Examples of Best Practice in SAS Program Assessment

Departments and programs across SAS have implemented and reported on a broad array of assessments of their majors and minors.

There are many best practices we could cite as examples of evidence-based decision-making in SAS: following are just a few of the ways that programs are being strengthened through student learning outcomes assessment.

assessment resources
The program learning goals of Africana Studies emphasize readiness for postgraduate success both professionally and academically, and as part of their effort to ensure such student outcomes, they have integrated direct assessment across their curriculum, including such program elements as internships, service learning, and study abroad. Most notably, they created a new culminating experience for their majors: a capstone seminar explicitly designed around the benchmarks they have established for student achievement of the program learning goals at completion of the Africana Studies major. The course design features a comprehensive series of formative assessments in structured tasks and assignments that directly address improvement of student outcomes on these goals.

In addition, they have linked each student learning outcome with at least one specific course or other element of the required curriculum leading up to this capstone, and developed benchmarks for achievement at each level, to be measured using common rubrics. Africana Studies has surveyed its graduates on how the major’s required and elective courses, internships, and service-learning experiences contribute to their readiness for professional success and/or graduate study, and the responses are used to inform their analysis of the direct assessment results as they consider possible modifications to their courses and curriculum.
Art History has multi-year assessment results for its program learning goals in all the courses of its culminating sequence, including its capstone-equivalent junior-senior seminars, and has used these assessment results to guide program and course revisions intended to improve student learning outcomes on the program’s competency goals. A standard assessment rubric (below) is used by multiple assessors to score student work from all these courses, and to generate year-to-year comparative data tracking changes in aggregate student performance on the learning goals at or near program completion. Modifications based upon the analysis of these results have included new pedagogical approaches in the culminating experience courses; curriculum revisions and the addition of co-curricular support to address identified areas of weak student performance; and mechanisms for better communicating program and course learning goals to students, disseminating the assessment rubrics and providing guidelines for how to achieve improved outcomes in all department courses.

<table>
<thead>
<tr>
<th>Did the student demonstrate critical thinking?</th>
<th>Yes. The student achieved a high degree of competence in this area</th>
<th>Somewhat. The student needs work in this area</th>
<th>No. The student did not demonstrate competence in this area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the student use appropriate sources?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did the student construct a historical and theoretical argument?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did the student construct a historical and theoretical argument?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cell Biology & Neuroscience continued its strong, comprehensive program assessment progress, which has steadily advanced to incorporate direct assessment in all the required and elective courses of their program. Close-the-loop actions over time have included revisions to program advising processes to match students more effectively to research faculty; review and modification of required courses identified as duplicative in topical content; development of new courses for non-majors and increased research opportunities for majors; and course scheduling revisions to improve student progress to degree completion, especially addressing the scheduling issues of double majors (a significant percentage of CBN students).

CBN now has multi-year direct assessment data on SLOs at program completion, scoring student performance on research and communication competencies in all its capstone courses with a set of 5 customized rubrics based on its program learning goals. These direct assessment results have been analyzed in conjunction with registration and graduation data that have revealed significant improvements in timely progress to graduation, as well as improved student performance measures in advanced courses, and augmented with indirect assessments of the revised courses and curriculum derived from an exit survey of graduating majors, and linked explicitly to program goals for post-graduate success.
Involving Majors in the Program Assessment Process

Classics

The Classics department has taken the approach of involving their graduating seniors actively in their program assessment process. They developed a set of benchmarks for student performance on their program learning goals at or near completion, and have used the resulting rubrics in direct assessments of a sample of student work from their upper-level courses. Graduating seniors are asked to submit a set of essays representative of their work in the major, and a panel of faculty members score student attainment of the desired outcomes in this work.

The department uses the results of these assessments both to inform their curriculum revision processes and to better understand the match between their own expectations and those of their students. In response to the results, Classics has implemented a new strategy to increase student participation in study-abroad and other co-curricular options that are closely aligned with student achievement of their program learning goals.
Augmenting the Culminating (Capstone) Experience to Improve Outcomes and Assessment

**Comparative Literature** has generated multi-year assessment results from a culminating experience for all its majors. A senior capstone workshop was created to support student performance near program completion, and serve as a site for assessment of the content knowledge learning goals for the major. Mandatory for all graduating seniors not completing an Honors Thesis, this one-credit course requires the completion of a research paper, and a reflective essay on the student’s experience of the major. Results of these direct and indirect assessments have led to changes in the department’s advising structure; revisions to the requirements for the senior research paper; and changes to the content and delivery of the workshop itself, with the aim of further improving student outcomes, clarifying expectations for the work submitted, and prompting more useful feedback from students.

---

**Junior Capstone Workshop**

The purpose of the Senior Capstone Workshop is to assess your achievement of the goals for the Comparative Literature Major.

**Comparative Literature Learning Goals**

1. Students will demonstrate familiarity with a variety of world literatures as well as methods of study (literature and culture across national and linguistic boundaries) and evaluate the nature, function, and value of literature from a global perspective.
2. They will demonstrate critical reasoning and research skills, design, and conduct research in an individual field of concentration (such as literary theory, women’s literature, postcolonial studies, literature and film, etc.) in a specific body of research and write a clear and well developed paper or project about a topic related to more than one literary and cultural tradition.
3. They will demonstrate competency in one foreign language and at least a basic knowledge of the literature written in that language.

We assess some of these goals by checking that you have satisfied the requirements for the Major. But we need more specific tools for assessing others.

For instance, we need to assess if you are able to “analyze a specific body of research and write a clear and well developed paper or project about a topic related to more than one literary and cultural tradition.”

Additionally, relevant to assessing your ability to “design and conduct research in an individual field of concentration (such as literary theory, women’s literature, postcolonial studies, literature and film, etc.).”

**Research Paper**

The first assignment is a research paper that you will turn in to us at the end of the semester on **Thursday, Dec. 4, 2015**.

The important thing is that the paper must meet certain requirements. These requirements are:

1. 15-page paper, following the MLA guidelines for research papers.
2. *If your major track is Comparative Literary Studies, select two or three literary texts belonging to different cultural traditions and/or geographical areas to include in your research paper.*
3. Devise an original, specific, and clear thesis on a topic that arises from putting these texts together for comparison, in relation to that topic, what is the contribution of each text? How do the texts differ? What do they tell us? Do they talk to each other? If you imagine them in dialogue?
4. In addition to interpreting the relationship of the texts among themselves regarding the chosen topic, place your reading of the texts in their historical contexts (language, cultural tradition, society, politics, gender, race, etc.).
5. You do not need to write a brand new paper; you can submit a paper (or an expanded version) that you have written before for another course, or a paper that is a combination of two or three other papers.

---

**Rubric for final papers on comparative topics:**

<table>
<thead>
<tr>
<th>Structure of the essay</th>
<th>Goals achieved (20-30 points)</th>
<th>In process (9-4 points)</th>
<th>Not achieved yet (4-0 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory paragraph with a clearly stated thesis.</td>
<td>Goals achieved consistently.</td>
<td>Goals achieved occasionally.</td>
<td></td>
</tr>
<tr>
<td>Thesis developed progressively and logically in the body of the paper.</td>
<td>Goals achieved consistently.</td>
<td>Goals achieved occasionally.</td>
<td></td>
</tr>
<tr>
<td>Concluding paragraph that summarizes the argument.</td>
<td>Goals achieved consistently.</td>
<td>Goals achieved occasionally.</td>
<td></td>
</tr>
<tr>
<td>Textual analysis</td>
<td>Able to analyze the texts according to the characteristics of their genre using the appropriate critical vocabulary, and quoting examples.</td>
<td>Goals achieved consistently.</td>
<td>Goals achieved occasionally.</td>
</tr>
<tr>
<td>Comparison</td>
<td>Able to appropriately select the texts for comparison, and establish the continuities, disjunctions, and dialogues between the chosen texts with concepts and examples.</td>
<td>Goals achieved consistently.</td>
<td>Goals achieved occasionally.</td>
</tr>
<tr>
<td>Historical-cultural context</td>
<td>Relevant background.</td>
<td>Goals achieved consistently.</td>
<td>Goals achieved occasionally.</td>
</tr>
<tr>
<td>Interpretation</td>
<td>An original interpretation. New ideas. Ideally supported by the analysis, comparison and contextualization of the texts under study.</td>
<td>Goals achieved consistently.</td>
<td>Goals achieved occasionally.</td>
</tr>
</tbody>
</table>
The Italian Department as developed and implemented direct measures of student oral and written communication across its advanced courses, scoring specific exam questions with standard rubrics. The results have informed decisions to change the curriculum and the structure and content of required courses; standardization of course evaluations at each level of the curriculum; and creation of a new capstone seminar, with direct assessments built into its design.

Assessment results led the Italian department to revise its language placement process, developing a new placement test that was piloted this year; a follow-up assessment of student learning outcomes will measure the results of the modified assessment process and curriculum in the next academic year.

Italian has been remarkably successful in involving all its faculty in assessment activities, using such tools as a Sakai site for sharing departmental assessment results and reviews, and regular communication about both program and Core learning goals assessment.
A program learning goal for Kinesiology and Health is that at graduation, all students will be prepared to immediately enter relevant careers, and be qualified for further graduate studies. To this end, seniors complete a capstone-level professional internship in an approved professional agency relevant to their specific major option (one of three health sciences tracks, or Sport Management). Upon the completion of this work-study experience, internship supervisors complete an online assessment survey that includes specific questions on student achievement of the learning goals for the major.

The survey also gathers information on the number of years of experience with internships; the number of interns from Rutgers and other universities that were supervised; how Rutgers majors perform relative to all interns, and to professional standards of practice; and other general feedback on the interns and their readiness for employment in the field. This calibration of the program’s student learning outcomes with those of comparable programs, in addition to direct evaluation of student performance in a professional setting, is valuable information in the department’s analysis of the degree to which their students are fulfilling the expectations for achievement in each program track.
Mathematics has implemented direct assessments in each capstone or “capstone analogue” course for its majors, and in introductory courses that are prerequisites for multiple majors, including its own. Common test items and workshop problems have been used in pre-/post-tests, with quantitative results scored by multiple assessors using uniform rubrics.

While developing this framework for longitudinal direct assessment of student learning outcomes over the program curriculum, Mathematics has used the assessment results to guide revisions to its courses, advising and scheduling processes. It has modified the assessment process itself, changing the selection of assessment prompts in order to generate information on how effectively different course elements foster the transfer of improved student skills from one task to another.

Direct assessment results have been used in conjunction with an analysis of course grades broken out by student class year, and data from their enrollment/special permission requests system, to assess the impact of delays in access to required courses on student acquisition of learning skills and retention of content relevant to the program goals. Based on this analysis, the department has revised its process for allocation of course seats, with follow-up assessments to measure improvements in student learning outcomes on the program goals.
Molecular Biology & Biochemistry

Based on the results of direct assessments of student performance in their research experience course sequence, Molecular Biology & Biochemistry has revised its curriculum to better prepare students for advanced study and career exploration; modified the capstone to focus on student performance of oral and written presentations of research; and created new required courses. The department uses a common rubric to collect assessments of student learning outcomes in its courses. The rubric identifies tools suitable for assessment of each learning goal, and student outcomes are ranked on a formative (developmental) scale from “developing” to “exemplary.”

At all levels of the curriculum, required research projects are assessed on the program learning goals for research content, critical analysis, and effective communication, and scored on uniform criteria by multiple assessors using this formative ranking scale. The department employs indirect assessments to augment its analysis of these direct assessment results: an exit survey of graduating majors includes questions on the effectiveness of the revised curriculum sequence and requirements (courses, research projects), in promoting achievement of the learning goals and timely progress to graduation. In addition, student responses on SIRS are used to assess the impact of course content and delivery, and to identify areas for possible further action.

The MBB department has used assessment results to revise the department’s advising guidelines and required advising meetings in each semester, incorporating career preparation activities in the junior and senior years of the major.
Psychology

The Psychology department implemented a pilot direct assessment of its program learning goals using the ETS Major Field Test in Psychology, taking advantage of the availability of this external objective metric to benchmark their student learning outcomes against a nationally-normed sample. An analysis of the test results and the test instrument itself revealed some significant mismatches between the MFT content and the program learning goals, as well as with other measures of student achievement in the major. The reliability of the test results was analyzed in light of factors affecting the participation rate and student motivation, including the lack of a link to requirements for degree completion.

Based on these results, the department concluded that the MFT is not an efficient, sustainable assessment of student achievement of its program learning goals, and is developing alternative customized in-house assessment tools, to be implemented at or near program completion as of the next academic year.
Best Practice Tips from the SAS Assessment Committee

Assessment Resources

Assessment Tools

SAS Undergraduate Program Learning Goals

SAS Assessment Committee

Developing a Program Assessment Plan (PowerPoint slides)

SAS Program Assessment Report (FORM)

Sakai Archive, SAS Program Assessment Reports (authorized users only)

Learning Goals Development & Assessment in Courses (PowerPoint slides) | PDF notes