



National Survey of Student Engagement 2020 Selected Items Related to Quantitative Reasoning

Dates of Administration: February 4, 2020 - March 3, 2020¹
Method of Administration: Web survey (Administered through NSSE)

Demographics and Response Rates:

| | First Years | Seniors |
|------------------------------|----------------------|---------------------|
| Overall Response Rate | 52% (116/225) | 42% (89/211) |
| % Female | 49% | 47% |
| % Am. Indian or AK Native | 0% | 0% |
| % Asian | 22% | 12% |
| % Black or African American | 5% | 5% |
| % Hispanic or Latino | 15% | 17% |
| % White | 32% | 38% |
| % International/foreign born | 12% | 8% |
| % Two or more races | 7% | 11% |
| % Unknown | 7% | 10% |

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 (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) and High Impact Practices (Learning Communities, Service-Learning, Research with Faculty, Internships, Study Abroad, and Capstones). Additionally, NSSE allows campuses to add up to two 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.

In 2020, right before transitioning to remote learning, HMC participated in NSSE and chose additional two modules: the [Civic Engagement Module](#) and the [Inclusiveness & Engagement with Diversity Module](#). While the comparison group for the overall survey is our Carnegie Class (Private More Selective Baccalaureate Arts & Sciences Focus – 27 other schools), our Comparison Group for the FY/SR module in 2020 is all other institutions who participated in the module...

NSSE results are used throughout the campus in academic and co-curricular programs to evaluate growth and development on student learning outcomes and by the college overall in its improvement efforts.

¹ HMC's 2020 NSSE administration concluded before we transitioned to remote learning, however, some of our comparison schools may have had their NSSE administrations interrupted or disrupted by the transition to remote learning. More info about actions taken by NSSE to minimize the pandemic's impact and the analyses completed to ensure data quality is available [here](#).

Highlights:

- For first years, scores on all the quantitative reasoning items were significantly higher than our peers in highly selective baccalaureate colleges, while 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.

| FIRST YEARS | | | | |
|---|------------|-------------|-------------|------------|
| | <u>HMC</u> | <u>Peer</u> | <u>Comp</u> | <u>Sig</u> |
| | n = 116 | n = 4,812 | | |
| During the current school year, about how often have you done the following? | | | | |
| <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 | 2.5 | ▲ | p < .001 |
| Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.) | 2.8 | 2.3 | ▲ | p < .001 |
| Evaluated what others have concluded from numerical information | 2.7 | 2.4 | ▲ | p < .001 |
| How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas? | | | | |
| <i>1 = very little; 2 = some; 3 = quite a bit; 4 = very much</i> | | | | |
| Analyzing numerical and statistical information | 3.2 | 2.5 | ▲ | p < .001 |

| SENIORS | | | | |
|---|------------|-------------|-------------|------------|
| | <u>HMC</u> | <u>Peer</u> | <u>Comp</u> | <u>Sig</u> |
| | n = 89 | n = 3,921 | | |
| During the current school year, about how often have you done the following? | | | | |
| <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.) | 2.9 | 2.6 | △ | p < .01 |
| Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.) | 2.3 | 2.5 | | |
| Evaluated what others have concluded from numerical information | 2.6 | 2.6 | | |
| How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas? | | | | |
| <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 |