

EVST Assessment Report 2019-20 Academic Year

In accordance with the EVST Student Assessment Plan, we evaluated EVST Program Learning Goal 1 at the completion of the 2019-20 academic year:

Students are able to *“Explain the structure and dynamics of the natural world.”*

To do this, we utilized two instruments, the senior survey (indirect assessment) and the capstone rubric (direct assessment). As explained below, we also piloted a new methodology this year.

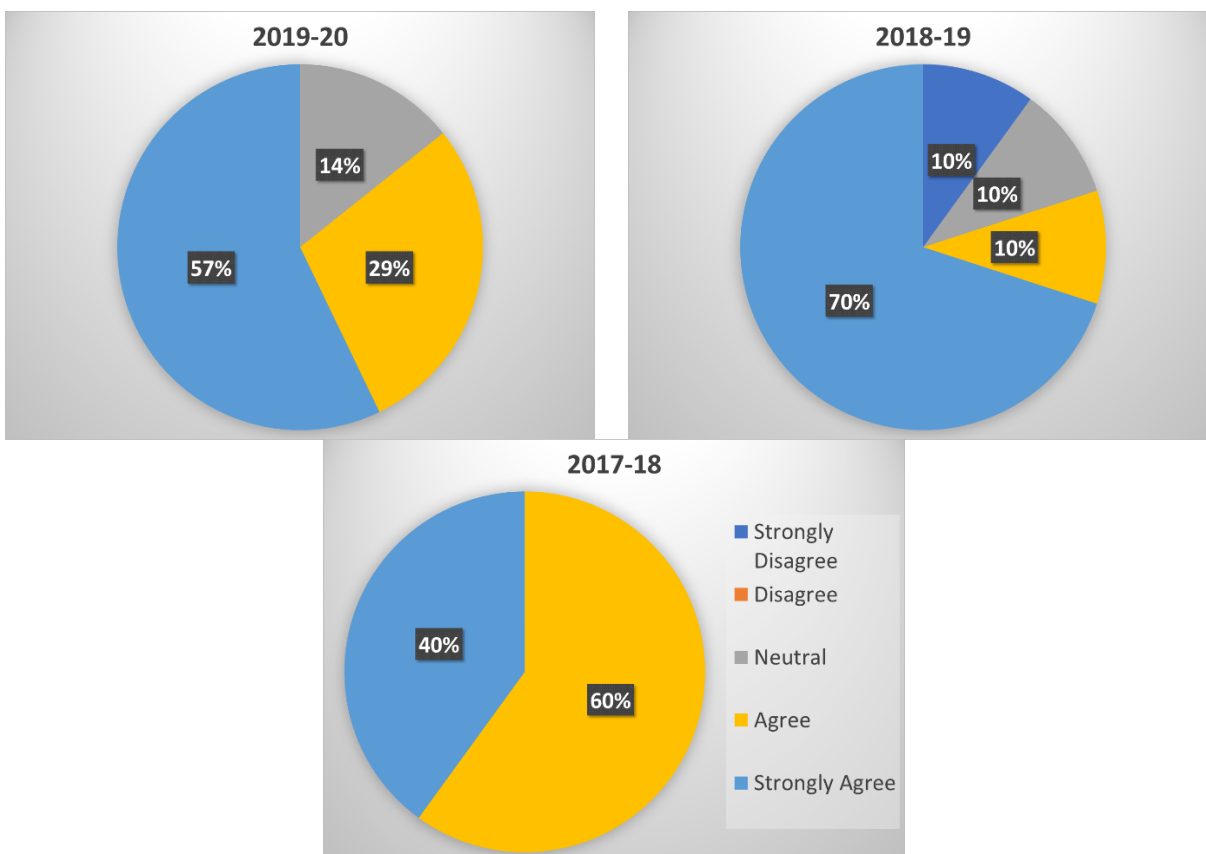
Indirect Assessment: Senior Survey

One question on the senior survey specifically addresses EVST Program Learning Goal 1; students are asked to respond, on a five-point Likert scale, to “I feel that the Hendrix College Environmental Studies curriculum has taught me to ‘explain the structure and dynamics of the natural world.’”

Responses for the current and two preceding years:

	2019-20	2018-19	2017-18
Strongly Disagree	0	1	0
Disagree	0	0	0
Neutral	1	1	0
Agree	2	1	3
Strongly Agree	4	7	2
Total	7	10	5

And the results presented graphically:



Clearly students self-assess favorably on this question, with at least 80% each year stating they “agree” or “strongly agree” that they have met this goal. In the current year, only one student did not positively self-assess, and this student responded with “neutral.” This shows an improvement over the previous year when one student responded, “strongly disagree.” The work ahead is to craft strategies to move even more students into the “strongly agree” category.

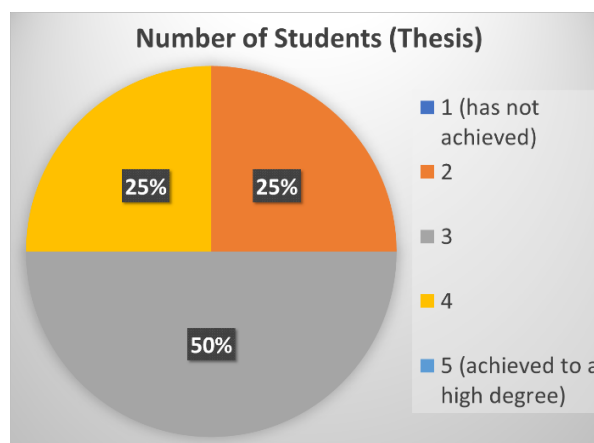
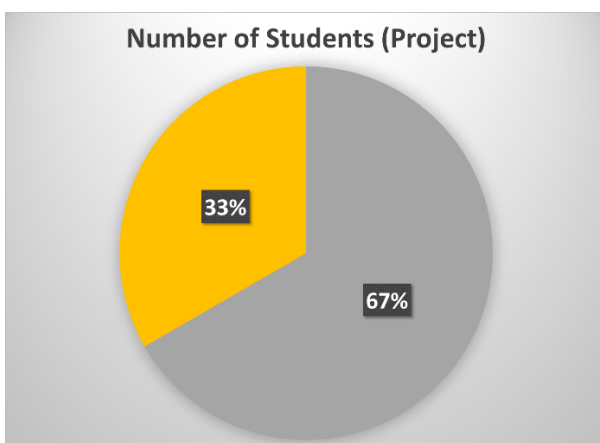
Direct Assessment: Capstone Rubric

This year students followed one of two paths through senior seminar, the EVST capstone experience: the senior thesis or the group project. Both are integrative experiences that allow the students to draw on acquired knowledge and a variety of skills. The final products are graded by a group of the program faculty using a rubric. Importantly, in addition to evaluating various components of the final products, participating faculty also assess student attainment of the Program’s five learning goals by using a five-point Likert scale (1 = “has not achieved”, 5 = “achieved to a high degree”).

For 2019-20, the EVST faculty directly assessed ten students on Learning Goal 1:

	Number of Students (Project)	Number of Students (Thesis)
1 (has not achieved)	0	0
2	0	1
3	4	2
4	2	1
5 (achieved to a high degree)	0	0

And graphically:



In this case, no students on either pathway, project or thesis, were assessed at “5”, the highest level of achievement. In fact, we assessed most students (six of ten) at “3”, middle of the range. It appears, first, that students evaluate themselves at a higher level than do professors. Further, work remains to positively move more students on the achievement spectrum.

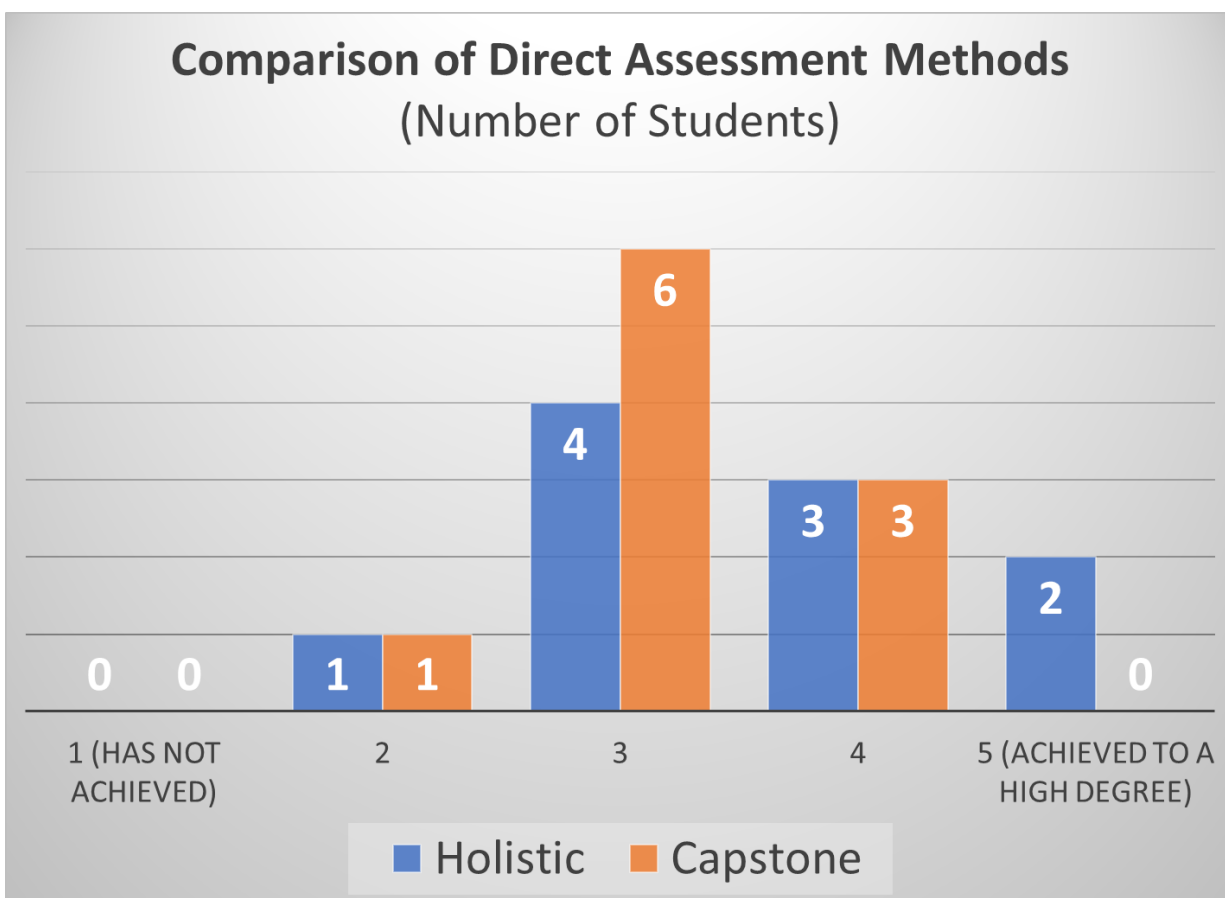
Additional Direct Assessment: Faculty Holistic Evaluation

Although not listed in the annual EVST Student Assessment Plan, the Program piloted a new direct assessment method this year. Program faculty were asked to place student learning goal attainment on the same five-point Likert scale (1 = “has not achieved”, 5 = “achieved to a high degree”) by thinking holistically about each student. We are exposed to students and their learning in various ways, such as through advising internships and academics, supervising Odyssey projects, teaching in various courses, discussing career plans and goals, and mentoring research and senior projects. Professors evaluated the students they know well, and these results were averaged.

For Learning Goal 1:

	Number of Students
1 (has not achieved)	0
2	1
3	4
4	3
5 (achieved to a high degree)	2

Comparing the assessment of senior capstone versus the new holistic approach:



These results are highly correlated ($p=0.87$), which is reassuring. Interesting, through the holistic approach, two students score a “5” on goal one attainment, “achieved to a high degree.”

Next Steps

Because of the COVID-19 pandemic and other extenuating circumstances, we were unable to hold our regular May retreat this year. This is the typical gathering where we discuss this assessment analysis and craft strategies—based on the data—for increasing student goal attainment. Instead, this discussion will occur during our August retreat (which will be held via video conferencing if the pandemic prevents us from meeting in person). In the meantime, this report has been sent to all EVST program faculty so we can each think about the results of the analysis and brainstorm ideas for moving forward.

Specifically, in August, we may want to discuss and address these issues:

- Should we consider additional questions for the senior survey to gain more insight into the indirect assessment? For example, would an open-ended qualitative question help us understand why a student did not “strongly agree” that they learned how to explain the structure and dynamics of the natural world?
- Are the indirect and direct instruments measuring the same thing? Do the Likert scales for the senior survey and the senior capstone goal assessment need to be better aligned? Are there ways to clearly differentiate among the various levels (1, 2, 3, 4, and 5) of the direct assessment Likert scale?
- Do we expect a senior thesis, thesis presentation, group-project deliverable, and project presentation to demonstrate mastery of all five program learning goals? In addition to rethinking assessment instruments, is there a need to rethink specific requirements of these final products? Related, how do we weigh assessment of the actual thesis versus the thesis presentation? The group-project deliverable versus the project presentation?
- Does the “holistic approach” to student assessment add value? Is this a more appropriate tool than the senior capstone assessment? The answer to these questions, in part, is related to the previous bullet point.
- And most importantly, what “holes” or shortcomings does this assessment of EVST Program Learning Goal 1 identify in the EVST curriculum, pedagogy, and major requirements? What changes will we implement to enhance student goal attainment?

This assessment report will be updated after August, when we discuss the data and any changes we will implement to improve student learning.