Assessment of Information Literacy at SLU Observations on Data from the 2014/2015 HEDS Research Practices Survey

Background and Goals

The HEDS Research Practices Survey (RPS) is a brief online survey designed to provide information about student research habits and skills. The survey, which takes about fifteen minutes to complete, includes questions about students' perceptions of their own research abilities as well as research-related tasks embedded in the questionnaire for the direct assessment of student knowledge and skill. The RPS can be used to obtain a snapshot of information literacy at a given time, or to assess changes in knowledge and skills over time. Results from other institutions that administer the RPS are available for comparison. Participation is voluntary and student responses are confidential. This is St. Lawrence University's third participation in the RPS. Now on a 3-year cycle, our last survey administration was in 2011-12. (See also a white paper summarizing its findings here.)

During the 2014-2015 academic year, the RPS was administered to two cohorts of SLU students. Incoming students were asked to complete the survey before matriculation in August 2014 and then again at the end of the spring semester in 2015, to allow for the assessment of changes in information literacy over the course of the first year. In order to assess the outcome of more advanced instruction, the RPS was also administered once in the spring to students enrolled in selected 200 – 400 level courses in seven different departments and programs who define "information literacy" as one of their departmental learning goals: Anthropology, Caribbean and Latin American Studies, History, Performance and Communication Arts, Religious Studies, and Psychology.

Observations and Recommendations

Data from the 2011-2012 administration of the RPS indicated that SLU students compare favorably with other institutions in terms of research experience. The 2014-2015 RPS data shows that our students continue to write more papers that require sources than first year students and seniors in the broader sample. In relation to the indirect data from the survey, we were most interested in the fact that our students' perception of the difficulty of intellectual tasks that involved developing a thesis and using research to support the thesis have increased during their first year, and they have increased more than for First Year students in general.

We believe that this is positive, in that students are recognizing that this is not a simple task. Two other observations about the data reinforce this conclusion: first, data about using search tools and locating resources suggests greater confidence and, second, students in First Year Seminar (FYS) courses with high performance on the performance tasks in many cases perceive the intellectual task as difficult.

Enjoyment of doing research goes down in the first year: the percent who indicate that they enjoy it quite a bit or very much declines over the first year from 34% to 22%. Perhaps our sole goal in relation to this finding is that we should try to develop assignments or research processes that lead to more enjoyment of research for students who have mastered performance tasks and understand developing a thesis and using evidence to support it. Interestingly, the percentage who report enjoying research returns to a higher level (36%) by senior year.

For most of the performance tasks, each additional year leads to some improvement in the percentage who answer correctly. At the senior level (and admittedly based on a smaller sample), the performance data suggests not only that our students have learned over their four years, but that on most of the performance tasks they compare favorably to seniors at other colleges: in a number of cases, 10% more SLU seniors have identified the correct answer. Interestingly, they continue to identify intellectual tasks as more difficult than peers at other institutions, while indicating high confidence in their ability to do tasks connected to more easily learned skills.

While the performance task section of the survey provides some direct evidence of the literacy skills of our students, changes in the instrument between 2011-2012 and 2013-2014 make it difficult to assess how effective our faculty development interventions have been. For example, on some questions that appear to be assessing the same skill, students have made significant gains, but these gains are sometimes apparent for pre-matriculants, suggesting that the change to the test question has resulted in the increased success to at least some degree. Thus, the strengths and concerns that we identify in relation to performance tasks are based solely on the 2013-2014 administration rather than on comparisons to the earlier data. Overall, although almost no one got all 29 performance tasks questions correct, we see performance improving as students move from pre-matriculants, to FYS students, to sophomores and juniors, to seniors.

PERFORMANCE TASKS - questions 13-29

<------ Spring 2015 Responses ------>

Course Level

Class Level

		Pre-		(FYS)				100-	200-	300-	400-
		Matric		FY	Soph	JR	SR	level	level	level	level
Total Responses		374		490	91	65	60	498	115	113	12
Number of correctly answered performance tasks (29 items)											
1-5 items correct		1%									
6-10 items correct		6%		1%			2%	1%		1%	
11-15 items correct (= up to half)		24%		13%	2%	3%	2%	13%	5%	2%	
16-20 items correct (= more than half)		49%		37%	45%	36%	20%	38%	41%	28%	18%
21-28 items correct		20%		49%	53%	59%	74%	49%	54%	68%	82%
All 29 items correct						2%	2%		1%	1%	
Total		279		428	85	59	54	436	106	104	11
Avg number of responses correct (out of 29 possible answers)		17.1		20.0	20.8	21.7	22.6	20.0	20.7	22.1	22.6
Percent of correct answers for these tasks	- s:		•								
Finding Sources (5 items)	П	59%		71%	73%	79%	80%	71%	76%	80%	82%

65%

72%

66%

76%

67%

80%

73%

82%

65%

72%

65%

76%

70%

76%

78%

59%

58%

Evaluating Sources (12 items)
Citing correctly Sources (12 items)

Finding sources: questions 13, 14, 15, 16, 21)

Evaluating Sources: questions 17, 20 (7 items), 22,27, 28, 29

Citing correctly Sources: questions 18, 19 (3 items), 23 24, 25 (5 items), 26

^{*} No missing values allowed for

We would hope to see these scores improve earlier, but we are also satisfied that along with assigning a greater number of papers requiring research instructors are providing instruction so that students are learning critical information literacy skills. In the first year, our students move from being able to answer correctly with slightly less frequency than their peers to being able to answer correctly in the midst of the FYS classes at slightly greater frequencies than their peers.

There are a few areas where we are concerned, and where we believe we should ask faculty to focus in the coming years. First, we believe that there are few places in the St. Lawrence curriculum where we explicitly talk with students about copyright issues, and we recognize this as a weakness. This is reflected in the performance task related to understanding copyright and fair use in the survey, with our students performing with less proficiency compared to students at other institutions. Our students do, however, recognize that one has to cite information unless it is common knowledge. They did well on questions related to recognizing plagiarism, so it seems that they are learning good habits of academic integrity generally. This section of the survey is new; thus we have no comparison to three years ago. However, we recognize that, in comparison to copyright issues, we have launched several initiatives over the past few years to better educate students on plagiarism, including holding an "Integrity Week" for several years and offering faculty development workshops on promoting academic integrity and reducing academic dishonesty. Considering that learning only occurs if reinforced at multiple points during a students' education, we recommend that more effort needs to be expended on issues of copyright and fair use to ensure that good practice is inculcated.

Second, we are pleased that by senior year over 88% of our students can define "peer-reviewed" (11% more than seniors at other colleges), but we are concerned that over 21% of them do not identify the statement, "Academic journal articles provide objective facts; popular magazine articles do not." as untrue. Since more of our students identified this correctly than seniors at other institutions, it may be that this issue is a confusing question. Still, being sure that students understand that peer review does not equate to truth is important.

Finally, we were concerned that skills were learned so unevenly across the First-Year Seminars. The fact that some FYS classes teach these skills so effectively means that we have a program that could be truly effective in introducing students to college-level research skills.

Altogether, the Assessment Committee sees these data indicating a trajectory among our students in which they consistently improve their research skills—and their understanding of the necessity for such skills—over their four years at St. Lawrence. That said, steps still should be taken to ensure a more thorough foundation of these skills across the FYS classes with incrementally more specific attention as students move through the sophomore year and into the major.