Departmental Assessment:
Clear, Simple, and USEFUL

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Definition

Assessment of student learning is the systematic gathering of information about student learning and the factors that affect learning, undertaken with the resources, time, and expertise available, for the purpose of improving the learning.

The purpose of assessment is informed decision-making, including the use of information about student learning.

The Three Basic Steps of Assessment

1. Articulate learning goals
   > "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

The Basic, No-Frills Departmental Assessment Plan

1. Learning goals (at the end of the program, students will be able to…)
2. Two measures:
   a. One direct measure (direct means student performance is directly evaluated, as in tests, exams, projects, interactions with clients, etc.)
      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 (indirect means an intervening step, such as asking students what they thought they learned, or tracking their career or graduate school placement)
      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.
   a. Set aside at least 2 hours to discuss ONE of your degree programs.
   b. Put the annual meeting in place NOW, without waiting for the perfect data.
   c. At the meeting, consider whatever data you have about learning, no matter how incomplete or inadequate.
   d. Outcomes of the meeting:
      i. ONE action item to improve student learning, with a timeline and assignment of responsibility
      ii. ONE action item to improve the quality of data, if needed, with a timeline and assignment of responsibility
   e. Keep minutes of the meeting
      i. To serve as your own record and reminder
      ii. To document for accreditors that assessment is taking place

Appendix A: Department of Biology Assessment Report

Majors

(Note: 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_____

Measures	Goal 1	Goal 2	Goal 3	Use of the information
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 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		X	X	Data reviewed annually by department for

Measures	Goal 1	Goal 2	Goal 3	Use of the information
how well alums thought they learned to conduct and communicate scientific research				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.

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 #2: Department of the Meaning of Human Life and Death

Chair: Mo Mentomori
April 1, 2008

Undergraduate Major

1. Learning Goals

When students complete the undergraduate major, they should be able to:

1. *For those in the science track*: Describe the physiological processes of "life" and "death" in humans and the scientific problems/issues that arise in describing those processes
2. *For those in the religion/philosophy track*: Outline the major philosophical and theological positions and controversies about human life and death that characterize historical and contemporary thought in at least two religious/philosophical traditions (e.g. Christianity, Judaism, Islam, Buddhism)

For both tracks:

3. Structure questions/hypotheses, design, and conduct inquiry (scientific, social scientific, or philosophical/theological) about life and death
4. Analyze, study, compare, and critique the definitions and meanings given to "life" and "death" in various cultures and religious traditions around the world
5. Construct and critique arguments, and analyze evidence about various issues concerning life and death
6. Acknowledge the complexity of issues of life and death
7. Show empathy and respect for those who hold positions different from their own
8. Articulate their own emerging values around issues of life and death
9. Be inclined to take action within their own society to live out their values and commitments around issues of life and death,
10. Communicate effectively orally, graphically, in writing, and in electronic media about issues of life and death

2. Gathering and Using Information about Student Achievement of the Goals

Measures	Goals Addressed	Use of the Information
1. Student senior projects are evaluated by the professor of the capstone course	all	Senior capstone teachers report annually to the department on strengths and weaknesses of the students' work in the aggregate. The department discusses and takes action as appropriate. Aggregated results are reviewed by the external consultants during academic review by the provost, every 7-8 years
2. A survey administered anonymously to all seniors in the senior capstone course asks students about their own perceptions of their learning, the factors that enhanced their learning or made it more difficult, and their suggestions for improvement.	all	Results of the survey are reported annually to the department and are analyzed during academic review, as above.

3. Examples of Change Based on Assessment Information

a. The review of senior student work reported by capstone faculty to the department in Fall 2001 showed students weak in their ability to present alternative views fairly, and to effectively address counterarguments or counterevidence to their own positions. The department decided to add major assignments that would require these skills in 103, in 210, and in 336, so that students would be better prepared in this area before the 499 capstone. In the report to the department of 2005 and 2006, student performance seemed stronger in these areas. The department will continue to track progress.

b. Student surveys from the science track consistently recorded difficulty with the amount of scientific information in the 100 and 200-level courses. Faculty teaching those courses analyzed final exams to identify areas of difficulty. An analysis of drops and grades below "C" showed that 23% of the students who took the 200-level science-track course subsequently dropped from the major. A committee will present recommendations for revising the 100-200-level science-track courses to try to address these problems.

4. Recommendations for Changes in the Assessment Process

We are pleased with the assessment process and foresee no immediate changes.

Example #3: Department of Theater

1.Learning Goals:

All theater majors should be able to:
1. Apply fundamental critical thinking skills to the analysis and interpretation of dramatic literature with particular attention yo acting, designing, or technical production. Such skills to include close reading of dramatic texts, analysis of genre, written and verbal presentations, and cross-cultural and cross-period research and analysis. Students must use both verbal and non-verbal aspects of communication in the presentation of resulting creative works.
2. Select and use, with safety and efficiency, the tools and equipment basic to theatre production technology including those required for both set and costume construction.
3. Communicate to an audience through at least one of the components of theatrical art: acting, designing, stage managing, or technical production.
4. Function effectively as a member of a theatre production team in the preparation of regularly scheduled public productions.

2.Gathering and Using Information about Student Achievement of the Goals

Measure	Goal	Use
Capstone Senior Project. Every senior student makes 10-12-minute presentation of work in his/her area (e.g. acting, design/production) before the entire faculty.	1, 3	Following each round of senior project presentations, faculty each complete evaluation in his/her own discipline, shared with other faculty and with the student. Faculty award grades. When significant number of student fail to pass or overall quality is low, faculty hold separate meeting to identify causes and take action.
Student Acting Auditions presented by each acting- emphasis student before members of acting faculty.	1, 3	Acting faculty meet following the auditions to consider quality of student work and make needed changes.
Production and Design Gateway Assessment through final exams in Scenography and Costume.	1, 2, 3	Faculty in Production/Design track student performance on these exams and make adjustments as needed
Performance Gateway Assessment through performance at middle and	1, 3	Faculty in Performance view the assessment and take notes, guided

end of first two semesters.		by competencies stated in the acting curriculum documents. When a significant number of students are found to be unprepared for promotion through these gateway courses, faculty consider causes and takes action.
Theatre Productions. Each major participates in at least one production of a live theatre performance for the public. Students are evaluated by faculty in their discipline at the end of each scheduled production on their ability to work effectively as a team member and communicate with the audience through their chosen medium. Faculty in all the disciplines collaborate to reach composite understanding of the student's overall performance and the performance of the students as a group.	1, 2, 3, 4	When a negative pattern emerges, faculty meet to diagnose any problems in curriculum, course sequencing, and/or instruction methods.
Exit Surveys and Interview. All graduating seniors are encouraged to meet with the chair for an exit interview. Students are asked to share their general impressions about the program.	1, 2, 3, 4	Results from interviews are shared with full time faculty at each annual faculty retreat.

3.Examples of Change Based on Assessment Information

- Acting faculty concluded that many seniors were failing to organize their senior projects to best reflect their actual skills. Faculty reconstructed the course so that it is now under the guidance of a single instructor (as opposed to individual academic advisors), and guided by a more detailed syllabus with progressive deadlines to keep students on track.
- In the acting auditions, in 2008, faculty noted that many first year students were performing poorly in the area of audience communication, referred to as "poise, clarity and brevity of introduction." The following year, the instructors for Craft of Acting I adjusted their lesson plans to include exercises addressing this specific issue at the end of the semester prior to auditions. Acting faculty have since noted a substantial improvement in first year students' auditions in this area.
- In 2007, in evaluating the student productions, design/production faculty pointed out that otherwise strong student designers sometimes failed to act as good team members because they had varying notions of their duties and expectations. Faculty responded by researching other university theatre department guidelines for student designers and developing their own. These universal guidelines have greatly improved

communication and resulted in much better teamwork among production/design students.

4.Recommendations for Changes to the Assessment Process

- To make the interview data more clear and specific, we intend to being asking standardized questions during the exit interviews.

Appendix B: Rubrics

Example #1: Rubric for Senior Biology Scientific Report

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. This is the major assignment in this course, titled "Scientific Research." The course was instituted recently as a result of employer feedback that students were insufficiently prepared to really understand and carry out the scientific method. The goal of the course is to prepare students to conduct original scientific research and present it orally and in writing. There were no resources to make this a lab course, so the students had to conduct research outside the lab. Most student graduates will be working with commercial products in commercial labs in the area, e.g. Noxell. In the assignment, 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).

Rubric for Written Scientific Report

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 place is 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 it cannot be replicated.

Non-experimental Information

5 -   Student researches and includes price and other non-experimental 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 non-experimental 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 excludes, 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.

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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 operational 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.

3 -   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

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

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

Example #2: Rubric for Evaluating Student Literary-Critical Essays

Note: such a rubric may be developed for use by all faculty teaching the gen-ed literature course, or faculty may be free to develop their own rubrics, perhaps using this as a guideline, or faculty may be asked to incorporate one or two common items into their own rubric.

5	4	3	2	1
Thesis: The thesis of the paper is clear, complex, and challenging. It does not merely state the obvious or exactly repeat others' viewpoints, but creatively and thoughtfully opens up our thinking about the work.	The thesis is both clear and reasonably complex.	The thesis of the paper is clear. It takes a stand on a debatable issue, though the thesis may be unimaginative, largely a recapitulation of readings and class discussion, and/or fairly obvious.	Thesis is relevant to the assignment. It is discernible, but the reader has to work to understand it.	Thesis is irrelevant to the assignment and/or not discernible.
Complexity and Originality: The essay is unusually thoughtful, deep, creative, and far-reaching in its analysis. The writer explores the subject from various points of view, acknowledges alternative interpretations, and recognizes the complexity of issues in literature and in life. Other works we have read and ideas we have discussed are integrated as relevant. The essay shows a curious mind at work.	The essay is thoughtful and extensive in its analysis. It acknowledges alternative interpretations and recognizes complexity in literature and in life. Some other works are integrated as relevant.	The writer goes somewhat beyond merely paraphrasing someone else=s point of view or repeating what was discussed in class. AND/OR the essay does not integrate other relevant works we have read.	Writer moves only marginally beyond merely paraphrasing someone else's point of view or repeats what was discussed in class.	The paper is mere paraphrase or repetition.
Organization and Coherence: The reader feels that the writer is in control of the direction and organization of the essay. The essay follows a logical line of reasoning to support its thesis and to deal with	As for "5" but sub-points may not be fashioned to open up the topic in the most effective way.	The reader feels that the writer is in control of the direction and organization of the essay most of the time. The essay	The essay has some discernible main points.	The essay has no discernible plan of organiza-tion.

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5	4	3	2	1
counter-evidence and alternative viewpoints. Sub-points are fashioned so as to open up the topic in the most effective way.		generally follows a logical line of reasoning to support its thesis.		
Evidence, Support: The writer's claims and interpretations are richly supported with evidence from the works we have read, secondary sources, and sensible reasoning. The writer assumes the reader has read the work and does not need the plot repeated, but the writer refers richly and often to the events and words of the literature to support his/her points.	As for "5" but the writer may briefly drop into mere plot summary	The writer's claims and interpretations about the works are generally backed with at least some evidence from the works. The writer may briefly drop into mere plot summary	The writer's claims are sometimes backed with evidence and/or the paper drops often into mere plot summary.	The paper is primarily plot summary.
Style: The language is clear, precise, and elegant. It achieves a scholarly tone without sounding pompous. It is the authentic voice of a curious mind at work, talking to other readers of the literary work.	The language is clear and precise.	The language is understandable throughout.	The language is sometimes confusing. Sentences do not track.	The language is often confusing. Sentences and paragraphs do not track.
Sources: The essay integrates secondary sources smoothly. It quotes when the exact words of another author are important, and otherwise paraphrases. It does not just string together secondary sources, but uses them to support the writer's own thinking. Each source is identified in the text, with some statement about its	As for "5" but sources may occasionally be quoted with no contextual explanation AND/OR writer may use direct quotation and paraphrase in less than optimal ways.	The essay does not just string together secondary sources, but uses them to support the writer's own thinking.	The essay strings together secondary sources.	There is no use of secondary sources.

5	4	3	2	1
author; there are no quotes just stuck into the text without explanation.				
Grammar, Punctuation: There are no discernible departures from Standard Edited Written English (ESWE)	There are a few departures from ESWE	There are no more than an average of 2 departures from ESWE per page in the critical areas listed below.	There are more than 2.	Some portion of the essay is impossible to read because of departures from ESWE.

Critical Areas:
-Spelling or typo
-Sentence boundary punctuation (run-ons, comma splices, fused sentences, fragments)
-Use of apostrophe, -s, and -es
-Pronoun forms
-Pronoun agreement, and providing antecedents for pronouns
-Verb forms and subject-verb agreement
-Use of gender-neutral language
-Capitalization of proper nouns and of first words in the sentence

Example #3. Rubric for Journals in English Literature

Assignment: Journals are to record students' questions about the literature and to consider how the literature relates to their own lives and values.
To achieve a C or above, the journal must be handed in on time, must contain the required number of daily entries, and each entry must be at least 250 words.
The faculty member collects and grades the journal entries periodically throughout the course; thus each grade reflects a number of journal entries.
The faculty member grades the journal entries on only two criteria: posing questions and connecting the literature to the students' own lives and values.

Posing Questions
1. The journal entries do not pose any questions and/or or they do not address the literature.
2. The journal entries pose at least one question that relates to the literature, but the question(s) raised are only factual or obvious questions that have simple answers. If the student attempts to answer the question, the answers are brief and limited.
3. As for 2 above, but at least once, the writer wrestles with the question for at least a couple of paragraphs, exploring possible meanings, answers, implications, and relating

the discussion to the work of literature. The writer's response shows recognition that more than one interpretation may be valid, and that more than one literary-critical lens may be useful.
4. The journal contains two or more entries where the writer poses and wrestles with a question as in 3 above.
5. The journal entries contain more than three entries that pose questions as for 4 above, and/or at least one question is addressed in several pages of unusually creative musing that address larger issues, extending the discussion to related areas, bringing in other readings, noting underlying assumptions, employing and evaluating more than one literary-critical lens, addressing multiple possible interpretations, or in other ways deepening the inquiry, showing a curious mind at work.

Connecting Literature to Students' Own Lives and Values
1. Journal entries merely summarizes the literature AND/OR merely reflect on the student's own life and values, but make little or no explicit connection between the two.
2. Journal entries summarize the literature AND reflect on the student's life and values. In at least one instance, the entry makes a connection between the two, but the connection is abbreviated, or it uses the literature in a simple way to draw "lessons" to apply to the student's own life.
3. One entry makes thoughtful links between the literature and the student's own life and values. It recognizes the complexity both of the literary work and of life and values.
4. More than one entry does as in 3 above.
5. All of the entries do as in 3 above. The students' musings are rich and deep, showing a thoughtful, reflective mind at work.

Appendix C: Data for Presentation to Department Annual Meeting

A Department of Economics

Measures

$ Direct: **Analysis of the senior capstone research** projects (written papers plus oral presentations). Three faculty examined a sample of written papers and attended oral presentations for a sample of senior students. These faculty produced written analyses of the student work, using the learning goals as criteria. These analyses were submitted to the assistant chair.

1.

$ **Focus groups of current students**, who met for an hour with the assistant chair

2.

$ **Alumni Survey**, conducted by the department under the leadership of the assistant chair, asking alumni to

3.

   $ Rate how important each of the learning goals were to them in their careers. 5 = essential; 4 = very important; 3 = important; 2 = slightly important; 1 = not important

4.

   $ Rank how well they had achieved this goal during their major. 7th = highest; 1st = lowest.

Goals, Assessment Methods, and Findings

Goal: 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)

Sub-Goals/Objectives	Alumni Survey: Importance (5 = Essential; 1 = not important)	Alumni Survey: Achievement (7th = highest)	Analysis of Capstone Student Projects	Focus Groups Current Students
A. Mathematical Methods: The use of mathematical methods to represent economic concepts and to	4.33 Very important	2nd of 7 objectives. Low	None included math.	Amount of math varies among classes. Maybe calculus should be required.

Sub-Goals/Objectives	Alumni Survey: Importance (5 = Essential; 1 = not important)	Alumni Survey: Achievement (7th = highest)	Analysis of Capstone Student Projects	Focus Groups Current Students
analyze economic issues				
B. Theoretical Models: To represent economic relationships in terms of theoretical models	4.33 Very important	3rd of 7 objectives. Low	Models used in papers and presentations with reasonable success.	Achievement is enhanced by having TA sessions. Theory course is good foundation if taken before other courses.
C. Gather Data: To gather economic data pertinent to economic theories in order to analyze economic questions	4.17 Very important.	5th of 7 objectives. High	Students showed an ability to collect data but over-relied on the web	Library research used in a few classes only.
D. Statistics: To use statistical methods to analyze economic questions	3.83 Very important	6th of 7 objectives. High	Little evidence of statistical methods	Limited exposure. Complaint about book used.
E. Software. To use statistical computer software to analyze economic issues	3.33 Important	7th of 7 objectives. Highest	Little evidence of use	Concern that software used in career will be different
F. Writing. To express economic ideas succinctly and professionally in writing	4.17. Very important	4th of 7 objectives. Medium	Writing skills of students generally acceptable, but not "very good" or "excellent"	Writing required more than speaking. In particular, research papers required in 588 and 575
G. Oral. To express economic ideas succinctly and professionally orally	4.5. Very important/ essential	1st of 7 objectives. Lowest.	Presentations revealed a lack of training in how to present, as well as nervousness.	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

Sub-Goals/Objectives	Alumni Survey: Importance (5 = Essential; 1 = not important)	Alumni Survey: Achievement (7th = highest)	Analysis of Capstone Student Projects	Focus Groups Current Students
				part of the Arts and Sciences college requirements. More discussion and presentations were advised.

Appendix D: Criteria for a Department's Report on Its Assessment

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Possible Audiences:
- Internal committee or director charged with oversight for assessment
- Inclusion in institution's report to regional accreditors
- Basis for program review, strategic planning, and/or budget requests

CRITERIA	
Learning Goals	
Learning goals are stated (or a URL is provided) for each degree or program of study	
Learning goals are stated as "Students will…"	
Learning goals are readily available to students and faculty	
The goal statement is limited to the learning goals; no other extraneous material is included.	
Methods for Collecting Information about Student Achievement of the Goals	
The dept uses at least one direct and one indirect method for each degree/ program of study.	
The dept collects only data that it will actually use for decision-making and that it deems reliable and valid for those purposes. No data are being collected that are not also being used.	
The report makes clear the relationship between the learning goals and the methods of collecting information.	
The methods of collecting information, taken together, address all the learning goals, or, if not, then the department explains its strategic choice about which goals to assess first.	
The report includes ONLY methods in which information from students is considered by the dept as a whole or a relevant group/ committee. The report does not include assessments that are considered only by a teacher to make improvements in his/her classroom, nor does it include explanations of requirements students must complete or other methods of individually grading students or determining their progress through the degree program, unless data from those assessments are aggregated and presented to the dept or a relevant committee for action.	
Assessments are based on whole populations (e.g. all majors) or on samples of reasonable size.	
Direct Methods	
Direct assessment does not depend on grades or other very broad evaluations, but is diagnostic and specific, yielding information about specific student strengths and	

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weaknesses, so the dept knows what to work on. (Example: NOT "The students' average grade on the capstone research project was 3.5," but "In the capstone research project, the weaknesses of senior students as a whole were A,B, and C, and their strengths were X, Y, and Z.")	
If the department relies on faculty members' individual reports about student work in the faculty members' own classrooms, the dept takes steps to encourage the objectivity of those reports by, for example, asking faculty to explicitly state and share the assignments or tests on which the assessment is based and the criteria and standards (perhaps in rubric form) that the faculty member has applied.	
Indirect Measures	
The dept's indirect measure(s) seem reasonable given the resources at hand and the kinds of information the dept needs for its decisions.	
For surveys, the dept has achieved a reasonable response rate, or it explains its thinking about response rates.	
Using Assessment Information for Dept Action	
Dept clearly describes its mechanism for considering assessment data and using data to make decisions at the dept level	
Description includes the types of data reviewed by the dept or the relevant committee	
Description includes the frequency of meetings	
Description includes the persons who participate	
If dept describes actions that have been taken or actions planned, these show how the decision is connected to the assessment data.	
The dept demonstrates that it continuously considers the quality of its assessment data and strives to improve that quality, given its limitations of time and resources.	

Program Review at UMD

Review of academic programs is an essential component of UMD's mission and enterprise. It provides opportunity for self-evaluation and for outside peer-evaluation. Results can serve to re-enforce the current strategy or to prompt new direction. The results of these reviews can be incorporated into the planning activities of the collegiate unit and the campus. It is important to have an objective evaluation with full disclosure of its findings.

Program Review Cycle

This program review process will be superceded by discipline accreditation requirements which are typically more comprehensive in nature. The program review cycle lists all individual and separate programs; however, any accreditation or external program review may cover multiple programs, either because of the nature of the disciplines or because there are multiple programs in a department.

Programs will be reviewed every five-seven years, depending on specific accreditation cycles. The self-study process will be initiated a year in advance by the VCAA and will include any specific questions that reviewers will be asked to address.

The self-study, guided by the outline below, should use historical data to review performance and quality, but at the same time, should be written with a forward-looking approach. Where and how is the department situated to deliver programs in the next 3-5 years? How are shifts and trends in historical data being used as a basis for planned changes.

The narrative of the report should be 20-25 pages; data can be embedded or included as tables in an appendix. The self-study may be longer for those departments offering several programs. Faculty vitae should be included in a separate volume. The self-study should cover the following items, as well as specific questions from administration, in a format that makes sense for the department.

1. Mission, goals and objectives of the department and programs.
2. Curriculum
    1. Describe the curriculum including its learning objectives, strengths and weaknesses.
    2. List the methods used to measure the learning outcomes.

3. Explain how results of these measures have affected changes in the program.
4. Include course objectives for all required courses in the appendix.
5. Discuss changes in the curriculum over the last three-four years, with reference to the last review if applicable.
6. Discuss how course offerings serve the needs of students from other departments and the general education requirements.

3. Undergraduate Advisement. Describe the advising model for students in the Program, and the typical faculty advising loads. What assessment or evaluation of advising is conducted?
4. Program Viability. Describe current and projected enrollment information: applications, admissions, persistence, graduation rates, number of credits on graduation; average gpa at graduation, etc. Discuss what students do upon graduation from the program.
5. Faculty. Describe the makeup of the faculty considering such things as:
   1. Academic and experiential background of the faculty
   2. Rationale for the size and composition of the program faculty
   3. Quantity and quality of the faculty to meet the teaching and advising needs of the program
   4. Extent of faculty turnover and changes anticipated for the future
   5. How the faculty composition reflects the diversity goals of the institution and efforts are being made to recruit faculty from underrepresented populations.
6. Capacity. Discuss resources for the program, including support staff, facilities, etc.
7. Program Administration. Comment on the effectiveness of the administrative and committee structure within the program. How well does it interact with students, the College (especially the Dean's office and Department Heads), and other governing bodies at UMD and the University as a whole?
8. Summary. How successful is the Program in achieving its objectives, as identified by assessment and this review. State the major problems identified by assessment and this review and what can be done to solve the problem without additional resources. What additional resources might be needed to solve this problem?

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.
- Banta, T.W., Jones, E.A., and Black, K.E. *Designing Effective Assessment: Principles and Profiles of Good Practice.* San Francisco: Jossey-Bass, 2009.
- 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. Though now nine years old, 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

General Education Assessment

- Banta, T.W. (ed.). *Assessing Student Achievement in General Education: Assessment Update Collection*. San Francisco: Jossey-Bass, 2007. Banta's opening essay is very helpful as an overview of gen-ed assessment and a sensible evaluation of possible approaches. The rest of the volume contains essays from the newsletter *Assessment Update*.
- Bresciani, M.J. (ed). *Assessing Student Learning in General Education*. Boston, MA: Anker, 2007. Very useful case studies.

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*. Mahweh, NJ: Lawrence Erlbaum Asociates, 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*, 2nd ed. New York: Agathon Press, 1995. Nichols, J.O. *A Practitioner's Handbook for Institutional Effectiveness and Student Outcomes Assessment Implementation*, 3rd 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.

- www2 .acs.ncsu.edu/upa/assmt/resource.htm. North Carolina State University maintains a website with links to numerous resources on assessment.
- 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) or by phone, 888-481-2665. Back issues are available.
- Conferences:
  - National Assessment Institute, held in Indianapolis under the auspices of the Indiana University-Purdue University Indianapolis, organized by Trudy Banta, one of the leading experts in assessment (www. planning.iupui.edu. Click on conferences).
  - North Carolina State University annual assessment conference. http://www.ncsu.edu/assessment/symposium/
  - Annual conferences of your regional or disciplinary accreditor