

P5 1 1

**Category III – Expert**

1 1 E-Center Chair & assessment point person
Finding 2.1: Profiles and responses of large/influential institutions.

Category I included departments in three colleges or universities with much larger student populations than that of the home institution. The researcher chose the three interviewed institutions based on their national ranking for entrepreneurial programs (see Appendix F). Since the personnel in large institutions have specialized duties, the process of discovering the ideal contact person presented challenges. Also included in Category I data were interviews which resulted from snowball sampling. The snowball samples institutions’ profiles and interviewee responses will follow the discussion of large or influential schools.

The initial Category I institutions are located in the Northeast and the West. The three universities had a student acceptance rate ranging from 17-51%. In these three private universities, the student enrollment ranged from 3,000 to over 40,000.

One of the interviewees was a designated department assessment person. One contact was the assessment coordinator for the entire institution, answering questions quite knowledgeably about the entrepreneurial program. One person held the positions of department chair, involved in the entrepreneurial center, and assessment contact. Two of the three institutions’ interviewees felt they were immersed in a culture of assessment with one of the three institutions’ interviewee expressing an evolving assessment culture. Two of the three institutions offered programs designed for women entrepreneurs. These three institutions contained entrepreneurial centers within their schools. All three institutions used business competitions to promote entrepreneurship. All three institutions had a blend of faculty who were practicing entrepreneurs and traditional academics. All three institutions used an assessment report which was in a narrative
format without standardized columns used by Nichols 5-Column method or the AACSB method). All three institutions were AACSB accredited.

Listed below are themes identified from the department representatives’ or their website statements. Best practices in assessment were used for coding the responses. The interview script was designed using best practices to guide the questioning. However, some responses were not on the scripted interview but used by the researcher as “take away” (see Appendix J). The researcher used repetitive responses (two or more) in all but one case which involved student-learning outcomes. Using coding previously described, the researcher sorted answers in a format based on best practices in assessment. A comprehensive list of responses is found in Appendix J. A summary of the responses are listed below by assessment best practices:

*Category I – Large or influential institution’s common responses*

Goals or purpose – The programs’ guiding objectives:

- To explore, reflect, analyze and communicate critically
- To analyze information quantitatively
- To think and act in an entrepreneurial way
- To make decisions based on ethical, social, environmental factors
- To demonstrate leadership and teamwork
- To demonstrate critical and integrative thinking
- To demonstrate decision-making ability

Measurement – Methods used in measuring goals and learning outcomes:

- Rubrics
- Surveys
- Course-embedded assessments/work samples
- Capstone or final presentation evaluated through faculty observations and rubrics
- External reviewers

Student-Learning Outcomes: Interviewees had difficulty responding to the question directly. The researcher listed outcomes that were often discussed in general conversations or were important to the researcher’s home department.

Hard skills
- identifying opportunity
- understanding and preparing feasibility analysis
- using confirmatory data
- utilizing presentation skills

Soft skills
- creativity
- independence
- interpersonal skills

Utility – use of data to improve the program:
- curriculum revision
- pedagogy and student deficiency identification
- department reflection
Collaboration – inter and intra department collaboration:

- goal setting
- assessment of goals
- development of co-curricular, supportive clubs and programs

**Finding 2.2: Snowball sampling (also in Category I) yielded two interviews.**

Snowball sampling results were included in Category I because the institutions’ characteristics were most similar to large/influential institutions. Both snowball sample institutions interviewed had AACSB designation. One university was a large, public research university in the East, and the second was a private college in the Midwest. Student enrollment ranged from 5,500 to over 20,000 students with acceptance rates of 60-65%. Both institutions had entrepreneurial centers. Both department representatives expressed that assessment was embraced by fellow members of their institution. For example, one institution had an entire department devoted to assisting faculty and staff with assessment. The researcher conducted a productive interview with the smaller institution (garnering information concerning assessment of their entrepreneurial program), but the larger university was not a productive interview. The smaller of the two snowball samples’ interview was with the point person from business and assessment while the larger university interview was with an assessment person who discussed only general assessment information. As a result, the larger university representative did not provide specific enough data to be meaningful for this study.

Due to the small sample size and relative similarities to Category I (larger institutions), the analysis of Category I included both snowball sample institutions. The responses provided from the snowball sample are listed:
Goals or purpose – The programs’ guiding objectives:

- To foster entrepreneurship throughout the campus
- To make ethical decisions
- To demonstrate oral and written communication
- To demonstrate analytical skills

Measurement – The measurement of goals or learning outcomes:

- Rubrics
- Course embedded assessments
- Observation

Student-Learning Outcomes:

- Interviewee was not specific about their respective outcomes.

Utility – How is the data used to improve the program?

- Department goal setting goals
- Curriculum maps are used to determine which courses impact the goal.

Collaboration – inter and intra department:

- Collaboration with the English department to improve written communication

Other noteworthy comments:

- The interviewee believed that too much energy was spent collecting data, and more energy should be spent on data analyses. In his words:

Where we plan on going with assessment is just overall simplifying the process I think. It’s a common story again that I’ve heard from other schools through AACSB and other avenues. People have been over zealous and trying to make a complex process out of something that really doesn’t need to be all that complex. They’re spending ten units of effort on complexity and maybe measure it back to three
efforts and then spend those other seven on using the data and analyzing the data and making correct decisions on how to react to the data. I would hope and it’s not exactly where we are now, but I hope in future iterations that 10-20% of our effort is spent on measurement and 80-90% is spent on what do we do because of the measurement, the analysis thereof of the appropriate structural changes because of it.

Finding 2.3: Profiles and responses from peer institutions.

Category II was comprised of five peer institutions. The researcher interviewed representatives from private liberal arts institutions in the East and Midwest. Student enrollment ranged from 930-1,600 students with acceptance rates of 50-75%. Four of the five interviews were with department chairs and one was with the chair of an entrepreneurial center. One institution was accredited by an external agency; one institution received a large grant to expand their entrepreneurial culture on campus. Four of the five institutions had entrepreneurial centers.

Data sources for Category II institutions included interviews with department representatives and a review of departmental websites. The researcher summarized common information for each section below. A comprehensive list of responses is found in Appendix J. The responses resulted from coding the transcript using interview protocol.

Goals or purpose – The programs’ guiding objectives:

- students will communicate clearly in written form and orally
- students will think analytically and demonstrate the ability to interpret data
- students will demonstrate the ability to problem-solve creatively and responsively
- students will developed long-term and global perspectives
Measurement – The measurement of goals or learning outcomes:

- Rubrics for presentations and papers (narrative assignments)
- External reviewers assess student competency using comments in a narrative description
- Surveys of students and alumni
- National testing used by three of the five institutions (Graduate Management Admissions Test, Bloomberg Assessment Test, and Major Field Tests in Business from Educational Testing Service)

Student-Learning Outcomes:

- No specific repetitive answers were given. Four institutions referred to previously discussed goals; one institution reported that it does not have specific learning outcomes. The institutions were consistent in their responses: the departments developed student-learning goals, and one institution’s department aligned the student-learning outcomes to the goals.

Utility – Use of the data used to improve the program:

- Data were used for reflection within the department
- Results were used to adjust the curriculum
- Personnel adjustments (only one institution reported but it was a significant reporting)

Collaboration:

- Inter and intra collaboration Business Department discuss results within the department
- Business department discussed with advisory groups
- Results of the measurements were reported to other departments/committees on campus for feedback

Other – The peer institutions shared valuable information

- Five of the institutions wrote annual assessments and submitted the plan to an institutional committee
- Four of the five institutions reported a weak or developing culture of assessment
- One of the five institutions reported financial support in order to continue assessment

Comparison of peer institution responses to large institution responses

Goal setting is much more generic for peer institutions and far less entrepreneurial-focused than in the larger institutions. However, the researcher saw overlap in required communication skills, required analytical skills, required creative problem-solving and required decision-making skills.

Measurement techniques are similar between large and small institutions. Both categories consistently used course-embedded assessment, rubrics, surveys, and external reviewers to observe and provide feedback on student work.

Both categories used results (utility) for curriculum enhancement and department reflection.

Collaboration for peer institutions was shared information among the department as well as interdepartmentally. Collaboration for the larger institutions involved discussion of assessment practices and discussion of supporting co-curricular programs.

**Finding 2.4: Profile and responses from the expert interviewed.**

The interviewed expert’s scholarly activity ranged from writing multiple current articles on entrepreneurial assessment, a book, and serving as a panelist on international entrepreneurial educational forums. In addition, the expert is a professor of entrepreneurship. The researcher posed the questions (Appendix B) and the expert offered suggestions and comments to support information gathered from Categories I and II institutions. The expert responded to questions as both a professor and a researcher.
Goal or purpose – The objectives of the programs are dependent on the entrepreneurial program and its focus; however, several generic goals were noted.

- Understanding and training with uncertainty, ambiguity, and opportunity
- Fundamental managerial skills
- Networking and teambuilding skills
- Technical skills for a start-up business process

Measurement – Measurement of goals and learning outcomes:

- Course embedded
- Business competitions
- Presentations

Student-Learning Outcomes:

- The most commonly reported student-learning outcome is understanding the venture-creation process.
- Built-in ambiguity, uncertainty. The students are forced to make decisions in a dynamic and uncertain situation. The purpose of the exercise is to create a realistic situation that entrepreneurs experience. As a result, the instructor does not know and cannot predict the outcome.

Utility – Using the data to improve the program. Several comments were especially noteworthy:

- Designing the program around the desired outcome
- Creating an “entrepreneurial context”
- Reflection
Other – The expert offered other valuable researched-based information to the home school.

- He advised: “design your own assessment practices around what it is you are trying to do”.

**Part 3: Using Best Practices in Assessment, Common Themes from Interviewed Institutions**

The researcher conducted 11 interviews with representatives from undergraduate business departments with entrepreneurial components. The researcher chose three large or influential universities, two snowball samples, five peer schools, and one scholar to interview. The researcher asked each representative the same questions (see Appendix B). Although the researcher used a script, some conversations contained more information than others. To analyze the responses, the researcher combined all responses (Categories I, II, III, and the home department) when addressing the best practice. The researcher addressed each question, its implications, and its recommendations for the home department. Finally, the researcher provided a composite of responses to the interview questions, their implication and their recommendations for the home school.

**Finding 3.1: Goals or purposes were identified.**

All interviewed institutions set goals. The goals were slightly different among the institutions; however, there were a number of repeated goals. Goals were broad in nature, but were supported by specific student-learning outcomes (Suskie, 2004). The interviewed institutions’ goals are listed in the following table:
Table 4.3  
*Comparison of goals identified by more than one institution or expert recommendation*

<table>
<thead>
<tr>
<th>Category I and Snowball Samples n=5</th>
<th>Category II Peer Institutions n=5</th>
<th>Expert n=1</th>
<th>Home Institution*** n=1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication Skills</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written</td>
<td>5=100%</td>
<td>4=80%</td>
<td>1=100%</td>
</tr>
<tr>
<td>Oral</td>
<td>5=100%</td>
<td>4=80%</td>
<td></td>
</tr>
<tr>
<td>Quantitative or analytical</td>
<td>5=100%</td>
<td>4=80%</td>
<td>1=100%</td>
</tr>
<tr>
<td>Ethical Decision making</td>
<td>5=100%</td>
<td>3=60%</td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adept at leading</td>
<td>5=100%</td>
<td>2=40%</td>
<td>1=100%</td>
</tr>
<tr>
<td>Integrative thinking</td>
<td>2=40%</td>
<td>2=40%</td>
<td></td>
</tr>
<tr>
<td>Decision-making ability</td>
<td>1=20%</td>
<td>0</td>
<td>1=100%</td>
</tr>
<tr>
<td>Team building ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical skills</td>
<td>1=100%</td>
<td>1=100%</td>
<td></td>
</tr>
<tr>
<td>Dealing with uncertainty, ambiguity, or flexibility</td>
<td>2=40%</td>
<td>1=100%</td>
<td></td>
</tr>
<tr>
<td>Foster Entrepreneurship throughout the campus</td>
<td></td>
<td></td>
<td>1=100%</td>
</tr>
</tbody>
</table>

*Note:* The home department listed the goal of preparing students for further studies, entry-level jobs or business ownership. No other institution shared this goal.

The interviewed institutions valued basic skills: communication, analytical skills, ethical skills, and leadership. The goals emphasized skills often associated with general education rather than entrepreneurship. The department learning goals reported by peer institutions seemed much more generic; Category I departments also included goals specific to entrepreneurship. It is worth noting that the peer institutions contained business departments with entrepreneurial components or centers and larger institutions represented entire entrepreneurial majors/programs. Regardless the size of the institution, common goals were expressed.
Recommendations for home department regarding goal setting

Based on interviewed institutions’ responses, the home department is in line with its goal setting. Almost every goal the home department identified (see Appendix D) is contained in other programs with the exception of leadership.

The second exception is the home department’s goal of preparing students for further studies, entry-level jobs, or business ownership. The goal is assumed by faculty and students, and is not a learning goal. The researcher recommends the elimination of this goal because influential institutions, snowball sample institutions, peer institutions, and the scholar did not identify the goal.

The home department may want to consider adding the goals of building integrative thinking, and decision-making abilities. If the home department does not add these as broad goals, the researcher recommends that they be incorporated into other listed goals.

Finding 3.2: Measurements identified.

The various measurements used in large and small institutions are listed in table 4.4.
### Table 4.4

*Comparison of measurements used*

<table>
<thead>
<tr>
<th>Category I and Snowball Samples n=5</th>
<th>Category II Peer Institutions n=5</th>
<th>Expert n=1</th>
<th>Home Institution*** n=1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubrics 4=80%</td>
<td>5=100%</td>
<td>1=100%</td>
<td>1=100%</td>
</tr>
<tr>
<td>Course embedded grades for tests,</td>
<td>5=100%</td>
<td>1=100%</td>
<td>1= 100%</td>
</tr>
<tr>
<td>projects, exams</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey 2=40%</td>
<td>1=20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student self-assessment 1=20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitions 3=60%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External reviewers 2=40%</td>
<td>1=20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty and external reviewer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>observations 1=20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standardized/national tests 3=60%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capstone course 3=60%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Implications**

All interviewees’ departments used multiple measurements to evaluate their goals. It is interesting to note that only the peer institutions use standardized tests. Consistent with Kuh and Ikenberry’s study (2009), the researcher noted that competitive institutions use fewer standardized tests and that the more competitive institutions (in this study the large/influential institutions) use locally developed measurements. The home department is inconsistent with the peer group in that it uses locally developed measurements exclusively. If the home department were consistent with their peer schools in using standardized tests, benchmarks may be used for comparisons between schools and trends within the home department.

All three large and influential institutions interviewed participate with internal competitions. Four of the five peer schools and the home department elect not to...
participate in competitions. Consequently, the students do not benefit from rivalry and monetary awards.

*Recommendations for the home institution regarding measurements used.*

As a result of these observations, the researcher recommends the home department use a national standardized test for comparison to other peer institutions and for recruitment. If test results for the home department were favorable, the home department could use results to attract students by promoting the academic strength of the program. Furthermore, the scores may be used to monitor progress within the home department from year to year.

The home department may seek funding for business competitions. The home institution may also consider offering in-house competitions on a smaller scale. Students could compete for funding for an innovative product, service, project, or non-profit service for the community.

**Finding 3.3: Student-learning outcomes identified.**

Student learning outcomes are important components of assessment best practices. The department (the unit of measure) should understand what its students are expected to produce. The learning outcomes “describe detailed aspects of goals” (Suskie, 2009, p. 117). However, in this qualitative study, the question requesting student-learning outcomes did not contribute to the results. The question was difficult for the interviewee to answer succinctly and accurately. Far too many responses were possible and the interviewee could not answer the questions thoroughly. This question would be
better served through a quantitative study using a survey. Table 4.5 provides a comparison of repetitive responses about student-learning outcomes.

Table 4.5

**Comparisons of student-learning outcomes among institutions. Information was limited.**

<table>
<thead>
<tr>
<th></th>
<th>Category I and Snowball Samples n=5</th>
<th>Category II Peer Institutions n=5</th>
<th>Expert n=1</th>
<th>Home Institution*** n=1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify opportunity</td>
<td>2=40%</td>
<td>1=100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feasibility analysis</td>
<td>1=20%</td>
<td>1=100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation skills</td>
<td>1=20%</td>
<td>1=100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative</td>
<td>1=20%</td>
<td>Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>1=20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People skills</td>
<td>1=20%</td>
<td>Not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand venture capital creation</td>
<td>Provided 1=100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to deal with dynamic or changing situations</td>
<td>1=100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assurance of Learning with AACSB</td>
<td>1=20%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Implications**

Conclusions would be inaccurate based on the incomplete responses offered. As noted, a more accurate portrayal of responses would need further study using a different research method.

**Recommendations for the home institution regarding student-learning outcomes.**

Based on the limited data, the home department contains similar student-learning outcomes to those in influential institutions. The researcher does recommend that the home business department with an entrepreneurial focus expose students to the reality of
creating venture capital, as well as understanding and managing changing scenarios because these are specific entrepreneurial skills.

Finding 3.4: Utility – how results from assessment are used.

Best practices of assessment include using assessment data (Banta & Black 2009; Suskie, 2009; Walvoord, 2004 and 2012). The data may be used for planning, changing curricula, personnel or budgeting, and “other factors that affect student learning” (Walvoord, 2004, p. 64). Using data collected through the assessment process to improve a program is a critical yet often abandoned step (Blaich & Wise, 2011). Surprisingly, each category of interviewees reported uses of assessment data. Table 4.6 provides comparisons of the various uses of assessment data.
Table 4.6
Comparisons of uses of assessment data

<table>
<thead>
<tr>
<th></th>
<th>Category I and Snowball Samples n=5</th>
<th>Category II Peer Institutions n=5</th>
<th>Expert n=1</th>
<th>Home Institution*** n=1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum changes</td>
<td></td>
<td>2=40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedagogy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Knowledge Deficiencies</td>
<td>1=20%</td>
<td>2=40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department Reflection</td>
<td>1=20%</td>
<td></td>
<td>1=100%</td>
<td>1=100%</td>
</tr>
<tr>
<td>Personnel Assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal Setting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create an Entrepreneurial Context</td>
<td></td>
<td></td>
<td>1=100%</td>
<td></td>
</tr>
<tr>
<td>Other Uses of Data</td>
<td></td>
<td></td>
<td>3=60%</td>
<td></td>
</tr>
</tbody>
</table>

Implications

Institutions primarily used the data for reflection or accreditation. The findings are consistent with other research studies that reported assessment data as “most commonly used for preparing for accreditation” (Kuh & Ewell, 2010, p. 19). This study revealed three out of 11 (27%) institutions used data to make changes in the department. Institutions collect assessment information, but do not make productive use of the data. The Wabash National Study reported 25% of schools specified in the study “have engaged in an active response to the data” (Blaich & Wise, 2011).

Recommendations for the home institution regarding use of assessment data.

The home department needs to begin using the data productively. The home department does not use the assessment data for program improvement which is the primary reason for collecting data. One example of data use includes monitoring course support of department goals (course mapping). “The most important audience is the
department itself; you must conduct assessment so that it serves the department and its students” (Walvoord, 2004, p. 51).

**Finding 3.5: How and why departments collaborate.**

Walvoord (2004) writes, “Assessment can be divisive and unnecessarily time consuming or it can be productive, inspiring, and thought-provoking for the department …” (Walvoord, 2004, p. 51). Walvoord continues, “plan how to best manage department discussions” (Walvoord, 2004, p. 51). Several forms of collaboration are listed in Table 4.7.

Table 4.7

*Comparison of collaboration efforts*

<table>
<thead>
<tr>
<th>Category I and Snowball Samples n=5</th>
<th>Category II Peer Institutions n=5</th>
<th>Expert n=1</th>
<th>Home Institution*** n=1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal Setting</td>
<td>3=60%</td>
<td>1=100%</td>
<td></td>
</tr>
<tr>
<td>Assessment of goals</td>
<td>2=40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of co-curricular activities</td>
<td>2=40%</td>
<td>2=40%</td>
<td></td>
</tr>
<tr>
<td>Work with other departments</td>
<td>3=60%</td>
<td>1=20%</td>
<td></td>
</tr>
<tr>
<td>Work with external advisor group</td>
<td></td>
<td>1=20%</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* The expert supported collaboration, but methods suggested were different than those reported by other institutions.

*Implications*

The interviewed institutions’ department representatives reported collaboration internally and externally through reviewers or mentors, and support services such as co-curricular activities. Internal discussions included setting goals for the department and assessing these goals. The interviewees reported significant collaboration with external parties which was incorporated into the department discussions that were beneficial to the
department, school, and students. This portion of the research was informative as it broadened the researcher’s understanding of the methods of collaboration as the literature presented.

*Recommendations for the home department regarding collaboration.*

The home department collaborates internally on goal setting; however, the department would benefit from other discussions. Some suggested collaborations include discussion with external reviewers following critiques of senior seminar presentations, working with Math and English departments, and establishing co-curricular clubs to promote entrepreneurial activities with students from other majors. Hiring an executive-in-residence to work with business department faculty and students would benefit the program.

**Summary**

This study provides two perspectives for improving the home-institution department. The home-department assessment plan was analyzed using best practices in assessment and noted two weaknesses. Results from the multiple assessment measures should support the decision-making process. Department collaboration is needed.

This study also used information provided from interviewed institutions. The interviews revealed common practices for the home department to consider:

- Consider adding goals (or incorporate into student learning objectives) such as building leadership skills, integrative thinking, making decision, dealing with change, and creating venture capital.
- Consider using national standardized tests for comparison to peer institutions, for recruitment, and for monitoring yearly progress within the home department.
\begin{itemize}
\item Consider using results of data to enact changes within the department.
\item Consider collaborating internally and externally.
\end{itemize}

The researcher began each interview with scripted questions and made every effort to follow the script; however, often the interviewee would stray from the specific question. Interviewees provided valuable insight into their program and assessment process. The researcher was surprised by the consistency of answers among vastly different institutions. For example, improving student communication skills was universal among interviewed institutions. The researcher accumulated practical ideas for use in the home institution. Interviews led to conversations about faculty’s participation in assessment, institution climate, faculty training, accreditations, extra-curricular activities on campus that support entrepreneurial activities, and many more topics. The interviews that strayed will serve the researcher outside the parameters of this study.
Chapter 5
Discussion and Conclusion

Introduction

Action research was used to develop ideas to improve the home department’s assessment plan and use of data collected. The research followed a systematic approach to improving the assessment plan and using data by using Monet’s (2012) Conceptual Model for Getting Started on Action Research. Monet (2012) recommended identifying the problem, planning an intervention using what is known, observing and collecting data, analyzing, and reflecting. Historically, the problem stems from the home institution’s inability to consistently collect and utilize data to make positive changes within the department. To remedy the problem, the researcher planned an intervention by examining existing assessment practices at the home institution, examining best practices in assessment discussed in the literature, and examining common methods implemented by other business departments with entrepreneurial components. The researcher collected and analyzed data for reflection on practical improvements to the assessment plan and procedures at the home-institution’s business department.

The Research Question Central to this Study

How could a small liberal arts college best measure and evaluate the student-learning outcomes to benefit the students in a business program with an entrepreneurial focus. This action-research project proposed to evaluate one institution’s business department with an entrepreneurial focus using research based assessment methods. This research also used data collected from colleges and universities that offered business
programs with entrepreneurial components to improve student learning at the home institution.

**Recommendations for Improvements**

The home department follows several key assessment best practices. The home department should be encouraged to continue goal setting, supporting the institution, establishing student learning outcomes and using multiple measures. The primary recommendation for improvement revolves around use of assessment data and collaboration.

Several observations were made based on interviews with the department members (Appendix I) and the assessment plan (Appendix D). This researcher suggests that the home department does not use assessment data for several reasons. First, the level of collaboration is weak within the department. Secondly, the home department does not exist in a culture of assessment; therefore analyzing data resulting from assessment is not likely to occur. The home-institution department has changed curricula and personnel every year; thus continuity is an issue. Institutional policy changes (moving to a 4-unit credit courses) have influenced the current curriculum, thereby indirectly influencing assessment. Funding for assessment is inadequate and therefore motivation has been squelched. Finally, since the home-department faculty is chronically understaffed, the departmental assessment process has suffered collateral damage. In spite of these shortfalls, the home department has maintained efficiency within its departmental operations. The observations described above are provided to show circumstances in which the home department operates. The circumstances are unique to the home institution and are not intended to be used for further research in this study.
The information provided above is given so the reader may understand the home department’s constraints.

According to Walvoord, it is vital the department practice responsibility, accountability, and mutual respect to maintain a successful assessment program. To achieve collaboration, Walvoord’s (2004) recommendations could be useful to the home-institutions’ business department: clarify the assessment’s purpose and its expectations of department members, structure new collaborative activities similar to prior successful activities in an effort to duplicate success, and explain the benefits and rewards of assessment. An example of a recent successful collaborative assessment activity is the structuring of an external review. Each member has been given a task, results are compiled and the department will evaluate the report in its first draft collectively.

Members must understand what is gained by assessment and why it is worth their time (Walvoord, 2004). Correlations should be investigated between assessment and improvement in department curricula and pedagogy. Each member of the department should take responsibility for a goal and be prepared to discuss the results. The department needs to have clearly communicated expectations and needs to understand the importance of their logical sequence (Walvoord, 2004).

**Assessment Purpose**

For program improvement, Ewell (2011), Suskie (2009), and Walvoord (2004) advocate establishing department goals. After careful consideration and reflection, the researcher proposes specific recommendations for the home department. Through collaboration, the department should identify four to five succinct current goals that it
believes are worthy of consistent support from course to course. Categories I, II, and III institutions reported four to five goals.

The home department may consider adding goals (or incorporate into student-learning objectives) used by interviewed institutions’ such as building leadership skills, integrative thinking, decision making, dealing with ambiguity, and creating venture capital. Another consideration for the home department would be to consider eliminating the existing goal five which addresses graduates’ preparation for the business world or advanced studies. This goal is not specific and is difficult to support by a measurable student-learning outcome. No institution interviewed identified this as a goal, or in any way recognized its importance.

The home department must decide what is important to their program and adjust their goals accordingly. An interviewee offered advice that remains haunting.

“you’ve really got to look at what it is that you were trying to do, your own program and then design … but design your own assessment practices around what it is you are trying to do … design assessment practices around what the program is picking to achieve.”

**Assessment Components**

After reviewing department goals, the next logical step to improving a department through assessment involves creating and measuring student-learning outcomes (Ewell, 2011; Suskie, 2009; Walvoord, 2004).

For measurement of student learning, the home department may consider using national standardized tests for comparison to peer institutions, for recruitment, and for monitoring yearly progress within the home department. The tests used by interviewed
institutions include Graduate Management Admissions Test, Bloomberg Aptitude Test, and Educational Testing Service Field Tests.

The home institution uses a similar (rubrics, course embedded grades, and external reviewers) measurement used by the interviewed institutions. However, the department does not use departmental competitions and may consider using such events to motivate and encourage students.

Recommendations are limited for the home department for improving student-learning outcomes. General meaningful recommendations could not be made using interviewed institutions’ responses because the data was incomplete and vague. Specific recommendations were limited to identifying entrepreneurial skills (which were included in goals) such as creating venture capital and understanding and managing change because they were recommended by Category III (the expert).

Assessment Process

The researcher recommends the home department use data collected for department curriculum change. Institutions interviewed (Categories I and II) use assessment data for curriculum changes. The home department identifies student-learning outcomes, measures the student-learning outcomes and collects data. However, assessment data are not used. For example, senior exams were administered and the results compiled. However, little discussion regarding the outcomes and no changes has been documented as a result of the senior exams. The researcher recommends unpacking the results looking for growth or deficiencies in student performance.
Table 5.1

Summary of recommendations for the home institution

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Category I (n=5)</th>
<th>Category II (n=5)</th>
<th>Category III (n=1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add goal of developing student leadership skills.</td>
<td>5=100%</td>
<td>2=40%</td>
<td>1=100%</td>
</tr>
<tr>
<td>Eliminate Goal 5 of preparing students for careers.  This goal is assumed and not a learning goal.</td>
<td>Not mentioned</td>
<td>Not mentioned</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>Use national test to measure knowledge base of program (Goal 2).</td>
<td>0</td>
<td>2=40%</td>
<td>0</td>
</tr>
<tr>
<td>Provide an opportunity business student competitions.</td>
<td>3=60%</td>
<td>1=20%</td>
<td>1=100%</td>
</tr>
<tr>
<td>Develop student learning outcome of creating venture capital.</td>
<td>0</td>
<td>0</td>
<td>1=100%</td>
</tr>
<tr>
<td>Utilize data for curriculum changes.</td>
<td>3=60%</td>
<td>0</td>
<td>1=100%</td>
</tr>
<tr>
<td>Encourage collaboration among department members</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Action Plan

A plan for implementing changes and for incorporating recommendations can be found in the following Action Plan.

1. **Use data from the pre-post survey taken from an upper division business course (Appendix J).** The data is used to measure Goal 1 of the home assessment plan (Appendix D). The objective of this step in the action plan is to create a forum for data to be shared within the department. To encourage collaboration, the instructor would analyze and present the data to the business faculty, inviting discussion.

   **How:** Update the existing survey from the business department (last used 2013). Also, review existing data (from 2013) to further edit the survey. The data received in 2015 would be helpful to the department for comparison to June 2013.

   **Who:** Post the survey on Moodle (working with academic computing). Moodle is accessible to all students. A deadline would be posted for the student response.
Students would be required to complete the survey per the syllabus.

A department meeting would be scheduled May 10, 2015 to discuss data and encourage reflection from department members.

**When:** April 20-25, 2015, and May 10, 2015.

**Product:** Data from student survey.

Analysis of common concerns from students and positive remarks from students would be distributed at the department meeting May 10, 2015. Also, an analysis of 2015 compared to 2013 would be distributed.

Minutes of meeting would be prepared noting reflections and potential uses of data.

**Cost:** No funding required – zero cost.

2. **Complete and analyze existing department mapping document for curriculum decisions. The objective of mapping is to use data for curricular improvement.**

   **How:** Student-learning outcomes for selected courses would be collected and added to the 2012-13 mapping document. Distribute electronic copy of updated mapping document to all department members for completion. Collect responses from all department members. An updated comprehensive department map would be distributed to department members.

   **Who:** Business faculty

   **When:** February 1-February 28, 2015. Select student learning outcomes are to be submitted.

   March 9-13, 2015. All department members complete mapping instrument.

   March 16-20. Compilation of finalized map.

   May 10, 2015. Meet with core department members to determine how student learning outcomes support goals and to determine if goals are appropriate.

   **Product:** An updated map of student learning outcomes and goals.

   **Cost:** No funding required – zero cost.
3. **Eliminate Goal 5 included in the 2012-2013 assessment plan.** The goal is to improve the assessment plan by eliminating goals which are not focused on student learning measures.

**How:** Eliminate Goal 5 for future assessment plans starting with 2013-2014 assessment plan. The goal: “Prepare students for advanced study in business, entry-level jobs, and/or open and run a business”. The intention of the goal is worthy; however, it is assumed and not a learning goal. The department must vote to eliminate the goal, but understands the commendable intention of the recommendation and underlying assumptions. The data gathered to measure the goal is not collected by the department, but is provided to the department annually by other departments on campus. The statistics will continue to be collected by other departments on campus, and the business department should review the data annually.

**Who:** Business Department and assessment committee approves

**When:** April 15, 2014

**Product:** 2013-14 Assessment Plan.

**Cost:** No funding required – zero cost.

4. **Include the goal to encourage leadership in the 2015-16 assessment plan.** The goal is to improve the business student by offering a course which is necessary for success in the business world.

**How:** The department would select the most appropriate courses to support the goal with identifiable and measurable student-learning outcomes. Using existing leadership, student-learning outcomes from other institutions as a model is recommended. Also, collaborating with the other leadership instructors would provide insight for supporting the goal. The business department would vote on the student-learning outcomes and measurements recommended.

**Who:** Business department faculty

**When:** June 2015

**Product:** Leadership student-learning outcomes and measurements in the 2015-16 assessment plan.

**Cost:** No funding required – zero cost.

5. **Encourage collaboration within the department.** Multiple methods are recommended. The goal of these recommendations is to provide the various methods to achieve collaboration.
A. **How:** Designate dates for monthly department meetings. Each department member would be responsible for chairing a meeting and preparing an agenda for the meeting. Minutes would be prepared for each monthly meeting. All members of the department would be expected to attend. **Who:** All department members using a rotating schedule; **When:** Starting August 2015; **Product:** Schedule of meetings, agenda and minutes; and **Cost:** Zero.

B. **How:** Nurture professional development. Discuss in department meetings, recommended conferences, and local courses of interest. Monitor faculty grants and travel funds. Encourage presentations to business department and discussion of attended conference courses. **Who:** All department members; **When:** January 2015; **Product:** Minutes of meeting; and **Cost:** Zero for the department and individual travel funds.

C. **How:** Provide business faculty timely notification of business-student presentations and activities. **Who:** All department members; **When:** January 2015; **Product:** Notification via emails and department bulletin board posting; and **Cost:** Zero.

D. **How:** Utilize department facilities (department offices and bulletin boards) for communication. **Who:** All department members and business students; **When:** January 2015; **Product:** Notification via emails and department bulletin board posting; and **Cost:** Zero.

E. **How:** Capitalize on opportunities made available resulting from the 10-year review process. **Who:** All department members; **When:** July 2015; **Product:** Documentation of actions taken resulting from 10-year review; and **Cost:** Zero.

F. **How:** Organize a department centric (local) retreat. **Who:** Business department members; **When:** July 2015; **Product:** Minutes from the retreat and resulting department changes; and **Cost:** $200 for catering.

6. **Implement a national test to be used by the business department.** The goal of this recommendation is to secure an objective measure in which to compare students annually and between the home institution and peer institutions.

**How:** Provide costs and options to the department for selection of an appropriate national test to measure skills and knowledge of senior/graduating business students. Options presented are:

- Graduate Management Admissions Test – The GMAT consists of four main sections—Analytical Writing Assessment, Integrated Reasoning, Quantitative, and Verbal (2.5 hours, 90 questions, and 1 “topic”);

- Bloomberg Aptitude Test (BAT) – Key performance areas: news analysis, economics, math skills, analytical reasoning, financial statements analysis, and investment banking (2 hours, 100 multiple choice); and
- Major field test by Educational Testing Service (ETS) – Accounting, economics, management, entrepreneurship, information system, finance, marketing, and legal and society systems. Time and number of questions depends upon the number of tests chosen.

Who: All graduating business majors

When: April 2016

Product: Returned scores from testing company.

Cost: GMAT - $250 per student,

BAT - $39 on-line per student, and

Major Field Tests - $25 per student per test

7. Incorporate the concepts of creating venture capital and dealing with ambiguity into existing assessment plan. The objective of this recommendation is to broaden the students’ understanding of entrepreneurship.

How: Include student-learning outcomes relating to venture capital and dealing with ambiguity in existing courses in finance, entrepreneurship and business seminar. Consider using other university’s student-learning outcomes as a model.

Who: Business Faculty

When: August 2016

Product: Mapping document (which supports the assessment plan 2015-2016).

Cost: No funding required – zero cost.

8. Host a business-student competition. The goal of this recommendation to encourage students to enhance their skills as an entrepreneur through competition and observing other entrepreneur students.

How: This project will require extensive planning and student coordination. To plan the event, students from various business courses and business student organizations would be expected to contribute. A date would be set (Spring 2016) and sponsors would be solicited. This competition would be a campus-wide event with voluntary and external judges asked to vote for the “winner”.

Who: All business department members. One business department faculty will chair the event and will delegate assignments to other faculty and students in the business department.
**When:** Fall 2017

**Product:** Supporting documents including minutes of planning meetings, the event program, rules for entry, and evaluation instruments.

**Cost:** Approximately $500 for printing, catering, etc.

**Limitations of the Study**

This action-research study is limited in two ways: the study is not generalizable and includes a small sample size. The general nature of this action research study is limited because it was specific and unique to the researcher and the home institution. In spite of the study’s limitations, it did provide the home department with well-researched assessment practices. Furthermore, the case studies revealed other entrepreneurial program’s practices. Although the sample size (11) was small, the subjects were diverse. Furthermore, questions regarding student-learning outcomes were too broad for the interviewee to answer and thus did not yield practical answers.

Because assessment terminology is not standardized, there was confusion regarding the student learning outcomes and goals.

**Future studies**

Several research questions surfaced in this study. The first question is: Why do institutions not use the results of their assessments? It is clear why departments use assessment data (for curricular improvement, for pedagogy improvement, for personnel staffing). The question remains, why departments do not use assessment data. A quantitative-based study using a survey may be useful.

A second question is: What are the most frequently used entrepreneurial student-learning outcomes? This study may yield a competency check sheet (such as creating
pro-forma statements, securing venture capital, managing human resources) which may be useful for standardizing and concentrating efforts to prepare students better in entrepreneurial education. Again, a quantitative study listing researched competencies in the form of a survey may be useful.

The third question this study yielded is: Are colleges and universities following the same direction as public education regarding standardized assessment of learning? The history of public schools’ progression toward standardized learning as a means of accountability compared to higher education’s concern for accountability may be useful to administrators of higher education. Higher education administrators would then be able to improve their assessment practices by looking at trends and student performance.

A final question for future study was: What happened in cycle two of the Conceptual Model for Getting Started on Action Research with the home department? What changes and why the changes were made by home department following this study; has the department enjoyed more meaningful collaboration; have changes been made in pedagogy and how have the changes been implemented; has the department changed any goals and why; has the department changed their measures and why; has the department started using their assessment data; and most importantly, has student learning improved?


Annapolis Group, 2013. Information provided by home institution.


Walvoord, B. (2012, October). *Assessment clear and simple*. Poster session at the IUPUI 2012 Assessment Institute, Indianapolis, IN.


Appendices
Appendix A
Description of Best Practices Purpose, Components, Process

To collect data using best practices, it is first helpful to see the literature in three primary functions: purpose, components, and process.

Assessment Purpose

Peter Ewell (2011) states that assessments, if used effectively, are for program improvement. Linda Suskie (2009) recommends that clear program or department goals must be established. She states that goals should reflect “what the student is to learn and why” (Suskie, 2009, p. 115). Barbara Walvoord (2004) suggests it is necessary that for the purpose of the assessment be understood and reasons for the assessment is conducted. She recommends that the audience understand the reasons for the assessment. In summary, each assessment must have a decided purpose, goal, and value.

Assessment Components

The components of an assessment that follows best practices include the establishment of student learning outcomes (Ewell, et al., 2011). Also, diverse methods of measurement are used (Ewell, et al., 2011; Walvoord, 2004; Suskie, 2009) and outcomes from the assessments need to be valued and reasonably accurate with truthful results (Walvoord, 2004; Suskie, 2009). Suskie (2009) also recommends that the assessment be cost effective. In summary, each assessment should involve multiple measures of student-learning outcomes, and accurate results should be reported in a cost-effective and timely manner.
Assessment Process

Data from assessment should be used to advise decisions on curriculum and pedagogy (Walvoord, 2004; Suskie, 2009). Peter Ewell (2011) also states that early in the planning stages, assessment should be used for program improvement. Other best practices when using data involve discussion and collaboration of department members, and cultivating a culture of assessment (Walvoord, 2004; Suskie, 2009).
Appendix B

Interview Questions

The four primary questions to be asked are in bold. Additional probing questions are listed.

I. **Purpose: What are the goals (or purpose) of your program?**
   
   A. Why are you assessing?
   
   B. Who will review the results of the assessment?
   
   C. Are your goals agreed upon and understood by the:
      
      1. Student
      
      2. Department faculty
   
   Other questions include:
      
      - Are the goals aligned with student learning outcomes?
      
      - Are the goals aligned with mission of the organization/school?

II. **Components: What are the student learning outcomes?**
   
   A. How are the student learning outcomes developed?
   
   B. How the students are made aware of learning outcomes?
   
   C. What student learning outcomes are most relevant?
   
   D. Do the student learning outcomes originate with the goals of the department?

III. **Components: Are student learning outcomes (SLO) measured?**
   
   A. Are multiple measures used (including direct and indirect)?
   
   B. What measurements are used?
   
   C. Have clear, appropriate standards for acceptable and exemplary student performance.
IV. Process: How are measurements of student learning outcomes used?

A. Are SLO results used for curriculum development?
B. Are SLO results used for pedagogy adjustments?
C. Are SLO results used for goal setting?
D. Are SLO results staff appointment?
E. Does measurement create a pipeline effect, measuring growth from year to year?

Other questions:

Is a formal assessment plan used annually?
What format of assessment is used (Nichols 5 column, other)?
Are resources available for the development of assessment?
Is assessment of your department efficient and cost effective?
Is your assessment plan reviewed for institutional cohesiveness?

Who reviews the plan?

What is the process for acceptance or rejection?

What are the forms of collaboration that exist?

Does a culture of assessment exist? Why or why not?

Do you know of any other schools with good assessment practices?
Appendix C
Research form used prior to interview contact

<table>
<thead>
<tr>
<th>School ______________________</th>
<th>City __________________</th>
<th>State _____</th>
<th>Zip ________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment __________________</td>
<td>Acceptance Rate __________</td>
<td>Private ______</td>
<td></td>
</tr>
<tr>
<td>Liberal Arts, etc. __________</td>
<td>4 year? __________</td>
<td>Residential? __________</td>
<td>Co-ed? __________</td>
</tr>
<tr>
<td>Entrepreneurial Center? ________________</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Description:

<table>
<thead>
<tr>
<th>Program name ____________________________________________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Major ______________</th>
<th>Options ______________</th>
</tr>
</thead>
<tbody>
<tr>
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<table>
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<td></td>
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<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Department Chair __________________</th>
<th>Contact Info ________________</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>Department Assessment Person __________________</th>
<th>Email ________________</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional Effectiveness Person __________________</th>
<th>Email ________________</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Faculty __________________</th>
<th>Ph.D./Dr. ________________</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Common Abbreviations:
Appendix D
Home Department 12-13 Assessment Plan

2012-13
Business

The mission of the unknown Business Department is to inspire and prepare students to work cooperatively, to concern themselves with the commercial world and its impact on the environment and on all its inhabitants. A comprehensive understanding of entrepreneurship is expected. The knowledge and skills base includes:

- FOUNDATION: A firm grounding in the basic terms, concepts, and theories of the wide range of fields relevant to business and the corporate environment.
- CONTEXT: Awareness of the social, ethical, historical, and technological issues that affect the corporate world.
- METHODS: Hands-on experience with technology, management and methods. Experiential learning will be used throughout the upper division courses.
- PROBLEM SOLVING: Strong analytical and problem-solving skills, both quantitative and qualitative.
- COMMUNICATION: Excellent communication skills, including reading, writing, and presentation skills.
- TEAMWORK: Substantial experience working in groups and functioning as part of a team.
**GOAL 1:**

| MISSION | The mission of the business program is to enable its graduates to be successful in the world of business.
|         | Students will concern themselves with corporate social responsibility and the society, the environment and profit for the stockholders.
|         | “… to be productive responsible members of the world community …” |

| GOALS   | A. Students will express greater awareness of stakeholders.
|         | B. Students will have a greater knowledge of the positive economic role that Entrepreneurship plays.
|         | C. Students will have a greater awareness of how involvement in Social Entrepreneurship can positively impact others, both at home and around the world. |

| MEASUREMENTS | A. Pre and post surveys will be administered to the class (Entrepreneurship & Innovation #XXX) to determine if students do express a greater awareness of stakeholder interests. The survey will indicate that 75% of the students have increased awareness.
|              | B&C. Pre- and post-survey will be conducted in Entrepreneurship & Innovation #XXX. The survey will indicate that 75% of the students have increased interest, knowledge and motivation to take action regarding corporate impact on society. |

| RESULTS    | A. Survey results show that 83% of the students express an increased awareness of stakeholder’s interests.
|            | B. The survey indicated that 83% of the students have a greater knowledge of the positive economic role that Entrepreneurship plays.
|            | C. The survey indicated that 94% of the students have a greater of how involvement in Social Entrepreneurship can positively impact others, both at home and around the world. |

| USE OF RESULTS | Continue to use the survey to determine initial awareness of the students upon entering the class. It has been determined that the survey alone does not prove to be a reliable indicator of growth in awareness.
|               | A pre- and post-test will be added to 2014-15 to solidify student awareness concerning entrepreneurship and its effects on the economy and its corporate impact. |
**GOAL 2:**

| MISSION | The student will understand the methods and major theories of business management (department mission).
|         | “…prepare for careers … college” |
| GOALS   | A. The students will know the foundational theories of Accounting, Commercial Law, Management, Marketing, Finance, Entrepreneurship. |
|         | B. Students will be conversant in Excel. |
| MEASUREMENTS | A&B. At least 75% of the majors will achieve a passing score (60% or better) on a comprehensive exit examination.* This exam will be composed of the fundamental aspects of each of the core areas. This one exam will be developed by department faculty. |
|         | An Excel problem will be included in the exam, and scored expecting 75% of students will receive a passing score (60% or better). |
|         | The grade on the comprehensive exam will be factored into the students’ final grade for senior seminar (5%). |
| RESULTS | The goal of 75% will achieve a passing score of 60% or better was not met. Only 45% of the 20 majors achieved a passing score of 60% or better. |
|         | An Excel problem was not administered. |
|         | 100% participation on the senior exam was due in large part to the 5% on the senior seminar grade. |
| USE OF RESULTS | The senior exam will not be used in its current form again. The exam is not an accurate measure of student learning. The results were not valid as there were issues with averages; some faculty a,b,c; some used % of 100; some students had access to formulas and others did not. The students were required to “take” the test—but the degree of accuracy was of no consequence to the students. Thus some students tried very hard, others did not. The concept of a test is worthy, but the current “test” results were of little value. |
|         | A new test will be administered in 2014-15 to determine student learning of fundamental concepts. |
|         | Logistically, administration of a single Excel problem was not practical or meaningful. Demonstration of Excel mastery will be evaluated in senior seminar by the professor. |
|         | Using the final exam grade in concert with the senior seminar grade proved to be an effective method to ensure the senior students completed the senior exam. |
**GOAL 3:**

| MISSION | The student will analyze and synthesize disparate information (mission statement).  
|         | “to reason clearly” (college)  
|         | “… enhance the development of critical and creative abilities, develops the ability to synthesize disparate information” (statement) |

| GOALS  |
|        | A. The students will conduct business research effectively.  
|        | B. The students will manage business information accurately.  
|        | B. The students will use quantitative business skills to support business decisions and solve problems. |

| MEASUREMENTS | All parts of Goal 3 will be measured in the capstone course (senior seminar BUSN XXX):  
|              | At least 90% of the students will earn ratings of “good” or better (on the scale “excellent,” “good,” “acceptable,” “poor,” or “unacceptable”) on the final project in senior seminar, BUSN XXX, as evaluated by the Business Faculty and two outside reviewers from local business organizations.  
|              | The grading rubric will be provided by the instructor of BUSN XXX. |

| RESULTS | Goals A, B, C were not measured individually, but as a part of the senior seminar goal.  
|         | The goal of 90% meaning “good” for the assessment was met. The average of 25 of 28 students was 89.29%.  
|         | Excellent - 90% or better (10/28=36%)  
|         | Good - 80% or better (25/28=89.29%)  
|         | Acceptable - 70% or better. |

| USE OF RESULTS | Dr. XXX noted a trend in the seminar presentation grades. The spring student’s grades were consistently higher. All the 90+ grades (10 students) were made by spring students. The increase in performance was attributed to a change in business modeling/strategy methods.  
|                | Dr. XXX will continue to use the “post it” strategy. |
| GOAL 4: | 
|---|---|
| **MISSION** | The student will communicate with precision and cogency (mission) "…enhance the development of critical and creative abilities…” (statement) |
| **GOALS** | The students will communicate effectively in all business environments. |
| **MEASUREMENTS** | Assessments will be administered in Entrepreneurship & Innovation (XXX), Business Seminar I (XXX), Business Practicum I & II (XXX, XXX). This experience should improve the final analysis in senior seminar. At least 90% of the students will earn ratings of “good” or better (on the scale “excellent,” “good,” “acceptable,” “poor,” or “unacceptable”) on the communication section of the assessment of the final project in BUSN XXX and senior seminar BUSN XXX. |
| **RESULTS** | In XXX, XXX, and XXX, 90% of the students did a good or better job in presentations, and 90% did an excellent job. The goal of 90% meaning “good” for the assessment was met. The average of 25 of the 28 students was 89.29. Excellent - 90% or better (10/28=36%) Good - 80% or better (25/28=89.29%) Acceptable - 70% or better The evaluation revealed the same percentages for overall evaluation (goal 3) and the communication scores (goal 4). The results were computed separately, but very insignificant differences in the scores resulted. |
| **USE OF RESULTS** | The use of presentations in lower division courses will continue as it has proved successful. One suggestion would be to prepare and use identical/very similar rubrics for evaluations. It was reaffirming to see data indicating the improvement in seminar scores. Efforts will continue to improve the presentation by preparing a department rubric for presentation evaluations. Also, conversations will continue concerning students' strengths and weaknesses. |
GOAL 5:

| MISSION | “…personal and professional achievement through … preparation for careers…” (college)…
|         | “… to provide each student with the knowledge and skills needed to achieve their career goals, whether that involves graduate education, becoming a business professional.” (department) |

| GOALS   | A. Graduates will be prepared to pursue advanced study in business. |
|         | B. Graduates will be prepared for entry-level jobs in the corporate world. |
|         | C. Graduates will be prepared to open and run a business in which they are passionate. |

| MEASUREMENTS | A. Surveys of department alumnae, either formally administered by faculty or informally gathered annually through oral or written communication, will indicate that at least 75% of graduates (calculated in four-year increments) seeking admission to graduate or professional school have been accepted. |
|              | B. Interviews by department faculty on a semi-annual basis with current and potential employers in the business field will indicate satisfaction with the department curriculum and the level of preparation the graduates exhibit. |
|              | C. Based on senior seminar analysis and presentations, judgment will be made as to the percentage of students “prepared.” A goal of 50% is expected. |

| RESULTS | A. Students completed a survey in May 2013 prior to graduation. The results indicated: 4 plan to attend graduate school (2 in business and 2 in other fields), 5 are employed, and 13 plan to work but were unemployed. Confirmation of the survey is not available due to a delay created by new reporting process within the college. Preliminary data has been captured, but is not available at this time for the 2013 graduates. |
|         | B. Interviews were not conducted. |
|         | C. An informal assessment indicated that the goal of 50% was met. |

| USE OF RESULTS | The department will continue to use a survey based on student input, in concert with career services/IR. Rolling four data has not been useful to gauging student success or learning outcomes. The 2012-13 goal five will be restructured. |
|               | The interviews have proven to be inclusive and arbitrary. This portion of the goal will be revised for 2013-14. |

*Specific core content areas:
- Accounting
- Commercial Law
- Marketing
- Management
- Commercial Law
- Finance
### Appendix E
General Description of Institutions Represented in the Study

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Category I</th>
<th>Category II</th>
<th>Cat III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4  5</td>
<td>P1  P2  P3  P4  P5</td>
<td>Expert  Home</td>
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<tr>
<td>Institutional Enrollment</td>
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<tr>
<td>Up to 2,000</td>
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<td>X  X  X  X  X  X  X</td>
<td></td>
</tr>
<tr>
<td>2,001-10,000</td>
<td>X  X  X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 10,000</td>
<td>X  X  X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Name of undergraduate major</td>
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<td></td>
<td></td>
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<tr>
<td>Entrepreneurship major</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>OR minor in entrepreneurship</td>
<td>X  X  X  X  X  X  X  X  X  X  X  X</td>
<td></td>
<td></td>
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<tr>
<td>Specific entrepreneurship courses offered</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Public institution</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Private, non-profit institution</td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>

E=East  W=West  NE=Northeast  SE=Southeast  Mid W=Midwest
Appendix F
National Rankings of top 10 undergraduate entrepreneurial programs

The Princeton Review & Entrepreneur Magazine

Top 10 undergraduate Schools for Entrepreneurship Programs for 2012-13

1 Babson College
2 University of Houston
3 University of Southern California at Los Angeles
4 Syracuse University
5 Baylor University
6 The University of Oklahoma
7 Stanford University
8 Washington University in St. Louis
9 Brigham Young University
10 Northeastern University

(Krier & O’Toole, 2013; Murray, 2013)

US News Ranking

Top 10 Entrepreneurship Ranking for 2012-13

1 Babson College
2 University of Southern California at Los Angeles
3 Massachusetts Institute of Technology
4 Indiana University – Bloomington
5 University of Pennsylvania
6 University of Arizona
7 University of North Carolina – Chapel Hill
8 Syracuse University
9 University of California – Berkeley
10 University of Texas – Austin

(Morse, 2013)
Entrepreneur.com Rankings (same as Princeton Review—except it highlights the “centers”)

Top 10 Entrepreneurial Colleges for 2012-2013. Under the college name, these schools have entrepreneurial “centers” ranked.

1 Babson College
2 University of Houston
3 University of Southern California at Los Angeles
4 Syracuse University
5 Baylor University
6 The University of Oklahoma
7 Stanford University
8 Washington University in St. Louis
9 Brigham Young University
10 Northeastern University

(Murray, L., 2013)
The course E and Innovation and Marketing Research support Goal 1, which has three objectives (A, B, C). Beneath the course title, individual student learning outcomes were listed. For example, in the course E and Innovation, Process of idea generation supports Goal 1-B. This mapping corresponds to Goal 1 of Assessment Plan (Appendix D). This is a partial mapping from the home department.

<table>
<thead>
<tr>
<th>Course #, Course (all listed)</th>
<th>Objectives</th>
<th>Goal 1 - measured in XXX</th>
</tr>
</thead>
<tbody>
<tr>
<td>E &amp; Innovation</td>
<td><em>greater awareness of stakeholders</em></td>
<td>A</td>
</tr>
<tr>
<td></td>
<td><em>understanding of the positive role of Entrepreneurship</em></td>
<td>B</td>
</tr>
<tr>
<td></td>
<td><em>greater awareness of positive impact of the Social Entrepreneur</em></td>
<td>C</td>
</tr>
<tr>
<td>E &amp; Innovation</td>
<td>Process of idea generation_</td>
<td>X</td>
</tr>
<tr>
<td>Feasibility Analysis</td>
<td>Use industry analysis for business plan_</td>
<td></td>
</tr>
<tr>
<td>Develop a basic business plan</td>
<td>Use competitor analysis for business plan_</td>
<td></td>
</tr>
<tr>
<td>Use industry analysis for business plan</td>
<td>Ethics and its role in business_</td>
<td>X</td>
</tr>
<tr>
<td>Use competitor analysis for business plan</td>
<td>Communicate the social role of business_</td>
<td>X</td>
</tr>
<tr>
<td>Interpret financial statements</td>
<td>Apply Excel software_</td>
<td></td>
</tr>
<tr>
<td>Market Research</td>
<td>Role of marketing research_</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Differentiate management from research_</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use primary data_</td>
<td></td>
</tr>
</tbody>
</table>
Appendix H
Rubrics used for the Senior Seminar Capstone Presentation

Rubric used by home institution:

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Final Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team:</td>
<td>Evaluator Name</td>
</tr>
</tbody>
</table>

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**INTRODUCTION:** The team introduces themselves and clearly describes, at a high level, the purpose of their presentation – and perhaps how they arrived there.

<table>
<thead>
<tr>
<th>Poor Quality</th>
<th>Average Performance</th>
<th>Excellent Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

-----------------------------------------------------------------------------------------------------------------------------

**BODY:** The main points of the presentation were clear. The information was current and the flow of the presentation was logical. The group knew the material and each conjecture or point was backed up with facts/research.

<table>
<thead>
<tr>
<th>Poor Quality</th>
<th>Average Performance</th>
<th>Excellent Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

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**QUESTIONS AND ANSWERS:** The group effectively and confidently answered audience questions without hesitation, treating each question with respect.

<table>
<thead>
<tr>
<th>Poor Quality</th>
<th>Average Performance</th>
<th>Excellent Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

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**DELIVERY:** The group members projected their voice clearly, made eye contact with the audience, and avoided distracting speech fillers and gestures. The slides were effective and of high quality.

<table>
<thead>
<tr>
<th>Poor Quality</th>
<th>Average Performance</th>
<th>Excellent Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

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**OVERALL:** Taking into account the factors above and any others you believe to be important, please provide an overall rating of the group.

<table>
<thead>
<tr>
<th>Poor Quality</th>
<th>Average Performance</th>
<th>Excellent Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
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</tbody>
</table>
ADDITIONAL COMMENTS (Feel free to use reverse side for additional room if necessary):

Additional Rubric used for senior seminar capstone course:

Evaluation Criteria | Midterm Presentation (Preliminary)
--- | ---
**Team:** ____________________________ | **Your Name** ____________________________

*(Circle scale for each dimension)*

<table>
<thead>
<tr>
<th></th>
<th>Below Expectations</th>
<th>Meets Expectations</th>
<th>Exceeds Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduces team</td>
<td>1 2 3 4</td>
<td>5 6 7 8</td>
<td>9 10 11 12</td>
</tr>
<tr>
<td>States purpose of presentation</td>
<td>No introduction</td>
<td>Team introduced</td>
<td>Engaging introduction</td>
</tr>
<tr>
<td>Provides an overview / agenda</td>
<td>No purpose or agenda for Presentation</td>
<td>Gives purpose of presentation</td>
<td>Generates interest in what’s to come</td>
</tr>
<tr>
<td></td>
<td></td>
<td>One slide for agenda</td>
<td>Agenda and “bottom line” issues to be addressed presented</td>
</tr>
<tr>
<td><strong>Body</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main points clear</td>
<td>1 2 3 4</td>
<td>5 6 7 8</td>
<td>9 10 11 12</td>
</tr>
<tr>
<td>Information current</td>
<td>Too much or little information covered</td>
<td>Slides have clear main points</td>
<td>Combination of text and graphics enhance main points</td>
</tr>
<tr>
<td>Order is logical</td>
<td>Misuse of jargon; not familiar with business</td>
<td>Scope is defined with sufficient detail and appropriate to audience</td>
<td>Clear speech</td>
</tr>
<tr>
<td>Familiar with business &amp; industry</td>
<td>Out of date information illogical order</td>
<td>Logical order to presentation</td>
<td>Able to cite limitations or critique information of current knowledge of business</td>
</tr>
<tr>
<td>Every assertion or conjecture is backed up with research and facts</td>
<td>Lack of Industry Knowledge</td>
<td>Good understanding of proposed business</td>
<td>Solid understanding of business model</td>
</tr>
<tr>
<td></td>
<td>No backup information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other Comments or Feedback:

Survey used by E and Innovation course at the home department:

This survey is used at the beginning of the semester course and again at the end of the course.

Survey, BUSN 3XX
Spring

Concepts in Entrepreneurship, Ethics, and Social Responsibility in Business

Use the following scale to indicate your knowledge of or awareness of the following concept statements.

1 = No awareness or knowledge of the concept
2 = Very little awareness or knowledge of the concept
3 = Average awareness or knowledge of the concept
4 = Higher than average awareness or knowledge of the concept
5 = Full awareness or knowledge of the concept- you could elaborate on it
Course Concept Statements

1. Building a strong ethical culture from the start in any venture is the foundation for social responsibility.
   Level of awareness: 1 2 3 4 5

2. There is more to being socially responsible than operating a business in an ethical manner.
   Level of awareness: 1 2 3 4 5

3. Whether as a budding entrepreneur, a small business owner, or a manager in a corporate environment, conducting business in a socially responsible manner is a part of meeting the expectations of all stockholders
   Level of awareness: 1 2 3 4 5

4. One key difference between pure entrepreneurship and social entrepreneurship is intent, as described in an organization's mission statement.
   Level of awareness: 1 2 3 4 5

5. In regards to entrepreneurship, there are many good ideas, but there are few opportunities.
   Level of awareness: 1 2 3 4 5

6. While many assume that entrepreneurs are risk takers, they typically will accept only moderate levels of risk.
   Level of awareness: 1 2 3 4 5

7. Social entrepreneurs possess many of the same traits and characteristics that traditional entrepreneurs exhibit.
   Level of awareness: 1 2 3 4 5

8. I understand what it takes for an employee, a manager, or a business owner to conduct business in an ethically and socially responsible manner.
   Level of awareness: 1 2 3 4 5

9. Most small businesses are not pure entrepreneurialships; few begin with an original idea that is developed right as the window of opportunity is open.
   Level of awareness: 1 2 3 4 5
Use the following scale to indicate your attitude towards the next three questions

1 = Not something I have considered
2 = No interest
3 = A little interest
4 = I’d have an open mind
5 = It is an interest and is possible
6 = Very Likely

10. What is the likelihood that you will start a business venture, whether it is to provide a product or service in the traditional entrepreneurial sense or as a social entrepreneurship?

1 2 3 4 5 6

11. What is the likelihood you might use knowledge from this course to take on an issue that might have a positive impact on a community, a region, or the world?

1 2 3 4 5 6

12. What is the likelihood that you will use entrepreneurial skills (i.e. brainstorming, bootstrapping, networking, etc.) in a future place of employment?

1 2 3 4 5 6
Appendix I
Collective responses from home department interview

The four primary questions to be asked are in bold. Additional probing questions are listed.

**Purpose (1): What are the goals(or purpose) of your program?**

Why are you assessing? For improvement and accreditation

Who will review the results of the assessment? The institution’s assessment committee--

Are your goals agreed upon and understood by the:

- Students? No
- Department faculty? Yes

Other questions include:

- Are the goals aligned with student learning outcomes? No
- Are the goals aligned with mission of the organization/school? Yes

**Components (2): What are the student-learning outcomes?**

How are the student learning outcomes developed? Instructor developed

How are students made aware of learning outcomes? Professors

What student learning outcomes are most relevant? No consensus

Do the student-learning outcomes originate with the goals of the department? No

**Components (3): Are student learning outcomes (SLO) measured?**

Are multiple measures used (including direct and indirect)? Yes

What measurements are used? Rubrics, survey, course embedded

Have clear, appropriate standards for acceptable and exemplary student performance? No
Process (4): How are measurements of student learning outcomes used?

Are SLO results used for curriculum development? No
Are SLO results used for pedagogy adjustments? Yes – Goals 1 and 2
Are SLO results used for goal setting? No
Are SLO results used for staff appointment? No
Does measurement create a pipeline effect, measuring growth from year to year? No

Other questions:

Is a formal assessment plan used annually? Not used – but developed
What format of assessment is used (Nichols 5 column, other)? Nichols
Are resources available for the development of assessment? No
Is assessment of your department efficient and cost effective? Cost effective – Yes; Efficient – Yes, for only those not reporting the assessment plan
Is your assessment plan reviewed for institutional cohesiveness? Yes
  Who reviews the plan? The institution’s assessment committee
  What is the process for acceptance or rejection? The plan is reviewed annually and recommendations are made to the departments. The plan could be rejected, but errors must be egress.

What are the forms of collaboration that exist? Within the department, discussions are concerning goals, not results.

Does a culture of assessment exist? No
  Why or why not? No answer

Do you know of any other schools with good assessment practices? No answer
Appendix J

Summary of Interviewed Institutions

The following is a summary of the responses using the aforementioned categories. The responses resulted from coding the transcript using interview protocol. A system of coding was established using the primary categories of purpose, components, and process. Responses were further coded by goals, measurements, student learning outcomes, utilities, collaboration, other and take-away (responses which were useful but not assessment related).

Note for reading summary: E = entrepreneurial or entrepreneurship

Category I – Large/Influential Institutions

Purpose

Institution 1

- People who review assessment results are the dean’s office, their staff, all division chairs academic policy committee (represented by all divisions)
- Goals and student learning outcomes are one in the same
- Goals stem from college mission
- Part of annual process includes review of goals by academic policy committee
- Academic policy committee develops goals
- Divisions gave input into program level goals, and are reviewed every year
- They do not want to change goals often creating a “moving target”
- All the learning goals are equally important
- Per Website verbatim:
  
  Rhetoric - explore, reflect, analyze and communicate critically
  Quantitative and Information Analysis – includes utilization of technology – communication of conclusions accurately
  Entrepreneurial thinking and Acting
  Ethics and social, environmental, and economic responsibility … make decisions based on an awareness of relevant stakeholders
Leadership and teamwork … graduates are adept at leading and functioning effectively in teams
• Critical and Integrative Thinking … integrated, holistic approach to learning and decision making

Institution 2
• The E program has 4 tracks – “working for an innovative company, social E track, family business track, an E management bent”
• Goals – “AACSB ones are given. We certainly collect those in line with AACSB requirement.”
• “The self-efficacy ones – I developed them.”
• Using the website from:
  Business School – develop the analytical, communication and creative problem-solving skills that employers seek
  Dept. E – “discover innate entrepreneurial potential giving you a set of tools and perspective to capitalize on that potential and help launch your career”

Institution 3
• Assessment “how can we know”
• “formalize will help”
• Why assessment – with an “eye to improving”
• On the website, very specific goals to very specific major and minors
  In the majors of business administration (and accounting) – leadership skills, managerial skills, develop entrepreneurial talent and foster critical thinking”
  E Studies the Center – Feasibility studies, business plan and starting and growing venture capital … recognize opportunity
  As E minors – “identify new opportunities, evaluate the worth of those undertakings and identify the issues and milestones necessary to effectuate the desired outcome

Measurement

Institution 1
• “Almost everything” is measured via embedded assessments, within the course
• Academic policy committee develop general rubrics (committee is made up of representation from all divisions)
• Each learning goal has a rubric
• He does not put much weight on survey – self-reporting issues and students rate their own competency (exit survey)
• Triangulate surveys to see if it corroborates with the direct evidence that we get from work samples
• Measurements include three point scale not meeting, acceptable, exceeds expectations, “holistic rather than analytic.” Faculty are more likely to apply the rubric in the same way.
• Use results of rubric, etc. for curriculum development. Currently they are in the middle of a curriculum revision – half students on old, half students on the new

Institution 2

• Capstone – Rubric measure “present to investors” “idea and full fledge business plan”
• Intro classes – “self-efficacy test. First day they fill out the survey. Then we do it again at the end of class.”
• “…it’s their perception itself, preparation”
• “Every class there’s at least five concrete learning objectives that are measurable and tangible for that instructor collects” … five hard measures include:
  • Self-assessment as a part of the course evaluation
  • Instructors’ evaluation to? The students
  • Observation of students working on their own business
  • Observation of students working with other business
• “there is no term paper in any of the E classes – rather a lot more with consulting based and experiential sense”
• “students do an “entrepreneurial audit” where they look through and basically say “This is going well. This is how we need to improve”. “At the end of the semester the students present it to the executive body of the company in front of the class” “here are five concrete recommendations to improve that”
• For final presentations, “we actually have external judges. We have an external evaluation of how well they do. We have externals that literally do external validation of what we’re doing. They provide feedback to the instructors saying this is how well they did; this is where they missed out. They had trouble explaining this.”
• “Business Plan competition” – open to everyone / the graduate students and seniors tend to do the business plan competition” p. 10.
• “for early stage, no business plan required, but rather a power point presentation
Institution 3

- Rubrics
- External reviewers
- Measurement by mastery or not mastery
- Rubrics “elevate unstructured informal” measurement/assessment to “formal”

Outcome

Institution 1 – same as goals

Institution 2

- SLO: “creative, independent, self-motivated, ethical, resilient global entrepreneurs”
- SLO: “in terms of hard skills” opportunity identification or recognition, feasibility analysis, developing growth strategies, finding creativity in revenue streams and cost cutting, guerrilla marketing, bootstrapping, raising capital”
- “creative integrative idea, and develop a full fledge business plan around [i] in senior seminar
- “people skills, research skills, assessing what’s currently going on”

Institution 3

- Students “know how to offer relevant information”
- Students offer and make decisions based on “confirmatory data” – does the data embrace, reject or adapt and modify the idea
- Presentation/communication skills using due diligence, decisions based on uniform criteria, presentation are professional at a micro level
- Create pro-forma
- Access opportunity
- Most valued outcome – want students to “embrace business as a whole”, “interdependence or awareness” of disciplines, integration, “understand failure”
Utility

Institution 1

- Gave example of how quantitative skill were lacking. A curriculum revision was made requiring more quantitative class to the curriculum. He said the examples were “hard to come by”
- Strong division chairs are most likely to look at the results of aggregate competency levels, looking for specific deficiencies

Institution 2

- “We have a heavy focus in our teaching experiential learning” p. 8
- Experiential learning reveals. “You can get to see the creative, independent, self-motivated part because they are doing it not necessarily just reading about it” p. 9

Institution 3

- “Rubrics are used. We establish learning goals and then there are rubrics used for more qualitative assignment … right to wrong, mastery to non-mastery, additional measures like quizzes. We also bring in some external parties to assess final projects”

Collaboration

Institution 1

- Cycle starts with
  - Review goals
  - Review results from last year
  - Review process
  - Look and make changes
  - Run assessments
  - Consider inconsistencies with change
- Assessment tool is a narrative with embedded tables and charts
- Funding is available for assessment
- Yes – our school enjoys a culture of assessment. It starts at the top—if it is valued, talk it up and financially support it – then the culture exists—mentality filters down
- Rubrics are developed and “tweaked” by individual departments (multi-purpose but not meaningless—a standard that is modified – he said he specifically did not want it added to---
Institution 2

- “Multiple clubs”
- As far as goals, would you describe that as very collaborative: “Absolutely yes. The Entrepreneurial Center, the Assessment Center, the subset of women’s entrepreneurial components … they all have been involved”
- “the university has never asked me for our key outcomes”
- It sounds like you guys spend a lot of time looking at surveys, rubrics … and make decisions about the program from those instruments? “Absolutely”

Institution 3 – no items

Other

Institution 1

- Assess for accreditation and improvement
- A “shared governance” model

Institution 2

Teacher evaluation:

- Professors visit/sit in other’s classroom and observe. “At the end I usually ask the students, I ask the instructor to leave. I ask the students how this lesson compared to other lessons? Was this normal? Was there anything that highlights this instructors teaching?” “You have a better understanding of what they’re doing.”
- a “Peer mentoring” system is set up – a “teaching buddy” -- “you go and watch and have some friendly conversation over coffee
- no financial support for assessment
- Do you file a formal assessment plan for your department? “no there has not been anything like that”
- “All classes have some type of experiential learning go on in there”

Institution 3

- Interviewee will be the point person for assessment—“we are just beginning the process”
- Assessing for “improvement and should someone come in from an accreditation perspective, we would pass with flying colors”
- We assess “in house, within individual classes at the department level”
- The Business school has its own undergraduate initiative where they’ve done extensive assessment for the purpose of accreditation
• She is in transition “next year we will be going through an internal review process where people elsewhere will be looking at our department”

Take Away

Institution 1

• Using standardized rubric for each goal – then tweaking for individual department use.
• “Task force” – to construct rubric. Members from other divisions/staff
• No moving targets—stable slo
• A “shared governance”

Institution 2

• Audit of existing company, need to make “5 concrete recommendations” and present to the bus board
• Women’s program for E program – good model
• Look for common “goals” in every class
• External judges of presentation – judging not just the student by the program – what we are doing well or not
• a “Peer mentoring” system is set up – a “teaching buddy” -- “you go and watch and have some friendly conversation over coffee.

Institution 3

• Use of external individuals or panels to get perspective

Snowball Sampling (SB)

Purpose

SB1

• “We have a campus wide charge to foster entrepreneurship throughout the campus”
• They report to two boards: AACSB and regional Higher Learning Commission”
• “AACSB is more about making corrective action---“…what schools have interpreted them to over focus on assessing instead of taking action based on the assessment”
• Assurance of Learning Committee gets program assessments.
“that goal is not to do better in assessment but to do better for your graduates”

Four goals: “knowledge of ethical situations, strong written and oral communication skills, critical analytical thinking skills, and be able to apply knowledge to practice”

Measurement

“We primarily do that through rubrics of an exam type question, or written parts of an assignment” … “we don’t really have pre- and post-tests”

“some are measured against the observance of say like an oral presentation or oral communication skill”

“Have 4 goals with A and B parts.” For example, Ethical – Part A demonstrates knowledge about ethical norms; Part B would be applied to social context” p. 6

“Part A, do they have the knowledge, can they apply it in a “business or societal context”

“We decided we did not measure to the level that we wanted to in the written communications and we’re actually working with English department and actually embedding within that course a lot more or within a couple of courses a lot more English instruction. We’re basically excited about that and I think that will not only help us in the assessment but more importantly it will help our graduates overall.”

Outcomes

Assurance of Learning (AACSB) develop the slo

Utility

They do use the results of the measurements to set and change/adjust goals

“When goals measure unsatisfactory we come back and do a procedure which would include looking up where that maps … and what courses have impacted upon the goal”
Collaboration

SB1

- Collaboration with the English department to improve written communication – see above quote

Other

School SB1

- Is assessment financially supported? “overall assessment does not have a lot of direct costs to it” … “assessment ends up being one big piece of that role” …“I teach within the college of business. My biggest role is the administrator. Assessment ends up being one piece of that role. It probably amounts to 10-15% of my time.”

School SB2

- Interviewee said he did not receive the informed consent agreement – will not do the interview but information below is from the website
- Very sophisticated method of assessing. AP (template for assessing). It uses objective, course/learning experiences, evaluation/assessment methods, objective accomplishment/results, dissemination, uses of evaluation/assessment results and actions taken -- excellent format and easily reorganized into something useful for home institution.

Take away

SB1

“Where we plan on going with assessment is just overall simplifying the process I think. It’s a common story again that I’ve heard from other schools through AACSB and other avenues. People have been over zealous and trying to make a complex process out of something that really doesn’t need to be all that complex. They’re spending 10 units of effort on complexity and maybe measure it back to three efforts and then spend those other seven on using the data and analyzing the data and making correct decisions on how to react to the data. I would hope and it’s not exactly where we are now, but I hope in future iterations that 10-20% of our effort is spent on measurement and 80-90% is spent on what we do because of the measurement, the analysis thereof of the appropriate structural changes because of it.”
**Category II – Peer Institutions (P)**

**Purpose** – Goals expressed by institutions

P1 Analytical thinking

- multiple framing
- reflexive exploration or meaning
- practical reasoning
- … imagine a world in a more complex way
- Adopted some of AACSB standards
- Really want students who can “think” – she was told that employers can do the specifics

P2

- We recruit heavily locally, “a number of our students want to return to their small towns”
- Goals listed on website—
  - Critical thinking
  - Analytical thinking
  - Problem solving
  - Communication
  - Leadership
  - Teamwork
  - Data interpretation
  - Creative problem solving (flexibility)

P3

- “Actual goal is to teach”
- Students to “Apply econ way of thinking”
- On website – The E Center were:
  - Reason
  - Critical thinking
  - Application of the scientific method
- From notes: for center – venture creation and “increase awareness of entrepreneurship as a viable career option
• Mission and goals on website. Reading and spoken language, clearly and effectively analyze??, thinking analytically, experiential learning, global perspective, global perspective, academic curiosity
• Strong focus on experiential learning at 7 strong focus on learning by doing”

P5
• “Four goals
  Written communication
  Oral communication
  Critical thinking
  Problem Solving”
• “… it is important to look at a macro view and take a critical look at what sort of skills business people are going to need in 10-20 years”

Student Learning Outcomes

P1
• Had 30 at one time – now have 4 (listed above as goals))
• All 4 are “most relevant”
• Recently condensed a “lot” of major – want to focus on 4
• “Slo start with the department

P2
• No – we do not have specific learning outcomes “at this point in time”. “It is something that is in the back of our minds.” “We went through reaccreditation process … I was expecting them to be a little more particular.”
• The 8 outcomes listed “were developed by the college 20 years ago … “they are all great for business and they also had a great overlap to the liberal arts.”

P3
• “for econ & business two SLO:
  o “Apply an economic way of thinking to real world business topics
  o Application via written communication, verbal communication and visual presentation”
  o These slo are “measured by presentation and written paper -- they come together”
“essentially they were developed by the faculty”
“we looked at the department goals and then aligned our slo”
“… and brainstormed on what the goals should be, what the learning outcomes should be, made sure they were aligned”
“very very strong emphasis on experiential learning. We try to tie into clients real world business projects … we bring a series of speakers throughout the year.

“Student learning outcomes are developed by the department”
“The communication Plus has some influence, but we develop our own goals as well”
creativity “still struggling with how to measure – particularly with e’ship”

Measurements

Use rubrics, surveys
Defined ways of testing—direct measures
“transfer part of the framework” – judge presentations using external reviewers and internship coordinators
Sliding scale rubric
No national/standardized testing
Each faculty does curriculum mapping
Each member does a write-up on how the year went/average grades—have a department meeting
Use a business advisory group
Spreadsheet assessments and a narrative assessment are produced

Service learning projects/competition
Entrepreneurial skills are “much more subjective” (than communication)
“In every course on our campus students are constantly being challenged as to how did you come up with that”
“let’s discuss what if something goes wrong”
“Subjective measures” not rubrics. “I do not think anybody uses a rubric at this point in time”
• Assessment is usually done on their final massive project that they will do for their capstone course” … “I and department give subjective conceptual skills, good analytical skills, calculations, ration analysis … not that sophisticated”
• “no National testing … not a good one out there … by default we used the GMAT (a long time ago) … the idea of national testing was dropped 10 years ago

P3

• We have a “common core test. Principals (intro, money & banking through intermediate micro and macro” – all 4 core classes – “We use those to track how the kids are doing on those questions” – “the grades are tied loosely to their second semester senior capstone” – 8% for econ seniors and 6% for econ/business
• A senior presentation and a senior paper … “I think the presentation is more telling”
• A senior paper
• “We use the BAT (Bloomberg Aptitude Test) – we love the test”
• “We have also used ETS in the past – we need a more generalist test
• “”we have also made our own test in-house”
• “it is about the process – no goal to it”
• “We use rubrics for presentation”

P4

Indirect Measures

• “We have funding that is dedicated specifically for those tools. Alumni survey, senior survey and senior focus group—funding from a single donor who is interested in improvement of the Accounting, Business, Entrepreneurial program”

Direct Measures

• Senior capstone projects, videotaped and assessed by panel of alums, business advisory
• Major field tests -- but not entrepreneurship and HR. They (HR and E) have senior cap projects with video and assessments
• The presentations have rubrics
• “HR is case based”
• “We all have rubrics … that is a part of our assessment tool”
• ”obviously we don’t want to make drastic changes based on one year results. That certainly being able to see those over a period of years will help us better down the road in terms of improvement of this program”
• Use national test: Major Field Test in Business—from ETS” fee built into their course fee
• “We just aligned the student learning outcomes based on that test (MFTB). Each of their program of interest must score at a certain level … easiest direct method we have because it was already in place. It was just a matter of aligning the slo with the broad based goals for them to reach program of interest.”
• MFAT scores used.
• Rubric for presentations in senior capstone and HR projects

P5
• “Yes we use rubrics. We also use pre- and post-tests of students, beginning in freshman Accounting and ending with the Senior Capstone. We give them a vocabulary test, and also collect writing samples, and evaluate some soft things. We actually do measure those things.”
• “You really need a combination of methods to be effective.”

Utility
P1
• Bus advisory group give suggestions, and they act. Example – writing courses put in to improve writing skill—advisory group gave good feedback
• Mixer with students and alumni and advisory panel – talk to each other about education – not a career fair
• Use measurements to adjust curriculum

P2
• “All departments do assessments of their major … there was no standardized practice”
• “no news is good news”

P3
• We use those (answers/scores) on 10 questions in core to track how the kids are doing on those questions”
• Used presentations (judged) by three department faculty—concluded that “kids are good at explaining technical background” but not why—“you never get to … the most innately creative part of that -- abstract thinking …”
• Survey alum/E who come to see “what our kids work on all year long”
• Math/econ are “assessed individually, but then jointly share information across modules”. “SACS requires the other two assess separately
• Data collected in past has been helpful to reflection – “we did it, but never used it for anything”

P4

• Using results from new assessments to make changes in curriculum. “… on the curriculum side the need to restructure classes with the program of interest” Not necessarily limited classes but we’ve changed the formatting of the program of interest in terms of when to take classes, which ones to take.
• Then there is another instance where really it showed the need to eliminate a class for a program of interest and add a different class in its place.”

P5

• I think I’ve spent more time tweaking classes based on what I’ve seen them understand from broader concepts than I have from pre- and post-tests that we’ve used, which measure specific facts. “… we have an opportunity to focus on what individual students seem to need”
• “want students to see both sides of the issue, not to accept the first answer” … “that would be the most important thing”

Collaboration

P1

• Departments write up a report and share with each other at the end of the year
• Advisory council and mixer

P2

• “Assessment goes to chair, sent to business department for comments, then educational policy committee for review. The educational policy committee makes suggestions change, modify. We do have a somewhat formal assessment process.” The educational policy committee deals with every educational issue on campus.”
• Departments across the campus work on common problems

P3

• Department members are at every presentation
• They do an annual assessment and turn in
“we are adding key professors to that capstone – abstract thinking”
“talking about outcomes, talking about what we are going to do with this or that data or force this and actually take a look at the data” … “we have delved deeper into assessment this year”

P4

“It’s been useful in that regard because as we sit down and do an assessment, it really made the faculty see the reasoning.
“… the other faculty didn’t really understand the need for doing assessment … it really gets the faculty on the same page and say “now I see why we want to do that”
Business program accrediting agency “has moved 7 ahead/level with assessment”
Business program accrediting agency requires annual reports “a narrative portion … each year”
“MFAT scores used to align slo” – “real eye-opener”

P5

“in my case it is a little bit of an extra challenge because I collaborate with the departments that provide course material to the major”
She sees a fair amount of collaboration across the curriculum

Other

P1

Culture of assessment – yes and no
Report annually (to school – and for their XXXXX grant) and every five years
They have 5 majors within the business department – each one does an assessment

P2

Goals are aligned with mission of college, there is a formal narrative assessment process, no resources provided, the Educational Policy committee sends back concerns if there are any
Culture of Assessment, “no more or no less than ten years ago”
“Other school in our state is doing what we are and some schools are doing less than we are”
“Enrollment may vary dramatically … it is not a straight line”
P3

- No financial backing for assessment “there is no course release, stipend” no payment for the work you are putting into it”
- “… everyone views this as a process. Now, it is actually about goals and actually trying to show legitimate things. Now things are edited, approved and sent back”
- Assessment is process oriented, econ is goal oriented – reconciliation tough
- Culture of Assessment, “it is pretty weak” “regional accrediting board told us it was weak”
- Administration never made it sound like it was important

P4

- Business program accrediting agency encouraged much assessment including posting on website in—requires assessment information. A formal application will be filed since our assessment info was accepted. “We are going to our first year of applying the assessment tools to come up with results and will submit that and … probably this fall we’ll do our formal application.”
- The department is very strong on assessment. “we are getting stronger with the transition of a new president over the past year … every department does assessment … there is no college-wide slo … it is really more departmentally”
- They submit department assessment to central committee for approval, etc.
- “Business program accrediting agency encourages much assessment including posting on the website.”
- We do an executive in residence (fall and spring), we do visiting entrepreneurship speaker. We have a faculty member who takes a lead on that -- she seeks input from the faculty. I organize a visiting entrepreneur in the fall.

P5

- “Yes” have an annual assessment
- Some funds for assessment
- Culture of assessment??—“we are developing”
- All students are encouraged to talk E -- “noteworthy that it does not have a pre-requisite. Any major could learn about E.”
Category III – Expert

Purpose

Three main goals—determined by the “type” of student

- Good general skills for the entrepreneurial – very “general” stuff attributes and competencies. They work in a public or non-profit setting
- Consultant “types” for small business or freelancers to help other (med or vet students) – the vets, docs, they get certificates
- Hardcore students – true E Students –
  - ***the purpose of the program will determine the competencies

- The specific goal for the True E student would include: an understanding and training with uncertainty, ambiguity and opportunity
- Start-up skills – Technical skills for a start-up process
- Regional business management skills – managing the business once it is started
- “life support” skills – networking and team building
- “Multiple thing that one is trying to achieve within a program but for different types of students”

Measurement

Depends on where the institution is. The culture and underlying pedagogy are also a factor in determining the method of assessment. The US may use multiple choice and other countries may use qualitative measurement.

- Type of testing depends on individual – and pedagogy. What lends itself to course and personal style. Interviewee uses presentation, pitch competition “stimulating the entrepreneurial lifeboat”
- His comment on our capstone: “So there’s about four through and embedded. The outcome that you are trying to get from the (1) individual courses that you are running, the (2) culture, (3) the traditional approach of the university that you are in, and (4) the context you are in.

Outcomes

The most common slo he sees is understanding the venture creation process.
Utility

- Start with outcomes you want to achieve then design the program around the outcome
- Try to create an “entrepreneurial context”
- Build in ambiguity, uncertainty -- then you do not know what challenges they will have to face and solve—much like an entrepreneur starting a business. The students are forced to make decisions in a “dynamic” and uncertain situation. Instructor does not know and cannot pinpoint the outcomes.
- Reflection will provide learning. At the moment there are no limited outcomes.

Other

Assessment reporting is done annually using a narrative format

- European does much with entrepreneurial training/assessment. He believes what is done in Europe, is transferable to US.
- European (countries outside the US) – government policy and money to expand and enhance entrepreneurship education. Governments are concerned if they are getting their money worth – the “impact”. It is top down, in the US it is bottom down. Other countries are trying to change the culture of E – over in elementary and high schools.

Take away

- Start with outcomes you want to achieve then design the program around the outcome.
- Build in ambiguity, uncertainty -- then you do not know what challenges they will have to face and solve—much like an entrepreneur starting a business. The students are forced to make decisions in a “dynamic” and uncertain situation. Instructor does not know and cannot pinpoint the outcomes
- Reflection will provide learning.
- ***this “plays the whole concept of outcomes down”
- Researcher is on the right track – drawing in general education assessment and entrepreneurship
- His final advice “you’ve really got to look at what it is that you were trying to do, your own program and then design your own, pick and draw for the people but design your own assessment practices around what it is you are trying to do” design assessment practices around what the program is picking to achieve
Appendix K
Permission Granting use of Illustrations

To Juliet Monet 9-11-14
I am preparing my dissertation on assessment of entrepreneurial education. It is an action research project. I found your published model "Conceptual Model for Getting Started on Action Research." The model (and diagram) fit beautifully in my paper, and I would like to use the diagram in my paper. I am requesting permission to use your illustration/diagram in my paper.

Thank you for your consideration. Please advise.

Response from Dr. Monet 9-12-14

Hi
Thanks you for asking. Yes you have my permission to use this diagram in your dissertation. I am sending you an updated version that has changed slightly based on data we have analyzed. This update is also posted on the Teachers' PL-INC (slight name change) website along with information to clarify each step.

Best regards,
-Julie
From NCGE – permission to use the Entrepreneurial Learning Outcome Framework

This framework is publicly available through NCEE documents but I know there can be sensitivities around this so I would suggest a simple email to Alison or Keith as CEO would be appropriate:

I held off replying to allow Allan and Paul to comment

- But to progress this there is no problem with permission (presume you mean publication usage – as refereed – but not sure what the letter might be needed for? is this for a book usage?)

Let’s liaise directly – but try this

or here
http://www.allangibb.com/pdf/

Let me know what is needed if a letter is required
Cheers
Alison
Appendix L
IRB Letter Granting Permission

To: Dr. Sally Selden and Ms. Suzanne Calvert, Co-Principal Investigators (Co-PIs)

Date: June 20, 2014

Re: LC IRB Review Reference #LCHS1314168; LC IRB Approval #: LCHSA1314138

Thank you for your recent submission to the Lynchburg College Institutional Review Board (IRB) for Human Subjects Research.

Your request for review of your research project: "Assessment of a Business Department with an Entrepreneurial Focus" has been completed. The proposal and related study comply with the standards set by the U.S. Department of Health and Human Services, Code of Federal Regulations, Title 45 CFR Part 46, Protection of Human Subjects. This approval is effective as of June 20, 2014. The study is therefore approved. The approval number is different than the review number – both are provided above in the reference line.

Please remember that if any modifications are necessary, these changes need to be approved by this committee (see our website’s Submission Instructions and Forms page for instructions and forms).

Approval for this proposal is for one year. You will receive a reminder close to this date reminding you to either renew or close your study. Renewal or closure notification must occur prior to June 20, 2015. See our website for the appropriate instructions and forms.

Please feel free to contact me at irb-hs@lynchburg.edu if you have any questions.

Sincerely,

Sharon Foreman-Kready, Ph.D., M.S.W.
Director and Chair, Institutional Review Board