# NSSE 2022
# Engagement Indicators
## Western Michigan University

## About Your *Engagement Indicators* Report

Engagement Indicators (EIs) provide a useful summary of the detailed information contained in your students' NSSE responses. By combining responses to related NSSE questions, each EI offers valuable information about a distinct aspect of student engagement. Ten indicators, based on three to eight survey questions each (a total of 47 survey questions), are organized into four broad themes as shown at right. The specific items within each EI are listed below, starting on page 5.

| Theme | Engagement Indicator |
|---|---|
| *Academic Challenge* | Higher-Order Learning |
| | Reflective & Integrative Learning |
| | Learning Strategies |
| | Quantitative Reasoning |
| *Learning with Peers* | Collaborative Learning |
| | Discussions with Diverse Others |
| *Experiences with Faculty* | Student-Faculty Interaction |
| | Effective Teaching Practices |
| *Campus Environment* | Quality of Interactions |
| | Supportive Environment |

### Report Sections

**Overview (p. 3)** — Displays how average EI scores for your students compare with those of students at your comparison group institutions.

**Theme Reports (pp. 4-13)** — Detailed views of EI scores within the four themes for your students and those at comparison group institutions. Three views offer varied insights into your EI scores:

**Mean Comparisons**
Straightforward comparisons of average scores between your students and those at comparison group institutions, with tests of significance and effect sizes (see below).

**Score Distributions**
Box-and-whisker charts show the variation in scores *within* your institution and comparison groups.

**Performance on Indicator Items**
Responses to each item in a given EI are summarized for your institution and comparison groups.

**Comparisons with High-Performing Institutions (p. 15)** — Comparisons of your students' average scores on each EI with those of students at institutions whose average scores were in the top 50% and top 10% of 2021 and 2022 participating institutions.

**Detailed Statistics (pp. 16-19)** — Detailed information about EI score means, distributions, and tests of statistical significance.

### Interpreting Comparisons

Mean comparisons report both statistical significance and effect size. Effect size indicates the practical importance of an observed difference. For EI comparisons, NSSE research has concluded that an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2018). Comparisons with an effect size of at least .3 in magnitude (before rounding) are highlighted in the Overview (p. 3).

*EIs vary more among students within an institution than between institutions,* like many experiences and outcomes in higher education. As a result, focusing attention on average scores alone amounts to examining the tip of the iceberg. It's equally important to understand how student engagement varies within your institution. Score distributions indicate how EI scores vary among your students and those in your comparison groups. Your NSSE Tableau dashboards and Report Builder (released in the fall) offer valuable perspectives on internal variation and help you investigate your students' engagement in depth.

### How Engagement Indicators are Computed

Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

For more information on EIs and their psychometric properties, refer to the NSSE website: **nsse.indiana.edu**

Rocconi, L.M., & Gonyea, R.M. (2018). Contextualizing effect sizes in the National Survey of Student Engagement: An empirical analysis. *Research & Practice in Assessment, 13* (Summer/Fall), pp. 22-38.

# NSSE 2022 Engagement Indicators

**Overview**

**Western Michigan University**

## Engagement Indicators: Overview

Engagement Indicators are summary measures based on sets of NSSE questions examining key dimensions of student engagement. The ten indicators are organized within four broad themes: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The tables below compare average scores for your students with those in your comparison groups. Use the following key:

▲ **Your students' average** was significantly higher ($p < .05$) with an effect size at least .3 in magnitude.

△ **Your students' average** was significantly higher ($p < .05$) with an effect size less than .3 in magnitude.

-- No significant difference.

▽ **Your students' average** was significantly lower ($p < .05$) with an effect size less than .3 in magnitude.

▼ **Your students' average** was significantly lower ($p < .05$) with an effect size at least .3 in magnitude.

Note: It is important to interpret the direction of differences relative to your institutional context. You may not see all of these symbols in your report.

### First-Year Students

| Theme | Engagement Indicator | Your first-year students compared with Carnegie Peers | Your first-year students compared with Carnegie Class | Your first-year students compared with NSSE 2021 & 2022 |
|---|---|---|---|---|
| Academic Challenge | Higher-Order Learning | -- | ▽ | ▽ |
| | Reflective & Integrative Learning | -- | -- | -- |
| | Learning Strategies | -- | ▽ | ▽ |
| | Quantitative Reasoning | -- | -- | ▽ |
| Learning with Peers | Collaborative Learning | △ | -- | -- |
| | Discussions with Diverse Others | -- | △ | -- |
| Experiences with Faculty | Student-Faculty Interaction | △ | -- | -- |
| | Effective Teaching Practices | -- | -- | ▽ |
| Campus Environment | Quality of Interactions | △ | -- | -- |
| | Supportive Environment | △ | -- | -- |

### Seniors

| Theme | Engagement Indicator | Your seniors compared with Carnegie Peers | Your seniors compared with Carnegie Class | Your seniors compared with NSSE 2021 & 2022 |
|---|---|---|---|---|
| Academic Challenge | Higher-Order Learning | ▽ | ▽ | ▽ |
| | Reflective & Integrative Learning | -- | -- | -- |
| | Learning Strategies | ▽ | ▽ | ▽ |
| | Quantitative Reasoning | -- | -- | -- |
| Learning with Peers | Collaborative Learning | △ | △ | △ |
| | Discussions with Diverse Others | -- | -- | -- |
| Experiences with Faculty | Student-Faculty Interaction | -- | -- | -- |
| | Effective Teaching Practices | ▽ | ▽ | ▽ |
| Campus Environment | Quality of Interactions | ▽ | ▽ | ▼ |
| | Supportive Environment | ▽ | ▽ | ▽ |

## Academic Challenge: First-year students

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote student learning by challenging and supporting them to engage in various forms of deep learning. Four Engagement Indicators are part of this theme: *Higher-Order Learning, Reflective & Integrative Learning, Learning Strategies,* and *Quantitative Reasoning.* Below and on the next page are three views of your results alongside those of your comparison groups.

### Mean Comparisons

| | WMU | Carnegie Peers | | Carnegie Class | | NSSE 2021 & 2022 | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Engagement Indicator | Mean | Mean | Effect size | Mean | Effect size | Mean | Effect size |
| Higher-Order Learning | 35.6 | 35.7 | -.01 | 37.5 * | -.14 | 37.8 * | -.16 |
| Reflective & Integrative Learning | 34.2 | 34.1 | .01 | 35.2 | -.08 | 35.3 | -.09 |
| Learning Strategies | 34.8 | 36.2 | -.10 | 37.5 ** | -.19 | 37.9 *** | -.22 |
| Quantitative Reasoning | 26.7 | 26.7 | .00 | 28.4 | -.11 | 28.7 * | -.13 |

*Your first-year students compared with*

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

### Score Distributions
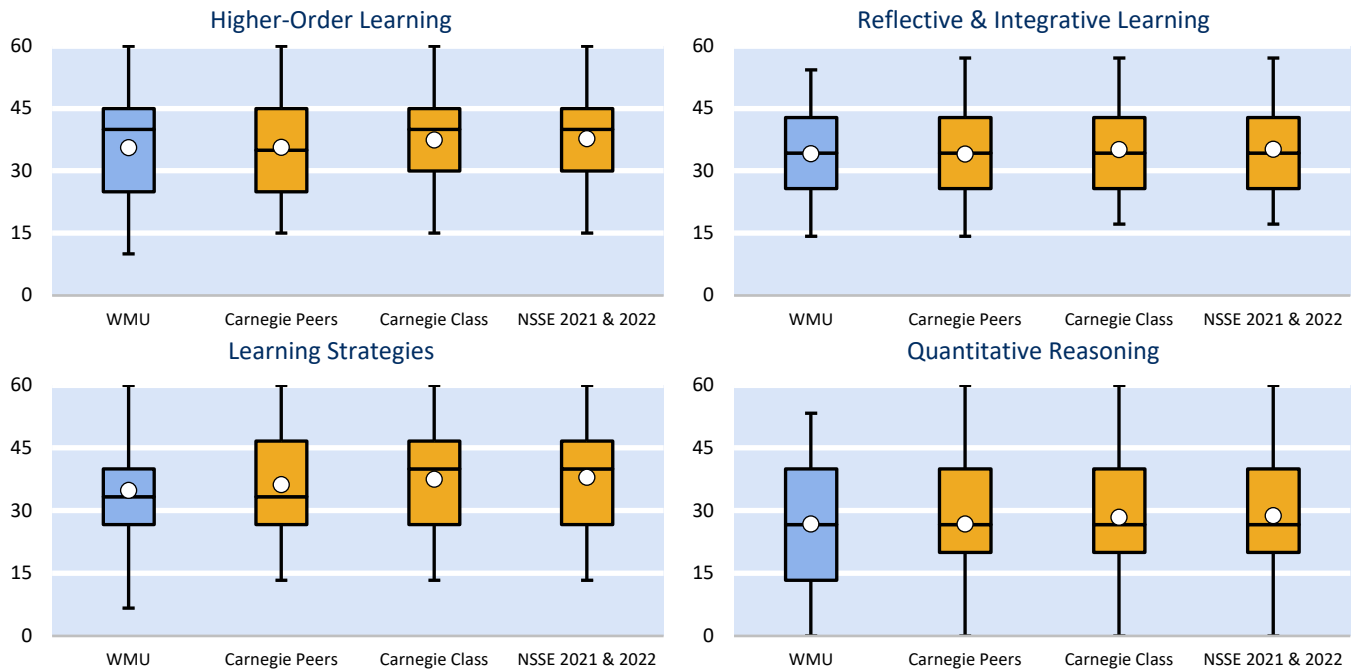


Notes: Each box-and-whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

## Academic Challenge: First-year students (continued)

### Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

| | WMU | Percentage point difference [a] between your FY students and | | |
|---|---|---|---|---|
| Higher-Order Learning | | Carnegie Peers | Carnegie Class | NSSE 2021 & 2022 |
| Percentage responding "Very much" or "Quite a bit" about how much coursework emphasized... | % | | | |
| 4b. Applying facts, theories, or methods to practical problems or new situations | 70 | +6 | +3 | +1 |
| 4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts | 64 | +1 | -3 | -4 |
| 4d. Evaluating a point of view, decision, or information source | 60 | -6 | -9 | -9 |
| 4e. Forming a new idea or understanding from various pieces of information | 69 | +3 | -0 | -1 |
| **Reflective & Integrative Learning** | | | | |
| Percentage of students who responded that they "Very often" or "Often"... | | | | |
| 2a. Combined ideas from different courses when completing assignments | 54 | +7 | +4 | +3 |
| 2b. Connected your learning to societal problems or issues | 49 | +0 | -3 | -3 |
| 2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments | 52 | -0 | -1 | -1 |
| 2d. Examined the strengths and weaknesses of your own views on a topic or issue | 55 | -8 | -9 | -9 |
| 2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective | 67 | -0 | -4 | -3 |
| 2f. Learned something that changed the way you understand an issue or concept | 61 | +1 | -4 | -4 |
| 2g. Connected ideas from your courses to your prior experiences and knowledge | 74 | -1 | -3 | -3 |
| **Learning Strategies** | | | | |
| Percentage of students who responded that they "Very often" or "Often"... | | | | |
| 9a. Identified key information from reading assignments | 68 | +0 | -3 | -4 |
| 9b. Reviewed your notes after class | 62 | -0 | -3 | -3 |
| 9c. Summarized what you learned in class or from course materials | 59 | +2 | -4 | -5 |
| **Quantitative Reasoning** | | | | |
| Percentage of students who responded that they "Very often" or "Often"... | | | | |
| 6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.) | 54 | +5 | +2 | +1 |
| 6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.) | 40 | +2 | -2 | -3 |
| 6c. Evaluated what others have concluded from numerical information | 40 | +5 | +0 | -1 |

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile available on the NSSE website.

a. Percentage point difference = Institution percentage− Comparison group percentage. Because results are rounded to whole numbers, differences of less than 1 point may or may not display a bar. Small, but nonzero differences may be represented as +0 or -0.

## Academic Challenge: Seniors

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote student learning by challenging and supporting them to engage in various forms of deep learning. Four Engagement Indicators are part of this theme: *Higher-Order Learning, Reflective & Integrative Learning, Learning Strategies,* and *Quantitative Reasoning.* Below and on the next page are three views of your results alongside those of your comparison groups.

### Mean Comparisons

| | WMU | Carnegie Peers | | Carnegie Class | | NSSE 2021 & 2022 | |
|---|---|---|---|---|---|---|---|
| | | | Effect | | Effect | | Effect |
| Engagement Indicator | Mean | Mean | size | Mean | size | Mean | size |
| Higher-Order Learning | 37.5 | 39.9 ** | -.17 | 39.8 ** | -.17 | 40.2 *** | -.20 |
| Reflective & Integrative Learning | 37.2 | 37.3 | .00 | 37.9 | -.05 | 38.1 | -.07 |
| Learning Strategies | 36.4 | 38.8 ** | -.16 | 38.6 ** | -.15 | 39.0 ** | -.17 |
| Quantitative Reasoning | 29.5 | 29.6 | -.01 | 30.4 | -.05 | 30.9 | -.08 |

*Your seniors compared with*

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

### Score Distributions
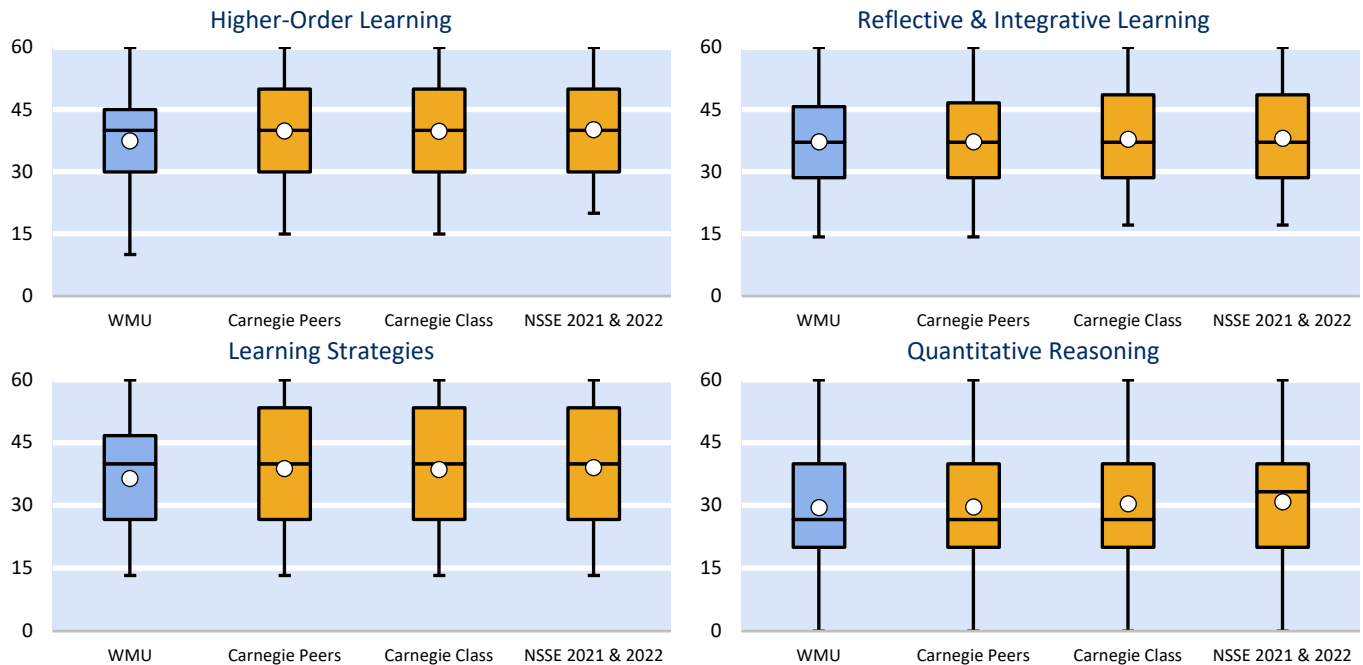


Notes: Each box-and-whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

## Academic Challenge: Seniors (continued)

### Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

| | WMU | Percentage point difference [a] between your seniors and | | |
|---|---|---|---|---|
| **Higher-Order Learning** | | Carnegie Peers | Carnegie Class | NSSE 2021 & 2022 |
| *Percentage responding "Very much" or "Quite a bit" about how much coursework emphasized...* | % | | | |
| 4b. Applying facts, theories, or methods to practical problems or new situations | 74 | -2 | -2 | -2 |
| 4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts | 71 | -3 | -3 | -3 |
| 4d. Evaluating a point of view, decision, or information source | 67 | -3 | -3 | -5 |
| 4e. Forming a new idea or understanding from various pieces of information | 67 | -5 | -5 | -6 |
| **Reflective & Integrative Learning** | | | | |
| *Percentage of students who responded that they "Very often" or "Often"...* | | | | |
| 2a. Combined ideas from different courses when completing assignments | 69 | +3 | +2 | +3 |
| 2b. Connected your learning to societal problems or issues | 58 | +0 | -2 | -3 |
| 2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments | 52 | +1 | -1 | -2 |
| 2d. Examined the strengths and weaknesses of your own views on a topic or issue | 65 | +0 | -1 | -1 |
| 2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective | 76 | +4 | +3 | +3 |
| 2f. Learned something that changed the way you understand an issue or concept | 69 | -1 | -2 | -2 |
| 2g. Connected ideas from your courses to your prior experiences and knowledge | 78 | -4 | -4 | -5 |
| **Learning Strategies** | | | | |
| *Percentage of students who responded that they "Very often" or "Often"...* | | | | |
| 9a. Identified key information from reading assignments | 68 | -7 | -7 | -8 |
| 9b. Reviewed your notes after class | 62 | -3 | -2 | -2 |
| 9c. Summarized what you learned in class or from course materials | 59 | -8 | -6 | -7 |
| **Quantitative Reasoning** | | | | |
| *Percentage of students who responded that they "Very often" or "Often"...* | | | | |
| 6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.) | 53 | -1 | -2 | -3 |
| 6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.) | 48 | +4 | +2 | +0 |
| 6c. Evaluated what others have concluded from numerical information | 44 | -0 | -2 | -3 |

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile available on the NSSE website.

a. Percentage point difference = Institution percentage − Comparison group percentage. Because results are rounded to whole numbers, differences of less than 1 point may or may not display a bar. Small, but nonzero differences may be represented as +0 or -0.

# NSSE 2022 Engagement Indicators

**Learning with Peers**

## Western Michigan University

## Learning with Peers: First-year students

Collaborating with others in mastering difficult material and interacting with peers from different backgrounds prepares students to deal with complex, unscripted problems they will encounter during and after college. Two Engagement Indicators make up this theme: *Collaborative Learning* and *Discussions with Diverse Others.* Below are three views of your results alongside those of your comparison groups.

### Mean Comparisons

| | WMU | Your first-year students compared with | | | | | |
| | | Carnegie Peers | | Carnegie Class | | NSSE 2021 & 2022 | |
| Engagement Indicator | Mean | Mean | Effect size | Mean | Effect size | Mean | Effect size |
|---|---|---|---|---|---|---|---|
| Collaborative Learning | 27.4 | 25.4 * | .14 | 27.8 | -.02 | 27.5 | .00 |
| Discussions with Diverse Others | 38.6 | 36.8 | .11 | 36.5 * | .13 | 37.1 | .09 |

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

### Score Distributions



Notes: Each box-and-whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

### Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

| | WMU | Percentage point difference [a] between your FY students and | | |
| Collaborative Learning | | Carnegie Peers | Carnegie Class | NSSE 2021 & 2022 |
|---|---|---|---|---|
| *Percentage of students who responded that they "Very often" or "Often"...* | % | | | |
| 1b. Asked another student to help you understand course material | 41 | +3 | -2 | -1 |
| 1c. Explained course material to one or more students | 49 | +9 | +5 | +5 |
| 1d. Prepared for exams by discussing or working through course material with other students | 36 | +5 | -1 | -1 |
| 1e. Worked with other students on course projects or assignments | 49 | +13 | +5 | +4 |
| **Discussions with Diverse Others** | | | | |
| *Percentage of students who responded that they "Very often" or "Often" had discussions with...* | | | | |
| 8a. People of a race or ethnicity other than your own | 71 | +6 | +6 | +5 |
| 8b. People from an economic background other than your own | 70 | +6 | +5 | +4 |
| 8c. People with religious beliefs other than your own | 67 | +7 | +8 | +5 |
| 8d. People with political views other than your own | 61 | +0 | +3 | +3 |

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile available on the NSSE website.

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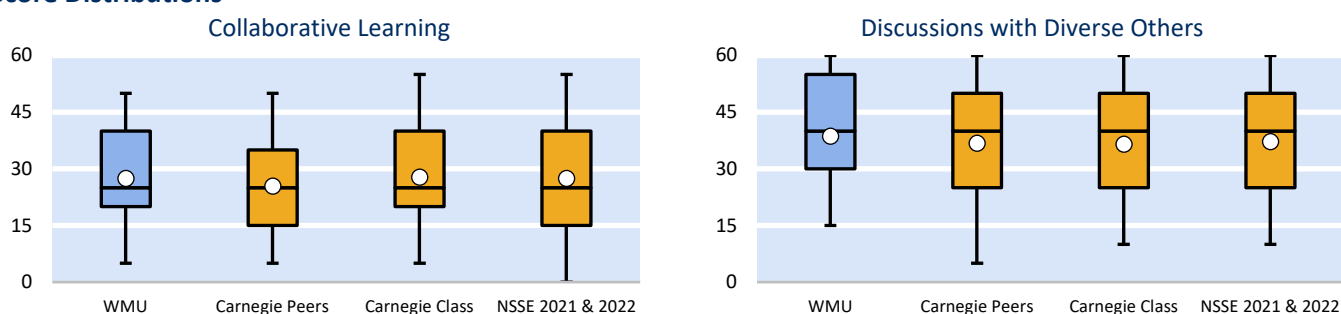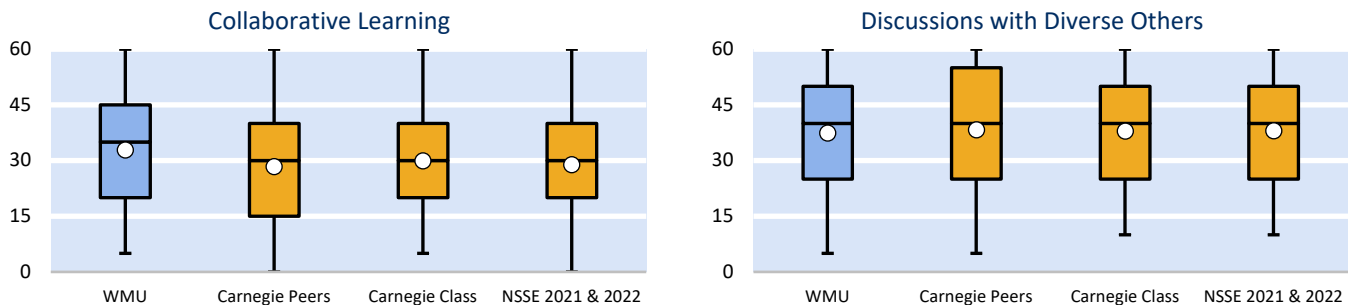
## Learning with Peers: Seniors

Collaborating with others in mastering difficult material and interacting with peers from different backgrounds prepares students to deal with complex, unscripted problems they will encounter during and after college. Two Engagement Indicators make up this theme: *Collaborative Learning* and *Discussions with Diverse Others.* Below are three views of your results alongside those of your comparison groups.

### Mean Comparisons

| | WMU | *Your seniors compared with* | | | | | |
|---|---|---|---|---|---|---|---|
| | | Carnegie Peers | | Carnegie Class | | NSSE 2021 & 2022 | |
| Engagement Indicator | Mean | Mean | *Effect size* | Mean | *Effect size* | Mean | *Effect size* |
| Collaborative Learning | 32.9 | 28.4 *** | .28 | 30.0 *** | .19 | 29.0 *** | .24 |
| Discussions with Diverse Others | 37.5 | 38.4 | -.05 | 38.0 | -.03 | 38.1 | -.04 |

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

### Score Distributions



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| | WMU | *Percentage point difference [a] between your seniors and* | | |
|---|---|---|---|---|
| **Collaborative Learning** | | Carnegie Peers | Carnegie Class | NSSE 2021 & 2022 |
| *Percentage of students who responded that they "Very often" or "Often"...* | % | | | |
| 1b. Asked another student to help you understand course material | 45 | +7 | +5 | +7 |
| 1c. Explained course material to one or more students | 57 | +9 | +7 | +8 |
| 1d. Prepared for exams by discussing or working through course material with other students | 44 | +8 | +5 | +6 |
| 1e. Worked with other students on course projects or assignments | 64 | +11 | +5 | +8 |
| **Discussions with Diverse Others** | | | | |
| *Percentage of students who responded that they "Very often" or "Often" had discussions with...* | | | | |
| 8a. People of a race or ethnicity other than your own | 65 | -2 | -2 | -3 |
| 8b. People from an economic background other than your own | 70 | +2 | +2 | +2 |
| 8c. People with religious beliefs other than your own | 64 | +0 | +2 | +2 |
| 8d. People with political views other than your own | 60 | -5 | -1 | -1 |

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## Experiences with Faculty: First-year students

Students learn firsthand how experts think about and solve problems by interacting with faculty members inside and outside of instructional settings. As a result, faculty become role models, mentors, and guides for lifelong learning. In addition, effective teaching requires that faculty deliver course material and provide feedback in student-centered ways. Two Engagement Indicators investigate this theme: *Student-Faculty Interaction* and *Effective Teaching Practices.* Below are three views of your results alongside those of your comparison groups.

### Mean Comparisons

| | WMU | *Your first-year students compared with* | | | | | |
|---|---|---|---|---|---|---|---|
| | | Carnegie Peers | | Carnegie Class | | NSSE 2021 & 2022 | |
| *Engagement Indicator* | *Mean* | *Mean* | *Effect size* | *Mean* | *Effect size* | *Mean* | *Effect size* |
| Student-Faculty Interaction | 19.5 | 17.5 * | .14 | 19.1 | .03 | 20.0 | -.03 |
| Effective Teaching Practices | 35.9 | 35.4 | .03 | 37.2 | -.10 | 37.9 * | -.15 |

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

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| | WMU | Percentage point difference [a] between your FY students and | | |
|---|---|---|---|---|
| **Student-Faculty Interaction** | | Carnegie Peers | Carnegie Class | NSSE 2021 & 2022 |
| *Percentage of students who responded that they "Very often" or "Often"...* | % | | | |
| 3a. Talked about career plans with a faculty member | 32 | -1 | -1 | -3 |
| 3b. Worked w/faculty on activities other than coursework (committees, student groups, etc.) | 19 | +4 | +1 | +0 |
| 3c. Discussed course topics, ideas, or concepts with a faculty member outside of class | 26 | +8 | +3 | +2 |
| 3d. Discussed your academic performance with a faculty member | 26 | +4 | -0 | -2 |
| **Effective Teaching Practices** | | | | |
| *Percentage responding "Very much" or "Quite a bit" about how much instructors have...* | | | | |
| 5a. Clearly explained course goals and requirements | 73 | +3 | -1 | -2 |
| 5b. Taught course sessions in an organized way | 69 | +3 | -1 | -3 |
| 5c. Used examples or illustrations to explain difficult points | 71 | +6 | +1 | -0 |
| 5d. Provided feedback on a draft or work in progress | 57 | -2 | -4 | -6 |
| 5e. Provided prompt and detailed feedback on tests or completed assignments | 55 | +5 | -1 | -3 |

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile available on the NSSE website.

a. Percentage point difference = Institution percentage− Comparison group percentage. Because results are rounded to whole numbers, differences of less than 1 point may or may not display a bar. Small, but nonzero differences may be represented as +0 or -0.
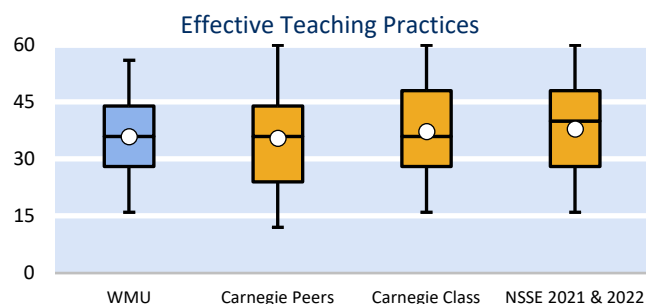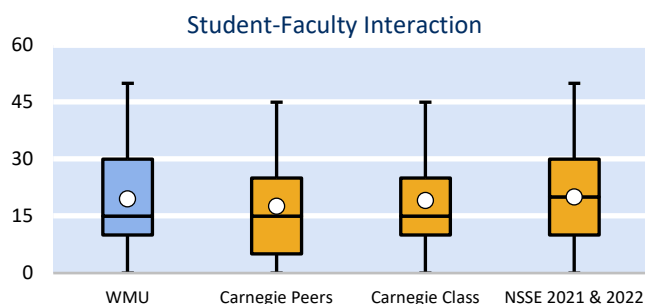
## Experiences with Faculty: Seniors

Students learn firsthand how experts think about and solve problems by interacting with faculty members inside and outside of instructional settings. As a result, faculty become role models, mentors, and guides for lifelong learning. In addition, effective teaching requires that faculty deliver course material and provide feedback in student-centered ways. Two Engagement Indicators investigate this theme: *Student-Faculty Interaction* and *Effective Teaching Practices.* Below are three views of your results alongside those of your comparison groups.

### Mean Comparisons

| | WMU | Carnegie Peers | | Carnegie Class | | NSSE 2021 & 2022 | |
|---|---|---|---|---|---|---|---|
| | | | Effect | | Effect | | Effect |
| Engagement Indicator | Mean | Mean | size | Mean | size | Mean | size |
| Student-Faculty Interaction | 21.2 | 21.7 | -.03 | 21.9 | -.04 | 22.5 | -.07 |
| Effective Teaching Practices | 35.6 | 37.9 ** | -.16 | 38.9 *** | -.23 | 39.4 *** | -.27 |

*Your seniors compared with*

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

### Score Distributions



Notes: Each box-and-whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

### Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

| Student-Faculty Interaction | WMU | Carnegie Peers | Carnegie Class | NSSE 2021 & 2022 |
|---|---|---|---|---|
| *Percentage of students who responded that they "Very often" or "Often"…* | % | | | |
| 3a. Talked about career plans with a faculty member | 35 | -3 | -3 | -4 |
| 3b. Worked w/faculty on activities other than coursework (committees, student groups, etc.) | 21 | -3 | -4 | -4 |
| 3c. Discussed course topics, ideas, or concepts with a faculty member outside of class | 27 | -0 | -1 | -3 |
| 3d. Discussed your academic performance with a faculty member | 28 | -1 | -1 | -3 |
| **Effective Teaching Practices** | | | | |
| *Percentage responding "Very much" or "Quite a bit" about how much instructors have…* | | | | |
| 5a. Clearly explained course goals and requirements | 73 | -2 | -4 | -5 |
| 5b. Taught course sessions in an organized way | 69 | -2 | -4 | -5 |
| 5c. Used examples or illustrations to explain difficult points | 66 | -6 | -8 | -9 |
| 5d. Provided feedback on a draft or work in progress | 58 | -1 | -3 | -4 |
| 5e. Provided prompt and detailed feedback on tests or completed assignments | 56 | -5 | -6 | -8 |

*Percentage point difference [a] between your seniors and*

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile available on the NSSE website.

a. Percentage point difference = Institution percentage − Comparison group percentage. Because results are rounded to whole numbers, differences of less than 1 point may or may not display a bar. Small, but nonzero differences may be represented as +0 or -0.

## Campus Environment: First-year students

Students benefit and are more satisfied in supportive settings that cultivate positive relationships among students, faculty, and staff. Two Engagement Indicators investigate this theme: *Quality of Interactions* and *Supportive Environment.* Below are three views of your results alongside those of your comparison groups.

### Mean Comparisons

| | WMU | Your first-year students compared with | | | | | |
| | | Carnegie Peers | | Carnegie Class | | NSSE 2021 & 2022 | |
| Engagement Indicator | Mean | Mean | Effect size | Mean | Effect size | Mean | Effect size |
|---|---|---|---|---|---|---|---|
| Quality of Interactions | 42.0 | 40.4 * | .13 | 41.5 | .04 | 42.4 | -.03 |
| Supportive Environment | 33.6 | 31.5 * | .15 | 33.1 | .04 | 33.3 | .02 |

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

### Score Distributions



Notes: Each box-and-whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

### Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

| Quality of Interactions | WMU | Percentage point difference [a] between your FY students and | | |
| | | Carnegie Peers | Carnegie Class | NSSE 2021 & 2022 |
|---|---|---|---|---|
| *Percentage rating their interactions a 6 or 7 (on a scale from 1="Poor" to 7="Excellent") with...* | % | | | |
| 13a. Students | 57 | +15 | +9 | +8 |
| 13b. Academic advisors | 52 | -0 | +1 | -2 |
| 13c. Faculty | 50 | +6 | +3 | -1 |
| 13d. Student services staff (career services, student activities, housing, etc.) | 44 | +1 | -1 | -3 |
| 13e. Other administrative staff and offices (registrar, financial aid, etc.) | 38 | -1 | -6 | -8 |
| **Supportive Environment** | | | | |
| *Percentage responding "Very much" or "Quite a bit" about how much the institution emphasized...* | | | | |
| 14b. Providing support to help students succeed academically | 71 | +4 | +2 | +1 |
| 14c. Using learning support services (tutoring services, writing center, etc.) | 68 | -0 | -2 | -3 |
| 14d. Encouraging contact among students from diff. backgrounds (soc., racial/eth., relig., etc.) | 61 | +8 | +5 | +4 |
| 14e. Providing opportunities to be involved socially | 66 | +8 | +3 | +2 |
| 14f. Providing support for your overall well-being (recreation, health care, counseling, etc.) | 62 | +5 | +0 | +0 |
| 14g. Helping you manage your non-academic responsibilities (work, family, etc.) | 35 | +3 | -2 | -3 |
| 14h. Attending campus activities and events (performing arts, athletic events, etc.) | 64 | +11 | +10 | +8 |
| 14i. Attending events that address important social, economic, or political issues | 47 | +9 | +4 | +3 |

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile available on the NSSE website.

a. Percentage point difference = Institution percentage − Comparison group percentage. Because results are rounded to whole numbers, differences of less than 1 point may or may not display a bar. Small, but nonzero differences may be represented as +0 or -0.

# NSSE 2022 Engagement Indicators

## Campus Environment
## Western Michigan University

## Campus Environment: Seniors

Students benefit and are more satisfied in supportive settings that cultivate positive relationships among students, faculty, and staff. Two Engagement Indicators investigate this theme: *Quality of Interactions* and *Supportive Environment.* Below are three views of your results alongside those of your comparison groups.

### Mean Comparisons

| | WMU | Your seniors compared with | | | | | |
|---|---|---|---|---|---|---|---|
| | | Carnegie Peers | | Carnegie Class | | NSSE 2021 & 2022 | |
| | | | *Effect* | | *Effect* | | *Effect* |
| *Engagement Indicator* | *Mean* | *Mean* | *size* | *Mean* | *size* | *Mean* | *size* |
| Quality of Interactions | 39.0 | 42.4 *** | -.27 | 42.3 *** | -.26 | 43.1 *** | -.32 |
| Supportive Environment | 28.5 | 30.9 ** | -.16 | 31.5 *** | -.21 | 31.6 *** | -.21 |

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

### Score Distributions



Quality of Interactions



Supportive Environment

Notes: Each box-and-whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

### Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

| Quality of Interactions | WMU | Percentage point difference [a] between your seniors and | | |
|---|---|---|---|---|
| | | Carnegie Peers | Carnegie Class | NSSE 2021 & 2022 |
| *Percentage rating their interactions a 6 or 7 (on a scale from 1="Poor" to 7="Excellent") with...* | % | | | |
| 13a. Students | 57 | +2 | -0 | -1 |
| 13b. Academic advisors | 47 | -7 | -4 | -8 |
| 13c. Faculty | 40 | -14 | -15 | -17 |
| 13d. Student services staff (career services, student activities, housing, etc.) | 38 | -7 | -6 | -8 |
| 13e. Other administrative staff and offices (registrar, financial aid, etc.) | 35 | -9 | -9 | -11 |
| **Supportive Environment** | | | | |
| *Percentage responding "Very much" or "Quite a bit" about how much the institution emphasized...* | | | | |
| 14b. Providing support to help students succeed academically | 61 | -3 | -5 | -6 |
| 14c. Using learning support services (tutoring services, writing center, etc.) | 56 | -7 | -8 | -8 |
| 14d. Encouraging contact among students from diff. backgrounds (soc., racial/eth., relig., etc.) | 47 | -4 | -6 | -7 |
| 14e. Providing opportunities to be involved socially | 56 | -4 | -5 | -5 |
| 14f. Providing support for your overall well-being (recreation, health care, counseling, etc.) | 49 | -8 | -10 | -9 |
| 14g. Helping you manage your non-academic responsibilities (work, family, etc.) | 20 | -8 | -11 | -12 |
| 14h. Attending campus activities and events (performing arts, athletic events, etc.) | 50 | -1 | -0 | -1 |
| 14i. Attending events that address important social, economic, or political issues | 36 | -1 | -5 | -5 |

Notes: Refer to your *Frequencies and Statistical Comparisons* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile available on the NSSE website.

a. Percentage point difference = Institution percentage − Comparison group percentage. Because results are rounded to whole numbers, differences of less than 1 point may or may not display a bar. Small, but nonzero differences may be represented as +0 or -0.
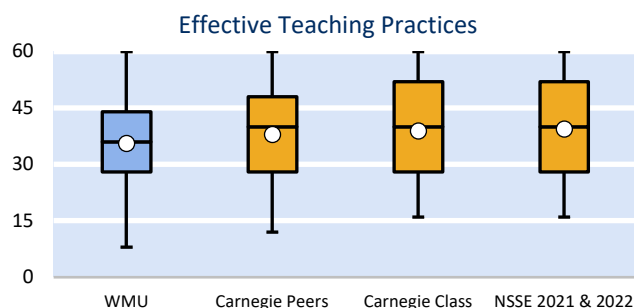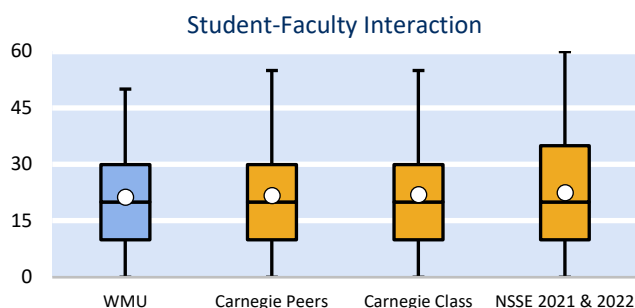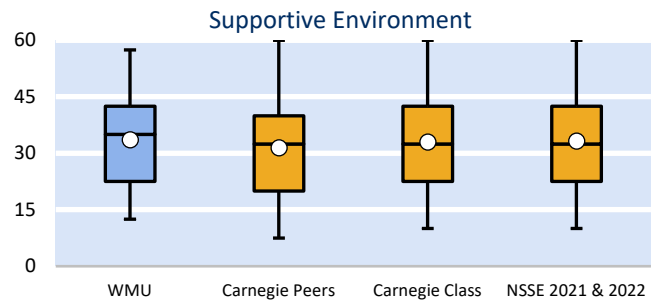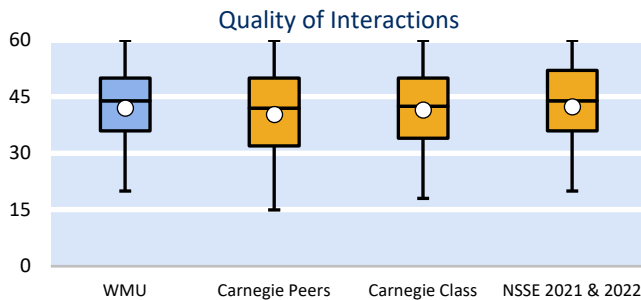
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## Comparisons with Top 50% and Top 10% Institutions

While NSSE's policy is not to rank institutions (see **go.iu.edu/NSSE-PnP**), the results below are designed to compare the engagement of your students with those attending two groups of institutions identified by NSSE[a] for their high average levels of student engagement:

   (a) institutions with average scores placing them in the top 50% of all 2021 and 2022 NSSE institutions, and

   (b) institutions with average scores placing them in the top 10% of all 2021 and 2022 NSSE institutions.

While the average scores for most institutions are below the mean for the top 50% or top 10%, your institution may show areas of distinction where your average student was as engaged as (or even more engaged than) the typical student at high-performing institutions. A check mark (✓) signifies those comparisons where your average score was at least comparable[b] to that of the high-performing group. However, the presence of a check mark does not necessarily mean that your institution was a member of that group.

It should be noted that most of the variability in student engagement is within, not between, institutions. Even "high-performing" institutions have students with engagement levels below the average for all institutions.

### First-Year Students

| | | WMU | Your first-year students compared with | | | | | |
| | | | NSSE Top 50% | | | NSSE Top 10% | | |
| Theme | Engagement Indicator | Mean | Mean | Effect size | ✓ | Mean | Effect size | ✓ |
|---|---|---|---|---|---|---|---|---|
| Academic Challenge | Higher-Order Learning | 35.6 | 39.2 *** | -.27 | | 42.1 *** | -.49 | |
| | Reflective and Integrative Learning | 34.2 | 36.9 *** | -.22 | | 39.2 *** | -.42 | |
| | Learning Strategies | 34.8 | 39.6 *** | -.34 | | 42.9 *** | -.57 | |
| | Quantitative Reasoning | 26.7 | 30.2 *** | -.22 | | 33.3 *** | -.42 | |
| Learning with Peers | Collaborative Learning | 27.4 | 31.8 *** | -.32 | | 35.4 *** | -.59 | |
| | Discussions with Diverse Others | 38.6 | 39.8 | -.08 | ✓ | 42.6 *** | -.28 | |
| Experiences with Faculty | Student-Faculty Interaction | 19.5 | 24.3 *** | -.32 | | 27.8 *** | -.55 | |
| | Effective Teaching Practices | 35.9 | 40.3 *** | -.32 | | 43.3 *** | -.55 | |
| Campus Environment | Quality of Interactions | 42.0 | 45.1 *** | -.26 | | 48.2 *** | -.50 | |
| | Supportive Environment | 33.6 | 35.9 ** | -.17 | | 39.1 *** | -.41 | |

### Seniors

| | | WMU | Your seniors compared with | | | | | |
| | | | NSSE Top 50% | | | NSSE Top 10% | | |
| Theme | Engagement Indicator | Mean | Mean | Effect size | ✓ | Mean | Effect size | ✓ |
|---|---|---|---|---|---|---|---|---|
| Academic Challenge | Higher-Order Learning | 37.5 | 41.9 *** | -.32 | | 44.2 *** | -.51 | |
| | Reflective and Integrative Learning | 37.2 | 40.3 *** | -.24 | | 42.7 *** | -.46 | |
| | Learning Strategies | 36.4 | 41.1 *** | -.32 | | 43.4 *** | -.49 | |
| | Quantitative Reasoning | 29.5 | 32.4 *** | -.18 | | 35.3 *** | -.37 | |
| Learning with Peers | Collaborative Learning | 32.9 | 34.0 | -.08 | ✓ | 37.9 *** | -.36 | |
| | Discussions with Diverse Others | 37.5 | 40.4 *** | -.18 | | 43.2 *** | -.38 | |
| Experiences with Faculty | Student-Faculty Interaction | 21.2 | 28.8 *** | -.46 | | 33.2 *** | -.75 | |
| | Effective Teaching Practices | 35.6 | 41.9 *** | -.45 | | 44.5 *** | -.65 | |
| Campus Environment | Quality of Interactions | 39.0 | 45.6 *** | -.54 | | 48.0 *** | -.72 | |
| | Supportive Environment | 28.5 | 34.3 *** | -.39 | | 37.4 *** | -.62 | |

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by the pooled standard deviation; *p < .05, **p < .01, ***p < .001 (2-tailed).

a. Precision-weighted means were used to determine the top 50% and top 10% institutions for each Engagement Indicator from all NSSE 2021 and 2022 institutions, separately by class. Using this method, Engagement Indicator scores of institutions with relatively large standard errors were adjusted toward the mean of all students, while those with smaller standard errors received smaller corrections. As a result, schools with less stable data—even those with high average scores—may not be among the top scorers. NSSE does not publish the names of the top 50% and top 10% institutions because of our commitment not to release institutional results and our policy against ranking institutions.

b. Check marks are assigned to comparisons that are either positive or non-significant with an effect size > -.10.

## Detailed Statistics: First-Year Students

| | Mean statistics | | | Percentile[d] scores | | | | | Comparison results | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | SD[b] | SE[c] | 5th | 25th | 50th | 75th | 95th | Deg. of freedom[e] | Mean diff. | Sig.[f] | Effect size[g] |
| **Academic Challenge** | | | | | | | | | | | | |
|   Higher-Order Learning | | | | | | | | | | | | |
|     WMU (N = 257) | 35.6 | 13.5 | .84 | 10 | 25 | 40 | 45 | 60 | | | | |
|     Carnegie Peers | 35.7 | 14.0 | .23 | 15 | 25 | 35 | 45 | 60 | 3,865 | -.1 | .917 | -.007 |
|     Carnegie Class | 37.5 | 13.4 | .09 | 15 | 30 | 40 | 45 | 60 | 22,316 | -1.9 | .028 | -.138 |
|     NSSE 2021 & 2022 | 37.8 | 13.5 | .04 | 15 | 30 | 40 | 45 | 60 | 106,272 | -2.1 | .012 | -.158 |
|     Top 50% | 39.2 | 13.3 | .06 | 20 | 30 | 40 | 50 | 60 | 54,829 | -3.6 | .000 | -.272 |
|     Top 10% | 42.1 | 13.0 | .17 | 20 | 35 | 40 | 55 | 60 | 6,260 | -6.4 | .000 | -.492 |
|   Reflective & Integrative Learning | | | | | | | | | | | | |
|     WMU (N = 283) | 34.2 | 11.9 | .71 | 14 | 26 | 34 | 43 | 54 | | | | |
|     Carnegie Peers | 34.1 | 12.4 | .20 | 14 | 26 | 34 | 43 | 57 | 4,261 | .1 | .870 | .010 |
|     Carnegie Class | 35.2 | 12.2 | .08 | 17 | 26 | 34 | 43 | 57 | 24,234 | -1.0 | .160 | -.084 |
|     NSSE 2021 & 2022 | 35.3 | 12.3 | .04 | 17 | 26 | 34 | 43 | 57 | 115,492 | -1.1 | .141 | -.088 |
|     Top 50% | 36.9 | 12.1 | .05 | 17 | 29 | 37 | 46 | 60 | 54,984 | -2.7 | .000 | -.225 |
|     Top 10% | 39.2 | 11.8 | .14 | 20 | 31 | 40 | 49 | 60 | 7,726 | -5.0 | .000 | -.425 |
|   Learning Strategies | | | | | | | | | | | | |
|     WMU (N = 231) | 34.8 | 14.2 | .94 | 7 | 27 | 33 | 40 | 60 | | | | |
|     Carnegie Peers | 36.2 | 14.3 | .25 | 13 | 27 | 33 | 47 | 60 | 3,525 | -1.4 | .153 | -.097 |
|     Carnegie Class | 37.5 | 13.9 | .10 | 13 | 27 | 40 | 47 | 60 | 20,874 | -2.7 | .004 | -.192 |
|     NSSE 2021 & 2022 | 37.9 | 14.0 | .04 | 13 | 27 | 40 | 47 | 60 | 98,783 | -3.1 | .001 | -.223 |
|     Top 50% | 39.6 | 14.1 | .06 | 20 | 27 | 40 | 53 | 60 | 49,980 | -4.8 | .000 | -.339 |
|     Top 10% | 42.9 | 14.3 | .15 | 20 | 33 | 40 | 60 | 60 | 9,307 | -8.1 | .000 | -.567 |
|   Quantitative Reasoning | | | | | | | | | | | | |
|     WMU (N = 238) | 26.7 | 15.5 | 1.01 | 0 | 13 | 27 | 40 | 53 | | | | |
|     Carnegie Peers | 26.7 | 15.7 | .27 | 0 | 20 | 27 | 40 | 60 | 3,574 | .0 | .990 | .001 |
|     Carnegie Class | 28.4 | 15.4 | .11 | 0 | 20 | 27 | 40 | 60 | 21,119 | -1.6 | .104 | -.106 |
|     NSSE 2021 & 2022 | 28.7 | 15.5 | .05 | 0 | 20 | 27 | 40 | 60 | 100,192 | -2.0 | .047 | -.129 |
|     Top 50% | 30.2 | 15.3 | .06 | 7 | 20 | 27 | 40 | 60 | 57,730 | -3.4 | .001 | -.223 |
|     Top 10% | 33.3 | 15.5 | .18 | 7 | 20 | 33 | 40 | 60 | 7,667 | -6.5 | .000 | -.421 |
| **Learning with Peers** | | | | | | | | | | | | |
|   Collaborative Learning | | | | | | | | | | | | |
|     WMU (N = 321) | 27.4 | 13.7 | .77 | 5 | 20 | 25 | 40 | 50 | | | | |
|     Carnegie Peers | 25.4 | 14.4 | .22 | 5 | 15 | 25 | 35 | 50 | 4,811 | 2.0 | .016 | .140 |
|     Carnegie Class | 27.8 | 14.5 | .09 | 5 | 20 | 25 | 40 | 55 | 26,153 | -.3 | .676 | -.024 |
|     NSSE 2021 & 2022 | 27.5 | 15.0 | .04 | 0 | 15 | 25 | 40 | 55 | 124,908 | .0 | .979 | -.001 |
|     Top 50% | 31.8 | 13.9 | .06 | 10 | 20 | 30 | 40 | 60 | 50,894 | -4.4 | .000 | -.318 |
|     Top 10% | 35.4 | 13.5 | .14 | 15 | 25 | 35 | 45 | 60 | 9,565 | -8.0 | .000 | -.591 |
|   Discussions with Diverse Others | | | | | | | | | | | | |
|     WMU (N = 234) | 38.6 | 15.6 | 1.02 | 15 | 30 | 40 | 55 | 60 | | | | |
|     Carnegie Peers | 36.8 | 16.5 | .29 | 5 | 25 | 40 | 50 | 60 | 3,537 | 1.9 | .095 | .113 |
|     Carnegie Class | 36.5 | 16.0 | .11 | 10 | 25 | 40 | 50 | 60 | 20,989 | 2.1 | .047 | .131 |
|     NSSE 2021 & 2022 | 37.1 | 16.1 | .05 | 10 | 25 | 40 | 50 | 60 | 99,412 | 1.5 | .162 | .091 |
|     Top 50% | 39.8 | 15.1 | .07 | 15 | 30 | 40 | 55 | 60 | 45,866 | -1.2 | .218 | -.081 |
|     Top 10% | 42.6 | 14.2 | .18 | 20 | 35 | 40 | 55 | 60 | 6,176 | -4.0 | .000 | -.278 |

## Detailed Statistics: First-Year Students

| | Mean statistics | | | Percentile[d] scores | | | | | Comparison results | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | SD [b] | SE [c] | 5th | 25th | 50th | 75th | 95th | Deg. of freedom [e] | Mean diff. | Sig. [f] | Effect size [g] |
| **Experiences with Faculty** | | | | | | | | | | | | |
| **Student-Faculty Interaction** | | | | | | | | | | | | |
| WMU (N = 270) | 19.5 | 14.6 | .89 | 0 | 10 | 15 | 30 | 50 | | | | |
| Carnegie Peers | 17.5 | 13.9 | .23 | 0 | 5 | 15 | 25 | 45 | 4,022 | 2.0 | .027 | .140 |
| Carnegie Class | 19.1 | 14.6 | .10 | 0 | 10 | 15 | 25 | 45 | 23,185 | .4 | .646 | .028 |
| NSSE 2021 & 2022 | 20.0 | 14.8 | .04 | 0 | 10 | 20 | 30 | 50 | 110,358 | -.5 | .568 | -.035 |
| Top 50% | 24.3 | 15.1 | .09 | 5 | 15 | 20 | 35 | 55 | 28,006 | -4.9 | .000 | -.321 |
| Top 10% | 27.8 | 15.3 | .22 | 5 | 15 | 25 | 40 | 60 | 305 | -8.3 | .000 | -.545 |
| **Effective Teaching Practices** | | | | | | | | | | | | |
| WMU (N = 254) | 35.9 | 12.6 | .79 | 16 | 28 | 36 | 44 | 56 | | | | |
| Carnegie Peers | 35.4 | 14.1 | .24 | 12 | 24 | 36 | 44 | 60 | 299 | .4 | .610 | .030 |
| Carnegie Class | 37.2 | 13.6 | .09 | 16 | 28 | 36 | 48 | 60 | 259 | -1.4 | .091 | -.100 |
| NSSE 2021 & 2022 | 37.9 | 13.7 | .04 | 16 | 28 | 40 | 48 | 60 | 254 | -2.0 | .011 | -.148 |
| Top 50% | 40.3 | 13.8 | .07 | 16 | 32 | 40 | 52 | 60 | 257 | -4.4 | .000 | -.321 |
| Top 10% | 43.3 | 13.7 | .18 | 20 | 36 | 44 | 56 | 60 | 278 | -7.4 | .000 | -.545 |
| **Campus Environment** | | | | | | | | | | | | |
| **Quality of Interactions** | | | | | | | | | | | | |
| WMU (N = 214) | 42.0 | 11.4 | .78 | 20 | 36 | 44 | 50 | 60 | | | | |
| Carnegie Peers | 40.4 | 13.1 | .24 | 15 | 32 | 42 | 50 | 60 | 256 | 1.6 | .048 | .125 |
| Carnegie Class | 41.5 | 12.6 | .09 | 18 | 34 | 43 | 50 | 60 | 18,955 | .5 | .583 | .038 |
| NSSE 2021 & 2022 | 42.4 | 12.4 | .04 | 20 | 36 | 44 | 52 | 60 | 89,810 | -.4 | .629 | -.033 |
| Top 50% | 45.1 | 11.9 | .07 | 22 | 38 | 48 | 54 | 60 | 30,726 | -3.1 | .000 | -.261 |
| Top 10% | 48.2 | 12.5 | .16 | 23 | 42 | 50 | 60 | 60 | 6,080 | -6.2 | .000 | -.497 |
| **Supportive Environment** | | | | | | | | | | | | |
| WMU (N = 228) | 33.6 | 13.8 | .91 | 13 | 23 | 35 | 43 | 58 | | | | |
| Carnegie Peers | 31.5 | 14.5 | .26 | 8 | 20 | 33 | 40 | 60 | 3,391 | 2.1 | .032 | .147 |
| Carnegie Class | 33.1 | 14.1 | .10 | 10 | 23 | 33 | 43 | 60 | 20,272 | .5 | .561 | .039 |
| NSSE 2021 & 2022 | 33.3 | 14.0 | .05 | 10 | 23 | 33 | 43 | 60 | 95,776 | .3 | .756 | .021 |
| Top 50% | 35.9 | 13.6 | .07 | 13 | 26 | 38 | 45 | 60 | 34,859 | -2.3 | .010 | -.172 |
| Top 10% | 39.1 | 13.3 | .21 | 18 | 30 | 40 | 50 | 60 | 4,127 | -5.5 | .000 | -.413 |

a. Results weighted by institution-reported sex and enrollment status (and institutional size for comparison groups).

b. Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.

c. Standard error of the mean, used to compute a confidence interval (CI) around the sample mean. For example, the 95% CI (equal to the sample mean +/- 1.96 x SE) is the range that is 95% likely to contain the true population mean.

d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.

e. Degrees of freedom used to compute the t-tests. Values vary from the total Ns due to weighting and whether equal variances were assumed.

f. Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.

g. Effect size is the mean difference divided by the pooled standard deviation.

## Detailed Statistics: Seniors

| | Mean statistics | | | Percentile[d] scores | | | | | Comparison results | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | SD[b] | SE[c] | 5th | 25th | 50th | 75th | 95th | Deg. of freedom[e] | Mean diff. | Sig.[f] | Effect size[g] |
| **Academic Challenge** | | | | | | | | | | | | |
| **Higher-Order Learning** | | | | | | | | | | | | |
| WMU (N = 353) | 37.5 | 14.4 | .77 | 10 | 30 | 40 | 45 | 60 | | | | |
| Carnegie Peers | 39.9 | 14.0 | .22 | 15 | 30 | 40 | 50 | 60 | 4,336 | -2.4 | .002 | -.171 |
| Carnegie Class | 39.8 | 14.1 | .08 | 15 | 30 | 40 | 50 | 60 | 29,836 | -2.3 | .002 | -.165 |
| NSSE 2021 & 2022 | 40.2 | 14.0 | .04 | 20 | 30 | 40 | 50 | 60 | 142,968 | -2.7 | .000 | -.196 |
| Top 50% | 41.9 | 13.7 | .06 | 20 | 35 | 40 | 55 | 60 | 56,975 | -4.4 | .000 | -.322 |
| Top 10% | 44.2 | 13.1 | .18 | 20 | 35 | 45 | 60 | 60 | 5,570 | -6.8 | .000 | -.513 |
| **Reflective & Integrative Learning** | | | | | | | | | | | | |
| WMU (N = 392) | 37.2 | 13.5 | .68 | 14 | 29 | 37 | 46 | 60 | | | | |
| Carnegie Peers | 37.3 | 13.3 | .20 | 14 | 29 | 37 | 47 | 60 | 4,718 | -.1 | .939 | -.004 |
| Carnegie Class | 37.9 | 13.1 | .07 | 17 | 29 | 37 | 49 | 60 | 31,714 | -.6 | .341 | -.048 |
| NSSE 2021 & 2022 | 38.1 | 13.0 | .03 | 17 | 29 | 37 | 49 | 60 | 152,265 | -.9 | .187 | -.067 |
| Top 50% | 40.3 | 12.5 | .06 | 20 | 31 | 40 | 50 | 60 | 51,779 | -3.0 | .000 | -.241 |
| Top 10% | 42.7 | 11.7 | .17 | 23 | 34 | 43 | 51 | 60 | 439 | -5.5 | .000 | -.463 |
| **Learning Strategies** | | | | | | | | | | | | |
| WMU (N = 332) | 36.4 | 14.9 | .82 | 13 | 27 | 40 | 47 | 60 | | | | |
| Carnegie Peers | 38.8 | 14.8 | .24 | 13 | 27 | 40 | 53 | 60 | 4,095 | -2.4 | .005 | -.162 |
| Carnegie Class | 38.6 | 14.7 | .09 | 13 | 27 | 40 | 53 | 60 | 28,177 | -2.2 | .008 | -.146 |
| NSSE 2021 & 2022 | 39.0 | 14.8 | .04 | 13 | 27 | 40 | 53 | 60 | 134,821 | -2.6 | .001 | -.175 |
| Top 50% | 41.1 | 14.6 | .06 | 20 | 33 | 40 | 53 | 60 | 62,053 | -4.7 | .000 | -.319 |
| Top 10% | 43.4 | 14.2 | .14 | 20 | 33 | 40 | 60 | 60 | 10,742 | -7.0 | .000 | -.494 |
| **Quantitative Reasoning** | | | | | | | | | | | | |
| WMU (N = 335) | 29.5 | 16.6 | .91 | 0 | 20 | 27 | 40 | 60 | | | | |
| Carnegie Peers | 29.6 | 16.7 | .27 | 0 | 20 | 27 | 40 | 60 | 4,141 | -.2 | .861 | -.010 |
| Carnegie Class | 30.4 | 16.5 | .10 | 0 | 20 | 27 | 40 | 60 | 28,509 | -.9 | .324 | -.054 |
| NSSE 2021 & 2022 | 30.9 | 16.6 | .04 | 0 | 20 | 33 | 40 | 60 | 136,495 | -1.4 | .123 | -.084 |
| Top 50% | 32.4 | 16.5 | .06 | 7 | 20 | 33 | 40 | 60 | 69,241 | -3.0 | .001 | -.181 |
| Top 10% | 35.3 | 16.0 | .18 | 7 | 20 | 33 | 47 | 60 | 8,352 | -5.9 | .000 | -.368 |
| **Learning with Peers** | | | | | | | | | | | | |
| **Collaborative Learning** | | | | | | | | | | | | |
| WMU (N = 432) | 32.9 | 15.9 | .77 | 5 | 20 | 35 | 45 | 60 | | | | |
| Carnegie Peers | 28.4 | 16.1 | .24 | 0 | 15 | 30 | 40 | 60 | 5,076 | 4.5 | .000 | .280 |
| Carnegie Class | 30.0 | 15.7 | .09 | 5 | 20 | 30 | 40 | 60 | 33,318 | 2.9 | .000 | .186 |
| NSSE 2021 & 2022 | 29.0 | 16.2 | .04 | 0 | 20 | 30 | 40 | 60 | 159,688 | 3.9 | .000 | .242 |
| Top 50% | 34.0 | 14.6 | .06 | 10 | 25 | 35 | 45 | 60 | 437 | -1.1 | .144 | -.077 |
| Top 10% | 37.9 | 13.7 | .16 | 15 | 30 | 40 | 50 | 60 | 471 | -5.0 | .000 | -.359 |
| **Discussions with Diverse Others** | | | | | | | | | | | | |
| WMU (N = 330) | 37.5 | 17.0 | .93 | 5 | 25 | 40 | 50 | 60 | | | | |
| Carnegie Peers | 38.4 | 16.8 | .27 | 5 | 25 | 40 | 55 | 60 | 4,114 | -.9 | .360 | -.053 |
| Carnegie Class | 38.0 | 16.5 | .10 | 10 | 25 | 40 | 50 | 60 | 28,279 | -.6 | .543 | -.034 |
| NSSE 2021 & 2022 | 38.1 | 16.5 | .04 | 10 | 25 | 40 | 50 | 60 | 135,280 | -.6 | .511 | -.036 |
| Top 50% | 40.4 | 15.9 | .06 | 15 | 30 | 40 | 55 | 60 | 62,120 | -2.9 | .001 | -.182 |
| Top 10% | 43.2 | 15.1 | .19 | 20 | 35 | 45 | 60 | 60 | 357 | -5.7 | .000 | -.378 |

## Detailed Statistics: Seniors

| | Mean statistics | | | Percentile[d] scores | | | | | Comparison results | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | SD[b] | SE[c] | 5th | 25th | 50th | 75th | 95th | Deg. of freedom[e] | Mean diff. | Sig.[f] | Effect size[g] |
| **Experiences with Faculty** | | | | | | | | | | | | |
| **Student-Faculty Interaction** | | | | | | | | | | | | |
| WMU (N = 371) | 21.2 | 14.9 | .77 | 0 | 10 | 20 | 30 | 50 | | | | |
| Carnegie Peers | 21.7 | 16.1 | .25 | 0 | 10 | 20 | 30 | 55 | 4,509 | -.4 | .624 | -.027 |
| Carnegie Class | 21.9 | 16.2 | .09 | 0 | 10 | 20 | 30 | 55 | 381 | -.7 | .385 | -.042 |
| NSSE 2021 & 2022 | 22.5 | 16.3 | .04 | 0 | 10 | 20 | 35 | 60 | 372 | -1.2 | .117 | -.075 |
| Top 50% | 28.8 | 16.2 | .10 | 5 | 15 | 25 | 40 | 60 | 382 | -7.5 | .000 | -.464 |
| Top 10% | 33.2 | 16.1 | .28 | 10 | 20 | 35 | 45 | 60 | 469 | -12.0 | .000 | -.749 |
| **Effective Teaching Practices** | | | | | | | | | | | | |
| WMU (N = 348) | 35.6 | 14.4 | .77 | 8 | 28 | 36 | 44 | 60 | | | | |
| Carnegie Peers | 37.9 | 14.7 | .23 | 12 | 28 | 40 | 48 | 60 | 4,344 | -2.4 | .004 | -.163 |
| Carnegie Class | 38.9 | 14.4 | .08 | 16 | 28 | 40 | 52 | 60 | 29,788 | -3.3 | .000 | -.231 |
| NSSE 2021 & 2022 | 39.4 | 14.5 | .04 | 16 | 28 | 40 | 52 | 60 | 142,785 | -3.8 | .000 | -.265 |
| Top 50% | 41.9 | 14.1 | .07 | 16 | 32 | 40 | 56 | 60 | 45,206 | -6.4 | .000 | -.453 |
| Top 10% | 44.5 | 13.6 | .16 | 20 | 36 | 44 | 56 | 60 | 7,534 | -8.9 | .000 | -.654 |
| **Campus Environment** | | | | | | | | | | | | |
| **Quality of Interactions** | | | | | | | | | | | | |
| WMU (N = 304) | 39.0 | 12.8 | .74 | 14 | 30 | 40 | 50 | 60 | | | | |
| Carnegie Peers | 42.4 | 12.6 | .22 | 20 | 34 | 44 | 52 | 60 | 3,640 | -3.4 | .000 | -.270 |
| Carnegie Class | 42.3 | 12.8 | .08 | 18 | 34 | 44 | 52 | 60 | 25,427 | -3.3 | .000 | -.256 |
| NSSE 2021 & 2022 | 43.1 | 12.7 | .04 | 20 | 36 | 44 | 52 | 60 | 121,783 | -4.1 | .000 | -.320 |
| Top 50% | 45.6 | 12.3 | .06 | 22 | 38 | 48 | 56 | 60 | 47,979 | -6.6 | .000 | -.541 |
| Top 10% | 48.0 | 12.5 | .11 | 22 | 40 | 50 | 60 | 60 | 14,530 | -9.0 | .000 | -.719 |
| **Supportive Environment** | | | | | | | | | | | | |
| WMU (N = 327) | 28.5 | 14.4 | .79 | 8 | 18 | 28 | 40 | 55 | | | | |
| Carnegie Peers | 30.9 | 14.8 | .24 | 8 | 20 | 30 | 40 | 60 | 3,993 | -2.4 | .005 | -.164 |
| Carnegie Class | 31.5 | 14.6 | .09 | 8 | 20 | 31 | 40 | 60 | 27,539 | -3.0 | .000 | -.207 |
| NSSE 2021 & 2022 | 31.6 | 14.7 | .04 | 8 | 20 | 33 | 40 | 60 | 131,605 | -3.1 | .000 | -.211 |
| Top 50% | 34.3 | 14.7 | .07 | 10 | 23 | 35 | 45 | 60 | 44,565 | -5.8 | .000 | -.393 |
| Top 10% | 37.4 | 14.5 | .22 | 13 | 28 | 38 | 48 | 60 | 4,724 | -9.0 | .000 | -.618 |

a. Results weighted by institution-reported sex and enrollment status (and institutional size for comparison groups).

b. Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.

c. Standard error of the mean, used to compute a confidence interval (CI) around the sample mean. For example, the 95% CI (equal to the sample mean +/- 1.96 x SE) is the range that is 95% likely to contain the true population mean.

d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.

e. Degrees of freedom used to compute the t-tests. Values vary from the total Ns due to weighting and whether equal variances were assumed.

f. Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.

g. Effect size is the mean difference divided by the pooled standard deviation.