

**Student Learning Outcomes Assessment
Within the Texas State MPA Program**

by

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ABSTRACT

The primary purpose of this research is to describe the extent to which the five student learning outcomes of the Texas State University MPA Program are demonstrated by its graduating students. The capstone assignment within the program, a research paper and oral examination, is the unit of analysis for the study. The methodology involves a survey of capstone projects performed by committee and a survey of graduating students. Descriptive statistics of percentages and modes are used to describe what outcomes are in evidence. The results indicate that the desired learning outcomes are demonstrated by an overwhelming majority of MPA students.

ABOUT THE AUTHOR

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CHAPTER 1: Introduction

An outcry for institutional accountability for student learning has become more and more insistent from government, accrediting bodies and society at large. “Pressures to adopt assessment systems to demonstrate that an institution is achieving its educational goal hit public universities hardest; sensitive to political pressure and dependent on public opinion, state schools are an easy target.” (Spangehl 1987, 35) There are good reasons for the concerns about the quality of American higher educational institutions. American industry has failed to compete in the international market and now there is an assault on the number one status of America as the leader of the Information Age. Outsourcing of technological and human resource services for both the private and public sector is becoming rampant as other countries are becoming more educated (National Center 2000, 12).

According to the National Center for Public Policy and Higher Education Measuring up 2000 State by State Report Card for Higher Education, “our country cannot sustain prosperity in the 21st century or maintain and enhance its democratic values and institutions without an educated citizenry” (National Center 2000, 12). In September 2006, the Secretary of Education, Margaret Spellings, Commission on the Future of Higher Education issued its final report calling for systemic changes at the nation’s colleges and universities. Among other recommendations critical to the nation’s global competitiveness, the panel suggested that colleges and universities should create a robust culture of accountability and transparency; and embrace a culture of continuous innovation and quality improvement through the development of new pedagogies, curricula, and technologies. The Measuring up 2000 Report, also stated, “America’s response--in contrast to that of other major industrial nations -- American higher education-- must be found

primarily in our, institutions, communities, and states. Within our federal system, the public policy responsibility lies principally with the states” (National Center 2000, 12).

In October 2000, the Texas Higher Education Coordinating Board adopted a new strategic plan titled “Closing the Gaps by 2015.” The document--which conspicuously includes a cost/benefit analysis--is aimed at closing gaps in education quality within the state and between Texas and other states. Rather than concluding with a flourish of rhetoric or brief summation, the final page of the strategic plan ends abruptly with this statement: “To assure that progress is made towards these goals, the state shall establish benchmarks and measures to assess progress toward the goals by each institution and Texas higher education as a whole” (THECB 2000, 18). In 2004, Governor Rick Perry issued executive order RP31, relating to the accountability of higher education systems and institutions, which called for “The boards of regents for public institutions of higher education in the state [to] direct that each institution and system work with the Higher Education Coordinating Board to create a comprehensive system of accountability” (State of Texas 2004, 1).

The Southern Association of Colleges and Schools (SACS)--of which Texas State University is a member--requires all accredited institutions to perform institutional assessments of student learning (Garza & Wuest, 2006). Student assessment is also a requirement of the Texas State University Academic and University Plan, as well as The National Association of Schools of Public Administration (NASPAA), which is the primary accrediting body of the Texas State MPA Program. In response to both the demands of lawmakers, and the values represented by its mission, the Texas State MPA Program has recently adopted a student learning outcomes model, which represent the knowledge, skills and abilities students should demonstrate upon completion of their degree in public administration.

The Texas State MPA Program is a 32-year-old department, accredited by NASPAA, which seeks "to prepare students for careers as managers and leaders in the public service" (Texas State 2002, 8) The Master of Public Administration degree is a 39-semester hour program, with a core of 30 hours and a nine hours of career support classes chosen by student specialization. The applied research project (ARP) is a required research paper for the MPA degree, and a comprehensive oral examination over course work and the applied research project is mandatory for completion of the degree requirements. As of 2006, there were 112 students enrolled in the Texas State MPA program.¹

STATEMENT OF PURPOSE

The purpose of this research is to (1) describe the extent to which the five student learning outcomes of the Texas State University MPA Program are demonstrated by graduating students and (2) develop a Power Point presentation concerning the use of student learning outcomes in higher education, and in Master of Public Administration programs and capstone courses in particular.² The capstone assignment within the program, which consists of a written Applied Research Project (ARP) and an hour long oral defense of the project, is the unit of analysis for the study. A survey of capstone projects performed by the ARP committee--a group of practitioners within the field of public administration--will be used to describe what outcomes are in evidence. The results should assist educators and administrators in regard to policy, curriculum, and instruction by examining the means used by the program to assess student learning.

¹ For current statistics on Texas State MPA enrollment see (<http://www.irp.txstate.edu/fb/ma/posi.htm>)

² The Power Point presentation was completed and presented at the 2006 Annual Conference of the National Association of Schools of Public Affairs and Administration (NASPAA) in Minneapolis, Minnesota on October 19th. The presentation slideshow can be found in Appendix E.

CHAPTER SUMMARIES

To achieve the research purpose, this study has been divided into six chapters. Each chapter begins with a statement of purpose that explains it in relation to the project and summarizes its contents. Chapter 2 presents a review of the scholarly literature relating to student learning outcomes assessment, its practice, and concludes with a emphasis on capstone courses and projects as an assessment method. Chapter 3 explains the research setting at Texas State University, the capstone projects used as an assessment method, and develops a conceptual framework around the five student learning outcomes. Chapter 4 operationalizes the conceptual framework in the form of survey questions regarding the direct assessment measure to be given to the ARP committee, as well as the student exit survey which represents a pre-existing measure now utilized as an indirect assessment method. Chapter 5 presents and discusses the results of both surveys using descriptive statistics and Chapter 6 concludes the project with a summary and analysis.

CHAPTER 2: Literature Review

PURPOSE

The purpose of this chapter is to provide a broad overview of student learning outcomes assessment and its impact on higher education. Through a review of the literature, the process of developing of student learning outcomes is examined, as well as practical methods of outcome measurement, concluding with a discussion of student learning outcomes applied to capstone courses. This chapter was presented as a stand-alone paper at the 2006 Annual Conference of the National Association of Schools of Public Affairs and Administration (NASPAA) in Minneapolis, Minnesota on October 19th, 2006.

INTRODUCTION

In defining assessment in higher education, Terenzini (1989, 647) reports that "some would assert assessment in its purest form has the improvement of learning and teaching as its primary purpose," and that it "focuses on individual students." The movement towards *outcomes assessment* is a refinement of that process, focusing the assessment of success or failure on the *outcomes* of a process. Student outcomes are "those aspects of the student's development that the institution either does influence or attempts to influence through its educational programs and practices" (Astin 1991, 38). In regard to student learning, these outcomes describe specific knowledge, skills, and abilities that the student should demonstrate after they have finished their education (CHEA 2003, 5).

Essentially, student learning outcomes are statements of expectation. They specify what a student is expected to be able to "do" after completing a particular learning activity, be it a particular lesson, course, or an entire program of study. The practical emphasis on a student's

demonstrated knowledge, skills and abilities sets the learning outcomes approach apart from other forms of evaluation based on less tangible goals, such as educational aims or objectives or assessment projects that attempt to aggregate performance data beginning with the organization as a whole (Terenzini 1989, 647). By maintaining a student focus, and a clear statement of what students are expected to be able to do as a result of their academic work, learning outcomes are intended to help students *and* instructors better understand what is expected of them.

ASSESSMENT IN HIGHER EDUCATION

Despite its current popularity, there is a broad consensus that assessment is not a new concept in higher education³. Unfortunately, there is no similar consensus on the exact definition of assessment in academia. While examining the working definitions, Davis (1989, 7) posits that, "Some writers approach assessment broadly, describing it as encompassing general activities of testing, evaluation, and documentation... Others equate *assessment* and *evaluation*, using the terms interchangeably. Still others view assessment narrowly, as specifically tied to student knowledge skills and outcomes." In fact, depending on how one defines assessment, the practice can be considered to be as old as teaching itself. The fundamental practice of assigning grades to student work is clearly a form of assessment (Miller 1999, 96). The assessment "movement," however, is based on a much broader concern than assessing students through grades; it is an attempt to assess the educational framework in which students learn. "Education, critics argue, should be judged by assessment; traditional measures of student achievement, such as course grades and retention and graduation rates do not satisfy these critic's standards for reliability and interpretability across programs and institutions" (Davis, 1989, 6). This is the assessment

³ See for example: Davis (1989); Garza (2001); Hindi & Miller (2000); Hutchings & Marchese (1990); Sell (1989); Terenzini (1989);

movement of the past two decades, which Spangehl (1987, 39) refers to as an "irresistible force in higher education," and demands that universities use assessment to show effectiveness, improvement, and *results*. "Serious assessment is nothing less than the institutionalization of self-awareness and constant change."

Although it is difficult to find an entirely satisfactory definition of modern assessment, the concept is clearly present in the university setting, and as Ewell (1987, 24) laments, "the content of institutional assessment programs can include anything from standardized testing to basic skills to in-depth investigations of such elusive qualities as critical thinking and problem solving." In an attempt to find a coherent organizational perspective on assessment, Sell (1989, 22) provides an outline of its common characteristics, as found in higher education.

Most colleges and universities are already doing extensive work in assessment if we define the term assessment as a process for informing decisions and judgments through (1) framing questions; (2) designing or selecting instruments and procedures for collecting data; (3) collecting analyzing and interpreting data; and (4) reporting and using information that is derived from qualitative as well as quantitative data.

Although he believes this definition is "broad" enough to encounter objection by some, it is helpful in revealing assessment as a *process* consisting of separate activities, which may already be present but overlooked. Sell (1989, 23) also differentiates between four levels of assessment activity based on their scope: starting with individual *student assessment*, and broadening to *faculty, program, and institutional*, the last of which includes assessment directed at the entire university. Student assessment, however, is unique in that "student outcomes assessment is never separate from other institutional issues, is affected and used by other kinds of assessment activities, and should be carefully examined for its avowed purposes, actual uses, and consequences" (Sell 1989, 38).

The interconnected nature of student assessment with broader efforts characterizes two major themes in the current assessment trend: coordination and improvement. Terenzini (1989,

644) describes past assessment efforts as "typically undertaken by individuals or by individual offices or committees," which are not, "part of any comprehensive, institutional plan for ongoing systematic self study or improvement." In 1988, the National Association of State Universities and Land-Grant Colleges (NASULGC), the oldest higher-education association within the U.S., issued a statement of principals for assessment that suggested efforts focus primarily on "improvement of student learning and performance," and "be linked to strategic planning and program review processes within the institution" (Williams 2002, 47). An academic assessment program should therefore be student focused, but scaleable, and able to provide direction for an entire department or university. Coordinated assessment efforts provide a much greater range of information, which can a powerful tool for improvement in many areas, and as Gray and Diamond (1989, 89) report, "The current assessment movement has as its primary goal the improvement of higher education."

As a result of these new priorities, the ability of a university to effectively utilize outcomes assessment is increasingly becoming the basis upon which its quality is judged. Astin (1991, 5) labels the traditional methods of assessing university quality as "*resources* and *reputational* conceptions of excellence." Resources are straightforwardly characterized as the amount of money, high-quality faculty, and high quality students retained by the institution. Assessment by reputation is even more simplistic, based solely on the idea that universities with the best reputation actually offer the best quality education--an idea that Astin refers to as "folklore." Spangehl (1987, 36) compares this method of assessment to a factory "demanding that its effectiveness and quality be judged, not by the products it produces, but the salaries and qualifications of its employees, its physical resources, and like factors that *might* influence the quality of its products." Although an argument *can* be made for the correlation of resources and

quality, Terenzini (1989, 645) argues that "assessment requires a redirection of institutional attention from resources to education." Kerby and Weber (2000, 202) explain how assessment efforts have shifted their focus from resources "to the accomplishment of the institutional mission, a commitment to continuous improvement," and for many programs, "the establishment of processes designed to keep the system working between accreditation visits."

OUTCOMES-BASED ASSESSMENT

Outcomes-based assessment is a form of assessment that focuses measurement and evaluation on the *outcome* of a process rather than resources or reputation. The practice of assessing outcomes is often familiar, as Garza (2001, 1) states, "[outcomes based] academic assessment efforts have been underway in higher education for more than two decades in the form of in-class examinations, grade point averages, and the occasional student survey."

Jennings (1989, 438) explains the process of outcomes assessment as "specifying the goals and objectives of a program and ways in which the attainment of those goals can be measured."

While Jennings considers teaching material "presumed" to accomplish educational goals to be important, "It is reasonable, however, to ask how successfully the curriculum achieves these goals. That requires some kind of outcome assessment" (Jennings 1989, 440).

As with any unfamiliar process, there are unique difficulties and pitfalls associated with student learning outcomes assessment that must be overcome. Many problems and criticisms raised about the approach can be traced back to a failure to fully grasp the core concept of outcomes-based assessment. After analyzing the assessment language used by disciplinary accrediting agencies, Whittlesey (2005, 11) reports, "Many terms were used that were synonymous with the term *outcomes*, including *goals*, *objectives*, and *competencies*." Not

surprisingly, faculty may feel that they are already taking an outcomes approach to learning, and all that is required of them is to change some terminology on their course outlines (Glennon, 2006, 2). Unfortunately this outlook often fails to develop true learning outcomes, and the use of traditional assessment criteria can significantly limit the effectiveness of many outcomes assessment efforts, leaving large gaps in our understanding of the true impact of programs. As Banta (1997, 83) explains, "Outcomes assessment may use the very same assignments and tests, but it results in a collective view of the data—across students and by multiple faculty—for the purpose of evaluating the success of the curriculum and instructional approaches that the faculty have designed and used."

A common terminology problem encountered when reconceptualizing a program for outcomes-based assessment is the confusion of *objectives* with outcomes. Educational objectives are less developed than outcomes. While objectives relate directly to instruction (what is being taught), outcomes assessment encompasses what is gained from instruction (what is being accomplished by students) (Glennon 2006, 3). Re-labeling existing educational objectives (teaching-focused) as outcomes (learning-focused) bypasses the primary intellectual process of developing measurable outcomes in the first place. Objectives are specific, content-focused and a critical planning component for programs and courses of study, but they are not examples of outcomes, which conceptualize intended *results* and can be demonstrated by students.

STUDENT LEARNING OUTCOMES

The Council for Higher Education Accreditation (CHEA 2003, 5) defines student learning outcomes as "the knowledge, skills, and abilities that a student has attained at the end (or as a result) of his or her engagement in a particular set of higher education experiences."

Outcomes-based assessment can be used to measure the results of multiple activities in the field of education, however, *student learning* outcomes are distinguished from *institutional performance* outcomes (the aggregated results of a program) in that they are focused on the performance of individual students (CHEA 2002, 2). It is a style of assessment that reflects Sell's (1989, 32) conviction that all assessment is connected through student outcomes, as well as Angelo (1995, 1) who states that "for more than a decade, higher education opinion leaders of all stripes, government officials, regional accreditation associations, and publications... have each and all urged college teachers to view and use assessment as a means to improve the quality of student learning."

Student learning assessment helps educators meet an inherent responsibility that they have to students (Banta 1997, 86). As Hutchings and Marchese (1990, 12) report, assessment "assumes that the point, indeed the test, of good teaching is student learning." The responsibility to be patrons of learning demands educators not only provide information regarding how students meet goals and expectations, but also that they strive to improve their performance as teachers, and the student learning outcomes approach to assessment provide a means to do both. Smith's explanation that "outcomes assessment demands that faculty think critically about their individual and collective contributions to the effectiveness of their programs," suggests that educators learn to appreciate assessment as "a catalyst for professional development." "For faculty, the primary value of evidence of student learning outcomes is to aid in the improvement of teaching and learning" (CHEA 2002, 2).

Adopting a student learning outcomes approach to program assessment also benefits students in more direct ways. Arguably the most meaningful advantage for students is that when faculty integrate learning outcomes into the course level, student learning can be assessed more

readily and students become more informed of faculty intentions and expectations (Glennon 2005). Braskamp (1989, 44) explains that the integration of assessment with learning assignments provides "intrinsic feedback" that can improve performance, because accomplishments are tangible both to the student and teacher. In other words, a student's ability to learn is improved along with the faculty's ability to assess. By explicitly designing educational experiences based on what students should be able to do with their knowledge, the learning outcomes approach also helps the educational community understand the point of the activity and encourages collaboration and cohesion within departments (Smith 2005, 7).

The advantages of student learning outcomes also extend well beyond college campuses. Assessment procedures respond to the demands of stakeholders in education for greater accountability. Measurable outcomes tell governments how much educational capital they have—an asset that every state needs to advance its economic, civic, and social welfare (Miller 2005). "Information about student learning outcomes is important to government, students and the public because these constituents increasingly tie judgments about the quality of an institution or program to evidence of student academic achievement" (CHEA 2002, 1). In an environment where requirements for assessment are becoming an increasingly common mandate, student learning outcomes represent a dynamic and demonstrative approach to assessment in higher education. As Hoole (2005, 6) explains, "outcomes assessment is an effective and compelling way to communicate to consumers, donors, and the public that organizational programs are making a difference."

THE ASSESSMENT MOVEMENT

The learning outcomes approach represents one aspect of a larger conceptual shift occurring throughout the educational community, which strives to make education more meaningful and effective. "Due to sweeping contemporary social and economic movements oriented toward ongoing quality improvement in education... educators have been motivated to reconceptualize the effectiveness of their programs" (Glennon 2006, 55). Educational stakeholders, such as parents, governments, and accrediting agencies, are demanding a greater degree of accountability from educators and educational institutions. Now that it is possible to identify the costs and benefits of a college education, students are interested in knowing the "return on investment" they receive from their degrees (Terenzini 1989, 645). This question demands fundamental introspection on the part of faculty members and institutions. Terenzini (1989) points out that in linking stated goals to the measure of progress towards their achievement, assessment represents a significant refocusing of institutional efforts on the purpose and effectiveness of the educational experiences they provide.

As Garza (2001, 1) explains, "The mindset of higher education environments has always been 'reactive' to the pressures placed on it." Therefore it comes as no surprise that the current assessment trend is not a spontaneous event. Over the past several decades, states and the federal government have increasingly encouraged academic accountability, "due in part to the spiraling costs of college and the growing concern about the quality and value of a college degree" (Steele 1996, 1). Initially, state-mandated assessment programs exhibited what Ewell (1987, 23) calls a "bewildering complexity" due to their different agendas. By the 1990s the movement had become more of a national interest. The provisions of the Government Performance and Results Act of 1993 require agencies to define missions, desired outcomes and measure organizational

performance at each level. The National Performance Review, under President Clinton, also adopted similar performance-based efforts, inspired largely by the principles of total quality management (Williams 2002, 47).

Higher education accrediting agencies, partially to prevent greater intervention by the government (Aristigueta & Gomes 2006, 3; CHEA 2002, 1; Holyer 1998, 1), have also begun to mandate an outcomes approach to assessment. Operating under U.S. Department of Education regulations, The Council for Higher Education Accreditation (CHEA), which has the ultimate authority to review and recognize American accreditation agencies, requires that accrediting organizations encourage their institutional and program counterparts to have student learning outcomes assessment plans and processes. Accordingly, all six⁴ regional accrediting organizations (which recognize institutions) and many of the disciplinary accrediting organizations (which recognize programs within institutions) also require the assessment of student learning (Whittlesey 2005, 10).

Public administration programs are in a unique position, compared to other programs of study, due to their connection with public agencies and their commitment to government service. Professor Robert Cleary (1993, 268) demonstrates this attitude by calling for a proactive review of MPA assessment procedures, not as a response to mandates, but to better prepare students to make contributions to effective and responsible government. In her analysis of educational and nonprofit accountability standards, Hoole (2005, 4) suggests that higher education and government agencies are experiencing a similar pressure to demonstrate results. "Both sectors share analogous tribulations when trying to measure effectiveness." She concludes that the

⁴ The Middle States Association of Colleges and Schools (MSA), New England Association of Schools and Colleges (NEASC), North Central Association of Colleges and Schools (NCA), Northwest Commission on Colleges and Universities (NWCCU), Southern Association of Colleges and Schools (SACS), and Western Association of Schools and Colleges (WASC).

outcomes assessment practices in academia are undoubtedly beneficial to external organizations, and that the accountability movement is now "a driving force throughout society" (Hoole 2005, 6). Durant (2002, 193) agrees that assessment for accountability should be a familiar topic to MPA programs, because unlike the professors in many other disciplines, MPA faculty undoubtedly spend a great deal of time emphasizing the need for government accountability and results-oriented management. "Should they [public administration academics] not be willing to apply the same concepts to their own work product?"

DEVELOPING STUDENT LEARNING OUTCOMES

Defining student learning outcomes for the purpose of assessment requires educators to ask certain questions. What is expected of a graduate of the program? What tasks should students be able to perform? What is most important? Assessment based on learning outcomes has been broadly defined as what students should be able to do with what they have learned. Programs must choose and define which student outcomes will provide the best vehicle for assessment. As Miller (1999, 94) states, "Though there are myriad directions to take in the assessment of learning, universities must direct their limited resources to the assessment issues that will have the greatest marginal effect on the quality of the university's product."

OUTCOMES AS VALUES

In choosing outcomes it is important to keep in mind that assessment in education is a tool and not an end unto itself. Ewell (1987, 28) cautions that "in their scramble to discover the what and how of assessment, institutions [may] forget why they are engaging in the process in the first place." He reiterates that the "why" of assessment should always be focused on

improvement, but which student learning outcomes will be most effective in this task? As Robertson, Carnes and Vice (2002, 6) explain, not all competencies required by a practitioner are appropriate for assessment, and "some competencies may even be more appropriately learned in a job setting." The choice of which learning outcomes are important and appropriate for measurement is a judgment that requires its own coherent set of criteria. Astin (1991, 38) comments that, "the very act of choosing to assess certain outcomes rather than others clearly requires us to make value judgments," and that those choices should "reflect the desired aims and objectives of the educational program."

Therefore, the student learning outcomes chosen by a program should be based on the educational experiences an organization values most. Banta (1997, 81) reports that the first principal "important for the successful practice of outcomes assessment in higher education" is an acknowledgement that student learning begins with educational values. For a university department or program, these "values" are commonly expressed most succinctly in the form of a mission statement, a document that Roberts (2001, 19) characterizes as a repository of the "basic values that characterize the program."

MISSION-BASED OUTCOMES

Astin's (1991, 3) premise that, "assessment practices should further the basic aims and purposes of our higher education institutions," strongly advocates mission statements as the proper starting point for all assessment efforts.

Any new assessment program should be predicated on a clear and explicitly stated understanding of what the institution's mission is and should be designed to further that mission. In other words, it should be possible to rationalize the assessment program--in all of its essential details--in terms of how it can facilitate the institution's basic mission (Astin 1991, xi).

The "basic mission" of an educational organization (especially on the program/department level) typically characterizes what students are expected to learn, and in the case of MPA programs accredited by National Association of Schools of Public Affairs and Administration, this is an explicit requirement.

"Over the past 10 years, the National Association of Schools of Public Affairs and Administration (NASPAA) has required [accredited] programs nationally to perform mission-driven and outcomes-oriented assessments" (Durant, 2002 193). Standard 4.2 of NASPAA's General Information and Standards for Professional Master's Degree Programs (2005, 9) states that, "The common and additional curriculum components shall develop in students general competencies that are consistent with the program's mission," and that the components must be "assessed as to their quality and consistency with the stated mission of the program." Roberts (2001, 19) interprets these regulations as a framework that "systematically links MPA program mission, goals, and objectives." Despite a mission-driven accreditation process that demands integrated performance measurement, NASPAA does not require student assessment to take any particular form. However, in suggesting the first step of an approach to meeting standard 4.2, NASPAA (2003) recommends that, "through your program's mission/objectives process, identify the set of desired student competencies, including learning outcomes, for the program."

Although NASPAA provides guidance for using student learning outcomes to determine how well its accredited institutions carry out their mission, the concept of mission-based learning outcomes is by no means restricted to public administration. Aristigueta and Gomes (2006, 2) point out that NASPAA, "joins others in the trend toward advocating accountability by demonstrating mission-driven results." Aristigueta and Gomes (2006, 2) explain that the mission (1) of a program determines its goals (2), which are followed by desired outcomes (3) that are

established to gauge the progress (feedback) towards achieving the overall mission of the program. The culmination of the process occurs when assessment results are used for program improvement, as described by Hindi and Miller (2000, 286), "Analysis of assessment measures enables departments to determine if goals are met, which in turn allows them to determine whether missions are accomplished and whether goals need to be modified."

DEVELOPING METHODS OF ASSESSMENT

It is of no small significance that Hindi and Miller refer to the analysis of "measures" rather than outcomes. In *Assessment for Excellence*, Astin (1991, 38) elaborates on another pitfall associated with outcome assessment, which results from educators confusing the *conceptual outcome* with the *outcome measure*. The conceptual outcome (the statement of expectation itself) is a "verbal description of some future condition or state of affairs that is considered desirable or important." Defining outcomes in this way is critical, however, the process of student outcomes assessment is "to define the relevant student outcomes *and to choose methods for assessing them*" (Astin 1991, 233, emphasis added) This "method" operationalizes the outcome in a way that can be measured.

METHODS TO ASSESS STUDENT LEARNING OUTCOMES

Many of the methods currently used to measure student learning outcomes are already familiar to educators and can include everything from standardized tests and research projects to exit surveys and transcript analysis. An attempt should always be made to choose the best method possible for measuring the given outcome, in order to maximize the effectiveness of assessment. Educators should, however, keep in mind that even the "best" assessment method

available will involve limitations of some kind. Writing on the difficulties associated with academic assessment measures, Williams (2002, 46) explains that any method chosen for assessment in or out of the field of public administration will involve tradeoffs, because either "perfect ones do not exist," or, "they are so difficult, expensive, and time consuming as not to be workable." He also posits that "multiple but poorer measures often help to offset mutual limitations," and "perhaps public affairs and administration programs should adjust their expectations and be largely content with practical measures that will serve well enough."

Although it is difficult to find outcomes assessment methods that encompass the complex nature of MPA programs, The Council for Higher Education Accreditation provides general guidelines for what methods work well in an accreditation setting. According to CHEA (2003), a method used for assessing student learning outcomes should provide *evidence* of learning by making and supporting the case that the desired outcome is present. "Evidence should be *relevant* to what is being claimed, *verifiable* through replication third-party inspection, and *representative* or typical of institutional performance" (CHEA 2003, 5).

Attempting to create entirely new methods of assessment to meet these criteria is often not the best approach, especially since "issues of cost, time and effort can be critical in outcome measurement" (Williams, 2002, 46). Williams goes on to explain that "most programs already create and report extensive information that can be used for this additional purpose." Restricted to the level of student learning, individual assignments and course grades represent the most obvious source of the evidence of outcomes. Miller (1999, 96) advocates traditional graded materials as a means of student learning assessment and agrees with Williams' cost/benefit approach, arguing that adding additional assessment activities should be implemented "if, and

only if the marginal benefit of the assessment exceeds the marginal cost (the loss of class time for new material)."

The methods used for the evaluation of classroom activities such as tests, reports and basic class participation – assuming the activities are part of a mission-derived curriculum – can provide effective learning outcome measurements. Sell (1989, 23) explains that assessment measures and "embedded" grading methods often share the same responsibilities. "Student assessment at the course and department level frequently serves the primary purpose of awarding grades and credits... In addition, some colleges and departments use senior exams, internships, and major projects as capstone experiences for assessing student performance." In order to distinguish between the good and the bad, Astin (1991, xi) advocates that these methods should be compared to the mission statement in order to judge their effectiveness, in a process similar to devising the mission-based outcomes. "Existing assessment practices should be scrutinized in terms of that same institutional mission, and those that do not appear to be enhancing that mission should be revised or abandoned."

DIRECT AND INDIRECT METHODS

Outcomes are assessed in a variety of different ways, but two major classifications addressed by CHEA are *direct* and *indirect* methods of assessment. These methods differ in the type of evidence used to demonstrate the desired learning outcome. "Direct evidence of student learning outcomes is the result of a process deliberately designed for this purpose" (CHEA, 2002, 2). Examples of direct methods include traditional "embedded" mechanisms used to gauge the competence of students such as capstone projects, exam scores, third-party testing (e.g., licensure) and other methods that rely on the "direct scrutiny of student performance and

attainment" (CHEA 2003, 5). Indirect methods of assessment include any other measure that relies on indirect evidence. Surveys and questionnaires are very common methods of acquiring indirect information on student learning outcomes, as are indirect measures of achievement such as graduation rates, job placement, and various types of self-reported information (CHEA 2003, 5).

Although both direct and indirect methods are valid approaches, judgments about the value and pertinence of the evidence of student learning "should involve at least one type based on direct observation or demonstration of student capacities--i.e., they should involve more than simply a self-report" (CHEA, 2002, 2). In describing the characteristics of an ideal standardized assessment process, Steele (1996, 13) puts the use of "direct methods" above all other guidelines, including validity and departmental agreement. Robertson, Carnes and Vice (2002, 14) point out that although student surveys are very popular in academic outcomes assessment, they reveal relatively little about lasting impacts of the program and must be supplemented with other data. This aversion to self-reported assessment is strongly reflected by Miller (1999, 96), who posits that,

In spite of our hope that students can tell us how much they have learned, especially when placed within the anonymous, nonthreatening environment of classroom assessment techniques, students do not possess a sufficient depth of knowledge or experience to make such a judgment. To think otherwise would confer upon them a level of wisdom inconsistent with their status as students.

This is not to suggest that all indirect methods are useless for the assessment of student learning. Miller (1999, 98) notes that a student's inability to self-evaluate is temporary, and that "in the long run" such information can be useful. This may be particularly true in practitioner-oriented fields, where work experience can provide an early perspective on the quantity of knowledge conferred upon graduates. Roberts (2001, 27) suggests that in the long term, stakeholder surveys

(employer and alumni) are both one of the most "cost effective" methods of gathering assessment data as well as an "invaluable tool for MPA program planning and evaluation."

SHORT, INTERMEDIATE AND LONG-TERM METHODS

To a certain extent, the term "outcome," in any context, implies the true "end" of a process, which raises concerns regarding the accurate measurement of learning outcomes. As Spanghel (1987, 38) elaborates, "There are faculty who believe (and they are probably right) that many of the 'benefits' of a student's education do not become visible, much less measurable, until many years have passed." This somewhat philosophical issue assumes greater pragmatic weight in the context of practitioner-oriented fields. Although educators can (and should) look for evidence of learning outcomes during the course of a student's education, outcomes demonstrated in the classroom do not typically occur in the setting of their long-term application, i.e., the workforce. "Simply stated, outcomes are practice oriented, and should make sense to practicing professionals as well as academic professionals" (Glennon 2006, 1). But how can educators accurately measure an applied skill in an academic setting? Indirect methods of outcome measurement lend themselves to such long-term evaluation: graduate surveys, employer assessments, and other forms of reporting. Unfortunately, these methods are often better at providing evidence of past success or failure than assisting current students.

As Aristigueta and Gomes (2006, 2) explain, "It is not unusual for final outcomes to take a long time to materialize, so intermediate outcomes, although not an end in themselves, are also used to measure progress." Direct methods of assessment that can be performed on student enrolled in, or just exiting, a program can be more useful than measures that attempt to gauge the total effect of learning on a graduate. Short-term "task specific assessment" is adequate, "so long

as the assessment task elicits the skills underlying the performance" (Maclellan 2004, 315). That is to say if the target of outcomes assessment (e.g., being able to speak in public) is the same as the classroom performance (delivering a presentation). However, Maclellan (2004, 315) also warns that "higher education is rarely concerned with one particular performance," but rather a student's ability to apply their learning to a dynamic environment.

CAPSTONE PROJECTS AS A METHOD

In addition to favoring direct assessment, CHEA also suggests that "evidence should cover knowledge and skills taught throughout a course or program" (CHEA, 2002, 2). For many MPA programs, capstone projects can offer the combination of a pre-existing method of assessment, which utilizes direct evidence and also encompasses the maximum scope of a student's experience within a program. Hutchings and Marchese (1990, 2) argue that graduate programs have an inherent advantage over their undergraduate counterparts--in terms of academic assessment--because practices such as oral examinations and thesis research provide evidence of the "cumulative effects of our teaching and curricula." Although oral and comprehensive examinations can be performed without the context of a final course, Julian (1996, 82) points out that testing done within a capstone course "is far less obtrusive than stand alone examinations." Durant (2002, 206) also favors the integration offered by mission-driven and outcomes-oriented capstone classes, suggesting that they "can create pride among students in jobs well done, involve them in coproducing the curriculum, and enhance their identification with program development."

Speaking from experience with the communications department at the University of Tennessee, Knoxville (UTK), Julian (1996) describes how a capstone course was implemented to

replace end-of-program examinations, which were the previous outcomes assessment measure. Throughout the course, students were asked to demonstrate a variety of learning outcomes that were linked to departmental goals, including written communication (in the form of a research project)⁵, public speaking, analysis, and reasoned decision-making. The results of the new assessment method provided insight into previously unknown areas of weakness, "In dealing with a particular subject area, students seemingly had no theoretical background" (Julian 1996, 81). By exposing weaknesses, the capstone course provided a vehicle to strengthen the program, and also became the means by which student's lack of theoretical understanding was resolved.

In another study of capstone courses as a method for outcomes assessment, Durant (2002) examined the MPA program at the University of Baltimore (UB), which set out to create an outcomes-oriented capstone specifically in response to NASPAA guidelines. Outcomes and measures in the UB course included knowledge and skills assessment through embedded assignments, as well as projects that integrated prior learning and client-based field projects-- which allowed students to demonstrate (and faculty to measure) outcomes associated with real life problems (Durant 2002, 196-7). Much like the UTK capstone experience, UB's capstone course replaced a stand-alone written examination, and Durant (2002, 194) reports that the course proved to be "a driver for strategic thinking about program development as a whole," rather than just a student assessment tool. He concludes that mission-driven, outcomes-oriented capstones "can hold up an unflinching mirror to the strengths and weaknesses of an MPA program, aid in program development, afford information for strategic faculty development and recruitment, and help refine mission statements" (Durant 2002, 206).

⁵ For more information on developing student learning outcome measures for writing and research skills see Peat, 2006.

CHAPTER 3: Setting

PURPOSE

This chapter examines student learning assessment from the perspective of Texas State University's Master of Public Administration program, and explores each of the program's student learning outcomes in regard to their purpose and relevance. The five learning outcomes are defined and connected to the scholarly literature, and the final section provides a conceptual framework to guide the construction of the finished research project.

THE TEXAS STATE MPA PROGRAM

The Southern Association of Colleges and Schools (SACS)--of which Texas State University is a member--requires all accredited institutions to perform institutional assessments of student learning. Student assessment is also a requirement of the Academic and University Plan, which requires all academic departments at Texas State University to assess student learning for program effectiveness and improvement (Garza & Wuest 2006). The Texas State MPA Program is an accredited program of The National Association of Schools of Public Administration, and therefore must fulfill standard 4.2 of the Standards for Professional Masters Degree Programs, which requires the assessment of curriculum components "as to their quality and consistency with the stated mission of the program" (NASPAA 2005, 9).

In response to these requirements, and the values represented by its mission, the program has adopted five student learning outcomes (**Table 3.1**) which convey the knowledge, skills and abilities students should demonstrate upon completion of their masters degree in public administration.

Table 3.1: Texas State MPA Program Student Learning Outcomes

1. Students should demonstrate the ability to communicate effectively in writing.
2. Students should demonstrate the ability to communicate effectively orally.
3. Students should demonstrate knowledge and comprehension of the National Association of Schools of Public Affairs and Administration's accrediting standards curriculum components.
4. Students should demonstrate the ability to see patterns and classify information, concepts and theories in public policy and administration.
5. Students should demonstrate the ability to judge public policy and management evidence based on reasoned arguments.

The five student learning outcomes were derived from the MPA program's mission:

The MPA Program's mission is to prepare students for careers as managers and leaders in the public service.

The program primarily serves the diverse community that is Central Texas. Such service is provided through course work, professional development opportunities, internships and applied research projects.

The Program responds to the changing public service environment through: an innovative curriculum, faculty scholarship and service, links to professional organizations, interaction with governmental agencies, and a commitment to state-of-the-art technology.

The Program is distinguished by emphasizing the central role of ethics in public service; reinforcing the use of technology in management; providing professional and educational opportunities to a diverse student body; delivering classes at convenient times and locations; offering a variety of career support areas; enabling rich and frequent contacts between students and faculty; providing students and alumni with professional networking opportunities; focusing on continuing professional development; emphasizing management in political institutions and processes; and integrating theoretical and applied approaches to public management. (Texas State, 2002, 8)

Prior to the creation of MPA learning outcomes, the mission was already instrumental in program assessment. "The first step in the mission-assessment process was the disaggregation of the formal mission statement into 24 mission element statements" (Texas State, 2002, 13). The mission elements were then linked to mechanisms (survey, content analysis, interviews, etc.) which are used for the collection of program assessment data. In accordance with mission-based assessment, the mission statement has now been used to construct desired student learning outcomes appropriate for assessment (Shields 2006).

TEXAS STATE MPA CAPSTONE COURSES

The Summary of Guidelines for Developing Methods to Assess Student Learning Outcomes at Texas State University calls for the incorporation of direct methods of student learning outcomes whenever possible (Garza & Wuest, 2006). In a presentation of the University's assessment policy, Garza and Wuest also explain how capstones provide "ideal data" for assessment.

Capstone courses provide students with a forum to combine various aspects of their programmatic experiences. For departments and faculty, the courses provide a forum to assess student achievement in a variety of knowledge and skills-based areas by integrating their educational experiences. Also, these courses can provide a final common experience for students in the discipline. (Garza and Wuest 2006)

Garza and Wuest also state that while the student's work in capstone courses is used as a conventional means for the assessment of student outcomes, "this method of assessment is unique because the courses themselves become the instruments for assessing student teaching and learning."

Because of their capacity to directly assess student learning in the most comprehensive format available, the Texas State MPA Program chose to use its existing capstone course assignments as the primary method for assessing the five student learning outcomes. The assignments consist of a written empirical research project and its defense through oral examination. The capstone projects are introduced through the program's capstone courses, which consist of a two part research methods sequence. The course uses multiple instructors as well as multiple methods to help ensure the reliability of assessments (Shields and Tajalli 2000).

The first course, POSI 5335 Problems in Research Methodology, emphasizes theory. It introduces students to the qualitative and conceptual aspects of research and prepares them to write their capstone research project, known as the Applied Research Project (ARP). During 5335 students prepare a rough draft of their ARP literature review chapter, construct a

conceptual framework, and develop a research prospectus. The second course, POSI 5397, deals with the actual empirical research involved in completing the ARP and is the terminal course of the program. Students work independently and receive direction and feedback on an individual basis. Once the ARP is completed, students submit to an oral examination and defend their projects before a committee (Shields and Tajalli 2000; Shields 1998).⁶

TEXAS STATE MPA CAPSTONE PROJECT

The Applied Research Project (ARP) is the Texas State MPA Program's capstone project and one of the methods chosen to directly assess student learning outcomes. It is an empirical research project related to an aspect of public administration chosen by the student. "The ARP is a cumulating experience and demonstrates in a concrete and summative way the analytic, policy, organization and writing skills of the student," and " allows for broad assessment and program feed back" (Texas State 2002, 21). One of the key purposes of outcomes assessment methods is to provide information that is useful and measurable. In this case, the ARPs show evidence of being an effective measure. Since the projects were made available online (<http://ecommons.txstate.edu>) on January 1st, 2006, they have been downloaded by unique (separate) users a total of 8819 times in 70 different countries.⁷

The Applied Research Project is linked with the student's oral examination, the second method chosen to directly assess student learning outcomes. The oral exam process is both collaborative and multidimensional. ARPs are defended before a committee that includes MPA faculty, practitioners in the field of public administration and, when appropriate, faculty from

⁶ For a complete list of articles relating to the Texas State MPA capstone experience see: Shields and Tajalli (2006); Shields (2006); Shields (2003); Shields (1999); Shields (1998).

⁷ As of 11/07/2006; see Appendix D for more information on the usage of ARPs by external constituencies.

other departments.⁸ As Dr. Patricia Shields, the Director of the Program explains, "assessment from professionals outside the program would give us a more realistic and perhaps more importantly, unbiased assessment of students knowledge and skills" (2006). The capstone project and oral examination represent a common experience for all students completing the MPA program, and offer students a chance to demonstrate what they have learned in a final, comprehensive format.

TEXAS STATE MPA STUDENT LEARNING OUTCOMES

WRITTEN COMMUNICATION

The first expected student learning outcome of the Texas State MPA program is the demonstration of effective written communication, in terms of **clarity**, correct **grammar and punctuation** and the proper use of **references**. Manns and Waugh (1989, 891) stress that "no ability is as important to the public manager as the ability to speak and write effectively." Smyth (2004, 372) suggests that essays are the best form of classroom writing assessment because they allow students the time to focus on developing their written skills of persuasive argument, and having in-depth essay questions test students' "ability to synthesize their knowledge gained from the course as a whole, rather than a specific section." Koliba (2004, 304) concurs that "a student's ability to synthesize experiences and concepts" is demonstrated by his or her ability to communicate coherently in writing. The ARP capstone project attempts to integrate the knowledge, concepts, and skills associated with the entire sequence of the MPA program and it is the strongest single indicator of quality writing abilities (Texas State 2002, 21). Capstone projects are an effective direct assessment method and evaluation of students' work in these

⁸ If the ARP involves program assessment, Texas State administrators are invited to sit on the oral committee. "In this capacity the Deans have found the projects useful as a form of institutional assessment. In addition, the program is able to collect and share assessment data with a key external constituency" (Texas State 2002, 21).

courses is an excellent means of assessing student outcomes (Garza & Wuest, 2006). In the exit survey, 100 percent of the students agreed that the MPA Program had contributed to their skills in writing and quantitative analysis (Texas State 2002, 34).

VERBAL COMMUNICATION

The second student learning outcome calls for effective verbal communication in the form of a clear **speaking style** and demonstrable understanding of the **subject matter**. Manns and Waugh (1989, 891) call effective interpersonal communication "the lifeblood of a public agency." The Texas State University MPA Program's NASPAA Self-Study Report mentions that "an employer survey identified oral presentations as an important skill that needed greater emphasis" (2002, 25). Denhardt (2001, 530) defines oral communications as "the skills that enable us to act within organizational and interorganizational systems, to mediate disputes and to influence change." According to Smyth (2004, 374), assessment of verbal communication is ever present in what she calls "low stake" assessment--the judgment of how students talk, indicators of engagement or boredom--which yields "revealing feedback as to the level of student comprehension and ability on the topics being studied each day." The oral examination structure serves as a comprehensive direct assessment mechanism within the Texas State MPA program, and every student must defend his or her applied research project as a graduation requirement. In the exit survey, 96.9 percent of the students said that the program had contributed to oral communication skills (Texas State 2002, 65).

NASPAA CURRICULUM

The NASPAA common curriculum components are a description of general competences that must be taught in accredited programs. "The curriculum components are designed to

produce professionals capable of intelligent, creative analysis and communication, and action in public service" (NASPAA 2006). NASPAA's Standards for Professional Masters Degree Programs list the components using the following three categories, they do not prescribe specific courses, but can clearly be interpreted as descriptions of desired learning outcomes.

Management of Public Service Organizations

- Human resources
- Budgeting and financial processes
- Information management, technology applications, and policy

Application of Quantitative and Qualitative Techniques of Analysis

- Policy and program formulation, implementation and evaluation
- Decision-making and problem-solving

Understanding of the Public Policy and Organizational Environment

- Political and legal institutions and processes
- Economic and social institutions and processes
- Organization and management concepts and behavior

Obviously, skill in the **management of public service organizations** should be considered a fundamental learning outcome displayed by public administration graduates. This category describes particularly broad competences, and as Roberts (2001, 23) points out, "general managerial competencies" are consistently more important to public administrators than "narrowly focused" analytic studies. In his analysis of federal hiring practices, Cleary (1993, 266) demonstrates that the majority of MPA graduates will enter directly into administrative/managerial positions. Therefore evidence of the three components must be demonstrated by students prior to entering the workforce.

Brad Sinclair's (2005) Applied Research Project, titled "What Do Texas City Managers Value? An Examination of NASPAA Accreditation Standards," provides an in-depth review of NASPAA curriculum standards in regard to their practical application for managers. Sinclair also refers to the components of the second category, **quantitative and qualitative techniques of**

analysis, as invaluable tools public administrators use to decipher complex programs and public policy. Shields (2006, 8) explains that "the interdisciplinary nature of public administration calls for both quantitative and qualitative methods." The Applied Research Projects also regularly require students to demonstrate these outcomes because of their analytical components (Texas State, 2002).

The final category, **understanding of the public policy and organizational environment**, contains components that relate to the understanding of public policy processes. Denhardt (2001, 529) explains that "delegation, negotiation, understanding or reading behavioral cues, or engaging in relationships of power and authority" are all "standard patterns" for public administrators. Once again, students' Applied Research Projects often demonstrate an understanding of these learning outcomes as students analyze and assess complex practical issues in public administration (Texas State, 2003).

ANALYSIS

The fourth student learning outcome is derived from Bloom's Taxonomy of Educational Objectives (1956). Benjamin Bloom worked with a group of educational psychologists to create this well-know classification system for categorizing the levels of abstraction of questions that commonly occur in educational settings. The six-level taxonomy provides a useful hierarchy in which to categorize learning outcomes depending on the type of cognitive skills they demand for demonstration. The levels of the "cognitive domain" are defined in terms of the skills they demonstrate, which is in direct correlation to the central theme of learning outcomes: the demonstration of learning. The complete taxonomy of the cognitive domain is displayed in **Table 3.2**.

Table 3.2 Bloom's Taxonomy of the Cognitive Domain⁹

Levels of Cognitive Ability	Focus	Behavioral verbs representing Intellectual Activity	Behavioral response (Source for outcome questions)
Knowledge	Focuses on remembering and reciting.	Who, what, when, where, define, describe, memorize label, list, recognize, identify, write, recite	Demonstrates simple recall.
Comprehension	Focuses on relating and organizing the information previously learned.	Summarize, restate, paraphrase, illustrate, match, explain, defend, relate, review, generalize, tell	Demonstrates an understanding of the information.
Application	Focuses on applying information according to a rule or principle in a specific situation.	Apply, change, put together, make, report, solve, interpret, prepare, discover, produce, design	Demonstrates an ability to use information, concepts and theories in new situations.
Analysis	A type of critical thinking that focuses on parts and their functionality to the whole.	Examine, classify, categorize, research, contrast, compare, disassemble, differentiate, separate, diagram, analyze, subdivide	Demonstrates an ability to see patterns and classify information, concepts and theories into component parts.
Synthesis	A type of critical thinking that focuses on putting parts together to form a new and original whole.	Combine, hypothesize, construct, originate, create, design, develop, suppose, organize, generate	Demonstrates an ability to relate knowledge from several areas to create new or original work.
Evaluate	A type of critical thinking that focuses on valuing and making judgments based on information.	Compare, recommend, assess, value, appraise, solve, criticize, weigh, debate, consider, defend, evaluate	Demonstrates an ability to judge evidence based on reasoned argument.

This outcome--to see patterns and classify information, concepts and theories--is classified as an **analysis**-level educational objective, because, as Bloom explains, "Analysis emphasizes the breakdown of the material into its constituent parts and detection of the relationships of the parts and of the way they are organized" (1956, 144). Students exhibiting evidence of the fourth outcome are therefore expected to demonstrate critical thinking skills that

⁹ For a detailed discussion of how the Texas State MPA Program uses Bloom's Taxonomy in their capstone course see: Shields (2006) "Using Pragmatism to Bridge the Gap Between Academe and Practice," presented at the 2006 conference of the American Society for Public Administration (ASPA), <http://ecommons.txstate.edu/polsfacp/1/>

enable them to take their education and use it as a tool for further understanding. Outcomes-based assessment is useful for measuring such higher-order skills because "the focus of outcomes centers on a whole, a pattern and a complexity of knowledge domains" (Glennon 2006, 4) rather than myopic objectives.

Limbach and Waugh (2005, 48) interpret Blooms' analysis domain as "critical thinking focused on parts and their functionality in the whole." For Texas State University MPA students, the "whole" is the complex world of public service and the "parts" are the concepts and theories of government policy and administration. McSwite (2001, 112) suggests that MPA students with competence in theory add "richness of perspective" and "flexibility of attention" to their capacity for effective administrative action. However, Cunningham & Weschler (2002, 106) explain that the simple memorization of theoretical concepts, regardless of their complexity, is not sufficient for public administrators who must "learn reflectively from experience and to change their responses." In other words, analytical skills allow students to continue to learn outside of the classroom. Pike (1996, 10) states that "one of the most lasting contributions a college or university can make is to cultivate enduring critical thinking skills among its students." Because disciplinary knowledge often becomes obsolete, the ability of practitioners to problem solve, think critically and use reason is an educational outcome that increases in importance over time. Therefore MPA students should be able to independently "identify a problem and then search for a theory or tool to help connect the problem to observed data" (Shields and Tajalli 2006, 316).

Robertson, Carnes and Vice (2002, 13) argue that if assessment is to be a multidimensional process of judging the individual in action, it must focus on tasks where students can show application of skills and knowledge in unfamiliar contexts. However, evidence of the demonstration of skills such as critical thinking and problem solving is more complex and

difficult to measure than task specific outcomes such as speaking and writing. Limbach and Waugh (2005, 49) explain that "If learners are to participate in critical thinking they must pose arguments, state opinions, look for evidence, critique the evidence, and think with fair mindedness." They suggest that "divergent questions," which offer open-ended-ness and a variety of correct answers, as an appropriate method, as well as a curriculum "combined with personal relevance to the student" (Limbach & Waugh 2005, 50-51)

The Texas State MPA capstone courses provide an excellent vehicle for students to demonstrate many of Limbach and Waugh's criteria through an open-ended research question that is both empirical in nature and often of great personal importance. It also provides students with the opportunity to demonstrate analytic-level education outcomes through the use of conceptual frameworks (Shields 1998, 210), which necessitate the development of theory as a problem-solving tool. Applied Research Projects must use micro-conceptual frameworks that are classified into five distinct categories depending on the nature of the research problem. This approach was developed by the MPA program specifically to enhance the analytical nature of the student projects (Shields and Tajalli 2006, 317). Each conceptual framework provides a "connective function" of how the problem is approached, data is collected and analyzed (Shields and Tajalli 2006, 316).

EVALUATION

While outcome number four was derived from the analysis level of Bloom's Taxonomy of the Cognitive Domain (1956), outcome number five involves the demonstration of Bloom's highest, **evaluation** level criteria. Bloom placed evaluation at the end of the cognitive spectrum because he considered it to be a mental function encompassing all other categories of behavior.

"Evaluation is defined as the making of judgments about the value, for some purpose, of ideas works, solutions, methods, material, etc." (Bloom 1956, 185). Evaluative learning outcomes are characterized by a student's ability to make judgments regarding the worth of material using criteria and values, resulting in an end product with a given purpose. Bloom cautions against confusing *opinions* with judgments. Opinions are often formed below the conscious level, but judgment involves the use of "distinct criteria in mind" (Bloom 1956, 186).

Limbach and Waugh (2005, 48) also consider evaluation to be a type of critical thinking, but a form "focused upon valuing and making judgments based upon information." If analysis is the critical thinking of theories and concepts, evaluation is the critical thinking of values. Bloom (1956, 188) explains that people in a democracy are inherently cautious of dealing with evaluation problems in education because of possible bias, and that feeling "is also dictated by a belief that in a democracy each citizen is expected--especially on political problems--to consider the major alternatives and then make his own decision." The irony of course is that many public administrators are regularly required to make evaluations--especially on political problems--that will have far-reaching effects on their fellow citizens. Although not all public administrators have this power, they often still have to make evaluations concerning recommendations and findings, and as Aristigueta and Raffel (2001, 168) posit, "graduate programs in public administration should provide students with the process and skills necessary to produce useful information for public decision-makers."

Denhardt (2001, 530) stresses that lower cognitive skills are critical for educated professionals, but insufficient, and students must develop a deeper understanding "so that they can act in a way consistent with their beliefs and values... even under pressures not to do so." Koliba (2004, 298) emphasizes the use of reflective practice as a method of assessing public

administration students' ability to apply their personal judgment and life experiences as problem solving tools. The Applied Research Projects offer Texas State MPA students the opportunity to demonstrate evaluative critical thinking skills. Shields and Tajalli explain that the program recognizes the fact that "public administrators often use research findings to make recommendations to improve programs; in other words, they are asked to gauge the effectiveness of program processes" (2006, 324). In the first capstone class, students are provided with conceptual framework outlines that specifically address impact evaluation, as well as process evaluation, of public programs, and recommendations concerning policy are encouraged as part of the final project (Shields and Tajalli 2006, 317).

CONCEPTUAL FRAMEWORK

An attempt has been made to define and justify the five student learning outcomes and their subcategories through a connection to the appropriate literature. This organization is outlined in **Table 3.3**, the conceptual framework table, which lists the curriculum component adjacent to its source material. Conceptual frameworks serve as guides for analytical research and their format is directed by the nature of the research problem (Shields, 1998). The conceptual framework used here is Descriptive Categories. Descriptive studies are commonly used to describe observations, and their flexibility allows researchers to examine the resulting patterns and their implications (Babbie 2004, 89). The five meta-categories identified are drawn directly from the program's student learning outcomes. **Table 3.3** presents the categories and links them to the corresponding literature.

TABLE 3.3: Conceptual Framework linked to the literature

Category	Source(s)
<p><u>Written Communication</u></p> <p>"Students should demonstrate the ability to communicate effectively in writing."</p> <ul style="list-style-type: none"> • Clarity • Grammar/Punctuation • References 	<p>Garza & Wuest, 2006 Koliba, 2004 Manns & Waugh, 1989 Smyth, 2004 Texas State, 2002</p>
<p><u>Verbal Communication</u></p> <p>"Students should demonstrate the ability to communicate effectively orally."</p> <ul style="list-style-type: none"> • Speaking Style • Subject Matter 	<p>Denhardt, 2001 Manns & Waugh, 1989 Smyth, 2004 Texas State, 2002</p>
<p><u>NASPAA Curriculum</u></p> <p>"Students should demonstrate knowledge and comprehension of the National Association of Schools of Public Affairs and Administration's accrediting standards curriculum components."</p> <ul style="list-style-type: none"> • Management of public service organizations • Application of quantitative and qualitative techniques of analysis • Understanding of the public policy and organizational environment. 	<p>Cleary, 1993 Denhardt, 2001 NASPAA, 2005 Roberts, 2001 Shields, 2006 Sinclair, 2005 Texas State, 2002</p>
<p><u>Analysis</u></p> <p>"Students should demonstrate the ability to see patterns and classify information, concepts and theories in public policy and administration."</p>	<p>Bloom, 1956 Cunningham & Weschler, 2002 Glennon, 2006 Limbach & Waugh, 2005 McSwite, 2001 Pike, 1996 Robertson, Carnes & Vice, 2002 Shields, 1998 Shields & Tajalli, 2006</p>
<p><u>Evaluation</u></p> <p>"Students should demonstrate the ability to judge public policy and management evidence based on reasoned arguments."</p>	<p>Aristigueta & Raffel, 2001 Bloom, 1956 Denhardt, 2001 Koliba, 2004 Limbach & Waugh, 2005 Shields & Tajalli, 2006</p>

In the following chapter the conceptual framework from **Table 3.3** is operationalized into a format that allows the student learning outcomes to be measured.

CHAPTER 4: Methodology

PURPOSE

This chapter explains the methodology used by the Texas State MPA Program's student learning outcomes assessment process. The conceptual framework developed in Chapter 3 is operationalized by creating survey questions with measurable responses. The research methodology for the study is explained. The evidence of each learning outcome was judged using one or more questions in two separate surveys

RESEARCH TECHNIQUE

The methods of data collection selected for this study are survey research and observation of student learning outcomes in the form of research papers and oral presentations. Outside readers were surveyed about their direct observation of students' papers and presentation abilities and MPA student exit surveys were used as an indirect measure of perceived learning. Descriptive categories are particularly applicable to this mode of research because they "give questionnaires a conceptual framework, and as a result, coherence" (Shields 1998, 214). Surveys are also particularly useful for studies in which individuals are the unit of analysis (Babbie, 2004, 243).

The study uses two surveys, one which was developed for the purpose, and another that represents an existing data collection method. In the first survey, respondents were the readers on the ARP committees, a group of practitioners within the field of public administration, many of whom are past graduates of the Texas State MPA Program. The committee members were asked to judge the performance of individual students on their capstone assignment, which consists of both a written Applied Research Project and the student's oral defense of the project. The five

student learning outcomes were used to develop a survey questionnaire (located in Appendix B). Due to the fact that the conceptual framework served as a direct model for the questionnaire, the results of the survey could be used to examine the extent to which Texas State MPA students exhibit the desired outcomes. Although the committee members recorded their evaluations in the form of a survey, their appraisal is a result of *direct* observation of students demonstrating learning in an examination setting.

The second survey used is the MPA student exit survey given to students after their completion of the oral exam. "The survey includes specific questions about the curriculum, and how the MPA Program contributed to student's knowledge and skills" (Texas State 2000, 22). Because many of the survey's questions are linked to the program mission statement, the survey can be used as an existing measure of mission-derived student learning outcomes. A number of the questions indirectly measure the five student learning outcomes because they use practically identical language. Because the survey is a form of self-evaluation and does not involve the demonstration of student knowledge or skills in a measurable fashion, the student exit survey is an *indirect* method of measuring learning outcomes.

Table 4.1 operationalizes the five categories and links them to the survey items. Each question corresponds to a particular learning outcome, or element thereof, and asks respondents to judge to what degree the outcome is demonstrated by the student.

TABLE 4.1: Operationalization of the Conceptual Framework

Category	Survey Question(s)	Survey Response(s)
<p><u>Written Communication</u></p> <ul style="list-style-type: none"> • Clarity • Grammar/Punctuation • References 	<p><u>ARP committee Survey (Direct)</u></p> <ol style="list-style-type: none"> 1) The student's writing was clear 2) The student's writing used correct grammar and punctuation. 3) The student's use of referencing was appropriate. <p><u>Student Exit Survey (Indirect)</u></p> <p>The MPA Program contributed to the development of my skills in:</p> <ul style="list-style-type: none"> • Writing 	<p>Strongly Agree Agree Neutral Disagree Strongly Disagree</p>

Category	Survey Question(s)	Survey Response(s)
<p><u>Verbal Communication</u></p> <ul style="list-style-type: none"> • Speaking Style • Subject Matter 	<p><u>ARP committee Survey (Direct)</u> 4) The student’s speaking style was clear. 5) The student’s discussion communicated a mastery of the subject matter.</p> <p><u>Student Exit Survey (Indirect)</u> The MPA Program contributed to the development of my skills in:</p> <ul style="list-style-type: none"> • Oral Communication • Presentation 	<p>Strongly Agree Agree Neutral Disagree Strongly Disagree</p>
<p><u>Analysis</u></p> <ul style="list-style-type: none"> • Ability to see patterns and classify information, concepts and theories in public policy and administration. 	<p><u>ARP committee Survey (Direct)</u> 6) The student demonstrated the ability to see patterns and classify information, concepts and theories in public policy and administration.</p> <p><u>Student Exit Survey (Indirect)</u> The MPA Program contributed to the development of my skills in:</p> <ul style="list-style-type: none"> • Quantitative Analysis • Financial Analysis 	<p>Strongly Agree Agree Neutral Disagree Strongly Disagree</p>
<p><u>Evaluation</u></p> <ul style="list-style-type: none"> • Ability to judge public policy and management evidence based on reasoned arguments. 	<p><u>ARP committee Survey (Direct)</u> 7) The student demonstrated the ability to judge public policy and management evidence based on reasoned arguments.</p> <p><u>Student Exit Survey (Indirect)</u> The MPA Program contributed to the development of my skills in:</p> <ul style="list-style-type: none"> • Program Evaluation 	<p>Strongly Agree Agree Neutral Disagree Strongly Disagree</p>
<p><u>NASPAA Curriculum</u></p> <p>Management of Public Service Organizations</p> <ul style="list-style-type: none"> • Human resources • Budgeting and financial processes • Information management, technology applications, and policy. <p>Application of Quantitative and Qualitative Techniques of Analysis</p> <ul style="list-style-type: none"> • Policy and program formulation, implementation and evaluation • Decision-making and problem-solving 	<p><u>ARP committee Survey (Direct)</u> <i>The ARP dealt with the following:</i></p> <p>N-1) Human Resource management N-2) Budgeting or financial processes N-3) Information management/technology applications N-4) Policy and program formation N-5) Program implementation/evaluation N-6) Decision-making N-7) Problem solving N-8) Political/legal institutions & processes N-9) Economic/social institutions & processes N-10) Organization/management concepts N-11) Ethical dilemmas or application</p>	<p><u>ARP committee Survey</u></p> <p>Somewhat Significantly Not At All</p>

Category	Survey Question(s)	Survey Response(s)
<p>Understanding of the Public Policy and Organizational Environment</p> <ul style="list-style-type: none"> • Political and legal institutions and processes • Economic and social institutions and processes • Organization and management concepts and behavior 	<p><u>Student Exit Survey (Indirect)</u> The MPA Program contributed to my <i>knowledge</i> in this area:</p> <ul style="list-style-type: none"> • Human Resources • Financial Resources • Information Systems Technology • Policy Process • Decision Making Problem Solving • Law • Public Management • Organizational 	<p><u>Student Exit Survey</u></p> <p>Strongly Agree Agree Neutral Disagree Strongly Disagree</p>

ARP COMMITTEE POPULATION AND SAMPLE

As a pre-existing entity dedicated to student assessment, the ARP committee provides an excellent resource for outcomes assessment via surveys. Surveys were distributed to respondents during the normal course of work and full participation was all but guaranteed. Samples were taken during the fall and summer semesters and the combined sample of returned surveys was 27, with a 100% response rate.

STUDENT EXIT SURVEY POPULATION AND SAMPLE

In addition to the committee survey, the methodology also incorporates the MPA Student exit surveys from the years 2000-2006. As in the case of the committee surveys, the population and sample were the same, and the response rate was 100%. The total number of students surveyed regarding outcomes related to the knowledge of NASPAA curriculum was 108 and the respondents to the other skill-based learning outcomes was 106.¹⁰

¹⁰ In some years, students were allowed to take the skill-based portion of the survey home, resulting in two lost responses.

STRENGTHS AND WEAKNESSES

Survey research has long been considered a reliable method of data collection because of the uniform nature of the standardized questionnaire form (Babbie, 2004, 274). In addition to its strengths, the unique conditions of this study help diminish several of the limitations inherent in survey research. One accepted limitation of surveys is their attempt to find the "least common denominator" amongst all respondents (Babbie, 2004, 274). In other words, in an attempt to be accessible to everyone, surveys often simplify complex topics resulting in superficial data. Another limitation of survey research is the dependence on the individual judgment of respondents to recall information. Although this element is one of the reasons survey research was chosen for the study, human error serves to limit the validity of surveys regardless of whether or not they have representative participation.

Fortunately, the respondents in this study were both small in number and equally well-equipped to provide educated responses to the questions. Simplifying the questionnaire for greater accessibility was not a consideration, and the questions relate as directly to the desired student learning outcomes as possible. In addition to these measures, the survey questionnaires were distributed and collected during the course of student assessment, thus allowing the respondents to focus on the topic at hand, rather than recall past information or opinions.

HUMAN SUBJECT PROTECTION

During the course of this study individuals in the field of public administration (the members of the ARP committee) were asked to participate in survey research regarding student performance. However, because the surveys were administered by the MPA program in the interest of concurrent evaluation efforts, the data gathered for this project represent secondary

analysis only, and does not fall under human subject protection guidelines. The student exit surveys were also a form of secondary analysis, and the majority had been conducted prior to the study under accepted conditions.

CHAPTER 5: Results

PURPOSE

This chapter examines the results of the survey of ARP committee members. The data from the direct measures, the applied research project and the oral exam, is placed in tables with each grouping of questions representing one of the five student learning outcomes desired by the Texas State MPA Program. Data from the indirect measure, the MPA student exit survey, is also included and discussed.

DIRECT MEASURES

WRITTEN COMMUNICATION

Table 5.1 *Student Learning Outcomes: Written Communication*

1. Students should demonstrate the ability to communicate effectively in Writing.	%Strongly agree and agree	Mode
The student's writing was clear.	96	Strongly Agree
The student's writing used correct grammar and punctuation.	93	Strongly Agree
The student's use of referencing was appropriate.	96	Agree

(n=27)

Because the applied research project is a specifically designed instrument to demonstrate student writing skills (Texas State 2002, 21) it provided an excellent measure for the first student learning outcome. **Table 5.1** shows that the overwhelming majority of committee members (96%) agreed that the student's writing was clear. The ability to use appropriate referencing was also demonstrated by the same majority (96%) of students, and is a likely reflection of the strong emphasis placed upon research methods in the first capstone course (POSI 5335).

ORAL COMMUNICATION

Table 5.2 *Student Learning Outcomes: Oral Communication*

2. Students should demonstrate the ability to communicate effectively orally	%Strongly agree and agree	Mode
The student's speaking style was clear.	96	Strongly Agree
The student's discussion communicated a mastery of the subject matter.	89	Strongly Agree

(n=27)

Oral communication is considered a "task specific" outcome (Maclellan 2004, 315) in that the demonstration of the outcome in an academic setting very closely relates to actual practice. The oral examination component of the capstone process allowed the committee an ideal situation to evaluate evidence of this outcome in students. In direct correlation to the results of the writing component, **Table 5.2** shows that the overwhelming majority of respondents (96%) agreed that students demonstrated a clear speaking style. Committee members also agreed that a slightly smaller, but still impressive majority of students (89%) demonstrated mastery of the subject matter.

ANALYSIS

Table 5.3 *Student Learning Outcomes: Analysis*

3. Students should demonstrate the ability to see patterns and classify information, concepts and theories in public policy and administration	%Strongly agree and agree	Mode
The student demonstrated the ability to see patterns and classify information, concepts and theories in public policy and administration.	82	Strongly Agree

(n=27)

While the written and oral communication outcomes were measured independently--by the written ARP and the student's presentation, respectively--committee members judged evidence of the analytical component using both performances as a true multidimensional assessment mechanism. **Table 5.3** shows that the majority of respondents (82%) felt that students demonstrated the type of critical thinking skills sought by the program. Fortunately, the

empirical nature of the applied research projects provides a "concrete and summative way" for students to show their analytical skills (Texas State 2002, 21).

EVALUATION

Table 5.4 *Student Learning Outcomes: Evaluation*

	%Strongly agree and agree	Mode
4. The student should demonstrate the ability to judge public policy and management evidence based on reasoned arguments.		
The student demonstrated the ability to judge public policy and management evidence based on reasoned arguments.	85	Agree

(n=27)

The evaluative outcome was also measured through a combination of written and oral performance. **Table 5.4** shows that the majority (85%) of committee members felt strongly or very strongly that students demonstrated this outcome in their projects and oral defense.

Table 5.5 *Student Learning Outcomes: NASPAA Curriculum*

5. Students should demonstrate knowledge and comprehension of the NASPAA accreditation standards curriculum standards (n=27)				
The applied research project dealt with the following		Significantly	Somewhat	Not at all
Human Resource management	% N	33% 9	37% 10	30% 8
Budgeting or financial processes	% N	30% 8	55.6% 15	15% 4
Information management/technology applications	% N	31% 8	34% 9	35% 9
Policy and program formation	% N	70% 19	30% 8	
Program Implementation/evaluation	% N	85% 22	15% 4	
Decision-making	% N	63% 17	26% 7	11% 3
Problem solving	% N	67% 18	26% 7	7% 2
Political/legal institutions & processes	% N	44% 12	37% 10	19% 5
Economic/social institutions & processes	% N	48% 13	37% 10	15% 4
Organization/management concepts	% N	56% 15	18% 5	26% 7
Ethical dilemmas or application	% N	33% 9	48% 13	19% 5

Interpreting the meaning of the results in **Table 5.5**, the NASPAA Standard Curriculum Components, requires a different approach than the previous outcomes. While graduating students are expected to show evidence of the other four learning outcomes during the capstone experience, there is no expectation that each project will demonstrate knowledge of all eleven unique NASPAA curriculum components. **Table 5.5**, therefore answers a different question by providing an aggregate picture of what topics were covered by the various students projects. It is interesting to note the high percentage of projects dealing with program evaluation (86%) and the analytical skill of problem solving (67%), which was reflected in student's demonstration of the evaluation and analysis outcomes (85% and 82% respectively). Other NASPAA components were represented to a lesser degree, but once again, this outcome was not meant to establish that the Applied Research Projects covered the entire curriculum. It does provide a picture of what areas the projects are contributing the most research, and represents a first step towards developing outcome assessment strategies for these individual standards.

INDIRECT METHODS

Although the student exit survey was not developed as an indirect measure of student learning outcomes, it represented an existing data collection method that could be used to provide evidence.

Table 5.6 *Student Exit Survey Results 2000-2006*

The MPA Program Contributed to the Development of my Skills in	%Strongly agree and agree
<u>WRITTEN COMMUNICATION</u> Writing	98
<u>ORAL COMMUNICATION</u> Oral Communication	95
Presentation	93

The MPA Program Contributed to the Development of my Skills in	%Strongly agree and agree
<u>ANALYSIS</u>	
Quantitative Analysis	97
Financial Analysis	87
<u>EVALUATION</u>	
Program Evaluation	83
Total Students	N = 106
"The MPA Program Contributed to my Knowledge in this Area"	%Strongly agree and agree
<u>NASPAA CURRICULUM COMPONENTS</u>	
Human Resources	95
Financial Resources	89
Information Systems Technology	81
Policy Process	95
Decision Making Problem Solving	97
Law	79
Public Management	94
Organizational	96
Total students	N = 108

Table 5.6 shows the results of the student survey questions which provided an indirect measure of student learning outcomes. Results for the skill-based outcomes are similar to the responses from the ARP committee, and each area shows a majority agreement that the skills are in evidence. Although responses by the ARP committee relating to NASPAA curriculum components were indecisive, the student surveys show an overwhelming agreement that the knowledge was an outcome of their education. Although student surveys are an indirect assessment method, this provides support that students at least think they have achieved the desired learning outcome.

CHAPTER 6: Conclusion

PURPOSE

The final chapter presents an overview of the project and summarizes the findings. The results of both ARP committee and student exit surveys are presented in a combined table. An analysis of the findings is presented, along with suggestions for future assessment and research.

SUMMARY OF RESEARCH

The purpose of this research was to (1) describe the extent to which the five student learning outcomes of the Texas State University MPA Program are demonstrated by graduating students and (2) develop a Power Point presentation concerning the use of student learning outcomes in higher education, and in Master of Public Administration Programs and capstone courses, in particular.¹¹ The capstone assignment was the unit of analysis for the study.¹²

The review of the literature identified the purpose and practice of outcome based assessment in higher education, describing how outcomes are developed and measured with a particular emphasis on capstone courses as a method. The setting chapter provided an explanation of the Texas State MPA program's mission and capstone course model, and justified the five student learning outcomes through connections to scholarly literature. The five student learning outcomes were presented as the study's descriptive categories and were then operationalized as a survey instrument. Using the instrument, a survey of capstone projects performed by the ARP committee described what student learning outcomes were in evidence. The student exit surveys were also used to provide indirect evidence of the desired outcomes The

¹¹ See Appendix E for PowerPoint presentation slides.

¹² For previous ARPs dealing with assessment of the project see: Almaguel (1997); Gute (1999); Hermes (2002); Ilo (2005).

results of both surveys showed which learning outcomes were demonstrated by students. **Table 6.1** shows the combined results of the ARP committee surveys and student exit surveys.

Table 6.1 Summary of Results

ARP COMMITTEE SURVEY RESULTS (DIRECT)				
Students should demonstrate the ability to communicate effectively in Writing (N=27)		%Strongly agree and agree	Mode	
The student's writing was clear.		96	Strongly Agree	
The student's writing used correct grammar and punctuation.		93	Strongly Agree	
The student's use of referencing was appropriate.		96	Agree	
Students should demonstrate the ability to communicate effectively orally (N=27)		%Strongly agree and agree	Mode	
The student's speaking style was clear.		96	Strongly Agree	
The student's discussion communicated a mastery of the subject matter.		89	Strongly Agree	
Students should demonstrate the ability to see patterns and classify information, concepts and theories in public policy and administration (N=27)		%Strongly agree and agree	Mode	
The student demonstrated the ability to see patterns and classify information, concepts and theories in public policy and administration.		82	Strongly Agree	
The student should demonstrate the ability to judge public policy and management evidence based on reasoned arguments (N=27)		%Strongly agree and agree	Mode	
The student demonstrated the ability to judge public policy and management evidence based on reasoned arguments.		85	Agree	
Students should demonstrate knowledge and comprehension of the NASPAA accreditation standards curriculum standards (N=27)				
The applied research project dealt with the following		Significantly	Somewhat	Not at all
Human Resource management	% N	33% 9	37% 10	30% 8
Budgeting or financial processes	% N	30% 8	55.6% 15	15% 4
Information management/technology applications	% N	31% 8	34% 9	35% 9

(continued) The applied research project dealt with the following		Significantly	Somewhat	Not at all
Policy and program formation	% N	70% 19	30% 8	
Program Implementation/evaluation	% N	85% 22	15% 4	
Decision-making	% N	63% 17	26% 7	11% 3
Problem solving	% N	67% 18	26% 7	7% 2
Political/legal institutions & processes	% N	44% 12	37% 10	19% 5
Economic/social institutions & processes	% N	48% 13	37% 10	15% 4
Organization/management concepts	% N	56% 15	18% 5	26% 7
Ethical dilemmas or application	% N	33% 9	48% 13	19% 5

STUDENT EXIT SURVEY RESULTS (INDIRECT)

The MPA Program Contributed to the Development of my <i>Skills</i> in	%Strongly agree and agree
<u>WRITTEN COMMUNICATION</u>	
Writing	98
<u>ORAL COMMUNICATION</u>	
Oral Communication	95
Presentation	93
<u>ANALYSIS</u>	
Quantitative Analysis	97
Financial Analysis	87
<u>EVALUATION</u>	
Program Evaluation	83
Total Students	(N = 106)
"The MPA Program Contributed to my <i>Knowledge</i> in this Area"	%Strongly agree and agree
<u>NASPAA CURRICULUM COMPONENTS</u>	
Human Resources	95
Financial Resources	89
Information Systems Technology	81
Policy Process	95
Decision Making Problem Solving	97
Law	79
Public Management	94
Organizational	96
Total students	(N = 108)

FINAL ANALYSIS AND FUTURE RESEARCH

This project was an exercise in descriptive research and will hopefully provide a background for future improvement in MPA student assessment. By examining the means used by the program to assess student learning, several strengths and weakness were uncovered. The result of the surveys showed that the Texas State capstone experience provided a method for students to demonstrate evidence of the writing, speaking, analysis and evaluation outcomes. However, the projects did not provide an effective way to demonstrate the outcomes associated with the NASPAA common curriculum components. The student exit surveys provided indirect evidence that many of the NASPAA components were, in fact, an outcome of their education. However, indirect measurement of student learning should never be relied upon as the single assessment method. As the literature explained, there should be multiple measures, and direct methods are preferred. While the applied research project and oral defense are clearly effective measures for the evidence of numerous desired student outcomes, they are not designed to cover the diverse body of knowledge desired in NASPAA accredited programs.

Although the capstone did not prove to be a good method of assessment for the curriculum components, they represent highly desired conceptual outcomes and another method of collecting evidence of their demonstration should be developed. Because the common curriculum components are taught in the Texas State MPA core (10 courses), separate assessment measures should be developed, or perhaps better yet, some existing methods of data collection could be adopted as direct learning outcome measures. The student exit survey could easily be expanded and tailored to provide a superior indirect measure. Relevant questions from the current survey (included in Appendix B) were chosen, but did not cover all 11 components or use the precise wording of the NASPAA standards.

A direct measure of the NASPAA component outcome seems to lie outside the scope of the capstone project and capstone courses. The literature would suggest several options. First, a comprehensive examination, separate from the existing measures, could be developed to directly demonstrate student competency in the curriculum areas. However, Julian's (1996, 82) experience indicates that such examinations are inferior to integrated capstone courses--which were used to replace their own examinations--and a comprehensive test would place increased pressure on students during what is, by design, an already challenging experience. A second, better option would be to develop measures for the component outcomes at the course level. This would require isolating the aspects of each course that are relevant to each standard, which would determine where the individual component outcomes would be best directly observed. In many cases the connection between course and component is obvious, for example the Texas State MPA ethics course and the NASPAA ethical component. In other cases it is less clear, such as the decision-making and problem-solving components. However, every course contains existing "embedded" mechanisms, in the form of assignments, projects, and tests that can be utilized for the assessment of student learning outcomes. The next logical step is to determine where and how the desired outcomes should be measured at the course level.

BIBLIOGRAPHY

- Almaguel, Ana. 1997. Content analysis of applied research projects 1992-1996 at Southwest Texas State University. Applied Research Project. Texas State University. Available online at <http://ecommons.txstate.edu/arp/141/>.
- Angelo, Thomas A. 1995. Improving classroom assessment to improve learning: Guidelines from research and practice. *Assessment Update*. 7(6): 1-2, 12-13.
- Aristigueta, Maria P. and Kimberly M.B. Gomes. 2006. Assessing performance in NASPAA graduate programs. *Journal of Public Affairs Education* 12(1): 1-18.
- Aristigueta, Maria P. and Kimberly M.B. Gomes. 2001. Teaching techniques of analysis in the MPA curriculum: Research methods, management science, and "the third path". *Journal of Public Affairs Education* 7(3): 161-169.
- Astin, Alexander W. 1991. *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. New York: Macmillan.
- Babbie, Earl. 2004. *The practice of social research, 10th ed.* CA: Thomson Wadsworth.
- Banta, Trudy W. 1997. Moving assessment forward: Enabling conditions and stumbling blocks. *New Directions for Higher Education*. 100: 79-91.
- Bloom, Benjamin S. 1956. *Taxonomy of educational objectives, handbook 1: Cognitive domain*. Addison Wesley.
- Braskamp, Larry A. So, what's the use? *New Directions for Higher Education*. 67: 43-50.
- Cleary, Robert E. 1993. Federal hiring of graduates of political science and public administration programs. *PS: Political Science and Politics* 26(2): 265-268.
- Council for Higher Education Accreditation (CHEA). 2003. *Statement of mutual responsibilities for student learning outcomes: Accreditation, institutions, and programs*. Washington DC.
- Council for Higher Education Accreditation (CHEA). 2002. Student learning outcomes workshop. *The CHEA Chronicle*. 5(2): 1-4.
- Davis, Barbara Gross. 1989. Demystifying assessment: Learning from the field of evaluation. *New Directions for Higher Education*. 67: 5-20.

- Denhardt, Robert B. 2001. The big questions of public administration education. *Public Administration Review* 61(5): 526-535.
- Durant, Robert F. 2002. Towards becoming a learning organization: Outcomes assessment, NASPAA accreditation and mission-based capstone courses. *Journal of Public Affairs Education* 8(3): 193-208.
- Ewell, Peter T. 1987. Assessment: Where are we? *Change*. January/February: 23-28.
- Garza, Lisa. 2001. Developing a comprehensive outcomes assessment program (COAP) model for implementation in higher education. Applied Research Project, Texas State University. Available online at <http://ecommons.txstate.edu/arp/119/>.
- Garza, Lisa and Beth Wuest. 2006. Methods for Assessing Student Learning Outcomes. Presentation, Texas State University.
- Glennon, Cheryl D. 2006. Reconceptualizing program outcomes. *Journal of Nursing Education* 45(2): 55-59.
- Gray, Peter J. and Robert M. Diamond. 1989. Improving higher education: The need for a broad view of assessment. *New Directions for Higher Education*. 67: 89-107.
- Gute, Mary. 1999. A comparison of masters level research projects in public administration and public affairs programs in central Texas. Applied Research Project. Texas State University. Available online at <http://ecommons.txstate.edu/arp/127/>.
- Hermes, Bruce. 2002. Government employer assessment of the SWT MPA. Applied Research Project. Texas State University. Available online at <http://ecommons.txstate.edu/arp/52/>.
- Hindi, Nitham and Don Miller. 1999. A survey of accounting practices in accounting departments of colleges and universities. *Journal of Education for Business*. 75(5): 286-290.
- Holyer, Robert. 1998. The road not taken. *Change* 30(5): 40-44.
- Hoole, Emily R. 2005. Through the looking glass: Educational accountability mirrors nonprofit accountability. *Assessment Update*. 17(4): 4-6
- Hutchings, Pat and Ted Marchese. 1990. Watching assessment: Questions, stories, prospects. *Change* 22(5): 12-37.
- Ilo, Saidat. 2005. A content analysis of applied research projects completed from 1999-2005 at Texas State University in the Masters of Public Administration Program. Applied

Research Project. Texas State University. Available online at <http://ecommons.txstate.edu/arp/11/>.

- Jennings, Edward T. 1989. Accountability, program quality, outcome assessment, and graduate education for public affairs and administration. *Public Administration Review*. 49(5): 438-446.
- Julian, Faye D. 1996. The capstone course as an outcomes test for majors. *Assessment in practice*. Banta, Trudy W., Jon P. Lund, Karen E. Black & Frances W. Oblander (Eds). San Francisco: Josey-Bass Publishers. 79-81.
- Kerby, Debra and Sandra Weber. 1999. Linking mission objectives to an assessment plan. *Journal of Education for Business*. 75(4): 202-209.
- Koliba, Christopher J. 2004. Assessing reflection assignments for public affairs courses: Implications for educating reflective practitioners. *Journal of Public Affairs Education* 10(4): 295-309.
- Limbach, Barbara J. and Wendy L. Waugh. 2005. Questioning the lecture format. *The NEA Higher Education Journal*. Fall: 47-56.
- MacLellan, Effie. 2004. How convincing is alternative assessment for use in higher education? *Assessment & Evaluation in Higher Education* 29(3): 311-321.
- Manns, Edith Kelley and William L. Waugh. 1989. Communication in public administration: The need for skill-based education. *Policy Studies Review* 8(4): 891-897.
- McSwite, O.C. 2001. Theory competency for MPA-educated practitioners. *Public Administration Review* 61(1): 111-116.
- Miller, Michael S. 1999. Classroom assessment and university accountability. *Journal of Education for Business*. 75(2): 94-98.
- National Association of Schools of Public Affairs and Administration (NASPAA). 2003. The logic of presenting student learning outcomes in the self study. www.naspaa.org.
- National Association of Schools of Public Affairs and Administration (NASPAA). 2005. General information and standards for professional masters degree programs. www.naspaa.org.
- National Center for Public Policy and Higher Education. 2000. Measuring up 2000: The state-by-state report card for higher education.
- Peat, Barbara. 2006. Integrating writing and research skills: Development and testing of a rubric to measure student outcomes. *Journal of Public Affairs Education*. 12(3): 295-311.

- Pike, Gary R. 1996. Assessing the critical thinking abilities of college students. *Assessment Update*. 8(2): 10-11.
- Roberts, Gary E. 2001. Using stakeholder surveys in MPA program performance measurement. *Journal of Public Affairs Education* 7(1): 19-30.
- Robertson, Michael T., Lana W. Carnes and Janna P. Vice. 2002. Defining and measuring student competencies: A content validation approach for business program outcome assessment. *Delta Pi Epsilon Journal* 44(1): 13-24.
- Sell, G. Roger. 1989. An organizational perspective for the effective practice of assessment. *New Directions for Higher Education*. 67: 21-41.
- Shields, Patricia. 2006. Using Pragmatism to bridge the gap between academe and practice. Presented at the 2006 Conference of the American Society for Public Administration, Denver, Colorado, April 1-4. available at: (<http://ecommons.txstate.edu/polsfacp/1/>)
- Shields, Patricia. 2003. A pragmatic teaching philosophy. *Journal of Public Affairs Education* 9(1): 7-12
- Shields, Patricia. 1999. Getting organized: A pragmatic tool for writing graduate papers. *Journal of Graduate Teaching Assistant Development* 7(1): 5-??
- Shields, Patricia. 1998. Pragmatism as philosophy of science: A tool for public administration. *Research in Public Administration* 4: 199-230.
- Shields, Patricia and Hassan Tajalli. 2006. Intermediate theory: The missing link in successful student scholarship. *Journal of Public Affairs Education* 12(3): 313-334.
- Sinclair, Brad. 2005. What do Texas City Managers Value? An Examination of NASPAA Accreditation Standards. Applied Research Project, Texas State University. Available on line at <http://ecommons.txstate.edu/arp/32/>.
- Smith, Joshua S. 2005. Fostering Faculty Engagement in Departmental Assessment in Higher Education. *Assessment Update*. 17(4): 7-9.
- Smyth, Karen. 2004. The benefits of students learning about critical evaluation rather than being summatively judged. *Assessment & Evaluation in Higher Education* 29(3): 369-378.
- State of Texas. 2004. *Executive Order RP31, relating to accountability of higher education systems and institutions* (January 22).
- Steele, Joe M. 1996. Postsecondary assessment needs: Implications for state policy. *Assessment Update*. 8(2): 1-2,12-13,15).

- Spangehl, Stephen D. 1987. The push to assess. *Change*. January/February: 35-39.
- Terenzini, Patrick T. 1989. Assessment with open eyes: Pitfalls in studying student outcomes. *Journal of Higher Education* 60(6): 644-664.
- Texas Higher Education Coordinating Board (THECB). 2000. *Closing the gaps: The Texas higher education plan*.
- Texas State University. 2002. *NASPAA self-study report*. Available online at <http://ecommons.txstate.edu/padmpub/1/> (accessed 2/23/06).
- Whittlesey, Valerie. 2005. Student learning outcomes assessment and disciplinary accrediting organizations. *Assessment Update*. 17(4): 10-12
- Williams, David G. 2002. Seeking the holy grail: Assessing outcomes of MPA programs. *Journal of Public Affairs Education*. 8(1): 45-56.

Appendix A

Interview with Dr. Patricia Shields, Director,
Texas State University Master of Public Administration Program

Q: Why is the MPA program doing student learning outcomes assessment?

Dr. Patricia Shields: Student learning outcomes assessment is mandated by the Southern Association of Colleges and Schools. It is also mandated by NASPAA. I believe it is a good idea and there is no way around it. We must do this kind of assessment.

Q: How is student learning outcomes assessment beneficial to the MPA program and its students?

Shields: It enables the faculty and university, for that matter, to have a big picture sense of what is going on in the program. We should be able to use the information against both benchmarks and as a baseline. This should enable the faculty to improve the program and to ensure that standards remain high. We also report the findings to our advisory council. The findings are an accountability mechanism – they let the council and, for that matter, the students and taxpayers know what students are learning.

Students pay tuition and the taxpayer pays a subsidy for each student.

Q: Why were the five student learning outcomes chosen?

Shields: We were mandated by the university to come up with at least 5 learning outcomes. We looked at our mission – to prepare students for careers as managers and leaders in the public service. It seemed reasonable that students should be equipped with communication skills (writing and speaking) as well as critical thinking skills. Four of the five outcomes dealt with writing, speaking and critical thinking (analysis and evaluation). We also believed that students should have knowledge and comprehension of the subject matter of public administration and public policy. We looked to the curriculum standards of NASPAA to give us guidance on how to conceptualize the subject matter of public administration in a comprehensive way – the fifth outcome.

Q: What methods/measures were chosen to provide evidence of student learning outcomes? Why?

Shields: The faculty wanted to use a method that would be easy to implement and would not take an extraordinary amount of time. We also believed that assessment from professionals outside the program would give us a more realistic and perhaps more importantly, unbiased assessment of students' knowledge and skills. Our capstone review process was already in place.

Students defended their paper during an oral exam. The three person committee included a practitioner. All members of the committee read the paper and listen to the students defense. Writing and speaking could be directly observed, as could critical thinking. The university required a direct method of assessment. The oral and paper provided a direct means. I had also discovered Blooms Taxonomy of the cognitive domain and believed I had a way to actually measure critical thinking.

So we developed a relatively short survey that dealt with the five outcome measures and give it

to the outside persons after the oral.

The fifth outcome measure is the weakest. It gives us a sense if most of the curriculum components are covered by the papers. It does not really assess whether the student knows and comprehends the material over the entire curriculum. We will need to do more course by course assessment.

Appendix B

Survey Instruments

Student Learning Outcomes Assessment: MPA Program

Part I Please indicate whether you Strongly Agree (SA), Agree (A), are Neutral (N), Disagree (D) or Strongly Disagree (SD) with the following statements.

1. The student’s writing was clear.
(SA) (A) (N) (D) (SD)
2. The student’s writing used correct grammar and punctuation.
(SA) (A) (N) (D) (SD)
3. The student’s use of referencing was appropriate.
(SA) (A) (N) (D) (SD)
4. The student’s speaking style was clear.
(SA) (A) (N) (D) (SD)
5. The student’s discussion communicated a mastery of the subject matter.
(SA) (A) (N) (D) (SD)
6. The student demonstrated the ability to see patterns and classify information, concepts and theories in public policy and administration.
(SA) (A) (N) (D) (SD)
7. The student demonstrated the ability to judge public policy and management evidence based on reasoned arguments.
(SA) (A) (N) (D) (SD)

Part II The following are curriculum components specified by the public administration accrediting body. Please indicate whether the Applied Research Project dealt with the following:

- | | | | |
|---|----------|---------------|------------|
| 1. Human Resource management | somewhat | significantly | not at all |
| 2. Budgeting or financial processes | somewhat | significantly | not at all |
| 3. Information management/technology applications | somewhat | significantly | not at all |
| 4. Policy and program formation | somewhat | significantly | not at all |
| 5. Program Implementation/evaluation | somewhat | significantly | not at all |
| 6. Decision-making | somewhat | significantly | not at all |
| 7. Problem solving | somewhat | significantly | not at all |
| 8. Political/legal institutions & processes | somewhat | significantly | not at all |
| 9. Economic/social institutions & processes | somewhat | significantly | not at all |
| 10. Organization/management concepts | somewhat | significantly | not at all |
| 11. Ethical dilemmas or application | somewhat | significantly | not at all |

MPA Student Exit Survey

The MPA Program contributed to my knowledge in this area.

Content Area	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
Decision making-Problem solving					
Financial Administration					
Human Resource Administration					
Policy Process					
Intergovernmental Relations					
Ethics					
Information Systems/Technology					
Organizational					
Applied Research					
Law					

The MPA Program contributed to the development of my skills.

Content Area	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
Writing					
Quantitative Analysis					
Oral Communication					
Ability to function in a team					
Financial Analysis					
Presentation					
Interpersonal relationships					
Supervisory					
Program evaluation					
Assessment					
Use of technology					

Appendix C:

Complete MPA Student Exit Survey Results

MPA Program Exit Survey Results 2000-2006

The MPA Program Contributed to my *Knowledge* in this Area (Percent Strongly Agree and Agree)

Knowledge Area	Total	2000	2001	2002	2003	2004	2005	2006
Decision making-Problem solving	97	87	100	100	100	100	95	100
Financial Resources	89	100	94	89	75	89	90	79
Human Resources	95	100	94	100	88	94	100	90
Policy Process	95	100	94	100	100	89	100	90
Intergovernmental Relations	90	93	94	89	100	88	95	77
Ethics	97	100	94	88	100	94	100	100
Information Systems Technology	81	80	82	78	100	78	85	72
Public Management	94	100	100	89	75	95	91	100
Organizational	96	93	94	100	100	94	95	100
Applied Research	99	100	100	100	100	100	95	100
Law	79	93	82	78	63	88	85	56
Total Students	106	15	17	9	8	18	20	19

The MPA Program Contributed to the Development of my *Skills* in (Percent Strongly Agree and Agree)

Skill	Total	2000	2001	2002	2003	2004	2005	2006
Writing	98	100	100	100	100	94	95	100
Quantitative Analysis	97	100	100	100	100	89	95	100
Oral Communication	95	93	100	100	100	95	95	90
Ability to function as a team	83	80	82	89	100	83	86	74
Financial Analysis	87	87	100	100	63	89	85	79
Presentation	93	93	100	89	63	89	95	100
Interpersonal Relationships	86	80	88	89	100	89	90	74
Project Management	89	93	100	78	63	89	90	90
Supervisory	79	73	82	89	63	83	81	79
Program Evaluation	83	67	100	78	75	82	76	95
Assessment	92	93	94	89	75	94	86	100
Use of Technology	80	73	94	79	63	83	95	63
Total Students	106	15	17	9	8	18	20	19

Appendix D:

ARP Usage Statistics

ARP Usage Statistics From <http://ecommons.txstate.edu/arp/>

Full-Text Downloads: 2005-08-30 through 2006-11-07	8819
Full Text Downloads outside of the US: 2006-01-01 through 2006-11-07	649
Average Full Text Downloads Per Month: 2006-05 through 2006-10	1102

Top 10 Most Downloaded ARPs:

<i>Applied Research Project Title</i>	<i># of downloads</i>
Aftercare for Youth with Mental Health Disorders in the Juvenile Justice System: An Assessment of the Aftercare Program of Williamson County Juvenile Services	233
Exploring the Effects of Specialized Sexual Behavior Treatment of Recidivism	222
Introducing the Scorecard to Pharmacy Benefit Manager	196
What Do Texas City Managers Value? An Examination of NASPAA Accreditation Standards	182
An Information Security Risk Assessment Model for Public and University Administrators	175
Human Resources Management: A Description of Professional Knowledge and an Examination of Intangible Qualities	172
Developing a Comprehensive Needs Assessment Model for Implementation in Continuing Education	169
Perceptions of Texas Parks & Wildlife Game Wardens about Effectiveness of Law Enforcement Programs	163
Group Dynamics & Power Structures: Toward a Greater Understanding of the Line-Staff Relationship Within the Austin Fire Department	150
Residential Land Use Policy and Conservation Development in the Blanco River Basin	143

Top 10 Non-US Download Locations

<i>Country</i>	<i># of downloads</i>
Canada	67
United Kingdom	66
India	61
Australia	52
Thailand	25
Germany	24
Turkey	23
Philippines	23
New Zealand	18
South Africa	17
Malaysia	16

Appendix E:

PowerPoint Presentation

"Using The Capstone Course to Generate Student Learning Outcomes"

Accreditation Institute Workshop

Presented at the 2006 Annual Conference of the National Association of Schools of Public
Affairs and Administration. Minneapolis Minnesota October 18-21.