

ENVIRONMENTAL STUDIES PROGRAM: WRITING ASSESSMENT REPORT

JANUARY 2013

Changes in personnel and faculty searches prevented the Environmental Studies Program from starting its assessment of writing earlier, but now that we have a full contingent of faculty on board, we have begun the process. This report describes the first round of writing assessment we conducted in December 2012.

Assessing Writing for Environmental Studies Majors

For our first assessment of writing in the Environmental Studies major, we examined papers from the three sections of the fall 2012 ES 100 class. ES 100 “Environmental Concerns in Perspective” serves as the gateway course to the major, introducing students to interdisciplinarity and the variety of methodologies used for Environmental Studies research. Because of the importance of environmental concerns in the world today and because ES 100 is introductory, in addition to majors, it also attracts students from a variety of interests and across the years. However, because it is the starting point for our major and all our students, this seems like a good place to begin our assessment of how our students are writing as they enter the major.

Developing a Rubric

Two academic experiences bookend the ES major: ES 100 and the capstone experience (ES 374 and ES 375). Although students follow a variety of pathways between these two points, they all conclude the major by preparing a collaborative, interdisciplinary project rooted in the Saratoga watershed. The ES 375 class provides its students with a clear, detailed set of expectations for a successfully written capstone paper:

Introduction to the research question:

- 1) Do the authors show why the issue is worth studying?
- 2) Do they provide the appropriate context for understanding their research theme?
- 3) Are the elements in #1 and #2 above informed by pre-existing scholarship (‘the literature’)?
- 4) Is the research question clearly articulated?
- 5) Does the research question arise from (bear obvious relation to) the provided context?

Methods:

- 1) Are the methods appropriate for addressing the research topic and/or hypotheses articulated in the Introduction?
- 2) Do the authors use pre-existing scholarship (‘the literature’) to construct defensible methods?
- 3) Are the authors clear about how they will collect the data? Could you repeat their study based on these descriptions?
- 4) Are the authors clear about how the resulting information will be interpreted (analyzed), and how those interpretations bear on the

research question?

Results:

- 1) Do the authors present their data clearly?
- 2) Do the authors make appropriate use of figures and tables?
- 3) Are the figures and text incorporated thematically into the written narrative?

Discussion:

- 1) Do the authors use the literature to help explain their findings and discuss how their findings are advancing our knowledge?
- 2) Do the authors make sound interpretations and conclusions based on their data?

General points:

- 1) Is the flow of arguments sound?
- 2) Is the theme of every paragraph evident, and does each paragraph build on the preceding paragraph and support the subsequent paragraph?
- 3) Is there unnecessary (or misplaced) content?
- 4) Are the conventions of grammar, spelling and referencing upheld?

Since these categories describe the quality of writing we seek from our seniors, we decided to assess how the writing of our students looks in relation to these categories as they begin the major. We developed a rubric for assessing student papers drawing from the categories above and eliminating elements that are not yet relevant to the writing of beginning students (capstone emphasizes methodology and data collection for original research). We also modified some of the language of the categories to better reflect the way in which writing is discussed in ES 100. We arrived at the rubric below composed of 13 categories that have their foundation in the writing expectations for our senior capstone projects:

Shows why the issue is worth studying
Provides appropriate context for understanding the research topic
Clearly articulates the research question (thesis)
Presents data clearly
Makes appropriate use of figures and tables
Incorporates figures and text thematically into the written narrative
Uses literature to help explain findings
Makes sound interpretations and conclusions based on data
Flow of arguments is sound
Theme of every paragraph is evident
Paragraphs build on the preceding paragraph and support the subsequent paragraph
Minimal unnecessary (or misplaced) content
Follows conventions of grammar, spelling, and citation

This rubric went through a number of revisions as the ES assessment committee of Nurcan Atalan-Helicke, Anne Ernst, and Michael Marx reviewed the document. Each of the items was assessed on a five-point Likert scale: 1-inadequate; 2-poor; 3-satisfactory; 4-good; 5-excellent. Atalan-Helicke and Ernst—fall ES 100 instructors—assessed the papers using the rubric and then met with Marx to discuss the assessment activity.

For the assessment activity, we used the second assigned paper of the ES 100 curriculum (“Food Security Analysis Paper”), a collaborative assignment written in teams of two. The collaborative aspect of the assignment parallels the collaborative dimension of the capstone projects. More importantly, much of the professional writing students will do in Environmental careers often involves some degree of collaboration, so we consciously want to develop students abilities in this area, despite the initial resistance many students express about collaborative writing. The collaborative nature of the assignment reduced the number of potential papers from 63 (the number of students enrolled in ES 100) to 31. For the assessment, we selected a random sample of every second paper from each of the three sections for a total of 16 papers.

Atalan-Helicke and Ernst had already graded the papers prior to the assessment, so for the assessment, they reread the selected papers from their sections.

Results

A simple tabulation of the ratings for each category reveals the strengths and weaknesses in this set of papers. A slight majority of the students did well (good or excellent) with “shows why the issue is worth studying,” “clearly articulates the research questions,” and “theme of every paragraph is evident”; the writing showed weaknesses in areas such as “provides appropriate context for understanding the research topic,” “presents data clearly,” “uses literature to help explain findings,” and “makes sound interpretations and conclusions based on data.” In terms of the more “writerly” (mechanical) elements in the rubric, this set of papers was particularly weak in “flow of arguments” and “paragraphs build on the preceding paragraph and support the subsequent paragraph.”

The use of figures and tables was not required of this assignment, and only three students from Ernst’s two classes elected to use them. As indicated below, their ability to work with figures and tables was wanting.

The following table shows the raw distribution of ratings:

	1	2	3	4	5
Shows why the issue is worth studying		1	2	7	6
Provides appropriate context for understanding the research topic		1	7	3	5
Clearly articulates the research question (thesis)	1	1	4	4	6
Presents data clearly		3	4	4	5
Makes appropriate use of figures and tables		1	2		

Incorporates figures and text thematically into the written nar	3				
Uses literature to help explain findings		3	4	6	2
Makes sound interpretations and conclusions based on data		3	4	6	2
Flow of arguments is sound		4	4	6	3
Theme of every paragraph is evident		1	2	6	7
Paragraphs build on the preceding paragraph and support the subsequent paragraph		3	4	4	5
Minimal unnecessary (or misplaced) content	1	1	6	4	4
Follows conventions of grammar, spelling, and citation	1	1	5	6	3

The second table presents the findings in percentages:

	1	2	3	4	5
Shows why the issue is worth studying		6%	13%	44%	38%
Provides appropriate context for understanding the research topic		6%	44%	19%	31%
Clearly articulates the research question (thesis)	6%	6%	25%	25%	38%
Presents data clearly		19%	25%	25%	31%
Makes appropriate use of figures and tables		33%	67%		
Incorporates figures and text thematically into the written narrative	100%				
Uses literature to help explain findings		19%	25%	38%	13%
Makes sound interpretations and conclusions based on data		19%	25%	38%	13%
Flow of arguments is sound		25%	25%	38%	19%
Theme of every paragraph is evident		6%	16%	38%	43%
Paragraphs build on the preceding paragraph and support the subsequent paragraph		19%	25%	25%	31%
Minimal unnecessary (or misplaced) content	6%	6%	38%	35%	25%
Follows conventions of grammar, spelling, and citation	6%	6%	31%	38%	19%

Discussion

Overall, the assessment suggests that the student writing in ES 100 is “satisfactory.” In nine of the 13 categories, a quarter or more of the papers were rated a 3 “satisfactory.” Atalan-Helicke, who had taught ES 100 last spring, observed that this fall, her class’s second paper didn’t show the improvement that she had seen in the past compared to the first paper. She also noted that her students were not as strong on the articulation of thesis statements as necessary. Both instructors also noted that overall, the students did a poor job with citation—in mechanics and understanding what to cite—despite a required library workshop on citation and the availability of programs like RefWorks, which greatly facilitate the citation process.

Both Atalan-Helicke and Ernst reported that the rubric was easy to use. The assessors knew precisely what they were looking for. The items seemed appropriate and relevant to the ES 100 assignment and writing. Both instructors felt they may want to incorporate the details of the assessment rubric into the ES 100 scoring sheet. If we agree on the assessment rubric, it is only fair that we distribute it to the students so that they are fully aware of how the faculty are reading and assessing their work.

This assessment activity gives us a first look at our ES students' writing. But it also raises some important questions for us to consider as we move forward with both our writing assessment and our program assessment. Interdisciplinarity is at the core of Environmental Studies at Skidmore. It is reflected in the wide variety of classes from across the curriculum that we require students to take as well as in the pedagogies of our individual classes. How then, do we assess this essential dimension of Environmental Studies in our student learning and writing? This dimension seems absent both from the ES 375 guidelines and the writing assessment rubric we developed. As mentioned early, collaboration distinguishes much of the work in the Environmental Studies Program. However, what does it mean to assess writing that is done collaboratively, or put another way, how do we specifically assess writing that is distinctly collaborative? Are there particular elements of writing that we should highlight? Should we give more attention to process rather than just focusing solely on the end product?

We will devote part of our February 2013 Steering Committee meeting to the discussion of this assessment report and assessment in Environmental Studies in general. But this first writing assessment sets the stage for next steps that we should take.

1. We should conduct a parallel writing assessment of the capstone projects of the class of 2013. This will allow us to compare the writing of seniors in comparison to the writing of our beginning majors and look for areas of growth and change.
2. From these writing assessments, we next need to ask ourselves both where do the students learn the skills they have improved in and where should we—or can we—provided added attention to the areas they demonstrate weaknesses in. We need to map these learning objectives—for both writing and learning—onto the ES curriculum.
3. This first ES 100 writing assessment also provides us with the opportunity to conduct a small longitudinal writing assessment to see what this group of students' writing will look like in three and four years when they are seniors. We can identify first year and sophomore students from the papers already. As these students declare their majors, we can further refine our pool and track them for future assessments.