



**National Survey of Student Engagement  
2021  
Selected Items Related to Quantitative and Reasoning**

**Dates of Administration:** March 2021 - April 2021<sup>1</sup>  
**Method of Administration:** Web survey (Administered through NSSE)

**Demographics and Response Rates:**

	<b>First Years</b>	<b>Seniors</b>
<b>Overall Response Rate</b>	<b>61% (126/206)</b>	<b>56% (102/181)</b>
% Female	52%	48%
% Am. Indian or AK Native	0%	0%
% Asian	32%	14%
% Black or African American	2%	4%
% Hispanic or Latino	19%	19%
% White	23%	35%
% International/foreign born	6%	7%
% Two or more races	12%	17%
% Unknown	7%	5%

**Background:**

HMC participates in the National Survey of Student Engagement (NSSE) annually each spring, surveying all first years and graduating seniors asking them about the characteristics and quality of their undergraduate experience. It includes 10 Engagement Indicators<sup>2</sup> and High Impact Practices<sup>3</sup>. Additionally, NSSE allows campuses to add additional topical modules to their survey. The Assessment and Accreditation Committee has worked with OIRE to develop a [cycle for the modules](#) that are relevant to HMC.

NSSE results are used throughout the campus in departmental program reviews to evaluate growth and development on student learning outcomes and by the college overall in its improvement efforts.

**Highlights:**

- For first years, scores on all the quantitative reasoning items were significantly higher than our peers in highly selective baccalaureate colleges. For seniors, we were significantly higher than our peers on two items: reaching conclusions based on analysis of numerical information, and the overall contribution of an HMC education to the development of analyzing numerical and statistical information. HMC seniors were consistent with their peers for the rest of the items.

<sup>1</sup> HMC’s 2021 NSSE administration occurred during remote learning, however, some of our comparison schools may have had different approaches to the COVID-19 pandemic. More info about NSSE, data collection policies, and analyses, click [here](#).

<sup>2</sup> Higher-Order Learning, Reflective and Integrative Learning, Learning Strategies, Quantitative Reasoning, Collaborative Learning, Discussions with Diverse Others, Student-Faculty Interaction, Effective Teaching Practices, Quality of Interactions, and Supportive Environment)

<sup>3</sup> Learning Communities, Service-Learning, Research with Faculty, Internships, Study Abroad, and Capstones

FIRST YEARS				
	<u>HMC</u>	<u>Peer</u>	<u>Comp</u>	<u>Sig</u>
	n = 113	n = 8,737		
<b>During the current school year, about how often have you done the following?</b>				
<i>1 = never; 2 = sometimes; 3 = often; 4 = very often</i>				
Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	2.8	2.6	△	p < .05
Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	2.8	2.4	▲	p < .001
Evaluated what others have concluded from numerical information	2.6	2.4	△	p < .01
<b>How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?</b>				
<i>1 = very little; 2 = some; 3 = quite a bit; 4 = very much</i>				
Analyzing numerical and statistical information	3.1	2.6	▲	p < .001

SENIORS				
	<u>HMC</u>	<u>Peer</u>	<u>Comp</u>	<u>Sig</u>
	n = 86	n = 7,021		
<b>During the current school year, about how often have you done the following?</b>				
<i>1 = never; 2 = sometimes; 3 = often; 4 = very often</i>				
Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	3.1	2.7	▲	p < .001
Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	2.6	2.6		
Evaluated what others have concluded from numerical information	2.7	2.6		
<b>How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?</b>				
<i>1 = very little; 2 = some; 3 = quite a bit; 4 = very much</i>				
Analyzing numerical and statistical information	3.4	2.9	▲	p < .001

- ▲ HMC students' average was significantly higher (p < .001)
- △ HMC students' average was significantly higher (p < .01)
- ◐ HMC students' average was significantly higher (p < .05)
- ▼ HMC students' average was significantly lower (p < .001)
- ▽ HMC students' average was significantly lower (p < .01)
- ◑ HMC students' average was significantly lower (p < .05)