

Appendix A
Plan for Assessing Student Academic Achievement
Denison University
Granville, Ohio
(Created 2001, Revised 2005)



➤ **Institutional Structure for Assessment**

The *Assessment Committee* is appointed by the Academic Affairs Council and reports to the Council and to the Provost. Members include the Associate Provost and four members of the Teaching Faculty appointed by the Academic Affairs Council and representing each of the academic divisions of the college. The Assessment Committee is charged with the following:

- Drawing up and continually revising an instruction manual (“Assessment Toolkit”) to guide departments in implementing their plans and in generating their annual reports.
- Regularly communicating with departments and academic programs to ensure that their assessment programs are on track.
- Reviewing departmental and program assessment plans and providing annual written feedback.
- Evaluating departmental and program assessment reports on an *annual basis*, providing written feedback to departments, and making recommendations to the Academic Affairs Council and the Provost.
- Providing an annual written report on the assessment program to the Academic Affairs Council and the Provost.
- Devising and executing a plan for the assessment of general education; evaluating the results of that assessment and making recommendations for program improvement to the Academic Affairs Council and the Provost.
- Regularly assessing the college’s assessment program.

Each department and academic program appoints an *Assessment Coordinator* to catalyze and manage its assessment program, and to ensure that the annual reports are submitted

in a timely fashion. Some departments form internal assessment committees made up of several members of the department.

The college provides an *operational budget line* for assessment to cover the expenses associated with carrying out assessment.

➤ **Mission**

The mission of Denison's educational program is set forth in the mission statement of the course *Catalog*: "Our purpose is to inspire and educate our students to become autonomous thinkers, discerning moral agents and active citizens of a democratic society. Through an emphasis on active learning, we seek to engage students in a liberal arts education that fosters self-determination and demonstrates the transformative power of education."

"Our faculty is committed to undergraduate education. As teacher-scholar-advisors, their principal responsibility is effective teaching informed by the best scholarship. Faculty members place a priority on close interaction with students, interactive learning, and partnerships with students in original research. Our low student/faculty ratio allows for close supervision of independent research and collaborative work in small groups and classes."

➤ **Goals**

Denison views a strong education firmly anchored in the liberal arts as the key to the realization of our mission objectives. A liberal education provides foundation and practice in varied disciplines and in the intellectual processes necessary to function as a free-thinking human being facing the challenges of the 21st century. We provide *breadth* by exposing students to a broad range of modes of inquiry in our general education program. We cultivate *depth* in all parts of the curriculum, but particularly in the major, through the intensive study of a particular discipline. Our overarching goal is to provide students with a set of experiences that leverage independent thinking and the creation of new ideas and meanings, and the ability to communicate them to others. In addition, we provide a set of co-curricular experiences that aim to foster self-determination and active social engagement. Specifically we pursue the following goals in our educational program:

1. Cultivating the ability for *critical thinking*. Fostering intellectual appreciation of the multiplicity of meanings and perspectives in the realm of knowledge and experience.
2. Developing a set of *competencies*: reading, writing, quantitative reasoning, and oral communication.
3. Building an intellectual community of learning, consisting of working, learning, and supportive relationships with peers and professors. Forming and sustaining such relationships inculcate the norms critical not only to self-development, but also for democratic participation. Through such networks, students are encouraged to reflect on deeply held values and develop new skills, but also learn the meaning of “self-interest, rightly understood.”

➤ Achievement of Goals

1. *Critical Thinking* Since the development of critical thinking is the north star of our educational program, the context for meeting that goal is our entire curriculum. In other words, this goal is a widely-recognized communal goal about which there is singular unanimity at Denison, and around which every course in the college is constructed – *both* in the major courses and in the general education courses. Programs that supplement this goal include the Honors Program, the Senior Research Program, and the Summer Scholars Program.
2. *Reading, Writing, Quantitative Reasoning and Oral Expression* The focused context for the development of reading and writing skills is the First-Year Seminar program. Every first-year student must take two seminars before the end of the first year. The purpose of the seminars is the development of the ability to communicate effectively through the written word. As for oral expression, every student is required to fulfill the oral communication general education requirement, either through coursework or demonstration of proficiency. As with critical thinking, these competencies are developed across the curriculum and throughout a student’s college career. The jump-start they receive through required courses is just the beginning of that process. Finally, all of our students are required to fulfill a quantitative reasoning requirement by the time they graduate. Many of these students will also take additional quantitative courses connected to their majors.

3. *Community of Learning* Consonant with our mission of educating students to be thinkers, discerning moral agents, and active citizens of a democratic society, we cultivate the contexts in which these goals are more richly achieved. In practice this means that students engage each other and faculty in ways consequential to their education. The structural features encouraging learning communities to form are small class sizes, a tight student-faculty ratio, reduced faculty teaching load, and numerous opportunities to work closely with faculty in academic and co-curricular modes. Opportunities are just that and their existence does not mean that students take advantage of them. Only by capturing student behaviors in relation to these opportunities do we have valid measures of a true community of learning at Denison.

➤ **Contexts for Assessment of Goals**

While we speak of the major and general education as separate entities, we view them in practice as a single pursuit, symbiotically directed toward the achievement of our learning goals. The goal of this integration of our educational programs is for our students to become masters of their environments, adept at understanding the world and acting positively to change it, and developing the ability to “talk with anyone” (Cronon). Within this context we assess both the major and the GE program.

1. *Assessment of the Major* Our primary location for the assessment of student learning is at the departmental level. We believe that the departmental level is the optimal one in which to anchor our assessment program for the following reasons. First, “Students typically do their best and most advanced work in their major fields of specialization. . . .”(AAC&U). We therefore focus our program on the major because it is a concentrated intellectual challenge presented to our students, the test of all they have learned before – including the competencies they have honed in general education courses. Second, we believe with Ernest Boyer that it is a mistake to view general education and the major in competition; rather, “these two essential parts of the baccalaureate program should be intertwined,” not only in their execution, but in the assessment of their learning outcomes. Liberal education outcomes are best measured “in context,” and we chose the major as our primary context because “liberal education outcomes . . . reach their highest level of cultivation in the context of the student’s area of specialization or major field(s).” (AAC&U). Our understanding is that the major and general education are the warp and woof of a single fabric, which is the liberal arts enterprise, as is characterized by this statement from the 2006 Task Force on the Major at Denison *While the General Education program provides breadth in a variety of disciplines, a major provides depth in a particular discipline. The major introduces students to the methodologies of the field and gives them experience in applying those methodologies toward the discovery of knowledge and understanding in this area of study. The major also explores the discoveries of*

the chosen field in the context of the General Education background. Conversely, the intellectual abilities learned in General Education courses flower in the rich context of the major.

2. Assessment of General Education The best assessment programs provide multiple measures to assure accuracy of results. While our primary focus of assessment is on the major, as described above, we use one direct and several indirect general education assessment measures to confirm what we learn in the departmental reports about the achievement of general education goals. They are described later in this plan.

➤ **Assessment in the Major**

Every department and academic program has appointed an Assessment Coordinator to catalyze and manage the departmental assessment program, and to ensure that reporting is done on an annual basis.

Assessment Plans: Departments and programs have submitted assessment plans to the Assessment Committee. Any revisions of the plans will be submitted with the annual reports. All plans must minimally include the following:

1. A statement of departmental mission statement and goals of the program.
2. A description of the contexts in which assessment takes place (e.g., capstone seminars, comprehensive exams, portfolios).
3. A description of the instruments that will be used to measure outcomes.
4. A description of the context(s) for discussion and analysis of the information obtained from the measures (e.g., departmental retreats or meetings, outside consultants).
5. An account of the mechanism(s) for factoring the information back into program improvement.

Assessment Measures: Departments and programs are asked to tailor their selection of assessment measures to their particular major or curricular program. The Assessment Committee does not select measures for them, although the Committee offers to meet with departments in their discussions of appropriate and reliable measures. In the “Assessment Toolkit” the Committee has included a section that discusses appropriate measures, distinguishing direct measures, indirect measures, and non-measures, and including many examples of each. The Toolkit also includes commentary on what sorts of measures are strongest and weakest.

On the basis of the first few iterations of the assessment program, the Committee learned what it expected would be the case – many different measures are used by different departments and programs. For example, the department of sociology/anthropology relies solely on its comprehensive year-long senior research project. The department of mathematics & computer science includes major field tests (ETS) and sequential skill development. Several of the languages use a combination of language portfolios and scores from the ACTFL external review process. The department of education relies on a battery of direct measures that includes a teaching portfolio, comprehensive examination, and evaluation by outside educators and college faculty. The department of theatre's instruments consist of a pre-test (verbal and written), a junior-year portfolio analysis, and a senior-year review of goals (established for students during the junior-year portfolio review) by the faculty advisor. The department of psychology uses the Research Methodology Assessment Exam, given at several points in the students' academic careers (thus providing valuable longitudinal results), and a comprehensive exam given at the end of the senior capstone course.

In its responses to annual departmental reports, the Assessment Committee points out deficiencies in measures, whenever they exist, and makes recommendations for substitutes. Likewise, it has affirmed the efforts of departments that have constructed appropriate and reliable measures.

Annual Reports: Departments and programs provide the Assessment Committee an annual report by September 15. The format for the annual report is a response to six specific questions:

1. What is the mission of your department in terms of student learning?
2. What are the goals of your curriculum and other components of the major in terms of student learning?
3. What measures did you use for assessing student academic outcomes in the major?
4. What methods did you use to analyze the data you gained? In what setting or settings did this analysis and subsequent reflection on the information you received take place?
5. What results did your analysis yield? What did you learn?
6. How have you factored what you learned back into the curriculum? That is, what have been your feedback mechanisms?

Evaluation of Reports: The Assessment Committee provides annual written responses to departmental reports, with advice and recommendations on the plan, the measures, the analyses of the data gathered, and the feedback process for program improvement. The Committee responds to the following set of specific questions in its responses to departments and programs:

1. Are the department's goals clearly articulated?

2. Are the goals operationalized in a clear fashion?
3. What measures has the department employed? Are they direct, indirect, or non-measures?
4. Are the measures of the goals (methods of assessment) clearly defined?
5. Are there procedures in place to implement the measures on a continuing basis?
6. Are the measures appropriate and reliable?
7. Are the measures sufficient?
8. Are the methods of analysis of the data appropriate?
9. Is the analysis of appropriate depth and breadth?
10. What feedback mechanisms has the department employed?
11. Are the feedback mechanisms appropriate and reliable?
12. Was the feedback sufficient?

When indicated, the committee makes recommendations about the particular departmental assessment program to the Academic Affairs Council and the Provost. The committee keeps the Academic Affairs Council and the Provost apprised of the program for assessment of majors in an annual report to that Council and the Senior Staff.

➤ **Assessment in General Education**

The Assessment Committee designs and oversees the assessment of student learning outcomes in the general education program.

Assessment Plan The Assessment Committee has designed a program for assessing general education at Denison. That program appears below. The Committee is responsible for an annual review of the program and for revision in light of what it has learned.

Assessment Measures

Direct Measures

In 2003 the Assessment Committee selected a direct measure that specifically proposed to measure the goals enumerated in our general education “statement of goals,” namely the Academic Profile test administered by the Educational Testing Service of Princeton. The goals of the Academic Profile test are described in the following description of the test by ETS:

The Academic Profile is a test of general academic knowledge and skills. It is intended for use by colleges and universities in assessing the outcomes of their general education

programs to improve the quality of instruction and learning. The test focuses on the academic skills developed through general education courses rather than on the knowledge acquired about the subjects taught in these courses. It does this by testing college-level reading and critical thinking in the context of the humanities, social sciences, and natural sciences. Mathematics and writing skills are tested independently of context areas. . . . Questions do not ask for recall of specific information but, instead, test a student's ability to read carefully, make judgments about clarity, correctness, or organization of material, think critically about issues and arguments, and work effectively with mathematics. No specific courses or course patterns are assumed.

- The accent on critical thinking in this description resonates well with goal 1 of our general education program.
- The tests of skills in reading, writing and quantitative reasoning likewise fit well with two of the three objectives stated in goal 2 of our general education program.
- Finally, the Academic Profile's aim to test reading and critical thinking in the context of the humanities, social sciences, and natural sciences probes outcomes in our liberal arts design of cultivating the awareness of different perspectives in the realms of knowledge and inquiry. (In a more detailed reading of the Academic Profile test, it becomes clear that ETS subsumes critical thinking in the arts under "Humanities.")

By giving the test both to first-year students and seniors, we are able to assess the "value added" dimensions of a Denison education in several skill and inquiry areas. Because the instrument is nationally normed, we are also able to compare the gains of our students with those of other colleges over the span of their college education.

Note: ETS abandoned the Academic Profile Test in 2005, and the Assessment Committee is currently in the process of evaluating other measures for adoption.

Indirect Measures

The Committee has employed a battery of indirect measures for assessing student outcomes, all of which relate to the assessment of goal 3, some of which relate to the assessment of all three goals. The primary component of these measures is a survey plan that, following any single Denison class, 1) covers a span of 24 years, 2) contains longitudinal components for any given class, and 3) carries national benchmarks for every survey instrument. Our aim is to track a single class for 24 years to learn as much as possible about what factors in a Denison education enhanced or detracted from their development as students, life-long learners, and "autonomous thinkers, discerning moral agents and active citizens of a democratic society" (Denison Mission Statement). Since

2000, the following seven survey instruments have been given to Denison classes each year:

Nine-Point Survey*

- 1) CIRP (Cooperative Institutional Research Program -- American Council on Education). Demographic and attitudinal survey given every other year to **first-year students** at orientation. National norms provided.
- 2) BCSSE (Beginning College Student Survey of Engagement)—Given to **first-year students** at orientation every other year. Measures academic and learning behaviors. Results compared with NSSE in spring of first-year and NSSE senior year. National norms provided.
- 3) Your First Year College (similar to CIRP), given to students at the end of their **first year**. Results compared to the CIRP given at orientation.
- 4) NSSE (National Survey of Student Engagement). Assessment survey given every year to **first-year students** (early spring). Measures academic and learning behaviors. National norms provided.
- 5) NSSE (National Survey of Student Engagement). Assessment survey given every year to **seniors** (early spring). Measures academic and learning behaviors. National norms provided.
- 6) HEDS (Higher Education Data Sharing) **Alumni** Survey. Given to every class one year out. Norms provided in a group of 138 colleges.
- 7) HEDS **Alumni** Survey. Given every other year to classes five years out.
- 8) HEDS **Alumni** Survey. Given every other year to classes 20 years out.
- 9) FSSE (Faculty Survey of Student Engagement). Given every year to faculty. While this survey is given to faculty rather than students, it complements the NSSE by giving us information about faculty views about “the extent to which students . . . engage in educational practices empirically linked to high levels of learning and development.” In its posing of similar questions, it is the mirror image of the NSSE.-

*As an example, the entering class of 2001 is on the following schedule:

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|------|---------------------------------------|
| 2000 | ▪CIRP at First-Year Orientation |
| | ▪Your First-Year College Survey |
| | (begins 2003) |
| | ▪BCESSE at Orientation (begins 2005) |
| | ▪NSSE as First-Year Students (spring) |
| 2004 | ▪NSSE as Seniors |
| 2005 | ▪HEDS 1 Year Out |
| 2009 | ▪HEDS 5 Years Out |

Other Indirect Measures

- Retention and transfer studies
- First- to second-year retention rates, graduation rates, length of time to degree
- Job placement data, graduate and professional school data.

Annual Reports: The Assessment Committee files an annual report to the Academic Affairs Council and the Provost by mid-March. The report describes what measures were used for assessing student academic outcomes in general education, what methods were used to analyze the data that were collected, the results yielded by the analysis, and recommendations for factoring the results back into program improvement. The report is also reviewed by the Senior Staff of the college.

Evaluation of Reports: The annual reports from the Assessment Committee are reviewed by the Academic Affairs Council and by the Provost, acting in their respective capacities as the college's academic policy committee and chief academic officer. The Council and the Provost will work in concert to make recommendations for program improvement based on the Assessment Committee's report.

In its deliberations the Committee has been aided by the following sources:

Astin, Alexander. *Assessment for Excellence*. New York: American Council on Education (Macmillan), 1996.

López, Cecilia. "Opportunities for Improvement: Advice from Consultant-Evaluators on Programs to Assess Student Learning." North Central Accreditation, Commissions on Institutions of Higher Education, 1996.

López, Cecilia. "General Education: Assessment of Student Learning." Paper delivered at the working conference, "Discovering What Works in General Education," Association of American Colleges and Universities (February 12-14, 1998), Tampa, Florida.

“Our Students’ Best Work,” A Statement from the Board of Directors of the Association of American Colleges and Universities,

North Central Association of Colleges and Schools, Commission on Institutions of Higher Education. *Handbook of Accreditation*. Second edition, 1997.

The Art & Science of Assessing General Education Outcomes: A Practical Guide, Andrea Leskes and Barbara Wright Washington, D.C. (Association of American Colleges and Universities, 2005).

Ernest Boyer, *College, the Undergraduate Experience in America*, The Carnegie Foundation for the Advancement of Teaching (New York: Harper & Row, 1987).