

Assessment Committee Report # 6 – Spring 2013 - Indirect Assessment of Writing Skills

Executive Summary

Several surveys St. Lawrence regularly participates in ask students about the amount of writing they are expected to do, their self-perceived writing ability, and how much their college education has contributed to improving as a writer. Our data indicates that St. Lawrence students enter with lower levels of *self-confidence* in their academic abilities (incl. writing) than students at other liberal arts institutions, but graduate with writing abilities that are very similar to students elsewhere. Survey data (from both faculty and students) consistently indicate that St. Lawrence students are asked to do more writing and are more frequently asked to prepare multiple drafts than students at other liberal arts colleges. Survey data also demonstrate that writing not only improves within the first year, but across all four years, and that the sum of gains might be greater for SLU students than for students elsewhere. Our data analyses finally suggest that there are some disciplinary differences in writing gains, with students in the humanities and area studies reporting the highest writing skill development.

A more detailed analysis of our survey data follows below.

Self Confidence at time of College Entry

SLU's incoming students can be uniquely characterized as being well prepared for doing college work but entering with lower-than-expected levels of self-confidence in their academic abilities.

E.g., when comparing the CIRP construct "Habits of Mind" (a score which measures behaviors and traits associated with academic success) with the "Academic Self-Concept" (a score which measures students' beliefs about their abilities and confidence in academic environments), SLU students ranked in 2010 higher than the "highly selective" and the "all" private/nonsectarian 4-yr college norm on "Habits of Mind," yet lower on the "Academic Self-Concept"(Figure 1).

As illustrated in Table 1, the differences between the "Habits of Mind" score and "Academic Self Concept" score were greater for St. Lawrence students than for students at other institutions. All institutions had in common that women had much lower-than-expected levels of academic self-confidence than men.

Figure 1: Habits of Mind vs. Academic Self-Concept - Incoming Students Fall 2010, 2011 and 2012 – St. Lawrence vs. Other Private Four-Year Institutions

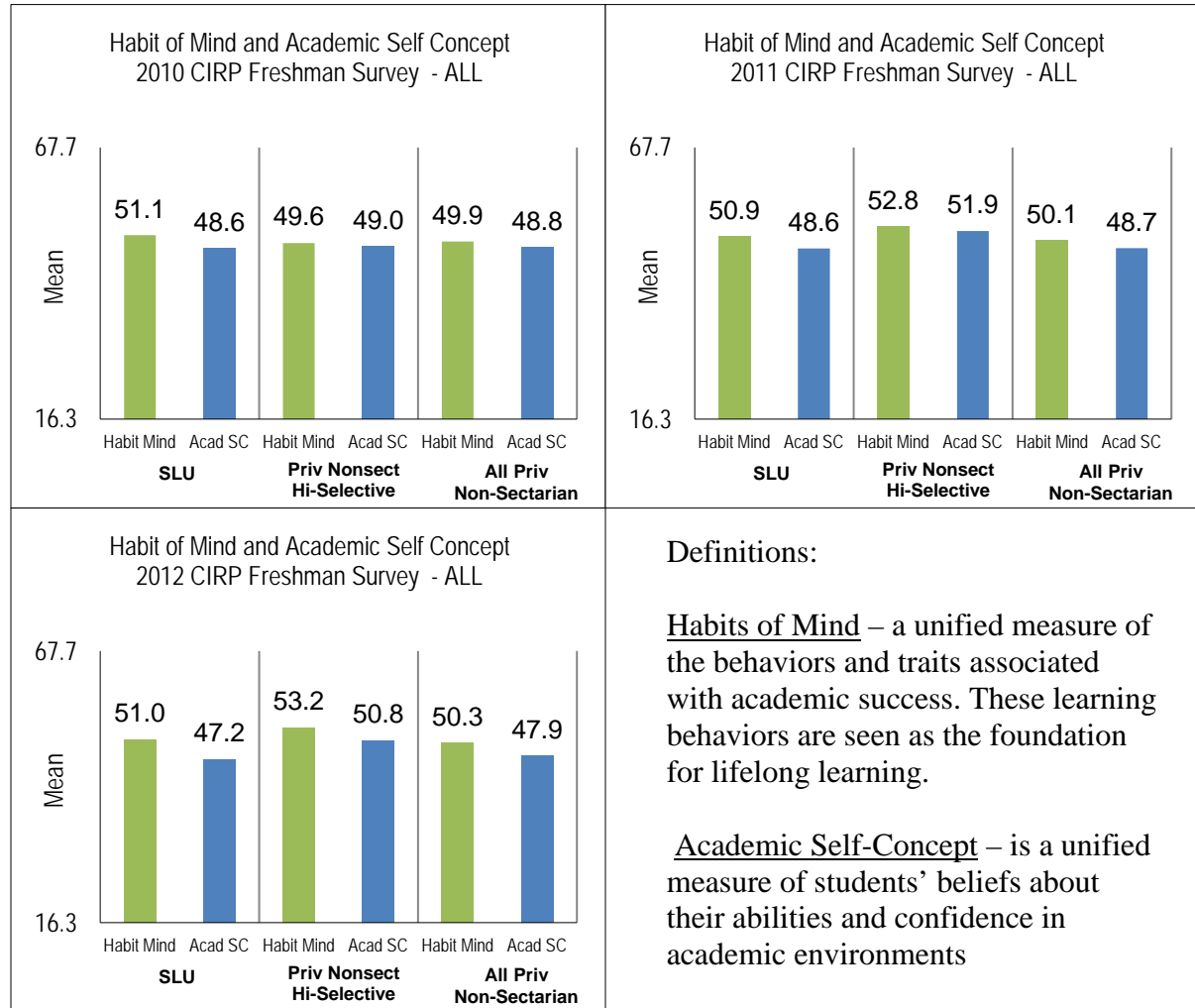


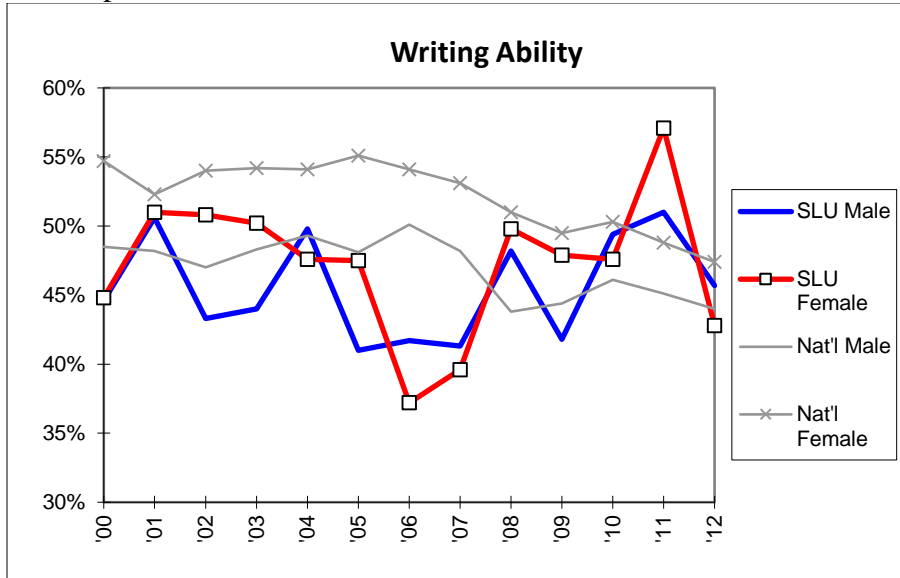
Table 1: Differences between Habit of Mind and Academic Self-Concept Score
Source: HERI CIRP Freshman Surveys, misc. years

	St. Lawrence Students			Priv Nonsect. Highly Selective Colleges			All Priv Non-Sect 4-yr Colleges		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
2010	-2.5	-1.2	-3.6	-0.6	1.3	-2.0	-1.2	0.4	-2.3
2011	-2.3	-1.0	-3.3	-0.9	0.6	-2.2	-1.5	-0.1	-3.4
2012	-3.8	-3.2	-4.2	-2.4	-0.9	-3.5	-2.4	-1.1	-3.4

Figure 2 shows that St. Lawrence’s entering female students have traditionally rated their writing ability below the national average (an exception was Fall 2011). While male students frequently

rated their writing ability below the norm in the past, since 2010, ratings have been above the national average.

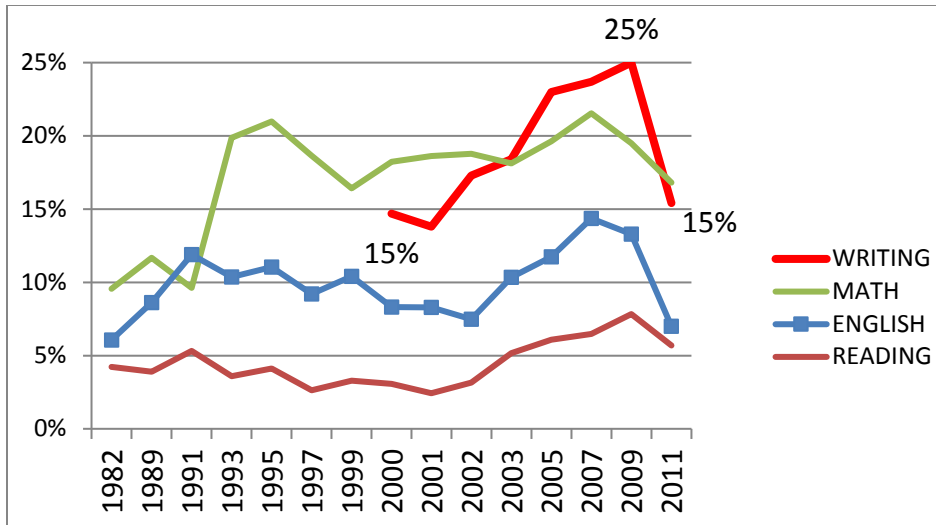
Figure 2: Percent of Incoming Students Rating Their Writing Ability as “Above Average” or in the “Top 10%”



Source: HERI CIRP Freshman Survey

The percent of students indicating a need for special tutoring or remedial help with writing increased from 15% in 2000 to 25% of in 2009, yet declined again to 15% in 2011 (Figure 3). The decline in 2011 was consistent with the 2011 higher rating ability scores (see Figure 2). This survey question is asked only every 2 years on the CIRP survey. We are not sure whether the class that entered in 2012 would have expressed a higher need for special tutoring if the question had been asked that year.

Figure 3: Percent of Incoming SLU Students indicating they need special tutoring or remedial work



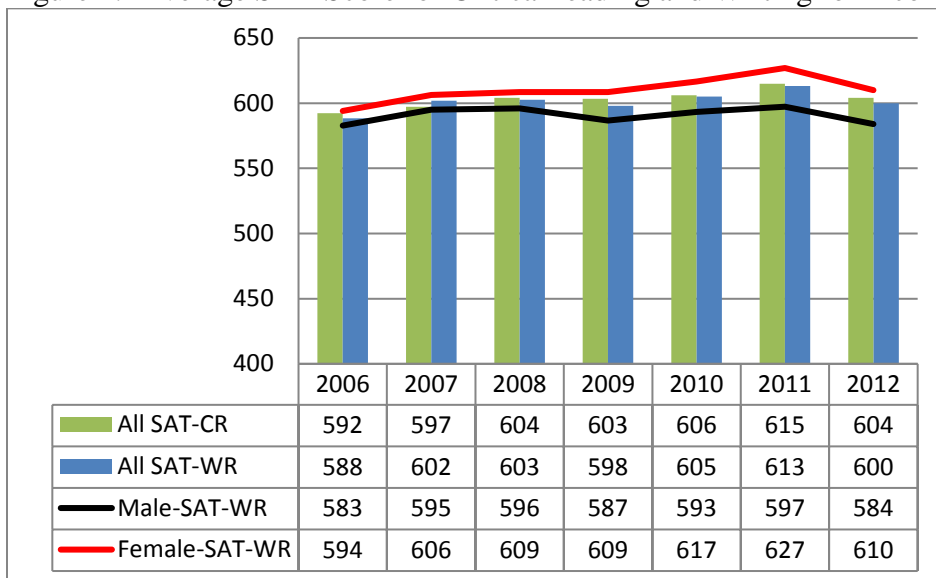
Source: HERI CIRP Freshman Survey

The Assessment Committee discussed whether the relatively high percentage of SLU students indicating they need remedial help with writing is due to the strong emphasis we have placed in admissions events on the importance of the First Year program for developing these skills– or whether it relates to the lower self-confidence of our incoming students.

Standardized Test Scores Related to Writing

The SAT Writing component was introduced in 2006 –the same year SLU became test-optional. While only about 55-60% of all students submit SAT scores, these data offer some interesting observations related to the self-reported data (Figure 4).

Figure 4: Average SAT Score for Critical reading and Writing for Incoming SLU Students



- The SAT Writing scores are higher for SLU women than for men, yet in four out of these 7 years, women rated their self-confidence in writing lower than men did.
- Overall, though, the ratings of self-confidence of writing went up between 2010 and 2011 – and so did the standardized test scores for Critical Reading (+12 pts) and Writing (+15 pts). Likewise, the decline from 2011 to 2012 in the self-confidence of writing skills was paralleled by a decline in Critical Reading (-11) and Writing (-13) scores.

Gains in Writing Ability– Matching Responses From College Entry To Senior Year

Open comments of students in senior and alumni survey often highlight that the St. Lawrence education has significantly increased their writing skills.

We analyzed *matching* survey responses of students (see Table 2), comparing ratings from the same students from college entry to the end of their first year (Class of 2013 data) , from the end of their first year to the end of their sophomore year (Class of 2012 data), and the overall change from college entry to graduation (Class of 2010 data). At every stage measured, the change represented a statistically significant increase – suggesting that students grow in their confidence in writing skills (as well as public speaking ability) each year while at St. Lawrence.

Table 2: SLU Self-Estimates of Abilities (Compared to the Average Student Your Age)

	Class of 2013			Class of 2012		Class of 2010 (HERI)	
	Mean Score at Entry	End FY	Change Entry to End FY	Mean Score at End Soph	Change End FY to-Soph	Mean Score at End SR Yr	Change Entry to Senior Year
Writing Ability	3.4	3.5	0.14	3.7	0.10	3.7	0.40
Public speaking ability	3.2					3.6	0.42
Communication Skills		3.7	sign.	3.8	0.04		
Academic Ability	3.8	3.9	0.04	3.9	0.09	3.9	0.07
Intellectual Self Confidence	3.6	3.6	0.00	3.7	0.06	3.8	0.27

Scale: 1 (lowest 10%) 2 (below avg) 3 (avg) 4 (above avg) 5 (highest 10%)

Sources: HERI Cirp Freshman Survey, in-house data collections, HERI Senior Survey

Our CSQ analysis, an in-house survey conducted at the end of the first year, further indicated that gains were greatest for students who perceived themselves as weak-to-average writers. Most of this group moved up one point in the scale during their first year, e.g. from below average to average (see Table 3).

Table 3: Self-Estimates of Writing Ability at College Entry and the End of the First Year

End of First-Year Writing Ability (CSQ 2010)	Pre-College Writing Abilities (CIRP 2009) (# of respondents)				
	1 Lowest 10% (pre)	2 Below Average (pre)	3 Average (pre)	4 Above Average (pre)	5 Highest 10% (pre)
1 Lowest 10% (post)	3	1	0	2	1
2 Below Average (post)	2	17	16	2	0
3 Average (post)	2	24	118	37	1
4 Above Average (post)	0	7	67	97	9
5 Highest 10% (post)	0	0	2	27	26
Total	7	49	203	165	37

Sources: HERI CIRP Freshman Survey and CSQ

Table 4 cross-tabulates replies of incoming students for the question whether they need remedial help with writing with writing ability scores at the end of their first year. Again, these are matching students. Of the 117 students (approx. 25% of the class) who initially thought they needed remedial help with writing, 82% (96 students) rated their writing as “average” or “above average” by the end of the first year.

Table 4: Remedial Need in Writing as Incoming Student Self-Estimates of Writing Ability at the End of the First Year

Remedial Need in Writing (CIRP 2009)	End of First-Year Writing Ability (CSQ 2010)				
	1 Lowest 10%	2 Below Average	3 Average	4 Above Average	5 Highest 10%
1 Not Needed	5	20	122	154	56
2 Needed	2	19	63	30	3
Total	7	39	185	184	59

Benchmarking Writing at St. Lawrence To Other Institutions

Most of the data discussed so far looked only at the growth of St. Lawrence students. In this section we will draw on national surveys that provide peer comparisons. Surveys discussed include the National Survey of Student Engagement (NSSE), the HERI Faculty Survey, the HEDS Senior Survey, and the HERI CIRP Freshman and Senior Surveys.

The HERI Faculty survey suggested that St. Lawrence faculty more frequently expect multiple drafts of papers from students than faculty at SLU’s peer group, the NCG, do (Table 5).

Table 5: In how many of your courses do you require... “Multiple drafts of written work”

	SLU 1998	SLU 2001	SLU 2004	SLU 2007	SLU 2010	NCG 1998	NCG 2001	NCG 2004	NCG 2010
None	20.8%	23.5%	14.4%	11.8%	11.0%	18.4%	24.5%	18.3%	16.7%
Some	49.5%	42.9%	41.4%	42.5%	50.0%	52.2%	49.7%	44.9%	52.5%
Most	15.8%	20.2%	24.3%	24.4%	22.0%	17.9%	17.7%	22.7%	20.3%
All	13.9%	13.4%	19.8%	21.3%	17.0%	11.5%	8.1%	14.1%	10.5%
# Resp.	101	119	111	127	100	803	679	917	1284
require in most or all	29.7%	33.6%	44.1%	45.7%	39.0%	29.4%	25.8%	36.8%	30.8%

Source: HERI Faculty Survey; replies are for full-time undergraduate faculty

As shown in Table 6, this finds confirmation in the NSSE survey results. Data has indicated so far that both SLU’s First Year students and Seniors are more often required to write and revise their work than students at other Baccalaureate institutions are.

Table 6: Select Findings from the National Survey of Student Engagement

	St. Lawrence				NCG 2011	Carnegie Peers				2011 Sig	Effect Size	
	2002	2006	2008	2011		2002	2006	2008	2011			
Reading and Writing												
1=none, 2=few er than 5, 3=betw een 5 and 10, 4=betw een 11 and 20, 5=more than 19												
Number of written papers or reports of 20 pages or more	1st Yr	1.37	1.48	1.46	1.30	1.21	1.20	1.24	1.25	1.25	***	0.33
	Senior	1.94	2.03	1.97	2.04	1.85	1.78	1.78	1.78	1.78	***	0.27
Number of written papers or reports of 5-19 pages	1st Yr	3.03	2.98	2.98	2.75	2.58	2.75	2.61	2.59	2.59	***	0.47
	Senior	3.18	3.17	3.14	3.19	3.05	2.96	2.93	2.93	2.93	***	0.23
Number of written papers or reports of fewer than 5 pages	1st Yr	3.70	3.39	3.58	3.61	3.31	3.53	3.33	3.35	3.35	**	0.23
	Senior	3.56	3.42	3.48	3.53	3.32	3.25	3.17	3.18	3.18	***	0.26
Academic, Intellectual, and Social Experiences												
1=never, 2=occasionally, 3=often, 4=very often												
Rewrote a paper or assignment several times 2002/2011: Prepared 2+ drafts of a paper or assignment before turning it in	1st Yr	2.67	2.76	2.27	2.64	2.50	2.64	2.59	2.57	2.57	**	0.21
	Senior	2.30	2.39	2.50	2.62	2.34	2.45	2.39	2.36	2.36	**	0.15
Worked on a paper or project that required integrating ideas or information from various sources	1st Yr	3.22	3.38	3.41	3.48	3.23	3.17	3.15	3.16	3.16	***	0.33
	Senior	3.47	3.50	3.56	3.66	3.57	3.47	3.46	3.45	3.45	**	0.15
KNOWLEDGE, SKILLS AND PERSONAL DEVELOPMENT												
1=very little, 2=some, 3=quite a bit, 4=very much												
Writing clearly and effectively	1st Yr	3.01	3.21	3.34	3.20	3.29	3.05	3.16	3.23	3.23	*	0.15
	Senior	3.18	3.29	3.44	3.38	3.47	3.31	3.34	3.40	3.40		
Speaking clearly and effectively	1st Yr	2.78	3.05	3.20	3.09	2.94	2.68	2.84	2.93	2.93	***	0.36
	Senior	3.03	3.15	3.33	3.36	3.22	3.13	3.14	3.20	3.20	***	0.16

HERI Senior survey shows that graduating SLU seniors rate their writing skills at part or within 0.1 points of students at other institutions (Table 7). In comparison, St. Lawrence outperforms other institutions with respect to public speaking.

Table 7: Writing and Public Speaking Ability at the End of the Senior Year and gains from College Entry to Senior Year; Classes of 2010 and 2012

	Writing Ability 2010	Writing Ability 2012	Public Speaking Ability 2010	Public Speaking Ability 2012
Mean Rating SR YR				
St. Lawrence	3.73	3.70	3.57	3.60
Private Non-Sect. 4-yr	3.84	3.79	3.56	3.53
All Private 4-yr Colleges	3.79	3.76	3.53	3.51
Change from FY to SR YR				
St. Lawrence	0.40	0.24	0.42	0.45
Private Non-Sect. 4-yr	0.30	0.21	0.31	0.30
All Private 4-yr Colleges	0.25	0.22	0.30	0.27

Scale: 1 (lowest 10%) 2 (below avg) 3 (avg) 4 (above avg) 5 (highest 10%) Source: HERI Senior Survey

Longitudinal ratings from the HEDS Senior Survey (Table 8) suggest that St. Lawrence has made gains in recent years, but - considering that SLU students are more frequently required to write and create multiple drafts - that we might not teach as effectively writing as our peer institutions so, though are better than others at teaching oral communication.

Table 8: Capacities enhanced by your undergraduate education

	2000	2001	2002	2003	2004	2005	2006	2007	2009	2011
Write effectively										
SLU	3.3	3.3	3.2	3.3	3.4	3.2	3.3	3.2	3.4	3.4
NCG	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.5
Communicate well orally										
SLU	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.4
NCG	3.2	3.2	3.2	3.1	3.2	3.1	3.2	3.2	3.1	3.3

Mean rating (1=not at all 2=a little 3=moderately 4=greatly)

Source: HEDS Senior Survey

Finally, a breakout of the 2009 responses by major indicated that writing skills are not evenly enhanced across all majors/academic divisions (Figures 5 and 6).

Figure 5: Self Estimates of writing ability and oral communication skills of graduating seniors, Class 2009

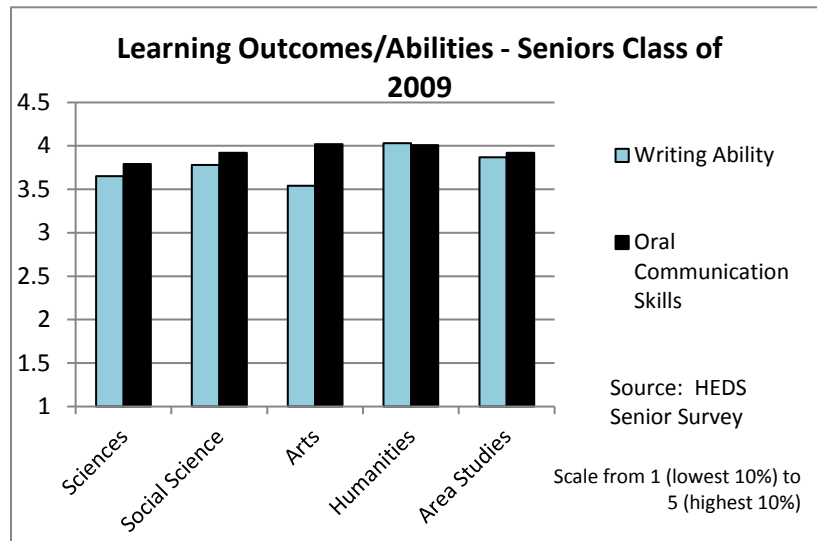
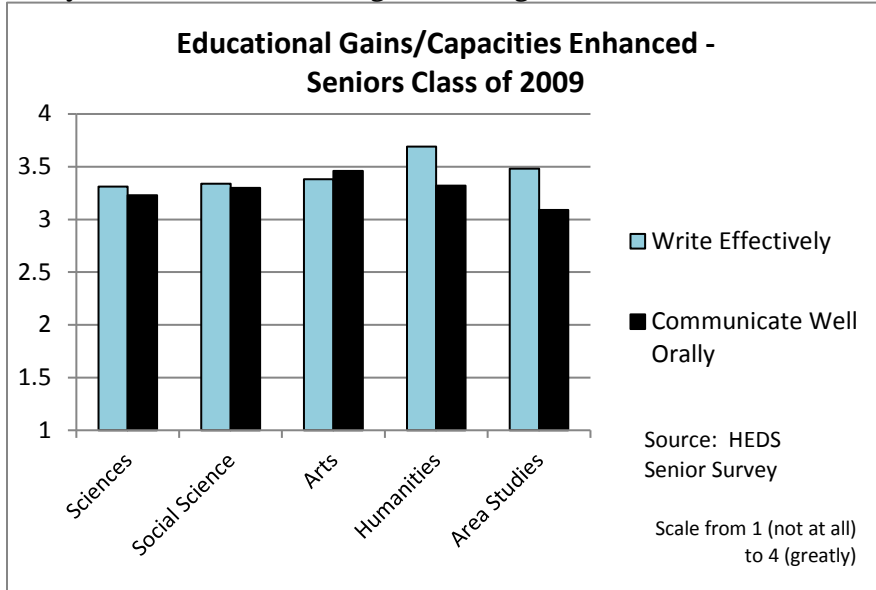


Figure 6: Rating to what extent the capacities to “write effectively” and “communicate well orally” were enhanced during the undergraduate education, Class 2009



Conclusion

While self-reported survey data has the advantage to benchmark performance consistently over a long period of time and across institutions, and enables also the collection of data for a large number of the students instead of just a sample, they lack though operational limitations. What types of writings styles do students excel in most or the least? What aspects of writing (thesis development, organizational structure, grammar and punctuation, etc.) improves the most or still shows deficiencies. These are the types of questions that can be answered with direct assessment, when looking at actual student work and scoring the paper with a rubric to standardize the evaluation of specific goals for writing.

Indirect and direct assessment should go hand in hand. For more information on St. Lawrence University’s efforts on direct assessment, see Assessment Committee [paper #3](#) on the Assessment website.