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# **Assessment Clear, Simple, and USEFUL**

## **Steps for Institutional Planners, Departments, and Faculty**

Barbara E. Walvoord, Ph.D.  
Professor Emerita  
University of Notre Dame  
Notre Dame IN 46556  
[Walvoord@nd.edu](mailto:Walvoord@nd.edu)  
Mobile: 574-361-3857

## **Goal of the Workshop:**

For participants to construct plans (or revise their current plans) for:

- Conducting assessment of student learning, using a variety of modes, including classroom-based assessment;
- Using that information to improve student learning on their campuses;
- Reporting the information to accreditors and other external audiences

## **Definition**

Assessment of student learning is the systematic gathering of information about student learning, using the time, resources, and expertise available, in order to improve the learning.

In other words, the goal of assessment is informed decision-making.

## **The Three Basic Steps of Assessment**

1. Articulate learning goals [objectives, outcomes]  
    “When students complete this [course, major, gen-ed program] we want them to be able to....”
2. Gather information about how well students are achieving the goals and why
3. Use the information for improvement

## **Assessment as a process is necessary, useful, and natural.**

When we are spending time and money trying to encourage student learning, nothing is more sensible than to ask, “Is it working? Are we getting the learning we hoped for?”

**“Assessment” as a higher-education reform movement is helpful and necessary in some ways, but in some ways also silly or dangerous.**

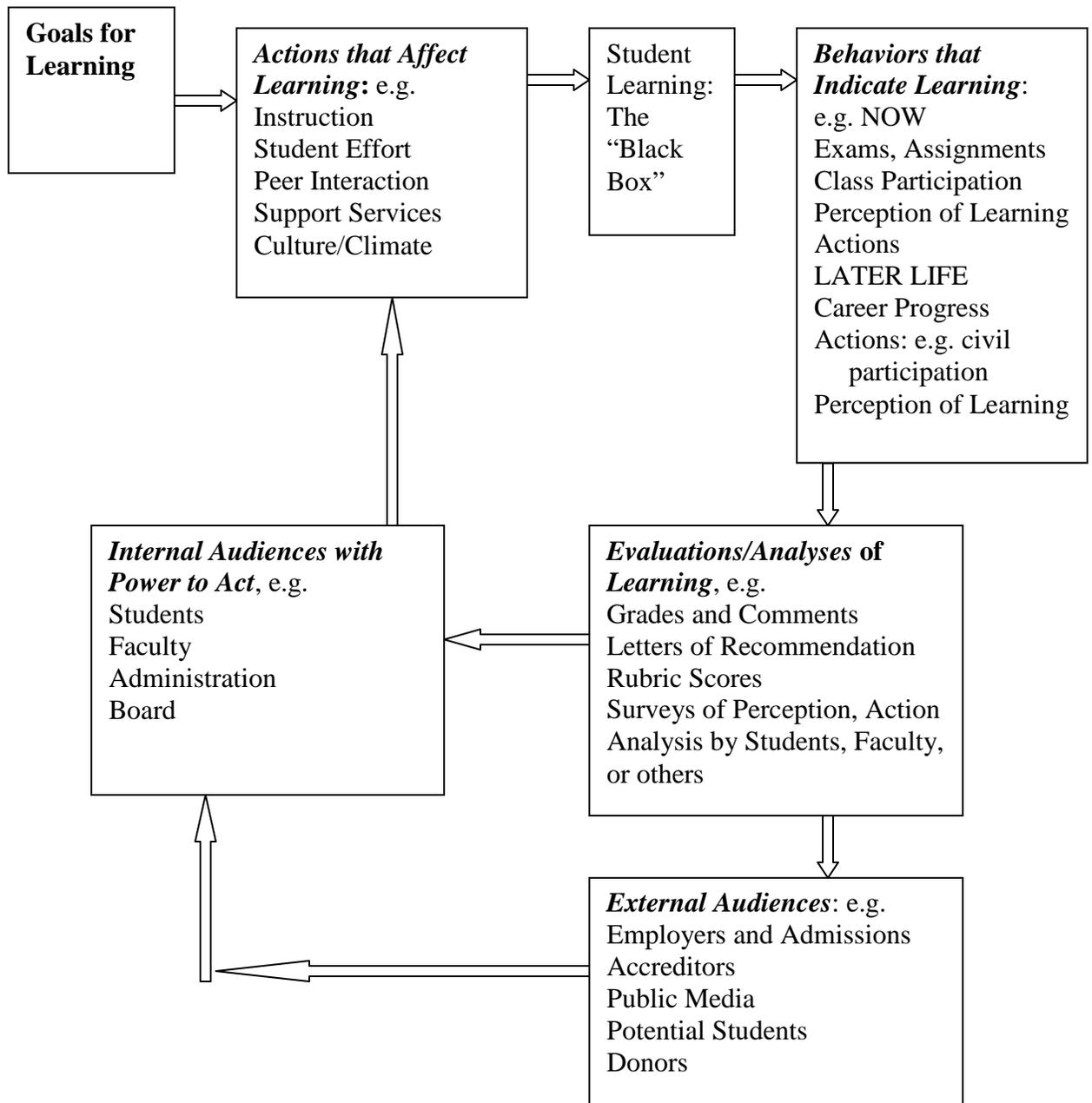
**The purpose of assessment  
is informed decision-making.**

**We are here to plan better decision-making,  
not to plan assessment as an end in itself.**

**Informed decision-making is what  
accreditors most want.**

**The goal is not to comply with accreditors  
but to establish healthy, information-based  
decision-making.**

**Then, when external audiences  
need to know what we do,  
we generate reports as efficiently as possible.**



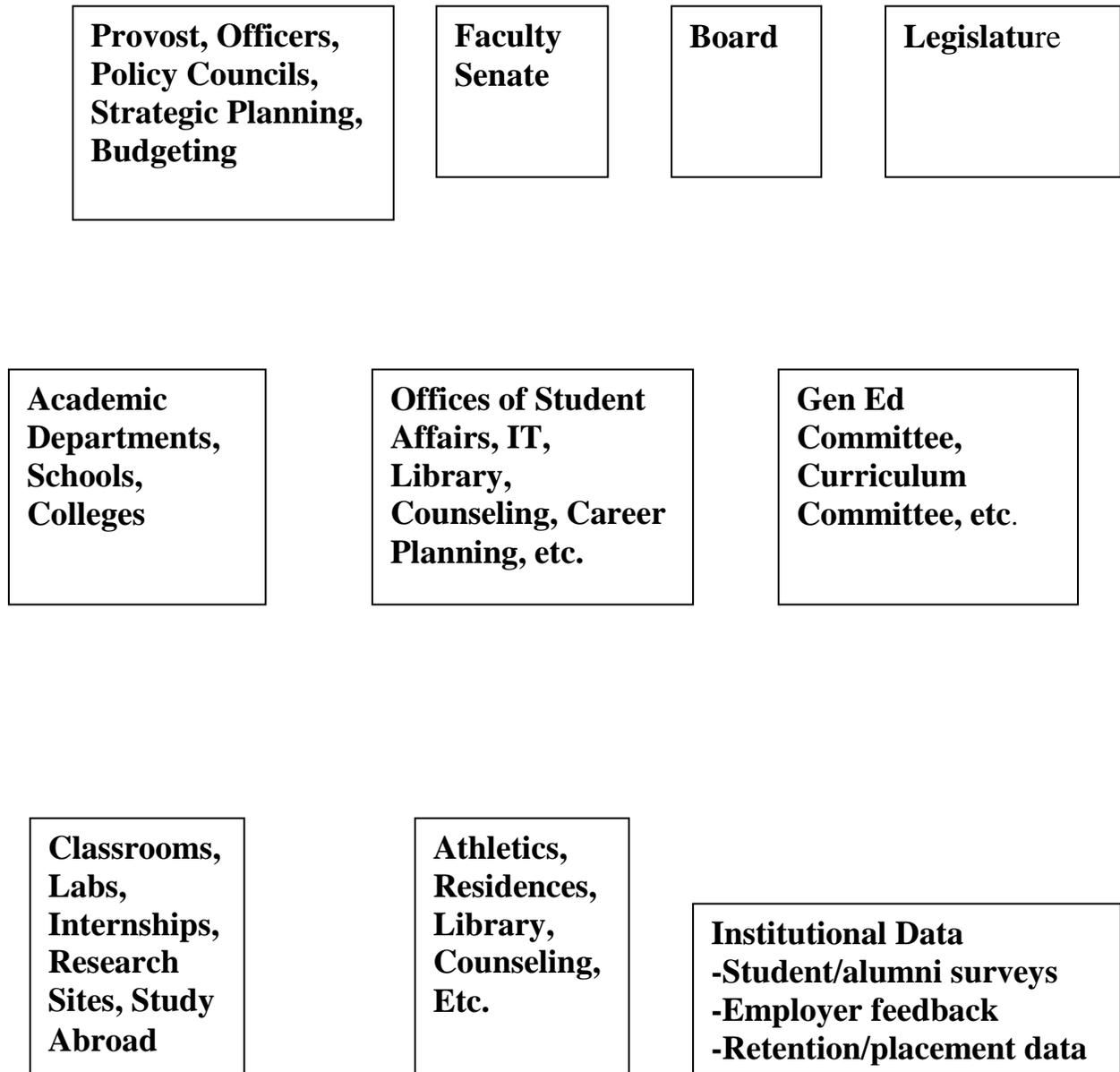
**The Big Picture**

## **The Ideal System for Information-Gathering and Improvement of Student Learning**

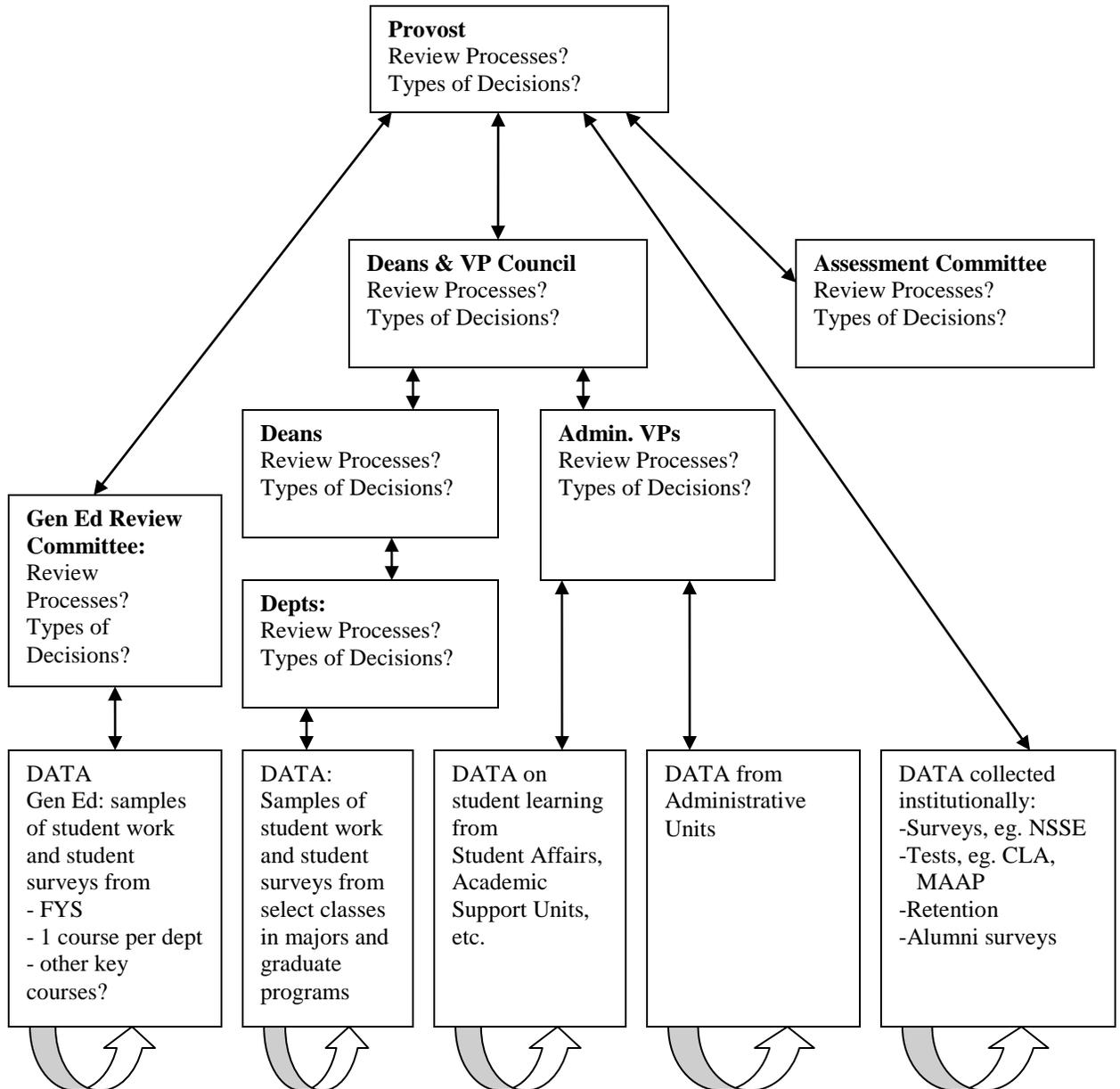
1. Exams, assignments, and classroom participation are valid indicators of the actual learning that the teacher desires
2. Evaluations/analyses accurately reflect learning and are appropriately diagnostic and explicit for their purposes
3. The system promotes healthy motivation and fair treatment at every level
4. Evaluations/analyses are communicated appropriately to their various audiences and serve their purposes
5. The system is efficient: no valuable information is lost; no useless information is communicated
6. The system is sustainable in terms of time and resources
7. Autonomy is appropriately protected at every level

# Tracing the Flow of Information and Decisions

**How does information about student learning reach the decision-makers?**



## Tracing the Flow of Information and Decisions



**Sample Questions:** What data are collected at each level?  
 Where are the horizontal connections?  
 What is the role of the assessment committee? What power does it have?  
 How are institutionally-collected data distributed and used?

## Variations for Use of Classroom Assessment

<i>Student Performance</i>	<i>Criteria by</i>	<i>Evaluated by</i>	<i>In the Form of</i>	<i>Report to</i>
Course-embedded assignments and tests	Instructor	Instructor	Grades	Students: self-improve't
			Rubric Scores	Faculty member: self-improvement
			Impres-sions	Department: decisions about curriculum, resources, etc.
				Other institutional decision-makers, e.g. curriculum committee, strategic planning, budgeting, program review
Standard Test as part of class work	Group of instructors/ committee as they create a common rubric or suggested guidelines	Group of instructors; Assessment committee; Department; Professional assn., etc.		
Common Assignment Agreed by Faculty				

## Guidelines

### Guideline: Embed assessment into core processes

- Program review
- Strategic planning
- Regular budgeting and planning cycles
- Hiring, reappointment, promotion, and tenure
- Key initiatives (e.g. extension of e-learning; emphasis on retention; introduction of learning communities)

### Guideline: Know your audiences and purposes

<i>Who?</i>	<i>Needs to Know What?</i>	<i>For What?</i>
Institution/ Department	How well do our strategies for student learning work? What can we do to improve?	Make improvements
Assessment Committee	What assessment strategies do we have in place? What do we need/plan for successful assessment in the future?	Recommend changes for improvement of assessment. Report to regional accreditor.
Accreditor	What assessment strategies does the institution have in place? What does it plan for the future? Does the institution meet our standards?	Accreditation review
Prospective students	How good is this institution? What can our graduates expect?	Enrolment
Donors	How well is this institution doing, by objective measures and external reviewers?	Giving
Trustees, Legislature	What assessment strategies are in place? What do we need to do to strengthen assessment? How well are the institution's students doing? Does the institution meet accreditation standards?	Planning, budgeting

## **Guideline: Establish accountability and reporting lines**

- Line administration: assessment must be part of the job of all line administrators
- Director and/or committee on assessment: monitor, coordinate, nourish, nudge
- Liaisons to units

## **Guideline: Don't put too much time into university-wide learning goals**

- Change formal documents if the payoff is great enough
- Otherwise, operate below the radar
  - “Explanations” or “translations” developed by committees
  - Previous documents

## **Guideline: An assessment audit may be a useful way to begin**

- A. Gather information on
  - i. Institution-wide measures
  - ii. Department/program-level measures, including academic and support services as relevant
- B. Report should include:
  1. Learning goals
  2. Measures
  3. Uses of the information
  4. Examples of how information has led to change
  5. Recommendations for improvement in assessment
- C. How to gather the information: some combination of
  1. Guidelines and deadline for chairs/directors to complete the report
  2. Workshop where chairs/directors complete the report
  3. Individual coaching for chairs/directors to complete the report

### ***Example: Audit of Institution-Wide Assessment Measures Tied to Goals***

**Note:** The chart below is part of an assessment audit at a national research university. It identifies various university-wide assessment measures that transcend a single department's students, shows where the data were generated, links the measures to the university's four broad, university-wide learning goals, and shows how each type of data is used. It was compiled by the assessment coordinator on the basis of interviews with heads of the various departments and a review of their websites or other materials.

### **Institution-wide Learning Goals**

Students will be able to:

1. Pursue knowledge and evaluate its consequences

- Think critically, abstractly and logically to evaluate and solve problems
  - Integrate new information to formulate principles and theories and display an openness to different viewpoints
  - Share the desire for intellectual creativity and the acquisition of knowledge
2. Communicate clearly and effectively in both written and oral forms
  3. Demonstrate knowledge and abilities in chosen areas of study
    - Develop an understanding of resources and procedures of fields and the ability to use them
    - Possess an appropriate core of knowledge in chosen fields
  4. Appreciate their social and moral responsibilities
    - Reflect upon the spiritual, moral, and ethical dimensions of life
    - Display the moral dimensions of their decisions and actions
    - Contribute to society as an active member

### University-Wide Measures to Assess University-Wide Learning Goals

University-Wide Measures That Transcend a Single Department's Students (Site Where Data are Generated)	Goal #1 Pursue Know- ledge	#2 Comm- nicate	#3 Chosen Area	#4 Social, Moral	How Data Are Used for Improvement
<b>Direct:</b> Study of Writing & Thinking in Composition and Across Curriculum calculates the types of thinking and writing required in papers written by sample of 29 students, in all their courses, across all four years (Writing Program)	X	X			Study not yet complete. Will be distributed to university community. Preliminary results already used by committee to help departments adhere to "intensive writing" requirements
Faculty surveys on tchg., student lng, climate, and faculty devel't including faculty perception of whether student learning increased after changes in teaching (Teaching/Learning Center; Institutional Research),	X	X	X	X	Data informed major changes in TL Center direction, esp. attention to depts. Also presented to officers, deans, department chairs, and Board, to inform decisions at those levels.
Student evaluations including whether students believe they met the learning goals of the course: data aggregated by department, college, and for entire institution (Institutional Research)	X	X	X	X	Data reported twice annually to departments and colleges, and to Provost and Provost's Advisory Committee. Used for institution-wide decisions and budgeting on quality of teaching and learning. Used by departments & colleges for personnel decisions, course assignment, and unit policies.
Advising interviews with all first-year students, including difficulties in learning; also tutoring and collaborative study groups, which reveal problems (First Year Studies)	X	X		X	Information informs First Year Studies policy and is shared with officers, Academic Council, and departments as appropriate for action to improve first-year student learning.
Enrollment, retention, placement, and			X		Shared regularly with Graduate

<b>University-Wide Measures That Transcend a Single Department's Students (Site Where Data are Generated)</b>	<b>Goal #1 Pursue Knowledge</b>	<b>#2 Communicate</b>	<b>#3 Chosen Area</b>	<b>#4 Social, Moral</b>	<b>How Data Are Used for Improvement</b>
time-to-degree data for graduate and undergraduate (Institutional Research; Grad School)					Council and departmental Directors of Graduate Study for their action
NSF Survey of Earned Doctorates (Graduate School)			X		Shared regularly with Graduate Council and departmental Directors of Graduate Study for their action
Exit survey of doctoral students (Graduate School; Institutional Research)	X	X	X		Shared regularly with Graduate Council and departmental Directors of Graduate Study for their action
Exit interviews with select graduate students (Graduate School)	X	X	X		Shared regularly with Graduate Council and departmental Directors of Graduate Study for their action
Graduate students' professional activities and impact on their field (Graduate School)	X	X	X		Shared regularly with Graduate Council and departmental Directors of Graduate Study for their action
Information Technology surveys of faculty & students, including how technology helps or hinders learning (Office of Information Technology)	X	X	X	X	Data informed TL Center consultations and grants to faculty for technology; also reported to Provost and Chief Information Officer/Vice President to inform decisions
Center for Community-Based Learning alumni surveys of learning and factors affecting learning, for social concern, civic and moral development (Service Learning; Institutional Research)				X	Informs CCBL program decisions; Shared with campus via CCBL reports
Student-conducted surveys of students, including factors that affect learning (Student Govt & Grad Student Union)	X	X	X	X	Annual report by students to Board of Trustees and campus, to inform decisions at all levels
Senior student surveys of perceptions of learning and factors affecting learning, using HERI, CIRP, and NSSE national surveys (Institutional Research)	X	X	X	X	Shared regularly with deans, department chairs, officers. Regular reports from OIR to entire campus.
Your First Year of College survey administered to all first-year students (Institutional Research)	X	X		X	Shared with First Year Studies, reported to officers and campus.
Alumni surveys of perceptions of learning and factors affecting learning (Institutional Research)	X	X	X	X	Shared regularly with deans, department chairs, officers. Regular reports from OIR to entire campus
Survey and focus groups of students on meaning of TCE question whether the course "stimulates creative and analytical thinking" (Scholarship of Teaching and Learning; Institutional Research)	X		X		Use by OIR in presentations to faculty and promotion/tenure committees on evaluation of teaching.

<b>University-Wide Measures That Transcend a Single Department's Students (Site Where Data are Generated)</b>	<b>Goal #1 Pursue Knowledge</b>	<b>#2 Communicate</b>	<b>#3 Chosen Area</b>	<b>#4 Social, Moral</b>	<b>How Data Are Used for Improvement</b>
Student alcohol use, using national instrument from Harvard. Student eating disorders. (Student Affairs)				X	Data shared with Academic Council, university-wide in special reports, and with Student Affairs staff and officers to inform decisions
Student participation in volunteer service, service-learning, and for-credit community-based learning (Institutional Research; Center for Community-Based Learning, Student Affairs)				X	Shared with campus community and with organizations involved, esp. Student Affairs and CCBL
Student participation in internships, faculty-sponsored research (Institutional Research, Service Learning)			X		Student reports used by departments and colleges for decision-making
Graduation rates for groups such as minorities, athletes (Institutional Research)	X	X	X		Shared with campus community and with organizations involved, esp. Academic Council, Athletics, Student Affairs
Student self-reports on aspects of extra-curricular life, e.g. drinking, participation in service, life in residence hall, etc. (Student Affairs)				X	Used by Student Affairs for improvement; Shared with campus, officers, Trustees
4-year Longitudinal study of how student students' spirituality, personality, and attitude are associated with adjustment to college environments, satisfaction with college life, and psychological well-being (Student Affairs)				X	Study is in process. Results will be used by Student Affairs and entire campus

**Examples of Changes Made on the Basis of These Data:**

**Recommended Improvements to Assessment System:**

**Guideline: Ask for separate department assessment reports if needed**

**(Your ultimate goal is to embed assessment reporting into departmental annual reports, program review, strategic planning, and budgeting.)**

*Example: One Form of Departmental Report*

Department name: \_\_\_\_\_

**1. Learning Goals:**

Name of degree or track (please fill in the name of each distinct track or degree, e.g. undergraduate majors studio track; undergraduate majors art history track; masters, Ph.D.)	Written goals exist in the format "Students will be able to..." (give URL or attach a copy)	Goals in the format can be inferred from other documents (give URL or attach a copy)	Goals are being written (please explain)	No written goals exist

Explanation of any aspect of the above \_\_\_\_\_

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**2. Methods for gathering and using information about student achievement of the goals**

(check all that are relevant)

<b>Method</b>	<b>Tracks /degrees in which this method is being used</b>	<b>Learning goals addressed by this method</b>	<b>Method is in use now</b>	<b>Method is used (please insert one) A = Annually or more often; E = Episodically; PR = as part of program review</b>	<b>Method partly in use (please explain below)</b>	<b>Method is being planned</b>	<b>We could use some help with this method (please explain below)</b>
1. Student classroom assignments or exams are evaluated by specific, written criteria, and results are reported to the department for program-level evaluation and improvement							
2. Students take a standardized test, whose results are reported to the department							
3. External judges evaluate student work and give feedback not only to the individual student but to the department							
4. Transcript analysis tracks what students take							
5. Exam/assignment analysis reveals what students are tested on							
6. Analysis of grades and withdrawals tracks how students progress through the program							
7. Student representation on committees or other bodies where their input is used for department-level decision-making							
8. Student focus groups yield information about their perceptions of their learning or factors that affect their learning							
9. Student surveys that collect information about their perceptions of their learning or factors that affect their learning							
10. Student job placement							
11. Student career progress							

12. Alumni surveys that ask about their perceptions of their learning or factors that affected their learning							
13. Other (please explain)							

Explanations of any of the above:

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3. **How does the information gleaned from the methods above get to the decision-makers, and how do they use it?**
4. **Examples of how assessment data have led to departmental action**, including what assessment was used, what actions were taken, and, if possible, how the department determined that the actions were accomplishing their intended goals.
5. **Plans for improving assessment, and resources needed:**

***Example: An Alternative Form of Departmental Report (more open-ended)***

(Note: This is a biology department report for its undergraduate majors. Similar matrices would be produced for general-education and graduate programs in the department)

**Learning Goals for Majors**

1. Describe and apply basic biological information and concepts
2. Conduct original biological research and report results orally and in writing to scientific audiences
3. Apply ethical principles of the discipline in regard to human and animal subjects, environmental protection, use of sources, and collaboration with colleagues

Website and/or other avenues by which these are readily available to students, prospective students, and faculty \_\_\_\_\_

<i>Measures</i>	<i>Goal 1</i>	<i>Goal 2</i>	<i>Goal 3</i>	<i>Use of the information</i>
Standardized test given to all seniors AND Final exams of three basic biology courses required of all majors	X			Data are reported to the department annually by the standardized exam committee and the instructors of the three basic courses. The department supports and encourages the instructors, takes any appropriate department-level actions, and reports meeting outcomes to dean or other body which has resources to address problems, and to those composing reports for accreditation or other external

<i>Measures</i>	<i>Goal 1</i>	<i>Goal 2</i>	<i>Goal 3</i>	<i>Use of the information</i>
				audiences. All data are reviewed as part of program review every seven years.
In senior capstone course, students complete an original scientific experiment, write it up in scientific report format, and also make an oral report to the class. The instructor(s) use explicit criteria to evaluate student work.	X	X	X	Annually, the senior capstone instructor(s) share students= scores with the department. The department takes action as above.
Alumni survey asks how well alums thought they learned to conduct and communicate scientific research	X	X	X	Data reviewed annually by department for action, as above
Sample of regional employers gathered two years ago to reflect how well our majors are doing and give advice to dept.	X	X	X	Data reviewed annually by department for action, as above

### **Examples of Changes Based on Assessment**

- Two years ago, our advisory council of regional employers recommended that our majors had a good level of biological knowledge but needed stronger skills in actually conducting biological research. Data from the alumni survey also mentioned this problem. We instituted the required capstone course, which requires students to conduct original scientific research, and we asked the instructor(s) annually to report to the department on student research and communication skills demonstrated by their capstone projects. In three years, when several cohorts of majors have passed through the capstone, we will again survey alumni and employers to see whether student skills have increased, and we will review data from all years of the capstone projects.
- The capstone instructor(s) last year reported low graphing skills in seniors; we arranged with the mathematics department for greater emphasis on graphing and better assessment of graphing, in the required math course. The capstone instructor(s) will report next year whether graphing skills are stronger. Prof. Brody is currently developing a rubric to assess graphing skills more systematically in the capstone.

**Alternate: If Assessment Report is Part of Program Review and/or Budget Request**

- Findings from analysis of data
- Planned actions to improve learning
- Budget requests

**Recommendations for Improving Assessment Processes**

- Standardized national test is costly and time-consuming to administer, has low student motivation in its current format, and results are difficult to map to our curriculum. Committee should review usefulness of the national test.

***Example: Analyzing Assessment Processes in All Departments***

<i>Department/ Program, General- Education Unit</i>	<i>Written learning goals</i>	<i>Goals readily accessible to students &amp; faculty</i>	<i>Direct Measures</i>	<i>Own Student survey/ focus groups</i>	<i>Use Insti- tutional Research (IR) student survey</i>	<i>Own alum survey</i>	<i>IR alum survey</i>	<i>Own place- ment data</i>	<i>IR place- ment data</i>	<i>Chair, com- mittee review data</i>	<i>Examples of action based on data</i>
<b>College of Arts &amp; Letters</b>											
Amer Stud	X				X		X		X	X	
Anthro			X	X		X				X	
Etc.											

**Guideline: Aim to embed assessment fully into departmental annual reports, program review, strategic planning, budgeting**

***Example: Guidelines for Program Review***

1. Departmental mission
2. Departmental goals
  - a. Student learning

- b. Research
  - c. Service
  - d. etc.
3. Assessing Strengths, Weaknesses
    - a. Student Learning
      - i. 2-year certificate
        1. How was assessment information gathered and analyzed?
        2. What did it reveal about strengths and weaknesses, and factors that affect them?
      - ii. Undergrad major
        1. How was assessment information gathered and analyzed?
        2. What did it reveal about strengths and weaknesses and the factors that affect them?
      - iii. Graduate masters (same as above)
      - iv. Graduate Ph.D. (same as above)
    - b. Student retention
    - c. Student placement
    - d. Other departmental goals—assessment, strengths and weaknesses
    - e. Etc.
  4. Which are the most important strengths to build upon, and/or weaknesses to address, and why?
  5. Plan for action, with budgets
    - a. If no new resources
    - b. 2% budget increase
    - c. 2% budget reduction
    - d. Etc.

## **Guideline: Make recommendations for improvement of assessment**

### ***Example: Analysis and Recommendations for a Large Research University***

#### ***Institution-Wide Assessment***

##### **Strengths:**

- The institution is generating a large amount of good indirect data on student learning, including three national surveys
- The Writing Program is conducting direct assessment—a well-designed study of the writing being done by a sample of students across all disciplines and all four years.
- A number of different offices generate the data, including Institutional Research, Graduate School, Student Government, Career Center, Student Affairs, and the like. Assessment is thus part of the culture and structures of the university.

### **Weaknesses**

- Chairs report that centralized data are sometimes not reported to departments in formats that chairs and department committees can easily understand or use
- As department chairs change, new chairs are not always well oriented to the centralized data available to them

### ***Departmental Assessment***

#### **Strengths:**

- 73% of departments have some kind of department-wide statement of learning goals
- All departments use at least some data on student learning, whether they collect it or get it from a centralized source.
- 58% of departments use direct measures
- 100% of departments use some type of indirect evidence. The most common types are IR data on student perception of their learning (63%), IR placement data (46%), and departmentally-conducted senior student exit interviews (27%).
- All departments undergo Academic Review on an eight-year cycle, with certain requirements for gathering data
- All departments must participate in the current strategic planning process

#### **Weaknesses:**

- 27% of departments have no stated learning goals
- Many of the rest are very vague
- Some goals are not readily available but exist in committee documents or the like
- Program review documents do not clearly specify assessment of learning as the basis for departmental review, analysis, and planning
- Neither do the strategic planning documents

### ***General Education Assessment***

#### **Strengths**

- The Writing Program conducts direct assessment of portfolios of a sample of students for their writing across the curriculum
- General institutional data provides information on student and alumni perception of such qualities as their moral and civic development, critical thinking, writing and speaking, etc.
- Humanities Core faculty meet once a month for discussions of pedagogy

#### **Weaknesses**

- The Writing Program data are not well known on campus
- General institutional data is not well known or well used by the campus as a whole
- Humanities Core monthly meetings do not focus on assessing student learning as the basis for pedagogical decisions

- Departments that offer gen-ed course options for the distribution requirement do not generally conduct effective assessment linked to gen-ed goals

### ***Recommendations***

- Change Academic Review guidelines to require assessment of majors, gen-ed courses, and graduate programs, then provide rich support for departments (resource persons, funding) to conduct assessment in preparation for provostial review
- Embed assessment into the new initiatives that emerge from the current Strategic Planning process
- As part of new department chairs orientation in fall, introduce new chairs to the available centralized data, including Writing Program data and its appropriate use.

Appoint a committee of chairs to work with IR and appropriate vice president to make data more readily usable by the chairs.

## **Guideline: Understand what accreditors are really asking**

Criteria for Accreditation of the Higher Learning Commission, North Central Assn., with SELECTED subpoints:

### 1. Mission and Integrity

- Mission documents state goals for the learning to be achieved by students
- The organization evaluates its structures and processes regularly and strengthens them as needed.

### 2. Preparing for the Future

- The organization's ongoing evaluation and assessment processes provide reliable evidence of institutional effectiveness that clearly informs strategies for continuous improvement

### 3. Student Learning and Effective Teaching

- Assessment of student learning provides evidence at multiple levels: course, program, and institutional
- Assessment of student learning includes multiple direct and indirect measures of student learning
- Results obtained through assessment of student learning are available to appropriate constituencies, including students themselves
- The organization integrates into its assessment of student learning the data reported for purposes of external accountability (e.g. graduation rates, passage rates on licensing exams, placement rates, transfer rates).
- The organization's assessment of student learning extends to all educational offerings, including credit and noncredit certificate programs
- Faculty are involved in defining expected student learning outcomes and creating the strategies to determine whether those outcomes are achieved.
- Assessment results inform improvement in curriculum pedagogy, instructional resources, and student services

- The organization evaluates the use of its learning resources to enhance student learning and effective teaching
  - The organization regularly assesses the effectiveness of its learning resources to support learning and teaching
  - The organization's systems and structure enable partnerships and innovations that enhance student learning and strengthen teaching effectiveness.
  - Budgeting priorities reflect that improvement in teaching and learning is a core value of the organization.
4. Acquisition, Discover, and Application of Knowledge
- The organization integrates general education into all of its undergraduate degree programs through curricular and experiential offerings intentionally created to develop the attitudes and skills requisite for a life of learning in a diverse society.
  - The organization regularly reviews the relationship between its mission and values and the effectiveness of its general education
  - Learning outcomes demonstrate that graduates have achieved breadth of knowledge and skills and the capacity to exercise intellectual inquiry
  - Learning outcomes demonstrate effective preparation for continued learning
  - The organization assesses the usefulness of its curricula to students who will live and work in a global, diverse, and technological society.
5. Engagement and Service
- The organization practices periodic environmental scanning to understand the changing needs of its constituencies and their communities
  - The organization's programs of engagement give evidence of building effective bridges among diverse communities

## Appendix A: Additional Help for Departments

Note: These steps can be used as the basis for department chairs working individually, or as the format for a workshop

### 1. Formulate Learning Goals for Each Distinct Course of Study (Major, Degree, Certificate, Track, or Program)

Format: When students leave our [major, degree program, track, etc.] we want them to be able to \_\_\_\_\_

Arriving at the goals: several methods

- Each faculty member submits his/her course goals and a departmental/ gen ed committee integrates them into a single list which the unit then discusses and amends as needed.
- OR Goals are derived from professional disciplinary sources and/or college competencies
- OR Goals are formulated by a faculty committee, and each faculty member is asked to derive his/her course goals from the central goals

### 2a. Check Where the Goals are being Taught and Assessed

One method for addressing the question is a grid that is passed around among department members or those teaching gen ed. It lists each learning goal and then asks the faculty to indicate, for each course they teach, whether they are teaching toward that goal and whether they are assessing it through classroom exams, projects, and the like.

Goal for Undergraduate Majors	101	102	201	202	etc. (including internship or extra- curricular activities)
Goal # 1 [e.g.: describe and apply basic biological information and concepts]					
Goal #2: [stated]					
Goal #3 [stated]					
Goal #4 [stated]					

Each faculty member marks, for his/her own courses:

TH: I teach this at a high level of emphasis  
 TL: I teach this at a low level of emphasis  
 AH: I assess this at a high level of emphasis  
 AL: I assess this at a low level of emphasis  
 Or leaves the cell blank to indicate they are not working on that goal

A department member or committee synthesizes these reports and identifies goals that are not being addressed, or addressed in questionable sequence, throughout the student=s curriculum. The examination of what is being taught, in what sequence, and at what level of complexity, may itself lead to curricular change.

The grid reveals where student learning is already being assessed, usually through graded work, in ways that may be useful to the department if the faculty members who are doing the assessment will share what they are discovering about student learning.

When selecting strategies and instruments for assessing student learning, my advice is to use student classroom work whenever possible. Such work is already being graded, so there is little added work. The assessment is made within the context of learningBone of the principles of good assessment included in recommendations by the American Assn. For Higher Education and other experts (for a copy of the AAHE recommendations, see Walvoord and Anderson, *Effective Grading: A Tool for Learning and Assessment*, p. 189-191, or contact AAHE at [www.aahe.org](http://www.aahe.org)).

## 2.b. Determine How Well Students Are Meeting the Goals

Methods may be direct or indirect.

**Direct Assessment** Requires:

<ul style="list-style-type: none"> <li>§ Performance by student</li> <li>§ Criteria to evaluate the performance</li> <li>§ Analysis of the data</li> </ul>	<p>Any of these may be generated at</p> <ul style="list-style-type: none"> <li>§ Classroom</li> <li>§ Department</li> <li>§ Institution</li> <li>§ External</li> </ul>
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Examples of Direct Assessment:

- § Classroom assignments/exams/projects evaluated by specific criteria. Faculty members evaluate these student works and report students= strengths and weaknesses to the department for discussion and action. For example, faculty teaching a senior seminar may report to the department areas of strength and weakness of the students as they enter the seminar and as they leave it. The department may decide on changes to curriculum prior to the seminar, and/or the seminar teacher(s), with their colleagues= help and encouragement, may decide to try various pedagogical changes to help

- students within the seminar.
- § A departmental exam administered to all students or a representative sample or students
- § A national standardized exam
- § Direct observation of students= performance on the job, either by university staff or by employers
- § A departmental Ashow@ of art work, drama, music, research projects, engineering projects, etc., evaluated by judges either external or internal to the department
- § Faculty Reports on Student Learning: example:

Completed by each instructor for each course, before the course begins:

Learning Outcome # (refer to learning outcomes list)	Brief description of how learning outcome is addressed in the course materials and information provided to students (e.g. readings, lecture, multimedia, field trips, etc.)	Brief description of work performed by students that will demonstrate or assess the learning outcome (e.g. exams, homework, projects, laboratories, etc.)	List of material that will be collected to evidence the learning outcome: one example of outstanding work, one of typical passing work. Specify how collected work related to this outcome.

Completed by each instructor, for each course, after the semester is over:

Learning Outcome # (should correspond with pre-semester form you submitted)	Identify strengths and weaknesses in your teaching methods for course materials related to this goal?	Indicate strengths and weaknesses in student achievement of the learning outcome	What changes, if any, do you plan for next time you teach this course, to improve student learning?	What actions can the department take to improve student weaknesses you identified?

**Indirect Assessment Includes:**

- Surveys or focus groups that tap students’ or alumni perceptions of what they learned or of the quality of the instruction
- Rates of retention, graduation, placement in career, admission into further schooling, etc.
- Employer surveys

**3. Use the Information for Improvement**

I suggest an annual meeting of department/program faculty, in which the teachers of capstone or other key courses present all available data, including rubric scores for student work, student survey results, etc.

Department/program faculty fulfill these roles in the meeting:

1. Encourage the faculty members reporting the rubric scores. Clarify this is not a judgment of the faculty member but of the department's cumulative work up to that time.
2. Analyze all the data and its implications
3. Identify and celebrate what is going well, and the reasons for success
4. Identify 1-3 action items: weaknesses that you can see how to address and for which you believe you have some chance of success
5. Take whatever action is required for improvement at the unit level
6. Request action at higher levels as needed
7. Report the assessment processes and outcomes as needed to administration, accreditors, etc.

A committee, chair, or other body may review and analyze all or part of the data before the general department meeting, and bring a summary and recommendations to the department/program

An outside body, such as a social science research institute, may also assist in the collection and/or analysis of data

### **The Basic, No-Frills Departmental Assessment Plan**

1. Learning goals
2. Two measures:
  - a. One direct measure
    - i. Review of senior work by faculty teaching seniors
    - ii. If students take a licensure or certification exam, this will be added as a second direct measure
  - b. One indirect measure
    - i. My preference: senior student surveys and/or focus groups asking three questions:
      1. How well did you achieve each of the following departmental learning goals [use scale such as “extremely well, very well, adequately well, not very well, not at all”]  
[list each department goal, with scoring scale for each]
      2. What aspects of your education in this department helped you with your learning, and why were they helpful?
      3. What might the department do differently that would help you learn more effectively, and why would these actions help?
    - ii. Second choice: Alumni surveys
    - iii. In some fields, job placement rates will be important
3. Annual meeting to discuss data and identify action items

## **Appendix B: Additional Examples of Departmental Assessment Reports**

### ***Example: Ph.D. Program, Department of Sociology***

#### **Learning Goals for Ph.D. Students**

1. Produce publishable research in the field
2. Follow ethical principles of the discipline for using sources, human subjects, and working with colleagues
3. For those bound for college teaching: teach effectively

<b>Measures</b>	<b>Goal 1</b>	<b>Goal 2</b>	<b>Goal 3</b>	<b>Use of Information</b>
Annually, Graduate Faculty meet to assess each graduate student's progress to degree and the quality of his/her course work, qualifying exam, and dissertation. At the end of the meeting, faculty discuss issues that affect graduate students as a group. Minutes are kept.	X	X	X	Graduate Studies Committee uses the minutes to take action or to shape recommendations to the Graduate Faculty or the department as a whole. Aggregated data are part of program review every 8 yrs
Graduate student publications and conference presentations (collected by Grad School and by departmental advisors)	X	X		Reviewed annually by Director of Graduate Studies and presented to Graduate Faculty for action as needed. Aggregated data are part of program review every 8 yrs
Job Placement	X	X	X	"
501, Research Methods: exam questions test students' knowledge of ethical principles and their application to sample cases		X		501 instructor(s) report results to Director of Graduate Studies, who presents to Graduate Faculty for action as needed. Aggregated data are part of program review every 8 yrs.
630, Teaching Sociology: students prepare syllabi, give lectures, lead discussions. Instructor evaluates these with a rubric.			X	"
Student exit interviews conducted by Graduate School	X	X	X	Grad School reports results for soc students to Director of Graduate Studies, who presents to Graduate Faculty for action as needed. Aggregated data are part of program review every 8 yrs
A faculty member visits the classroom of every teaching assistant at least twice a semester and prepares a written analysis of the quality of teaching, using a departmental rubric.			X	Faculty visitors report annually to the department for action as needed. Aggregated data are part of program review every 8 yrs

### **Examples of Changes Based on Assessment**

- Based on departmental dissatisfaction with the publication rate of graduate students, a new graduate course, “Publishing in Sociology,” was added three years ago, which has resulted in a 3-fold increase in the number of graduate student publications in refereed journals
- In response to graduate student exit interviews requesting teaching experience with different kinds of students, two teaching internships per year were developed for students to teach sociology in a nearby community college and a small liberal arts college.

### **Recommendations for Improving Assessment Processes**

- Faculty visitation to T.A. classes is not occurring as regularly as it should. Faculty complain that the rubric is not adequate. Committee should review this entire assessment procedure and recommend changes by next Fall.

### ***Example: Majors in Economics Department, Including Assessment Data***

Note: This report includes actual data from the assessment measures during the year the report was prepared. The Assessment Committee thus undertook BOTH of the possible tasks: analyzing assessment processes for recommendations about improving those processes AND analyzing assessment data for recommendations about student learning. Because the department presents actual data, it uses a slightly different format, showing the goals first, then the assessment method and the results for each goal. This report is adapted from an assessment report prepared by Professor Philip Way for the Department of Economics at the University of Cincinnati.

### **Measures of Student Learning for B.A. in Economics, B.A. in Business Economics**

- § Survey of alumni, conducted with help of the Office of Institutional Research
- § Focus groups of current students, who met for an hour with the assistant chair
- § Analysis of the senior capstone research projects evaluated according to the faculty members= criteria
- § Audit of transcripts of majors to determine which courses they took and in which sequences

### **Goals, Assessment Methods, and Findings**

1. Critical thinking (analytical) and communication skills, to enable undergraduate students to think and communicate like economists (in other words, to become skilled in the logic and rhetoric of economics)
  - A. The use of mathematical methods to represent economic concepts and to analyze economic issues
    - Surveys: Average rating of 4.33 (helped somewhat) on a five-point scale (1-5). Achievement of this objective is rated 4<sup>th</sup> out of 12 objectives.
    - Focus Groups: Amount of math varies among classes. Maybe calculus should be required.

- Capstone: papers and presentations: none included math.
- B. To represent economic relationships in terms of theoretical models  
 Surveys: Average rating of 4.33 (helped somewhat). Ranked 4 out of 12.  
 Focus Groups: Achievement is aided by having TA sessions. Good foundation if taken before other courses.  
 Capstone: models used in papers and presentation with reasonable success.
- C. To gather economic data pertinent to economic theories in order to analyze economic questions  
 Surveys: Average rating of 4.17 (helped somewhat). Ranked 7 out of 12.  
 Focus Groups: Library research used in a few classes only.  
 Capstone: students showed an ability to collect data but over-relied on the web.
- D. To use statistical methods to analyze economic questions  
 Surveys: Average rating of 3.83 (helped somewhat). Ranked 10 of 12.  
 Focus Groups: Limited exposure. Complaint about book used.  
 Capstone: Little evidence of statistical methods.
- E. To use statistical computer software to analyze economic issues  
 Surveys: Average rating of 3.33 (no effect one way or the other).  
 Ranked 12 of 12.  
 Focus Groups: Concern that software used in career will be different.  
 Capstone: Little evidence of use.
- F. To express economic ideas succinctly and professionally in writing  
 Surveys: Average rating of 4.17 (helped somewhat). Ranked 7 of 12.  
 Focus Groups: Writing required more than speaking. In particular, research papers required in 558 and 575.  
 Capstone: Writing skills of students generally acceptable, but not Avery good@ or Aexcellent.@
- G. To express economic ideas succinctly and professionally orally.  
 Surveys: Average rating of 4.5 (helped somewhat/significantly). Ranked 2 of 12.  
 Focus Groups: Most courses do not involve oral communication, although it would be useful after graduation in the workforce. One idea was a sequence of courses in communication as part of the Arts and Sciences college requirements. More discussion and presentations were advised.  
 Capstone: Presentations revealed a lack of training in how to present, as well as nervousness.

2. Content: To master key economic concepts and fields and to understand how the field works in practice, and what economists do.

- A. To master key economics concepts  
 Surveys: Average rating of 4.5 (helped significantly). Ranked 2 of 12.  
 Focus Groups: no complaints.
- B. To understand economics in general, and at least two fields of economics in depth (one field for Business Economics)  
 Surveys: Average rating of 4.33 (helped somewhat). Ranked 4 of 12.

Focus Groups: Students like being able to choose what interests them. Exposure to a variety was said to be helpful. Business Economics students appear to have more diverse training.

Audits: [report presents the courses actually taken by majors, and their sequence]

C. To understand international economics and economic development

Surveys: Average rating of 4.0 (helped somewhat). Ranked 9 of 12.

Focus Groups: Students like this recommendation – useful.

Audits: The average student completes 2.3 courses in international/development.

D. To understand how the economy works in practice and what economists do

Surveys: Average ratings of 4.67 (helped significantly) in Economics and 3.67 (helped somewhat) in Business Economics. Ranked 1 of 12 and 11 of 12.

Focus Groups: Students like having guest speakers in class. At present, few think they know what economists do. Some advocated a broader co-op program.

Capstone: Students exposed to several speakers who are economists. Learned what they do.

### **Recommendations for Student Learning**

### **Recommendations for Assessment Processes**

## Appendix C: Additional Guidelines for General Education

*Where are decisions being made about Gen-Ed, and what information about learning would be helpful?*

Provost, President's Council,  
Budgeting, Planning

Colleges, Schools, Departments

Classrooms

Institution-wide data:  
e.g.  
Student surveys  
Alumni surveys  
Standardized tests  
Retention  
Placement  
Employer surveys  
Portfolio assessment  
Etc.

### *Classroom-Based Assessment for General-Education Courses*

1. Require that new and reviewed Core/ Gen-Ed courses:
  - a. State student learning goals consonant with Core/Gen-Ed goals
  - b. Identify assessment (tests, exams, assignments) that test the goals
  - c. How the information is used for improvement in the course
  - d. Be willing to contribute information about students' strengths and weaknesses to departmental/institutional bodies

I suggest you base the judgment NOT on a syllabus, but on a 1-2-page application form that answers the four questions above.

2. Select sites for assessment of specific competencies, e.g. the writing course, math course, senior capstone, etc.

### *How to Aggregate Classroom Data*

1. Reports of student strengths and weaknesses by teachers, collected and analyzed by committee
2. Student portfolios examined by a committee with a rubric
3. Student work from a sample of classes each semester, analyzed by a committee with a rubric

***Example: General-Education Assessment Matrix***

**General-Education Learning Goals**

1. To demonstrate the habit of reflective self-assessment aimed at developing self-knowledge, taking responsibility for one’s own learning, monitoring one’s intellectual and personal growth, and acting thoughtfully on one’s beliefs
2. To participate competently in academic and civic discourse by writing and speaking effectively, by thinking critically and imaginatively, by conducting purposeful inquiry, and by using appropriate technological tools for research and analysis
3. To understand key concepts, perspectives, and methods in philosophy, religious studies, and mathematics and in representative disciplines in the natural sciences, the social sciences, and the humanities
4. To integrate and consolidate knowledge and learning from various Core courses, co-curricular experiences, and courses in the major into a world view that is open to new ideas and persons, understands diversity and multicultural perspectives, and tolerates ambiguity
5. To articulate one’s vision of social and environmental justice, to assess one’s own personal commitment to justice, and to demonstrate actions taken to ameliorate in justice and to promote a better world
6. To demonstrate the ability to work with and for others; to translate beliefs, thoughts, values and commitments into action, thereby becoming responsibly empowered in the world

**Matrix Showing Classroom-Based and Institution-Wide Assessment of Gen Ed Goals**

<b>Assessment Measure (office where data originate)</b>	<b>Goal 1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>How data are used for improvement</b>
Senior student questionnaire (Institutional Research)	X	X		X		X	Results reported to officers, strategic planning committee, Core Assessment Committee, and Faculty Senate
Alumni questionnaire (Institutional	X	X	X	X	X	X	As above

Assessment Measure (office where data originate)	Goal 1	2	3	4	5	6	How data are used for improvement
Research)							
Core Goals questionnaire annually to all students in selected Core courses	X	X	X	X	X	X	Reviewed annually by Core Assessment Committee and Senior Synthesis faculty. Reported to officers, strategic planning committee, Core Assessment Committee, and Faculty Senate
Analysis of 1 student assignment in each Core class, using an instructor-generated rubric based on Core goals	X	X	X	X	X	X	Annual meetings by discipline of all faculty teaching Core curriculum, to share instructor analysis of students' strengths and weaknesses. Followed by discussion of pedagogical strategies. Written report and recommendations sent to Core Assessment Committee.

### Recommendations for Improvement in Assessment Processes

1. Work with Institutional Research to determine whether student and alumni survey data, could be more specific to individual departments and courses and if so, how to manage and fund the dis-aggregation and distribution of those data
2. More guidance for the discipline-based faculty meetings.

Fund an annual workshop for Gen Ed faculty, especially new faculty, to re-affirm Gen Ed goals and discuss appropriate course design and pedagogy. Every four years, fund a week-long summer workshop, with stipends to the faculty, for an expanded version of the workshop, with the same purpose.

### *Example: Assessment in a General Education Course (Core Literature), Department of English*

#### Learning Goals for Sophomore Core Literature Course (General Education)

1. During and after the course, students will read literature for pleasure
2. Students will write a literary-critical essay demonstrating ability to use the techniques of literary analysis they have been taught in the class and to acknowledge alternative interpretations
3. Students will reflect thoughtfully on their own ideas and values, in response to works of literature

Are these on the web or otherwise readily available to faculty and students? \_\_\_\_\_

<b>Measures</b>	<b>Goal 1</b>	<b>Goal 2</b>	<b>Goal 3</b>	<b>Use of information</b>
<p>In all Core Lit courses, instructors assign an essay requiring students to apply literary critical methods to literature and to acknowledge alternative interpretations. They evaluate students' essays by explicit written criteria.</p>		X		<p>In annual meeting, Core Lit instructors report student scores to their colleagues, who:</p> <ul style="list-style-type: none"> <li>- Collegially support the instructor's plans for improvement</li> <li>- Take appropriate action if needed at the department level</li> <li>- Report results of the meeting to dean or other body with budgetary resources if needed, and to Gen Ed committee.</li> </ul> <p>Aggregated scores are part of program review every five years.</p>
<p>Each Core Lit course requires at least three 2-4-page journal entries in which students reflect the impact of the literature they read on their own thinking and values. Instructors evaluate the journals using a rubric. Instructors report the percent of student journals that make thoughtful links.</p>			X	<p>In an annual meeting, instructors share their evaluations of the journals and strategies for encouraging more reflective and thoughtful journals. Aggregated data are part of program review every five years.</p>
<p>Survey administered to students at the end of each Core Lit class, asking whether, during that semester, they have read literature not required for class.</p> <p>Student survey administered by Institutional Research to all seniors asking whether they have read books not required in class.</p>	X			<p>Results reported annually to the department for discussion and action. Aggregated data are part of program review every five years.</p>

**Examples of Changes Based on Assessment**

2. Minutes from the meetings on journals show that instructors express their intentions to adopt strategies they have heard in the meetings, and report having done so. Percent of journals that make thoughtful links has risen in the past three years from 47% to 68%.

**Recommendations for Improving Assessment Processes**

3. Our goal is that students will form a lifelong habit of reading literature for pleasure. Yet we have data only on the Core Lit course and senior students. High rates of student employment and family responsibility at our institution mean that students' discretionary reading time is exceptionally limited during the college years. Could Institutional Research add a question to the next alumni survey asking whether alums have, in the past year, read a novel, poem, or short story, or attended a live drama performance, not required for academic credit?

# Appendix D: Rubrics for Evaluating Student Classroom Work

## *Example #1: Rubric for Scientific Experiment in Biology Capstone Course* by Virginia Johnson Anderson, Towson University, Towson, MD

Assignment: Semester-long assignment to design an original experiment, carry it out, and write it up in scientific report format. Students are to determine which of two brands of a commercial product (e.g. two brands of popcorn) are “best.” They must base their judgment on at least four experimental factors (e.g. “% of kernels popped” is an experimental factor. Price is not, because it is written on the package).

### **Title**

- 5 - Is appropriate in tone and structure to science journal; contains necessary descriptors, brand names, and allows reader to anticipate design.
- 4 - Is appropriate in tone and structure to science journal; most descriptors present; identifies function of experimentation, suggests design, but lacks brand names.
- 3 - Identifies function, brand name, but does not allow reader to anticipate design.
- 2 - Identifies function or brand name, but not both; lacks design information or is misleading
- 1 - Is patterned after another discipline or missing.

### **Introduction**

- 5 - Clearly identifies the purpose of the research; identifies interested audiences(s); adopts an appropriate tone.
- 4 - Clearly identifies the purpose of the research; identifies interested audience(s).
- 3 - Clearly identifies the purpose of the research.
- 2 - Purpose present in Introduction, but must be identified by reader.
- 1 - Fails to identify the purpose of the research.

### **Scientific Format Demands**

- 5 - All material placed in the correct sections; organized logically within each section; runs parallel among different sections.
- 4 - All material placed in correct sections; organized logically within sections, but may lack parallelism among sections.
- 3 - Material placed in right sections but not well organized within the sections; disregards parallelism.
- 2 - Some materials are placed in the wrong sections or are not adequately organized wherever they are placed.
- 1 - Material placed in wrong sections or not sectioned; poorly organized wherever placed.

### **Materials and Methods Section**

- 5 - Contains effective, quantifiable, concisely-organized information that allows the experiment to be replicated; is written so that all information inherent to the document can be related back to this section; identifies sources of all data to be collected; identifies

- sequential information in an appropriate chronology; does not contain unnecessary, wordy descriptions of procedures.
- 4 - As above, but contains unnecessary information, and/or wordy descriptions within the section.
  - 3 - Presents an experiment that is definitely replicable; all information in document may be related to this section; however, fails to identify some sources of data and/or presents sequential information in a disorganized, difficult pattern.
  - 2- Presents an experiment that is marginally replicable; parts of the basic design must be inferred by the reader; procedures not quantitatively described; some information in Results or Conclusions cannot be anticipated by reading the Methods and Materials section.
  - 1 - Describes the experiment so poorly or in such a nonscientific way that is cannot be replicated.

#### **Non-experimental Information**

- 5 - Student researches and includes price and other nonexperimental information that would be expected to be significant to the audience in determining the better product, or specifically states non-experimental factors excluded by design; interjects these at appropriate positions in text and/or develops a weighted rating scale; integrates nonexperimental information in the Conclusions.
- 4 - Student acts as above, but is somewhat less effective in developing the significance of the non-experimental information.
- 3 - Student introduces price and other non-experimental information, but does not integrate them into Conclusions.
- 2 - Student researches and includes price effectively; does not include or specifically exclude other non-experimental information.
- 1 - Student considers price and/or other non-experimental variables as research variables; fails to identify the significance of these factors to the research.

#### **Designing an Experiment**

- 5 - Student selects experimental factors that are appropriate to the research purpose and audience; measures adequate aspects of these selected factors; establishes discrete subgroups for which data significance may vary; student demonstrates an ability to eliminate bias from the design and bias-ridden statements from the research; student selects appropriate sample size, equivalent groups, and statistics; student designs a superior experiment.
- 4 - As above, but student designs an adequate experiment.
- 3 - Student selects experimental factors that are appropriate to the research purpose and audience; measures adequate aspects of these selected factors; establishes discrete subgroups for which data significance may vary; research is weakened by bias OR by sample size of less than 10.
- 2 - As above, but research is weakened by bias AND inappropriate sample size
- 1 - Student designs a poor experiment.

#### **Defining Operationally**

- 5 - Student constructs a stated comprehensive operational definition and well-developed specific operational definitions.

- 4 - Student constructs an implied comprehensive operational definition and well-developed specific operational definitions.
- 3 - Student constructs an implied comprehensive operational definition (possible less clear) and some specific operational definitions.
- 2 - Student constructs specific operational definitions, but fails to construct a comprehensive definition.
- 1 - Student lacks understanding of operation definition.

#### **Controlling Variables**

- 5 - Student demonstrates, by written statement, the ability to control variables by experimental control and by randomization; student makes reference to, or implies, factors to be disregarded by reference to pilot or experience; superior overall control of variables.
- 4 - As above, but student demonstrates an adequate control of variables.
- 3 - Student demonstrates the ability to control important variables experimentally; Methods and Materials section does not indicate knowledge of randomization and/or selected disregard of variables.
- 2 - Student demonstrates the ability to control some, but not all, of the important variables experimentally.
- 1 - Student demonstrates a lack of understanding about controlling variables.

#### **Collecting Data and Communicating Results**

- 5 - Student selects quantifiable experimental factors and/or defines and establishes quantitative units of comparison; measures the quantifiable factors and/or units in appropriate quantities or intervals; student selects appropriate statistical information to be utilized in the results; when effective, student displays results in graphs with correctly labeled axes; data are presented to the reader in text as well as graphic forms; tables or graphs have self-contained headings.
- 4 - As 5 above, but the student did not prepare self-contained headings for tables or graphs.
- 4 - As 4 above, but data reported in graphs or tables contain materials that are irrelevant and/or not statistically appropriate.
- 2 - Student selects quantifiable experimental factors and/or defines and establishes quantitative units of comparison; fails to select appropriate quantities or intervals and/or fails to display information graphically when appropriate.
- 1 - Student does not select, collect, and/or communicate quantifiable results.

#### **Interpreting Data: Drawing Conclusions/Implications**

- 5 - Student summarizes the purpose and findings of the research; student draws inferences that are consistent with the data and scientific reasoning and relates these to interested audiences; student explains expected results and offers explanations and/or suggestions for further research for unexpected results; student presents data honestly, distinguishes between fact and implication, and avoids overgeneralizing; student organizes non-experimental information to support conclusion; student accepts or rejects the hypothesis.
- 4 - As 5 above, but student does not accept or reject the hypothesis.
- 3 - As 4 above, but the student overgeneralizes and/or fails to organize non-experimental information to support conclusions.
- 2 - Student summarizes the purpose and findings of the research; student explains expected results, but ignores unexpected results.

- 1 - Student may or may not summarize the results, but fails to interpret their significance to interested audiences.

#### Student Scores on Rubric for Science Reports

<b>Trait</b>	<b>Year 1</b>	<b>Year 2</b>
<u>Title</u>	<u>2.95</u>	<u>3.22</u>
<u>Introduction</u>	<u>3.18</u>	<u>3.64</u>
<u>Scientific Format</u>	<u>3.09</u>	<u>3.32</u>
<u>Methods and Materials</u>	<u>3.00</u>	<u>3.55</u>
<u>Non-Experimental Info</u>	<u>3.18</u>	<u>3.50</u>
<u>Designing the Experiment</u>	<u>2.68</u>	<u>3.32</u>
<u>Defining Operationally</u>	<u>2.68</u>	<u>3.50</u>
<u>Controlling Variables</u>	<u>2.73</u>	<u>3.18</u>
<u>Collecting Data</u>	<u>2.86</u>	<u>3.36</u>
<u>Interpreting Data</u>	<u>2.90</u>	<u>3.59</u>
<u>Overall</u>	<u>2.93</u>	<u>3.42</u>

(From Walvoord and Anderson, *Effective Grading: A Tool for Learning and Assessment*, 1998, pp. 197-201, 147).

#### ***Example: Rubric for Journals in English Literature***

Connecting literature to students' own lives and values

1. Journal entry merely summarizes the literature OR merely reflects on the student's own life and values
2. Journal entry summarizes the literature AND reflects on the student's life and values, but makes little or no explicit connection between the two
3. Entry uses the literature in a very simple way to draw "lessons" to apply to the student's own life
4. Entry makes thoughtful links between the literature and the student's own life and values. It uses the literature as a vehicle for pushing and exploring the student's own life and values. It recognizes the complexity both of the literary work and of life and values.

# Resources

## The Short List

- Walvoord, B. E. *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education*. Jossey-Bass, 2004. In 79 pages plus appendices, I try to give institutions, departments, and gen ed programs all they will need.
- Palomba, C. A., and Banta, T.W., eds. *Assessing Student Competence in Accredited Disciplines: Pioneering Approaches to Assessment in Higher Education*. Sterling, VA: Stylus Publishing, LLC, 2001. At 350 pages, it gives more extensive details on many of the subjects covered in this volume, and it is organized as a manual of advice to practitioners. The single most useful reference as an accompaniment to Walvoord's short guide.
- Stevens, D.D. and Levi, A.J. *Introduction to Rubrics*. Sterling, VA: Stylus, 2005.
- Suskie, L. *Assessing Student Learning: A Common Sense Guide*. Anker, 2004. A 300-page guide with many good ideas and illustrations.
- Banta, T. W., Lund, J. P., Black, K. E., and Oblander, F. W. *Assessment in Practice: Putting Principles to Work on College Campuses*. San Francisco: Jossey-Bass, 1996. Contains 82 case studies of best practice, each in 2-3 pages. More than a decade old, but still a wealth of practical ideas. 350 pages.
- Walvoord, B. E., and Anderson, V. J. *Effective Grading: A Tool for Learning and Assessment*. San Francisco: Jossey-Bass, 1998. Shows how the classroom grading process can be enhanced and how it can be used for assessment. Helps classroom teachers make the grading process fair, time-efficient, and conducive to learning. Contains a case study of how a community college used the grading process for general-education assessment.
- Web pages and publications of your regional and professional accreditors

## Additional Resources

- Astin, A. W. *Assessment for Excellence: The Philosophy and Practice of Assessment and Evaluation in Higher Education*. American Council on Education Series on Higher Education. Phoenix: Oryx Press, 1993. A thoughtful treatment of the values and theoretical frameworks behind various assessment practices, as well as very practical advice about gathering and interpreting data, from one of the most respected higher education researchers.
- Banta, T. W. & Associates. *Building a Scholarship of Assessment*. San Francisco: Jossey-Bass, 2002. Essays by leaders in the field, addressing practical issues, but focusing on developing a "scholarship of assessment." Bibliography provides recent references to more specialized works on designing and selecting assessment instruments and other topics. 300 pages.

- Huba, M. E., and Freed, J. E. *Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning*. Needham Heights, MA.: Allyn & Bacon, 2000.
- Lucas, A.F., and Associates. *Leading Academic Change: Essential Roles for Department Chairs*. San Francisco: Jossey-Bass, 2000. Collection of essays on leading change in departments. Essays by Gardiner and Angelo are especially valuable for guiding assessment.
- Messick, S. J., ed. *Assessment in Higher Education: Issues of Access, Quality, Student Development, and Public Policy*. Mahwah, NJ: Lawrence Erlbaum Associates, 1999. Places assessment in broader social and political contexts.
- Nichols, J. L. *Assessment Case Studies: Common Issues in Implementation with Various Campus Approaches to Resolution*. New York: Agathon Press, 1995. Nichols, J.O. *The Departmental Guide and Record Book for Student Outcomes Assessment and Institutional Effectiveness*, 2<sup>nd</sup> ed. New York: Agathon Press, 1995. Nichols, J.O. *A Practitioner's Handbook for Institutional Effectiveness and Student Outcomes Assessment Implementation*, 3<sup>rd</sup> ed. New York: Agathon Press, 1995. These are practical guides to an extensive assessment process, with illustrative case studies.
- Peterson, M. S. Augustine, C. H., Einarson, M.K., and Vaughan, D. S. *Designing Student Assessment to Strengthen Institutional Performance in Associate of Arts Institutions*. Stanford, CA: Stanford University, National Center for Postsecondary Improvement, 1999. Similar volumes, also 1999, on Baccalaureate, Comprehensive, and Doctoral/Research universities.
- Upcraft, M. L. and Schuh, J. H. *Assessment in Student Affairs: A Guide for Practitioners*. San Francisco: Jossey-Bass, 1996.
- Walvoord, B. E. "Assessment in Accelerated Learning Programs." In R. J. Wlodkowski and C. E. Kasworm (eds.), *Accelerated Learning for Adults: The Promise and Practice of Intensive Educational Formats*. New Directions for Adult and Continuing Education, no. 97. San Francisco: Jossey-Bass, 2003. An 11-page summary of an early version of Walvoord's *Assessment Clear and Simple*, applicable not only to accelerated learning but also to traditional higher education.
- <http://ericae.net> provides links to what the sponsors consider some of the best full-text books, reports, journal articles, newsletter articles, and papers on the Internet that address educational measurement, evaluation and learning theory
- <http://ts.mivu.org>. The on-line journal, *The Technology Source*, sponsored by Michigan Virtual University, contains an online index: look under "assessment—past articles." Practical ideas for classroom and institutional assessment of online courses as well as other computer-based applications such as on-line testing.
- Subscribe to *Assessment Update* for the most recent examples and developments in assessment. Published monthly, it contains brief case studies of successful practice, updates on new developments, and reflections on issues of theory and practice. Order from the web page ([www.josseybass.com](http://www.josseybass.com)) or by phone, 888-481-2665. Back issues are available.
- American Association for Higher Education is the premier national higher-education organization helping higher education institutions with assessment. Their conferences,

web resources, and publications are an ongoing source of good information ([www.aahe.org](http://www.aahe.org)).

- Conferences:
  - National Assessment Institute, held in Indianapolis at the conference center of the Indiana University-Purdue University Indianapolis, organized by Trudy Banta, one of the leading experts in assessment ([www.planning.iupui.edu](http://www.planning.iupui.edu). Click on conferences).
  - Annual conferences of your regional or disciplinary accreditor