

Assessment: A Fundamental Responsibility

The following colleges and universities have issued the statement on assessment in higher education that follows. It reaffirms the fundamental responsibility of colleges and universities to assess the effectiveness of their programs, looking not only at the content students learn but at the habits of mind they develop, and looking at longer-term impact as well as shorter-term achievement.

The statement is endorsed by nearly 100 public and private colleges and universities and includes examples of assessment activities at several institutions. It was prepared by a task force convened by the Consortium on Financing Higher Education (COFHE), an organization focused on quality in undergraduate education. Signatories include all COFHE members plus many other public and private institutions, ranging from small liberal arts colleges to large research universities. The statement and examples can be found at www.assessmentstatement.org.

Agnes Scott College	Hampden-Sydney College	Sewanee: University of the South
Alma College	Hampshire College	Skidmore College
Amherst College	Harvard University	Smith College
Austin College	Harvey Mudd College	Southwestern University
Barnard College	Hendrix College	Spelman College
Bates College	Hope College	St. John's University
Berea College	Johns Hopkins University	St. Olaf College
Bowdoin College	Kenyon College	Stanford University
Brown University	Lawrence University	Swarthmore College
Bryn Mawr College	Lewis & Clark College	Syracuse University
California Institute of Technology	McDaniel College	Trinity College
Carleton College	Massachusetts Institute of Technology	Trinity University
Carnegie Mellon University	Monmouth College	University of California, Berkeley
Claremont McKenna College	Mount Holyoke College	The University of Chicago
Colby College	Muhlenberg College	University of Pennsylvania
College of St. Benedict	Nebraska Wesleyan University	University of Pittsburgh
College of Wooster	Northwestern University	University of Puget Sound
Colorado College	Oberlin College	University of Rochester
Columbia University	Oglethorpe University	University of Southern California
Cornell University	The Pennsylvania State University	University of Virginia
Dartmouth College	Pitzer College	University of Wisconsin-Madison
Denison University	Pomona College	Vanderbilt University
DePauw University	Princeton University	Vassar College
Duke University	Reed College	Washington and Lee University
Emory University	Rice University	Washington University in St. Louis
Franklin & Marshall College	Ripon College	Wellesley College
Furman University	Rutgers, The State University of New Jersey	Wesleyan University
Georgetown University	Sarah Lawrence College	Whittier College
Gettysburg College	Scripps College	Williams College
Grinnell College		Yale University
Hamilton College		

Assessment: A Fundamental Responsibility

High stakes- Important stakeholders

Improving teaching and learning is in the national interest. For individuals and for our nation, higher education opens doors to economic prosperity and civic engagement. It provides the tools to make new discoveries and improve the quality of life. It is understandable that students, parents and others want to be sure that the educations we provide are meeting the highest possible standards. We share this same goal. Like other stakeholders, we want to be sure that our assessment programs allow us to understand the extent to which our teaching and learning goals are being met.

We come together as universities and colleges committed to educating undergraduates in the liberal arts and sciences. We focus not just on what students know when they graduate, but on how their undergraduate experience prepares them for the future. The most important measure of our success is not only the *content* our students learn, but even more importantly the *habits of mind* they develop (such as critical thinking, ability to evaluate alternative courses of action, resourcefulness and creativity) that will help them continue to learn and to cope with the challenges, changes and complexities inherent to a productive life.

We believe we have a fundamental responsibility to assess the effectiveness of our programs, while at the same time recognizing that the transformative impact that we aspire to have on our graduates is measured in decades, not in weeks or months. This long-term horizon complicates our ability to assess the outcomes of the educations we provide and requires us to sustain our assessment process over an extended period of time. It is far easier to measure a short-term achievement (for example, mastery of a particular skill or of a particular academic field at the time of graduation) than to measure a life-long attribute, such as intellectual curiosity or analytical rigor or a commitment to civic engagement. Standards of assessment that focus on what is easily measured run the risk of degrading the quality of the education that students receive (via pressure to teach to the test or only to learn for the test) and of diverting attention from the harder-to-measure but more important roles that our institutions play in fostering a thoughtful, engaged and broadly-educated citizenry.

As institutions we have always placed a high value on continually questioning whether we are doing our best. As scholars we lead our professional lives according to the principle of peer review, subjecting our research and creative activities to rigorous assessment by specialists in our fields. As teachers we welcome equally rigorous assessment of student learning. We recognize the importance of examining systematically the quality of teaching and learning at our institutions, and we embrace opportunities to learn from each other. We believe – as we demonstrate below – that we already engage in effective assessment in ways that are appropriate to our missions and that enhance the quality of the educations we provide to our students. We also believe that we can always do better, and we have welcomed the opportunity to think together about how we might improve.

Diversity of Colleges and Missions

***Our Students,
Our Graduates***

It may surprise some to know how much our colleges and universities have changed over their long histories and how much they continue to change, especially in reaching out to students from diverse backgrounds. For example, at COFHE schools, almost 30 percent of the students are people of color and some 47 percent receive financial aid. The average award for students on financial aid is more than \$28,000 per year. Close to half of our students are involved in community service, and hundreds of thousands of our graduates make significant contributions to society through their work, their volunteer activities and their philanthropy. For specific examples, please see the online brochure, "Take a Closer Look" at www.openingdoorschanginglives.org

A core strength of American higher education is the diversity of institutions that contribute to the overall enterprise. This diversity maximizes the opportunity for each student to find the specific environment that will best serve his or her interests and talents, thus optimizing the positive impact higher education can have on American society. Many dimensions of this diversity are apparent: for example, whether a school is public or private; whether its student body measures in the hundreds or the thousands (or even tens of thousands); whether it attracts students regionally, nationally, or internationally; whether it is a research university granting graduate and professional degrees, a four-year college focusing primarily on undergraduate education, or a community college providing opportunities to students across a broad spectrum of ages and educational goals. Other dimensions require closer scrutiny: for example, the level of selectivity in admissions; the specific demographic characteristics of the student body; or the sometimes idiosyncratic differences among institutions in their particular disciplinary strengths. It is this diversity that makes American higher education distinctive; it also makes it the envy of the world, as evidenced by the very large numbers of foreign students seeking degrees at American colleges and universities.

While all of our institutions share a basic commitment to providing undergraduates with a liberal arts education emphasizing critical thinking, our differences mean that students will take different paths to achieve this end. For example, larger institutions are more likely to have a substantial commitment to graduate and professional education, which provides students with access to cutting edge research programs, as well as to faculty in the professional schools. Since liberal arts colleges tend to be smaller, their students are more likely to enjoy focused attention from the faculty to a degree not as readily found in a larger university setting. Other differences, even among very similar institutions, reflect different strengths and priorities that are deeply woven into the fabric of each institution in a way that defines its characteristics. At the same time, all of our institutions expect our undergraduates to acquire knowledge in a range of fields, develop a breadth of intellectual skills, and study at least one subject in depth.

The Value and Challenges of Assessment

Our colleges and universities take seriously their obligation to evaluate the extent of student learning, the effectiveness of teaching and the design of the curriculum. Assessment is alive and well at our institutions.

The Appendix provides a small sample of the many examples of

Sharing responsibility for learning

Any assessment of student learning must take into account the responsibilities of students and of faculty. Students bear responsibility for their educations in many ways, from choosing carefully what kind of institution to attend and selecting courses for which they have adequate preparation, to attending class and performing assignments to the best of their abilities.

Faculty bear responsibility for being knowledgeable in the subject matter, choosing appropriate pedagogies and providing an environment conducive to learning by students with varying degrees of preparation, motivation and aptitude.

Effective teaching has moved from a model of the “sage on the stage” towards a “guide by the side” approach, emphasizing an active role for students combined with an active role for faculty as coaches and facilitators. Methods of assessment must include analysis of student performance coupled with analysis of the effectiveness of the faculty in supporting student achievement.

rigorous assessment that can be found across the country. These examples illustrate several important ways in which assessment can be used to improve students’ educational experiences and outcomes.

Assessment can support decisions about the undergraduate curriculum. As described in the Appendix, one university has set aside funds that the Dean of Undergraduate Education can use to support new approaches to teaching, with some of the experiments involving individual faculty members and others cutting across several academic departments. All of the projects are expected to have a plan for testing whether the innovation improved teaching. Another university has assessed whether changes made in the curriculum, combined with the availability of writing tutors, have been successful in promoting a “culture of writing.” Yet another college has studied whether changes in its curriculum led to a larger number of students taking more advanced, literature-level courses in foreign languages.

Assessment can help faculty regularly revisit and update courses. The Appendix describes how one university is using student evaluations not only to provide feedback to faculty about the quality of instruction as is typically done, but also to assess the effectiveness of the course’s contribution to the development of higher-order skills. This assessment is then used to modify the course for the next time it is offered.

Assessment can provide information about long-term educational effects. One college noted in the Appendix asked alumnae who had graduated ten years earlier to identify the areas of intellectual development that had been most important to them after college. The areas they identified – the ability to write effectively, to communicate orally, to acquire new skills on one’s own, among others – became the priorities for the college’s continuing efforts to strengthen its curriculum.

Assessment can help individual faculty members constantly evaluate whether students are learning. In every college and university, assignments, papers, projects, and exams are crafted to determine how well students have mastered the material and techniques of a given subject. Students learn through constructive criticism, and through grades that demonstrate to the student, and to external audiences, the degree to which the student has mastered the skills and knowledge the course is intended to impart.

Assessment can evaluate the development of higher-order skills. As cited in the Appendix, one college developed a program to

examine not just whether students are gaining mastery of a body of knowledge, but whether they are developing the ability to conduct original research and critical analyses. This college requires rising sophomores to submit a portfolio of three to five papers from at least two areas of the curriculum. The students are expected to demonstrate that they have mastered several key writing skills – the ability to report on observation, analyze complex information, provide interpretation, use and document sources, and articulate and support a thesis-driven argument. The exercise provides helpful feedback to students mid-way through their college careers. At another institution, the senior capstone experience challenges students to synthesize what they have learned and use higher-order skills in critical reasoning and writing to develop an original analysis based on extensive research.

Assessment can help institutions learn from one another. Many colleges and universities participate in projects and consortia that collect survey data. They do so to obtain general comparative data from similar schools because these data provide a context for their own results and allow them to assess their students' responses over time. Well-known examples of surveys include those conducted each year by UCLA's Higher Education Research Institute, the Consortium on Financing Higher Education and the Higher Education Data Sharing consortium. These data are shared across participating institutions in a way that facilitates analysis of longitudinal progress within a single institution as well as comparisons across peer institutions that can be used for benchmarking.

Assessment through standardized measures does not evaluate what is best and most valuable about American higher education. A liberal arts education requires faculty to take a holistic approach in judging whether students have developed both substantive expertise and the ability to give a clear exposition of original scholarship involving critical reasoning. Based on our experience, we are skeptical about efforts to make this kind of assessment through standardized tests, including those that purport to measure critical reasoning. While many of these tests incorporate exercises that aim to assess a broad range of student development, assessment experts are far from agreement about whether "value added" can be measured accurately across diverse institutions. With students beginning their academic journeys at widely divergent starting points and pursuing a diverse array of curricula, we do not endorse any approach that depends solely on a single standardized measure or even a single set of standardized measures.

Assessment should be locally driven. We advocate locally-based,

Accountability or Assessment?

It is important to distinguish between two related, but distinct, concepts: Accountability to institutional mission and assessment of teaching and learning. “Accountability to institutional mission” refers to the idea that universities and other educational institutions should make data available by which external constituencies – including prospective students, parents, the government, and other stakeholders – can judge whether these institutions are performing their missions successfully. This is an important commitment to the American social contract and should be engaged seriously by institutions of higher learning. “Assessment of teaching and learning” refers to the idea that institutions should continuously and rigorously review, and implement measures to enhance, the quality of instruction and student performance.

faculty-driven efforts to define and measure the skills and capacities that each institution emphasizes to meet its educational goals. This approach will be more meaningful, and ultimately more effective, than any nationally standardized test. The Appendix illustrates some of the ways in which institutions are collecting data to help improve individual courses, set academic priorities, and evaluate whether specific innovations in the curriculum are having the intended result. They are examples of how we believe assessment should be conducted – with local initiative, with the active involvement and support of faculty, and with an eye toward strengthening the mission of the particular institution.

Assessment is distinct from accountability; we want to emphasize this point made in the sidebar. The principal purpose of accountability is to verify whether an institution has met the expectations of its various constituencies, and colleges and universities have an obligation to collect, analyze and provide data by which their constituencies may hold them accountable. But the principal goal of assessment is to use various sources of evidence to make educational improvements. Assessment may begin with the question of whether certain goals are being met, but it is ultimately about how to come closer to meeting those goals. Thus, assessment efforts should be squarely focused on improving the education of students and informing the institution’s efforts at self-improvement.

A Culture of Learning & Teaching

Many of our institutions have invested over a long period of time in complex, high-quality forms of assessment that include senior theses or other capstone projects, comprehensive oral or written exams in the major, writing portfolios, and significant investments in post-graduate outcomes research compared across institutions. Our approaches to assessment encourage experimentation and exploration, and rely heavily on peer review. Our peer review processes have created a system in which those best-suited to assess a given project do so, and our peer review systems have already incorporated new components of student learning research.

Our academic departments are made up of many master teachers with years of experience as well as creative junior faculty building their skill base. Our systems of tenure and promotion encourage the communication of experience and knowledge across these networks through peer review of research and through course critique and mentoring within departments. We encourage institutions to enhance these systems to emphasize the best research on teaching and learning. Our institutional leaders can

strengthen these networks by providing information and resources through teaching and learning centers, faculty mentoring and enhanced access to support for innovative classroom experiments.

Importantly, the system of peer review should extend beyond our institutional gates into the accreditation system. Just as our faculty members are most likely to use advice and criticism from experts in their own fields, our institutions must rely on the feedback of peer institutions that are similar in structure and mission in the accreditation process. We believe the accreditation system works best when true peers review institutional progress, and we encourage accrediting agencies to match visiting teams thoughtfully and with the input of institutional representatives. In order for this system to be successful, representatives from the full spectrum of institutions must make themselves available to serve on accrediting teams; we encourage our colleagues to recommit themselves and their institutions to such participation.

Conclusion

All of these efforts lead to an ultimate goal: Advancement in our understanding of the work of educating students, and the continuous improvement that goes along with this understanding. Assessment, if targeted and designed thoughtfully and responsibly in the context of our missions and goals, is an effective tool to encourage reflection and increased self-consciousness about what works best in educating the next generation of leaders. We reiterate our commitment to work for continuous improvement on behalf of our multiple constituencies, both within the United States and around the world.

Appendix: Assessment in Action

The following are illustrative examples of the types of assessment activities being undertaken by all colleges and universities associated with this statement. For the sake of brevity, this document contains only those examples cited in the text. An online resource will be maintained at www.assessmentstatement.org in which these and additional examples will be posted. Schools endorsing the statement will be invited to post their examples.

1. **Barnard College** implemented revisions to its general education requirements for the class entering in fall 2000, replacing the existing distribution model with a more highly defined format called the Nine Ways of Knowing. From the outset, the aim was to compare student understanding of the new requirements to student views of the former system (e.g., on clarity, purpose, satisfaction), and to examine certain changes in the pattern of course selection by students associated with the new curricular requirements.

To these ends, a four year study of graduating seniors was undertaken, designed to obtain their perspectives on the requirements to which they were subject; the first two classes were the last under the earlier requirements and the second two classes were those which graduated under the Nine Ways of Knowing. The study was based on small focus groups of seniors interviewed by a retired Barnard faculty member in Sociology or one of the class deans. The second component of the assessment involved a transcript analysis conducted by the Registrar to ascertain whether certain patterns of course-taking changed in the transition to the new requirements. For example, the new requirements specify that all students must take a literature course, and encourage students to complete the requirement in the foreign language they use to fulfill another element of the Nine Ways of Knowing. The transcript analysis will show whether the change has affected the number of students who continue to the literature-level of study in that foreign language

2. **Carleton College:** To meet the College's portfolio requirement, students at the end of their sophomore year must submit three to five papers demonstrating their ability to write effectively in different rhetorical and disciplinary contexts. The papers must be "authenticated" by instructors, who certify that the papers were written for their classes and indicate if they have since been revised. Finally, students write reflective essays about their writing to introduce the portfolios. Each portfolio must represent at least two of the college's four curricular divisions (Arts and Literature, Humanities, Social Sciences, and Mathematics/Natural Sciences) and must include at least one paper from the student's "Writing Requirement" course. Together, the papers must also demonstrate their author's mastery of each of several key writing skills—the ability to report on observation, to analyze complex information, to provide interpretation, to use and document sources, and to articulate and support a thesis-driven argument.

In addition to assessing the student's success in these areas, faculty readers also provide feedback on the quality of writing. Each portfolio is rated on whether it "rarely," "usually," or "consistently" demonstrates attention to audience and purpose, clarity of prose, clear organization, effective use of evidence, distinctive voice, appropriate diction, and control of error. During assessment, faculty readers assign one of three scores to every writing portfolio: "pass," "exemplary," or "needs work." Evaluating the portfolios, a task Carleton assigns to a volunteer group of "faculty readers," also provides opportunity for faculty development.

3 **MIT:** The Dean for Undergraduate Education (DUE) is charged with promoting education across the Institute. DUE has two funds (D'Arbeloff and Alumni) to support cross-cutting educational innovation. The D'Arbeloff fund is used to support interdisciplinary educational innovation often involving several departments and many faculty. The Alumni Fund supports smaller scale innovations by a single faculty member. Resources from both funds are accessible by faculty in all schools. The underlying idea is that the funds will support innovations that the departments might not want to support since they don't know the effectiveness of the innovation. Thus it is critically important to assess the impact and value of the proposal. All proposals to the funds must outline how they will undertake assessment. In the case of the D'Arbeloff fund, ten percent of the proposal award is set aside for professionals in the Teaching and Learning Lab to work with the faculty to develop appropriate assessment tools. For the Alumni Fund, the faculty are all asked to report at an annual workshop for MIT faculty and representatives of the sponsoring alumni classes.

These arrangements build assessment into the work from the beginning and have been instrumental in persuading departments to pick up the innovations when the DUE funds ended. This happens after one or two years depending on the proposal. The Physics course Teaching Enabled Active Learning (TEAL) was funded this way. Pre- and post-exams that tested conceptual knowledge showed significantly better results compared with traditional methods of teaching freshman physics.

4. **Smith College** approved a strategic plan in 2007 based on a core commitment to strengthen student capacities within the College's open curriculum. Specifically, Smith students will develop the ability to think critically and analytically and to convey knowledge; they will develop a historical and comparative perspective; and they will become informed

global citizens. Smith's integration of these capacities includes a commitment to holistic assessment of student achievement.

In developing these capacities, Smith relied on the experiences of alumnae regularly gathered through a survey conducted through a consortium of selective institutions. Ten years after graduation, Smith alumnae were asked about the areas of intellectual development that were important to them in their lives after college. The selected capacities were driven by the areas alumnae cited as most important. More than two-thirds of Smith alumnae thought it was very important to write effectively, to communicate orally, to acquire new skills on one's own, to understand oneself, and to synthesize and integrate ideas and information. The College carefully chose 10-year-out alumnae, well into the career and life-building phases of their lives when the lifelong effects of a liberal arts education are maturing. This feedback was an important driver of the development of the capacities around which Smith will be building its curricular plans in the coming years.

5. Duke University: To assess the effectiveness of learning goals in individual courses, Duke University's Trinity College of Arts and Sciences uses a two-form course evaluation tool, modified from an evaluation tool produced by the IDEA Center of Manhattan, Kansas. At semester's end, students are asked not only to comment on standard course evaluation questions (e.g., quality of instruction, degree of difficulty), but also to rank the extent to which the course contributed to several higher-order learning outcomes (e.g., "learning to conduct inquiry through methods in the field," "developing writing skills," etc.). Course instructors are asked independently to rank the relative importance of this same set of higher-order learning outcomes from their perspective. This two-form system thus provides a direct measure of how well the instructor's learning goals match students' self-assessment of their own progress on these measures.

The primary point of feedback on learning outcomes assessment is the individual instructor, who can through the two-form mechanism assess how well he or she is meeting higher-order learning expectations from the students' point of view. Additionally, this information may be used by departments to determine how well the departmental expectations for its majors are met (as articulated in departmental mission statements and learning objectives). This departmental level of analysis and feedback is not yet fully implemented at Duke, but deans now routinely use these data to evaluate courses' and programs' strategic interests (e.g., particularly large majors, new cross-disciplinary programs, innovative courses).

6. Yale University: In fall 2005, Yale began implementation of broad changes in its undergraduate curriculum, including a new requirement that student complete two writing courses (which can be fulfilled in courses across the disciplines). At the same time, Yale is expanding tutorial assistance through the Writing Center and other sources of support for students.

Yale is collecting portfolios of student writing from a stratified random sample of juniors and seniors. The University will review the students' portfolios to assess certain aspects of writing in the Yale College curriculum. In addition, Yale will conduct a brief survey of experiences with writing among students from all current classes.

The project will test at least two hypotheses: first, even among students who enter Yale with very high verbal SAT scores, an early course focused on writing has a demonstrable effect on improving writing quality. Second, the new requirement for two writing courses, combined with the expansion of support services such as writing tutorials, fosters a campus culture in which students are more likely to share their writing with others for feedback before submitting it for courses.

7. Princeton University: For 85 years, the senior thesis has been the capstone of a Princeton education. All Princeton seniors undertake a substantial independent research project, supervised by a faculty member. While the typical thesis is a written report based on scholarly investigation or scientific experimentation, some students produce creative theses, such as novels, plays, or dance performances.

The thesis presumes that, through the foundational work of general education and the focused study of departmental concentration, undergraduates develop the capacity to engage in independent study in their chosen fields. Students meet regularly with their faculty advisers throughout the senior year as they plan and execute their thesis projects. The resulting thesis typically undergoes several drafts, each with the benefit of faculty feedback. The final product is then assessed independently by multiple readers, who provide extensive comments.

What is most important, thesis-writers and faculty members agree, is less the specific learning of the subject matter covered in the thesis than the contribution of the thesis to the central goals of a Princeton education, the development of traits that augur well for future success, no matter what one's professional and civic commitments. These include: mental discipline; independence of mind and judgment; the capacity to focus and pursue a subject in depth; the ability to design and execute a large, complex project; the skills of analysis, synthesis, and clear, economical writing; and the self-confidence that grows from mastering a difficult challenge. The senior thesis demonstrates whether these goals have in fact been met.

For additional copies
contact COFHE
cofhe-support@mit.edu

Consortium
On
Financing
Higher
Education

Suite 402
238 Main Street
Cambridge, MA 02142-1046
(617) 253-5030
FAX (617) 258-8280