

Information Literacy Assessment Summary

May 2014

This overview will look at the gathered data related to information literacy, including both direct and indirect measures from multiple sources. The summary also includes overall themes and recommendations identified by the Drake Curriculum Analysis Committee. A common theme throughout the data shows that Drake students have weaker skills in the areas of high-level analysis and information synthesis (examples being: analyzing an argument for its flaws, or marshaling evidence to make a case).

Summary of Findings by Information Literacy Outcome

Outcome #1: Navigate and integrate scholarly resources into their research and reflection.

- A sample of papers was reviewed using the Information Literacy rubric. On a scale of 1-4 (4 = Excellent, 3 = Satisfactory, 2 = Marginal, 1 = Unsatisfactory), the papers averaged 2.58 with regards to organization/application/use of information.
- Students responding to the 2010 National Survey of Student Engagement were asked how often they "Worked on a paper or project that required integrating ideas or information from various sources." Drake first-year student responses were equivalent to first-year responses at peer institutions, while Drake senior's indicated a lower frequency compared to seniors at peer institutions.

Outcome #2: Articulate the social and ethical implications of information use and misuse.

- A sample of papers were reviewed using the Information Literacy rubric. On a scale of 1-4 (4 = Excellent, 3 = Satisfactory, 2 = Marginal, 1 = Unsatisfactory), the papers averaged 2.75 with regards to ethics in information.
- Students responding to the 2011 Drake Student Survey were asked, "How have you or your abilities changed in each of the following areas since coming to Drake?--Understand the ethical issues related to use and misuse of information." On a scale of 1-5, the mean was 3.99. The mean score to this same item in 2014 was 4.24, representing a notable increase over time (Scale: 5 = Very strong, 4 = Strong, 3 = Moderate, 2 = Weak, 1 = Very weak).

Outcome #3: Evaluate information resources and identify quality resources relevant to the problem or issue investigated.

- A sample of papers were reviewed using the Information Literacy rubric. On a scale of 1-4, the papers averaged 2.92 with regards to location/scope of information.
- Students responding to the 2011 Drake Student Survey were asked, "How have you or your abilities changed in each of the following areas since coming to Drake?--Acquire,

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analyze & interpret information." On a scale of 1-5, the mean was 4.15 (Scale: 5 = Much better, 4 = Better, 3 = About the same, 2 = Worse, 1 = Much worse).

- Students responding to the 2014 Drake Student Survey were asked how strong do you believe your skills are in these areas: "Evaluate the quality or reliability of information." 84% of students responded "Strong" or "Very strong."
- Students responding to the 2010 National Survey of Student Engagement were asked to what extent "Coursework emphasizes: Making judgments about the value of information, arguments, or methods." Frequencies for both Drake Freshmen and Drake Seniors were slightly lower than ANAC groups.
- Students responding to the 2013 National Survey of Student Engagement were asked, "During the current school year, how much has your coursework emphasized the following: Evaluating a point of view, decision, or information source." Frequencies for both Drake Freshmen and Drake Seniors were slightly lower than Drake Peer groups.
- Student responses to the longitudinal panel study (Foundations of Learning Assessment and Drake Student Survey) indicate a significant increase in students' self-rated ability to evaluate the quality or reliability of information. The moderate effect size indicates this area is one of the greatest changes over time compared to other longitudinal outcomes (see Appendix 4).

Outcome #4: Select and employ the appropriate method and data for disciplinary research, problem-based learning, experiential-based research, and/or reflective/integrative coursework.

- A sample of papers were reviewed using the Information Literacy rubric. On a scale of 1-4, the papers averaged 2.73 with regards to analysis.
- Students responding to the 2011 Drake Student Survey were asked, "How have you or your abilities changed in each of the following areas since coming to Drake?--Acquire, analyze & interpret information." On a scale of 1-5, the mean was 4.15.
- Students responding to the 2014 Drake Student Survey were asked how strong do you believe your skills are in these areas: "Evaluate the quality or reliability of information." 84% of students responded "Strong" or "Very strong."

November/December Meeting of DCAC convened on 25 November 2013

Information Literacy assessment and "new" rubric

The latest iteration of the Information Literacy rubric was distributed by email. A group of four individuals (Gilbert, Dunham-LaGree, Majeran, Saunders) used it to analyze different examples of student work from three different AOI courses. Per the rubric, all report finding the latest version of the rubric easier to apply. Per the work analyzed, the area where most problems seem to arise in student work is in "Organization/Application/Use of Information." Saunders reported

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that this was consistent with work that has been analyzed to date using the Critical Thinking Rubric.

A discussion ensued on next steps: Is it worthwhile putting this rubric forward to Faculty Senate? The tenor of the discussion was not in favor of putting this forward as an “isolated” issue, as in, “Please adopt this rubric” outside of a larger context. Given that a) there are ongoing Gen Ed curricular discussions and b) there is a need to communicate and begin to discuss trends, a broader conversation seems to be in order; perhaps a “workshop-type” faculty discussion? The Chair will approach Senate Exec with ideas from this discussion.

Brief report on trends in Info Lit baseline (Dunham-LaGree)

Carrie Dunham-LaGree reported that ten sections of FYS had taken an “Info Lit baseline” instrument this Fall. This is the third year that a “pre-test” has been administered, however, this year, a more standardized tool (common to several other Iowa colleges) was used. More definitive data on strengths/weaknesses (as well as how it compares to past years) will be forthcoming.

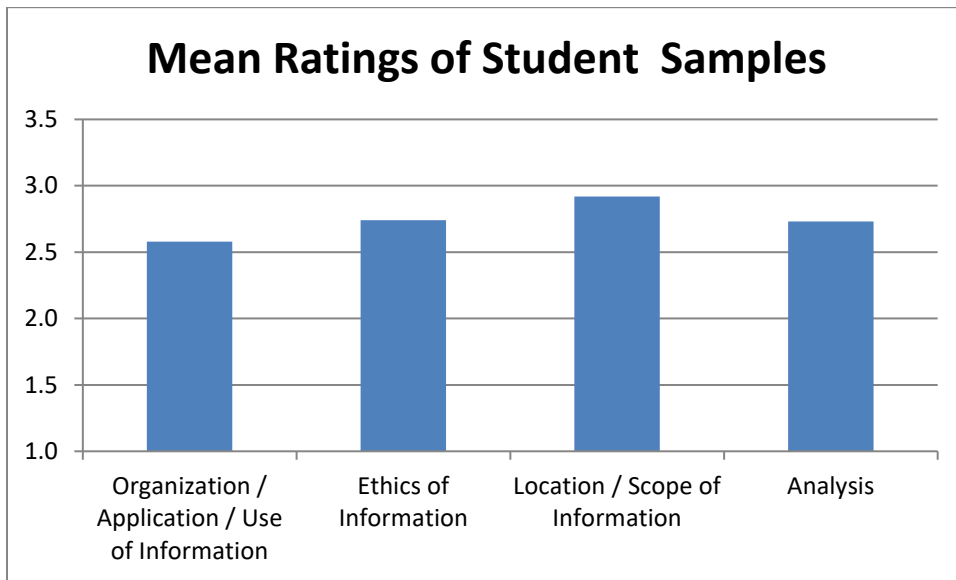
Drake Curriculum Assessment Committee Summary Report for 2013-14

Drake students continue to have challenges in the area of high-level analysis and information synthesis (examples being: analyzing an argument for its flaws, or marshaling evidence to make a case). These challenges are consistent across data points (based on both self-reported measures such as NSSE and the Drake Student Survey, and more limited but coursework-based assessment of Information Literacy AOI and FYS examples). Also, written communication skills (both in terms of the demands of the Drake experience and students’ abilities to produce quality written output) were identified as an allied concern. The committee recommends continued efforts to design and implement development workshops and resources to address these areas of challenge.

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Appendix 1: Mean Ratings of Student Work Using Information Literacy Rubric (n = 12)



Scale: 4 = Excellent, 3 = Satisfactory, 2 = Marginal, 1 = Unsatisfactory

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Appendix 2: Frequency Distribution for Select 2008 and 2010 National Survey of Student Engagement Items – Percent reporting “Quite a Bit” or “Very Much” with National Comparison Benchmarks

Higher-Order Learning									
First-Year Students									
<i>Very Much + Quite a Bit</i>									
2008									
2010									
	2008 Drake FY	2008 ANAC FY	2008 Carnegie Peers FY	2008 NSSE		2010 Drake FY	2010 ANAC FY	2010 Carnegie Peers FY	2010 NSSE
	%	%	%	%		%	%	%	%
Coursework emphasizes: Analyzing the basic elements of an idea, experience, or theory	89%	85%	83%	79%		88%	87%	83%	80%
Coursework emphasizes: Synthesizing and organizing ideas, information, or experiences	81%	74%	72%	67%		75%	78%	73%	70%
Coursework emphasizes: Making judgments about the value of information, arguments, or methods	76%	73%	72%	69%		73%	77%	74%	70%
Coursework emphasizes: Applying theories or concepts to practical problems or in new situations	86%	76%	77%	74%		81%	81%	78%	75%
Higher-Order Learning									
Seniors									
<i>Very Much + Quite a Bit</i>									
2008									
2010									
	2008 Drake SR	2008 ANAC SR	2008 Carnegie Peers SR	2008 NSSE		2010 Drake SR	2010 ANAC SR	2010 Carnegie Peers SR	2010 NSSE
	%	%	%	%		%	%	%	%
Coursework emphasizes: Analyzing the basic elements of an idea, experience, or theory	89%	87%	87%	84%		88%	90%	87%	86%
Coursework emphasizes: Synthesizing and organizing ideas, information, or experiences	74%	78%	78%	75%		75%	82%	79%	77%
Coursework emphasizes: Making judgments about the value of information, arguments, or methods	79%	76%	77%	73%		75%	77%	77%	74%
Coursework emphasizes: Applying theories or concepts to practical problems or in new situations	78%	84%	84%	80%		88%	86%	85%	82%

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Appendix 3: Frequency Distribution for Select 2013 National Survey of Student Engagement Items – Percent reporting “Quite a Bit” or “Very Much” with National Comparison Benchmarks

	2013			
	2013 Drake FY	2013 Drake Peers FY	2013 Carnegie Class FY	2013 NSSE
	%	%	%	%
Analyzing an idea, experience, or line of reasoning in depth by examining its parts	80%	83%	73%	73%
Forming a new idea or understanding from various pieces of information	71%	77%	70%	69%
Evaluating a point of view, decision, or information source	72%	79%	72%	70%
Applying facts, theories, or methods to practical problems or new situations	88%	80%	73%	74%
	2013			
	2013 Drake SR	2013 Drake Peers SR	2013 Carnegie Class SR	NSSE 2013
	%	%	%	%
Analyzing an idea, experience, or line of reasoning in depth by examining its parts	81%	83%	78%	78%
Forming a new idea or understanding from various pieces of information	76%	77%	74%	73%
Evaluating a point of view, decision, or information source	74%	76%	75%	72%
Applying facts, theories, or methods to practical problems or new situations	85%	85%	80%	80%

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Appendix 4: Results from Longitudinal Panel Study Highlighting Changes in Self-Rating of Ability to “Evaluate the quality or reliability of information”

Table 1. Change in Student Self-Rating of Skills Over Time (2011-13 Foundations of Learning Assessment/2014 Drake Student Survey)

	Pretest Mean (FLA)	Posttest Mean (DSS)	Repeated Measures Mean Comparison (Time)	
			Sig. (2-tailed)	Effect Size
Read and understand scientific writings written for an informed lay audience	3.34	3.71	.000	0.34
Employ evidence effectively in writing	3.82	4.08	.000	0.33
Evaluate the quality or reliability of information	3.81	4.09	.000	0.32
Understand the ethical issues related to use and misuse of information	3.96	4.22	.000	0.26
Evaluate reasoned arguments	3.91	4.12	.000	0.25
Apply understanding of ethical issues when developing solutions	3.90	4.12	.000	0.25
Ability to use educational experiences to analyze civic and global issues.	3.62	3.83	.000	0.23
Construct reasoned arguments	3.95	4.11	.000	0.20
Ability to integrate skills and knowledge from different sources and experiences	4.05	4.20	.000	0.19
Communicate effectively with people from other cultures and backgrounds.	3.89	4.00	.005	0.12
Knowledge of how to participate effectively in the democratic process.	3.52	3.62	.008	0.11
Articulate a vision of my own values, ethics, or core beliefs	4.14	4.22	.039	0.09
Execute appropriate mathematical operations for a given question	3.80	3.81	.821	0.01
Understand the perspectives and experiences of people who are different than you	4.22	4.21	.854	0.01
Create or interpret art (ex. Sculpture, painting, music, theatre)	3.06	3.04	.687	0.02
Ability to read carefully	4.20	4.18	.604	0.02
Analyze differences between industrialized and developing areas of the world	3.71	3.67	.320	0.04
Understand the historical, political, and social connections of past events	3.68	3.61	.091	0.07