

# Assessment and Accountability in Higher Education

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## Introduction

Pressure from external stakeholders increasingly requires higher education institutions to provide concrete evidence of student learning, i.e., learning that will assist graduates to become productive, working members of society (Banta, 2001).<sup>1</sup> As such, assessment of student learning has become a significant part of the process of determining institutional quality (Middle States Commission on Higher Education, 2005; Mundhenk, 2005). This article describes an example of one university's response to the call for greater accountability for student learning outcomes and how one school within this university has responded to it. The article concludes with reflections on next steps for meeting future assessment expectations.

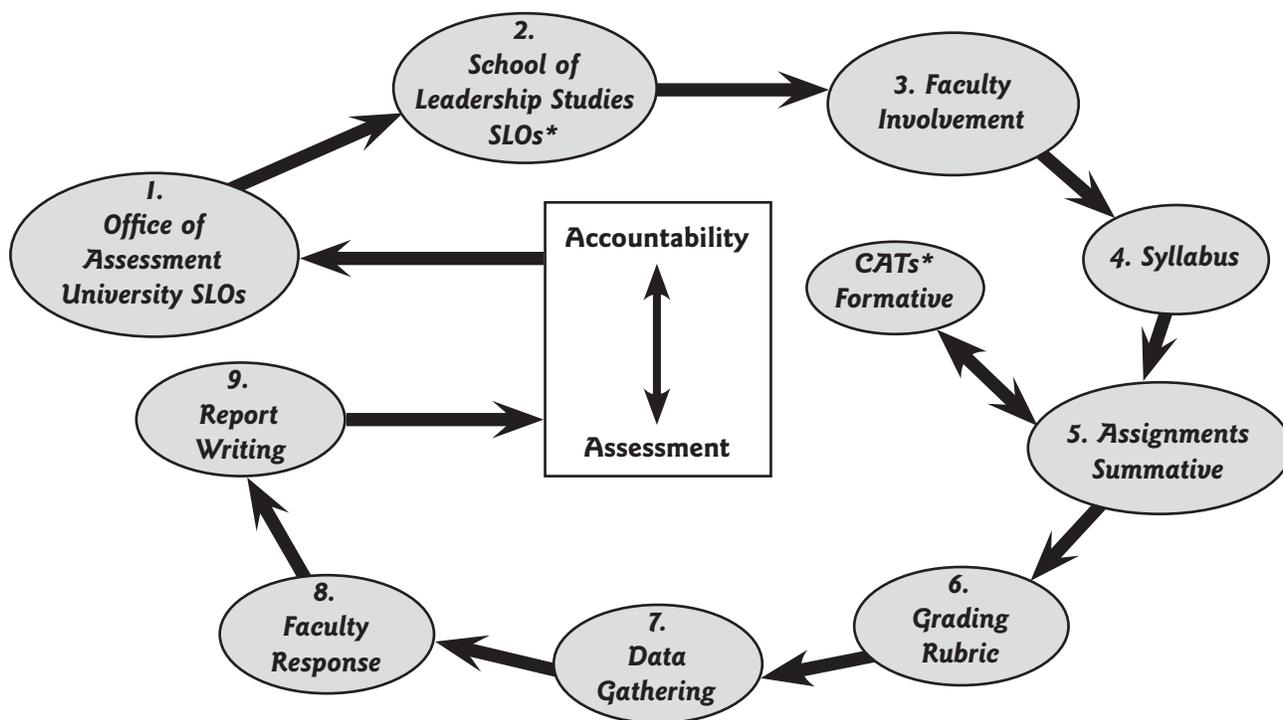
## Framework for Assessment

The evaluation of student learning is commonly referred to as assessment. Angelo and Cross (1993) defined assessment as an ongoing, multidimensional process of appraising the learning that occurs in the classroom before and after assignments are graded with the feedback used to improve teaching and subsequently student learning.<sup>2</sup> At Kansas State University, accountability for and assessment of student learning is shared by the Office of Assessment and academic units, here, the School of Leadership Studies. The Figure below lays out a cyclical process that captures the nine components that comprise the university's assessment framework.

## The Role of the Office of Assessment

At Kansas State University, accountability for and assessment of student learning begins and ends with the Office of Assessment whose mission is to support continuous improvement processes through facilitation of meaningful assessment of student learning and effective methods for feedback and action in response to assessment results (Kansas State University, 2009a). According to the Office of Assessment, the university strives to create an atmosphere of intellectual curiosity and growth while preparing citizens who will continue to learn and who will contribute to the societies in which they live and work. Students share in the responsibility for a successful university educational experience.

Figure  
Assessment as a Process



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\*Note: SLOs are student learning outcomes. CATs are classroom assessment techniques.

The Office of Assessment also provides guidance and feedback to the university's academic units, as follows:

Kansas State University is committed to student learning and to providing the highest quality educational experiences for its students. The university upholds assessment of student learning and the use of the results of assessment as key strategies to ensure continuous improvement of student learning. Student learning outcomes at the university, degree program and support program levels provide a shared vision of what we value and what students are expected to learn. Within a culture of reflection, scholarship, trust and shared responsibilities, faculty, with participation from students, administrators, alumni and K-State constituents, develop and implement ongoing and systematic assessment strategies to understand what, how much, and how students learn. Through the use of both direct and indirect sources of evidence of student performance, results from assessment guide collective actions for, among others, curricular change, better learning opportunities for students, improvement of teaching, and more effective academic support services (Kansas State University, 2009a).

Therefore, it is important that student learning outcomes be clear and measurable.

To that end, this office sets forth five undergraduate student learning outcomes. Upon completion of the degree and regardless of their major, graduates are expected to demonstrate the following:

1. Knowledge: Students will demonstrate a depth of knowledge and apply the methods of inquiry in a discipline of their choosing, and they will demonstrate a breadth of knowledge across their choice of varied disciplines.
2. Critical thinking: Students will demonstrate the ability to access and interpret information, respond and adapt to changing situations, make complex decisions, solve problems, and evaluate actions.
3. Communication: Students will demonstrate the ability to communicate clearly and effectively.
4. Diversity: Student will demonstrate awareness and understanding of the skills necessary to live and work in a diverse world.
5. Academic and professional integrity: Students will demonstrate awareness and understanding of the ethical standards of their academic discipline and/or profession (Kansas State University, 2009b).

The Office of Assessment requires direct and indirect measures of student learning.<sup>3</sup> For example, direct measures of student learning include portfolios, essay questions, performance on licensure examinations, and performance evaluation during internships. Indirect measures of student learning include SAT/ACT scores, exit interviews of graduates, job placement data, and self-report measures assessing student's perception of what they have learned. To emphasize the importance of student assessment, the Office of Assessment sponsors an assessment showcase where departments and programs are invited to present their assessment process, and awards are given by the provost to recognize successful assessment endeavors.

### **School of Leadership Studies Student Assessment**

In step two of the process, responsibility for implementation of the Office of Assessments directives is passed to academic units. This step requires development of learning outcomes. Based upon

the School of Leadership Studies' mission statement, "Developing knowledgeable, ethical, caring, and inclusive leaders for a diverse and changing world" (Kansas State University, 2009c) and the university undergraduate student learning outcomes, the School of Leadership Studies developed eight student learning outcomes:

1. Identify and understand contemporary theories of leadership.
2. Practice leadership consistent with one's personal philosophy.
3. Understand and be able to apply appropriately the skills of problem solving and conflict resolution.
4. Understand and appreciate frameworks for ethical decision-making.
5. Demonstrate knowledge of personal beliefs and values and a commitment to continuing personal reflection and reassessment.
6. Identify and comprehend the impact of culture on one's leadership style.
7. Evaluate one's growth as an interculturally competent leader.
8. Understand that innovation and collaboration are important to leading personal, community, national and world change (Kansas State University, 2009d).

These eight outcomes were then linked to four core courses in the leadership curriculum:

- EDLST 212 – Introduction to Leadership Concepts;
- EDLST 350 – Culture and Context in Leadership;
- EDLST 405 – Leadership in Practice
- EDLST 450 – Senior Seminar in Leadership Studies.

The learning outcomes are crosswalked with the courses in the Table on the next page.

Step three of the assessment process is faculty involvement. Here, School of Leadership Studies faculty initiated the process of faculty involvement by placing the eight student learning outcomes on syllabi for the four core courses, with those outcomes that specifically pertain to the course boldfaced. Faculty use the learning outcomes to focus their teaching.

Related to faculty involvement is syllabus development, Step four, which includes the selection of course content, assignments, textbooks, readings, and assessment which are aligned to the learning outcomes. Prior to the commitment to assessment, School of Leadership Studies instructors did not meet as a team. With a common set of learning outcomes, instructors now meet in teams to discuss the core courses. For example, those who teach Introduction to Leadership Concepts meet before, during, and at the end of the semester to discuss these components. Related to summative assessment, step five, the meetings have provided an opportunity for collaboration and consistency.<sup>4</sup> As a result of the meetings, corresponding grading rubrics, Step six of the process, were developed.

In Step seven, instructors record the following data on a spreadsheet template at the end of each semester: course syllabus; assignment; grading rubric; and assignment data. Once the data are compiled, the spreadsheet is returned to the instructors. All instructors receive their individual data, a composite of all the sections' data, and a comparison of data semester-by-semester for their respective section and all sections.

In Step eight, instructors are asked to provide feedback on the above information and to respond to variations of the following questions: (1) Does the team plan to make any changes to the assessment assignment? If so, what changes? (2) Does the team plan to include additional assignments for assessment? (3) After reviewing the data,

**Table**  
**Core Course Alignment with School of Leadership Studies and University Student Learning Outcomes**

<b>School of Leadership Studies Alignment Matrix</b>				
	<b>Intro to Leadership Concepts</b>	<b>Culture and Context in Leadership</b>	<b>Leadership in Practice</b>	<b>Senior Seminar in Leadership</b>
<b>School of Leadership Studies Student Learning Outcomes*</b>				
Identify and understand contemporary theories of leadership	<b>A*</b>			
Practice leadership consistent with one's personal philosophy			<b>A</b>	
Understand and be able to apply appropriately the skills of problem solving and conflict resolution			<b>A</b>	
Understand and appreciate frameworks for ethical decision-making				<b>X*</b>
Demonstrate knowledge of personal beliefs and values and a commitment to continuing personal reflection and reassessment				<b>A</b>
Identify and comprehend the impact of culture on one's leadership style		<b>A</b>		
Evaluate one's growth as an interculturally competent leader		<b>A</b>		
Understand that innovation and collaboration are important to leading personal community, national and world change				<b>X</b>
<b>Kansas State University Student Learning Outcomes</b>				
<b>Knowledge</b> Students will demonstrate a depth of knowledge and apply the methods of inquiry in a discipline of their choosing, and they will demonstrate a breadth of knowledge across their choice of varied disciplines			<b>X</b>	<b>X</b>
<b>Critical Thinking</b> Students will demonstrate the ability to access and interpret information, respond and adapt to changing situations, make complex decisions, solve problems, and evaluate actions	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Communication</b> Students will demonstrate the ability to communicate clearly and effectively	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Diversity</b> Students will demonstrate awareness and understanding of the skills necessary to live and work in a diverse world		<b>X</b>	<b>X</b>	
<b>Academic and Professional Integrity</b> Students will demonstrate awareness and understanding of the ethical standards of their academic discipline and/or profession			<b>X</b>	<b>X</b>

\*Note: A = Student performance is used for program level assessment of the outcome.  
 X = Students have the opportunity to learn the outcome

do you have any concerns with the findings? If so, what adjustments, if any, do you plan to make to address the concerns?

For the final step, the author uses the data and information described to write the School of Leadership Studies annual progress report on assessment of student learning which is submitted to the Office of Assessment. The report addresses seven areas developed by the Office of Assessment:

1. List the student learning outcomes that were assessed during the academic year including those for which data were gathered as well as those for which developmental work was done, such as the creation or piloting of assessment measures.
2. For each learning outcome, describe the measures used (over a three-year period approximately one-half of the measures used are to be direct measures and at least one direct measure must be used for each student learning outcome); the sample of students from whom data were collected; the timetable for the collection; and the forum in which the measures were administered.
3. Describe the results of the assessment. (What do they tell you about student learning? What did you learn about strengths and weaknesses of your program?) If specific results are not available, describe the progress that has been made on the initiatives included in the approved assessment plan.
4. Describe the process by which faculty reviewed the results and decided on the actions and/or revisions that were indicated by them.
5. Describe the actions and/or revisions that were (or will be) implemented in response to the assessment results.
6. Describe the effects on student learning of the previous year's actions.
7. Given the assessment activities and results to date, describe your plans for the coming year. (Clearly identify significant changes that have been made to degree program student learning outcomes or to the general assessment strategy.)

For reporting purposes, a department or program may choose from two types of formats. The first is narrative and is comprised of a series of open-ended questions where responses can be inserted directly after each question (See Appendix A). The second format is tabular where a series of open-ended questions are listed vertically and the learning outcome(s) are entered into the cells of the table (See Appendix B). The School of Leadership Studies has chosen the narrative format.

### Conclusion and Next Steps

This article has described the student assessment and accountability framework used at Kansas State University and how it has been implemented by the School of Leadership Studies. To meet future assessment expectations, the School of Leadership Studies intends to:

1. Continue to involve faculty in the assessment process.
2. Encourage faculty to talk with each other about assessment.
3. Gather assessment data over time to determine if the assessment process improves student learning.
3. Encourage the use of various classroom assessment techniques.
4. Cultivate an environment of summative and formative assessment.
5. Implement curriculum changes based upon assessment data.

As the School of Leadership Studies transitions to a more balanced assessment approach, our intent is to start with flexible, easily adaptable, simple, and potentially quick-to-apply classroom assessment techniques in classroom teaching. According to Angelo and Cross (1993), "classroom assessment helps individual college teachers obtain useful feedback on what, how much, and how well their students are learning" (p. 3).<sup>5</sup> In order to make the assessment process purposeful, applicable, and user-friendly, classroom assessment techniques must be developed to meet the needs of the course and the assessment process. Classroom assessment techniques are exercises designed specifically to find out what students know (Cottell & Harwood, 1998). Three proposed techniques are being considered:

1. The *minute paper*, also known as the one-minute paper, provides a quick and extremely simple way to collect written feedback on student learning. To use, stop class two or three minutes early, and ask students to respond to variations on the following questions
  - (a) What was the most important thing you learned during this class?
  - (b) What important questions remain unanswered?
2. *Muddiest point* provides high information return for a very low investment of time and energy. To use, stop class two to three minutes early, and ask students to respond to variations on the following question: What was the muddiest point in class (e.g., lectures film, lecture, discussion)?
3. *Background knowledge probe* focuses attention on the most important material to be studied. It provides a preview of what is to come and a review of what the student already knows about the topic. The same probe can be given at the end of the topic or course. To use, before introducing the course or an important new concept, prepare several multiple choice, short answer, or open-ended questions that will probe the students' existing knowledge of that topic.<sup>6</sup>

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## Endnotes

<sup>1</sup> Stakeholders include, but are not limited to, state boards of regents, potential employers, current students, alumni, and parents.

<sup>2</sup> It should be noted, however, that according to Banta (2007), external stakeholders do not necessarily agree with an approach to assessment as continuous improvement, but instead view assessment as an accountability function.

<sup>3</sup> It is important to note that there are two types of evaluations of assessment: formative and summative. Formative assessments usually take place in the early stages of a course and address questions about implementation and ongoing planning. Information obtained from formative assessment is used to adapt teaching and learning to meet student needs. The goal of formative assessment is to gain an understanding of what students know (and don't know) in order to make responsive changes in teaching and learning techniques (Black & William, 1998). For example, on the first day of class, instructors might ask students a series of questions related to the course content to identify what the students know. Conversely, summative student learning assessment is commonly thought of in terms of tests, papers, and other graded assignments. In general, summative assessment results are used to make some sort of judgment, such as to determine what grade a student will receive on a classroom assignment, measure program effectiveness, or determine whether a school has made adequate yearly progress. Summative assessment typically documents how much learning has occurred at a point in time (Stiggins, Arter, Chappuis, & Chappuis, 2006). For example, the grade obtained from the final examination given at the end of a course is a summative evaluation. Criterion-reference assessment measures student knowledge and understanding in relation to absolute criteria rather than relative ones (Tuckman, 1988). Therefore, criterion-referenced assessments measure student performance in relation to standards, not in relation to other students. For example, all students may earn

an "A" if all meet the established absolute criteria. Norm-reference assessments are designed to measure and compare individual student performance to those of an appropriate peer group or norm group at the classroom, local, state, or national level (Tuckman, 1988).

<sup>4</sup> Currently, neither criterion-reference assessment standards nor norm-reference assessment standards are utilized in the School of Leadership Studies for assessment of learning outcomes in the four core courses. Although only graded assignments are used in the School of Leadership Studies for student assessment, a transition is taking place that will incorporate nongraded assignments to provide a more balanced approach to assessment.

<sup>5</sup> Angelo and Cross (1993) further stated that classroom assessment techniques "are not meant to take the place of more traditional forms of classroom evaluation. Rather, these formative assessment tools are meant to give teachers and students information on learning before and between tests and examinations; therefore they supplement and complement formal evaluations of learning" (1993, p. 25).

<sup>6</sup> These techniques were selected from a list suggested by Angelo and Cross (1993) for their ease of implementation and as a good next step in formative assessment and assessment data not graded.

## Appendix A

### Annual Progress Report on Assessment of Student Learning for Undergraduate Programs (Narrative Format) (Rev. 10/08)

Academic year: 2007-2008

Department/Program:

Degree program(s):

Person(s) preparing report:

Date submitted:

Summary of the 2007-2008 Annual Progress Report on Assessment of Student Learning

Link to department web site where degree program student learning outcomes (SLOs), Alignment Matrix, and 2007-2008 APR Summary are posted

Alignment Matrix for degree program is attached or was previously submitted

1. List the student learning outcomes that were assessed during the academic year, including those for which data were gathered as well as those for which developmental work was done, such as the creation or piloting of assessment measures.
2. For each learning outcome, describe the measures used (over a three-year period approximately one-half of the measures used are to be direct measures, and at least one direct measure must be used for each student learning outcome), the sample of students from whom data were collected, the timetable for the collection, and the forum in which the measures were administered. (Examples of direct measures can be accessed at <http://www.k-state.edu/assessment/Learning/direct.htm>).
3. Describe the results of the assessment. (What do they tell you about student learning? What did you learn about strengths and weaknesses of your program?) If specific results are not available, describe the progress that has been made on the initiatives included in the approved assessment plan.
4. Describe the process by which faculty reviewed the results and decided on the actions and/or revisions that were indicated by them.
5. Describe the actions and/or revisions that were (or will be) implemented in response to the assessment results.
6. Describe the effects on student learning of the previous year's actions.
7. Given the assessment activities and results to date, describe your plans for the coming year. (Clearly identify significant changes that have been made to degree program SLOs or to the general assessment strategy.)

## Appendix B

### Annual Progress Report on Assessment of Student Learning for Undergraduate Programs (Tabular Format) (Rev. 10/08)

Academic year: 2007-2008

Department/Program:

Degree program(s):

Person(s) preparing report:

Date submitted:

Summary of the 2007-2008 Annual Progress Report on Assessment of Student Learning

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Link to department web site where degree program student learning outcomes (SLOs), Alignment Matrix, and 2007-2008 APR Summary are posted

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Alignment Matrix for degree program is attached or was previously submitted

Questions to be Addressed	SLO(s) Assessed in the Academic Year		
1. List the student learning outcomes for which assessment data were gathered during the academic year or for which development work was done on assessment measures.	1.	2.	3.
2. For each learning outcome, describe the measures used (over a three-year period approximately one-half of the measures used are to be direct measures, and at least one direct measure must be used for each student learning outcome), the sample of students from whom data were collected, the timetable for the collection, and the forum in which the measures were administered. (Examples of direct measures can be accessed at <a href="http://www.k-state.edu/assessment/Learning/direct.htm">http://www.k-state.edu/assessment/Learning/direct.htm</a> ).			
3. Describe the results of the assessment. (What do they tell you about student learning? What did you learn about the strengths and weaknesses of your program?) If results are not available, describe the progress made on initiatives in the approved assessment plan.			
4. Describe the process by which faculty reviewed the results and decided on the actions and/or revisions that were indicated by them.			
5. Describe the actions and/or revisions that were (or will be) implemented in response to the assessment results.			
6. When reporting on second and subsequent years (2006, 2007, 2008, etc., respectively), describe the effects on student learning of the previous year's actions.			
7. Given the assessment activities and results to date, describe your plans for the coming year. (Clearly identify significant changes that have been made to degree program slo's or to the general assessment strategy.)			