EXAMPLE

DEPARTMENTAL/PROGRAM ASSESSMENT REPORT
Department: _____Biology_____

SECTION 1: 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: _____

SECTION 2: Measures and Use of Information

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	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	X	X	X	Senior capstone

original scientific experiment, write it up in scientific report format, and also make an oral report to the class. The instructor(s) use a rubric to evaluate student work.				instructor(s) share students' rubric scores with the department. The department takes action as above. Program review as above.
Alumni survey asks how well alumni/alumnae thought they learned to conduct and communicate scientific research, what aspects of the program helped them learn, and what suggestions they have for improvement in the program.	X	X	X	Data reviewed by department for action, as above. Program review as above.
Sample of regional employers gathered two years ago to reflect how well our majors are doing and give advice to department.	X	X	X	Data reviewed annually by department for action, as above.

DATA

Fall 2012 Writing Assessment Report for Math and Science Division

Course	n	Usage of Standard English		Acceptable Essay Form		Critical Thinking	
		Yes	No	Yes	No	Yes	No
Biol 2115	8	6	2	5	1	8	0
Biol 2103	8	6	2	8	0	8	0
Total	16	12	4	13	1	16	0

SECTION 3: Recommendations for Improving Assessment Processes

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

SECTION 4: Examples of ACTION Based on Assessment Data

- 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.

SECTION 4: Budgeting and Planning

Current Findings: Analysis of student senior capstone work, as well as senior student surveys reveal that

many students are weak in graphing skills. Particularly, students choose randomly among types of graphics, rather than selecting the best for the audience and purpose; they do not provide enough information on the graph itself alone; they draw the graphics in misleading ways; they do not correctly title the graphs or label the axes of the graphs; and they do not integrate the graphic information appropriately into the text. The department would like to address this problem as its action item.

Action Plan: The department has appointed a task force to take these actions:

- Search for, or construct, a diagnostic test of graphic competency that could be given to students to pinpoint their strengths and weaknesses in graphing.
- Investigate online, interactive graphics instruction modules that might be integrated into the curriculum
- Identify course in which more graphic instruction, practice, feedback, and assessment could be included
- Discuss with the mathematics department how the required math course might better provide our students with the graphic skills they need.

Resources:

- Summer stipend fir two professors to complete the first two items above
- If necessary, purchase or license fees for the test or modules in the first two items above
- Pizza lunch for faculty to discuss classroom strategies for helping students with graphics

Walvoord, B.E. (2010). *Assessment Clear and Simple*. San Francisco, CA: Jossey-Bass.