

# **Student Learning Assessment Options and Resources**

## **The Handbook at a Glance**

**This handbook from the Middle States Commission on Higher Education is a bridge between the Commission's standards for accreditation and the practical challenges of planning, assessment, and continuous improvement.**

### **Contents**

1. Motivating and Involving Campus Communities
2. Learning Goals
3. Evaluating Student Learning
4. The Student Learning Assessment Plan in the Context of Institutional Planning
5. Using Results to Improve Teaching and Learning

**The handbook and its companion website, [www.msache.org/mainstudents.html](http://www.msache.org/mainstudents.html), offer extensive resources, including exercises, hundreds of examples from assessment practices, and guidelines that can be used on campus for self-reflection, brainstorming, and workshop exercises.**

**Middle States Commission on Higher Education**

# Student Learning Assessment: Options and Resources

## User-friendly Resources!

The explanations and examples in the handbook and website are intended to help each institution to develop goals and to select the best methods. They do not increase or modify accreditation standards.

The handbook addresses the needs of everyone interested in, or practicing, higher education assessment. Each chapter focuses on a separate aspect of the assessment process, so the chapters can be used individually and at any stage of the process as a guide and stimulus.

Useful appendices include: Assessment Standards in *Characteristics of Excellence in Higher Education*; An Assessment Practices Quiz; Key to "Assessment Practices Quiz"; A Department/Program Student Outcomes Survey; Learning Goals and Assessment Techniques; From Effect to Cause: A Brainstorming Exercise; and Student Learning Styles: Frequently Asked Questions.

The website is organized by the chapter topics in the book. It provides hundreds of resources, including on-line assessment activities and assessment "clearinghouse" sites.

## Chapter 1: Motivating and Involving Campus Communities

This chapter offers encouragement, guidance, and resources to those who are leading assessment initiatives on their campuses. It offers strategies for chief academic officers and leaders of assessment to encourage involvement and "ownership" by faculty, staff, and students.

Institutional culture plays an important role in the success and value of assessment efforts. The culture is created through an interaction of both formal and informal influences, such as the form of control of the institution (public or private), any faith-based affiliation it may have, its governance practices, and the prevailing social and political context. The handbook suggests questions that institutions might wish to ask as they identify aspects of their culture that may enhance or frustrate assessment efforts.

## Chapter 2: Learning Goals

This chapter provides many resources for articulating learning goals clearly, and it describes the relationships among learning goals at the course, program, and institutional levels. It focuses on using clear, straightforward, and meaningful goals. It recommends that institutions base their assessment programs on a few important goals, rather than on complicated lists of secondary goals. Resources include several exercises to help groups of faculty and others to develop shared learning goals, such as the Angelo & Cross Teaching Goals Inventory and leading questions for developing learning goals.

### Its sections include discussion and examples of:

- ✧ benefits that clearly articulated learning goals will have for students, faculty and staff, the institution, and the public
- ✧ relationships among learning goals at all levels (institutional, program, department, and course levels)
- ✧ first steps toward developing learning goals (situation audit; starting with what already exists; examining existing practices for success)
- ✧ defining learning goals before selecting assessment methods
- ✧ ensuring the quality and relevance of learning and goal statements (key learning outcomes; wide agreed-upon concepts; communication of learning goals; meaningful learning goal statements that lead to improvement; sufficiently explicit learning goals; interconnectedness of student learning goals)
- ✧ resources for creating student learning goal statements (existing syllabi and course descriptions; leading questions; analysis of student work; inventory of teaching goals)

One example of the relationship among learning goals at the institution and program levels:

Institutional Goals	Programs and Program-level Goals			
	General Education	Residential Life	Business	History
Leadership	Function effectively as a team member	Apply conflict resolution skills	Develop leadership skill in self & others	Analyze historical perspectives on leadership

**For choosing learning goals, the handbook recommends that institutions:**

- ✧ Start with success
- ✧ Determine which learning goals are already being assessed and what data may be available to assess other goals at institutional, program, and course levels
- ✧ Define learning goals before choosing assessment methods by operationally defining each goal and tailoring data collection to defined goals
- ✧ Ensure relevance of goals by identifying key learning outcomes, using widely agreed upon concepts, communicating goals, selecting important and meaningful goals, being explicit, and integrating goals in different areas and levels.

## **Chapter 3: Evaluating Student Learning**

This chapter provides an overview of the methodological considerations that are relevant to assessing student learning. It suggests several easy-to-implement practices and offers guidance in choosing appropriate types of assessment, depending on the learning goals being developed and the institutional resources that are available. By explaining methodological issues relevant to evaluating student learning (including how to assure validity and reliability), it helps institutions to select among standardized or customized tests, quantitative and qualitative evidence, and direct and indirect measures of student learning.

**This chapter includes the following sections:**

### **Basic Issues in Assessment**

- ✧ formative and summative assessment
- ✧ benchmarking

### **Methodological Considerations**

- ✧ direct and indirect methods for assessing student learning at the course, program, and institutional levels; limitations and considerations related to indirect methods of evaluation
- ✧ quantitative and qualitative evidence
- ✧ other methodological considerations:
  - reliability and validity;
  - pretests, post-tests and longitudinal designs
  - role of grades in assessment
  - self report measures
  - statistical vs. practical significance

## **Key Questions when Choosing Assessment Instruments**

- ✧ Is the evidence provided by the instrument linked to important learning outcomes?
- ✧ Is a standardized instrument appropriate for the learning goals of the institution? Is the evaluation method appropriately comprehensive?
- ✧ Are important learning outcomes evaluated by multiple means?
- ✧ Do questions elicit information that will be useful for making improvements? Are they clear and interpreted consistently? Does everyone interpret the responses the same way?
- ✧ Do the results make sense?
- ✧ Are the results corroborated by other evidence?
- ✧ Are efforts to use "perfect" research tools balanced with timeliness and practicality?
- ✧ Is evidence gathered over time and across situation? How much should be assessed?
- ✧ Are faculty and staff members who are knowledgeable about measurement serving as resources for developing assessment instruments?

## **Easy-to-Implement Tools and Techniques**

- ✧ rubrics or rating scales (e.g., simple checklists; holistic rating scales)
- ✧ self-reflection
- ✧ rating/comments from internship or research supervisors
- ✧ placement rates; test blueprints

## **Other Assessment Tools**

- ✧ multi-dimensional or comprehensive tests
- ✧ ad hoc surveys and pre-graduation surveys
- ✧ focus groups
- ✧ portfolios
- ✧ retention/graduation rates

## **Direct and Indirect Methods for Assessing Student Learning**

The concepts of direct and indirect methods of evaluating student learning are often confused with each other and with quantitative (numerically-based) and qualitative (narrative-based) forms of information. Direct methods of evaluating student learning are those that provide evidence that a student has command of a specific subject, content area, or skill, or that the student's work demonstrates a specific quality such as creativity, analysis, or synthesis. In contrast, indirect methods of evaluating student learning involve data that are

*related to the act of learning, such as factors that predict or mediate learning or perceptions about learning, but that do not relate directly to the learning itself. Both of these forms of evaluation are valuable, because one determines whether a student has learned, and the other explains why a student has learned.*

The handbook gives extensive examples of direct and indirect learning at each level. For example:

Direct Measures (Excerpts)	Indirect Measures (Excerpts)
Course Level: <ul style="list-style-type: none"> <li>▪ Examinations and quizzes</li> <li>▪ Observations of field work, internship performance, service learning, or clinical experiences</li> </ul>	<ul style="list-style-type: none"> <li>▪ Course evaluations</li> <li>▪ Percent of class time spent in active learning</li> <li>▪ Number of student hours spent at intellectual or cultural activities related to the course</li> </ul>
Program Level: <ul style="list-style-type: none"> <li>▪ Capstone projects, senior theses, exhibits, or performance</li> <li>▪ Pass rates or scores on licensure, certification, or subject area tests</li> <li>▪ Employer and internship supervisor ratings of students' performance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Registration or course enrollment information</li> <li>▪ Employer or alumni surveys</li> <li>▪ Student perception surveys</li> </ul>
Institutional Level: <ul style="list-style-type: none"> <li>▪ Performance on tests of writing, critical thinking, or general knowledge</li> <li>▪ Rating-scale scores for class assignments in General Education</li> </ul>	<ul style="list-style-type: none"> <li>▪ Transcript studies that examine patterns and trends of course selection and grading</li> <li>▪ The institution's annual reports, including institutional benchmarks and graduation rates</li> </ul>

**The chapter also summarizes evaluating student learning:**

- ✧ Use indirect measures to explain or support findings from direct measures
- ✧ Choose the most relevant level for evaluation of the learning goals: institutional, program, or course
- ✧ Select quantitative or qualitative measures based on the type of student learning goals
- ✧ Relate goals to learning
- ✧ Choose appropriate research design
- ✧ Use formative assessment "mid-course" to improve teaching and learning
- ✧ Use common sense: Is the result logical?

## **Chapter 4: The Student Learning Assessment Plan in the Context of Institutional Assessment**

This chapter of the handbook is the starting point for institutions that are beginning to develop plans for the assessment of student learning at the institutional and program levels, or those that are updating already existing plans. It places student learning assessment in the institutional context of strategic planning and broad institutional assessment, and it provides a framework for developing assessment plans.

### **Its sections include:**

- ✧ Assessment of student learning within an institutional context
- ✧ Characteristics of effective assessment plans
- ✧ Components of institutional-level plans and program-level plans for the assessment of student learning

The handbook illustrates how each department can address the same issues as the whole institution from the department's own perspective, within the context of institutional goals. Conversely, it discusses how the institution's overall plan may amalgamate those of its several departments when appropriate.

## **Chapter 5: Using Results to Improve Teaching and Learning**

This chapter provides examples of how intentional changes at the course, program, and institutional levels can produce results that improve learning. A "Message to Faculty" suggests clear, practical changes that faculty members can effect to improve learning. This chapter is also intended to help institutions to gauge whether their environments are conducive to making use of assessment results.

The excerpts in the table on the facing page are from materials in the handbook that illustrate how assessment results can be used at the institutional, program, and course levels.

### **A Message to Faculty**

The handbook contains a message to faculty on the interconnectedness of assessment, teaching, and learning. It emphasizes that improving student learning requires more than creating plans and choosing measures. It begins with the faculty-student relationship and the essential characteristics of an environment conducive to learning. The handbook suggests ways that faculty members can use basic tenets about how students learn in their everyday interactions with students.

Learning Goal: Students will...	Direct & Indirect Measures	Outcome	Possible Reason or Hypothesis	Action Taken
<b>Institutional Level</b> Exhibit competitive career potential	Alumni survey Data from benchmark institutions	Graduates' salaries five years post graduation are lower than those of students with comparable positions who attended other institutions.	Students are not trained in salary negotiation. Students are under-prepared relative to other institutions.	Offer opportunities for mock interview and mock raise requests. Survey employers to determine cause. Change curricula as a result of employer survey.
<b>Program Level</b> Communicate competently in the major	Scores on faculty-developed rating scales for final oral exam and final report in capstone course	Student performance in capstone courses is poor, as measured by rating scales for oral presentations and written reports.	Students are not receiving enough experience making oral presentations in prerequisite major courses.	Revamp departmental curriculum to require oral and written reports in every course. Revamp syllabus of at least one required course to include multiple communication experiences.
<b>Course Level</b> Demonstrate discipline-specific information literacy	Rubric-scored term paper Student survey or course evaluations	Research skills are weak, as demonstrated by poor performance on research term paper.	Expectations for term paper were not clearly spelled out. Appropriate search engines or sources were not available in the library. Little practice with these skills on smaller assignments.	Create a "blueprint" for the paper, clearly spelling out expectations. Require an early non-graded first draft and provide feedback. Examine library funding for possible reallocation. Revamp required course to include several practice assignments drawing on scholarly research skills in the discipline.

Middle States Commission on Higher Education ♦ 3624 Market Street, Philadelphia, PA 19104  
Telephone: 215-662-5606 ♦ Fax: 215-662-5501 ♦ Info@msache.org

## Publications Order Form

Please send me \_\_\_ copies of *Assessment of Student Learning: Options and Resources* at the following rate:

1 to 5 copies @ \$19.95     6 to 10 copies @ \$17.50     Over 10 copies @ \$16.50

Amount Enclosed: \$ \_\_\_\_\_ Purchase Order No.: \_\_\_\_\_

Charge to my:  American Express;  Visa;  Master Card A/c # \_\_\_\_\_

Expires: \_\_\_\_\_ Signature: \_\_\_\_\_ (Required for credit card charge)

Shipping:

First Class Mail at no additional charge     2nd Day Delivery by \_\_\_ U.S. Postal Service; \_\_\_ FedEx  
 Overnight PM Delivery by Federal Express  
 Bill our \_\_\_ Federal Express; \_\_\_ USPS A/c # \_\_\_\_\_

Ship to  
Name: \_\_\_\_\_

Institution/Organization: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Country: \_\_\_\_\_

Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_