

Assessment Report: Critical Thinking Report
Assessment Period: Academic Year 2021

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The following report is based on data from the two most recent cycles of the **National Survey of Student Engagement (NSSE)** administered at Eastern Illinois University. This report presents and compares data that describes **students' critical thinking** from the "**NSSE Frequencies and Statistical Comparisons**" Reports of 2017 and 2020. Data are collected from **first-year students** and from **seniors**. While EIU administered both the Collegiate Learning Assessment (CLA+) and the Watson-Glaser Critical Thinking Appraisal (2000-2016) in years past, EIU's General Education Committee is building a new framework for assessing critical thinking.

First-Year Students

Survey year	Response rate	Sampling error	Total respondents	Full completions
2017	32%	+/- 5.4%	223	173
2020	26%	+/- 4.7%	326	229

Seniors

Survey year	Response rate	Sampling error	Total	Full completions
			respondents	
2017	37%	+/- 4.3%	328	256
2020	30%	+/- 4.7%	300	252

This report utilizes the definition of "critical thinking" as specified on the "critical thinking value rubric" composed by the AAC&U (Association of American Colleges and Universities):

"Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion."

Following the AAC&U definition, the report before you collates data from three large umbrella questions asked in the NSSE survey.

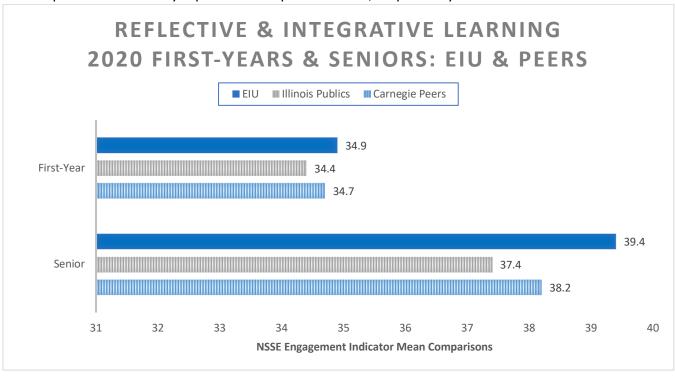
Students' answers give a snapshot of how they view their critical thinking activities within these three broad frameworks, corresponding to categories defined by NSSE: "reflective and integrative learning" (question 2), "higher-order learning" (question 4), and institutional experience (question 17 or 18).

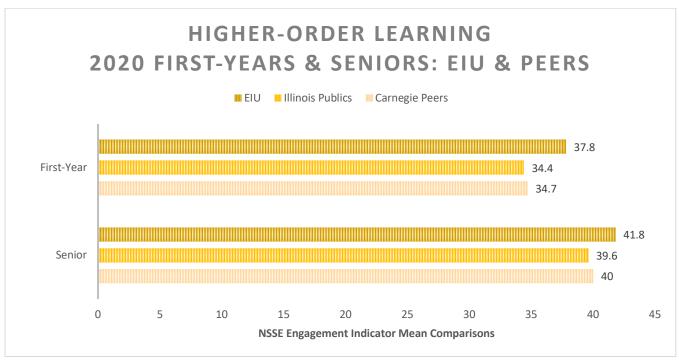
This report begins with an overall picture comparing EIU and peer institutions, and then moves to detailed pictures of each critical thinking framework. The breakdown of the survey questions compiled for NSSE's Engagement Indicators demonstrates areas in which EIU students report minor divergences from peer institutions.

2020 data can be found on pages 2-5. **2017 data** can be found on pages 6-9. In the tables, questions correspond to the NSSE survey, listed in **Appendix 1** (page 10). "Peer institutions" indicates similarly-sized public, master's degree-granting institutions. See **Appendix 2** for a specification of peer institutions (page 11).

2020 larger picture: EIU & peer institutions

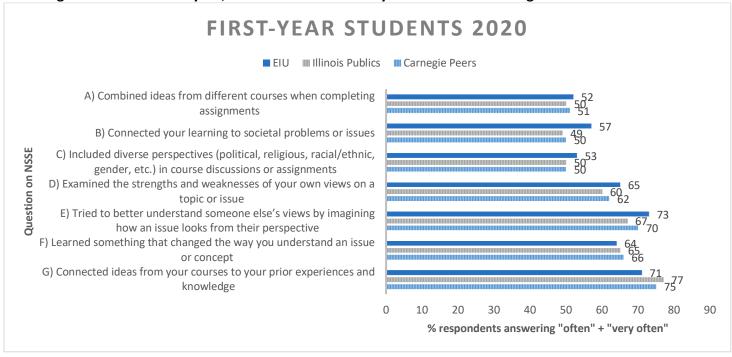
The NSSE Report compiles scores ("Engagement Indicators") in four categories of "deep learning." EIU uses two of these categories—"Reflective & Integrative Learning" and "Higher-Order Learning"—to measure critical thinking. *EIU compares favorably against peer institutions in both categories.* For Reflective & Integrative Learning, EIU first-year students show nearly equivalent mean comparisons to peer institutions, while at the senior level, NSSE reports EIU scores are "significantly higher with an effect size less than .3 in magnitude." For Higher-Order Learning, both EIU first-years and seniors exceed peer institutions by 3-points and 2-points overall, respectively.



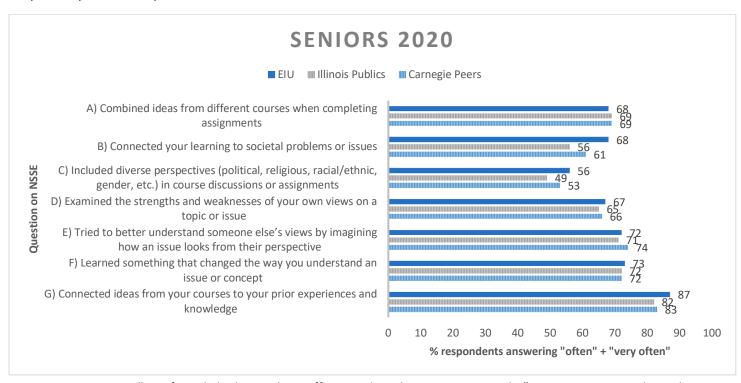


2020 detailed picture: reflective & integrative learning

2. During the current school year, about how often have you done the following?



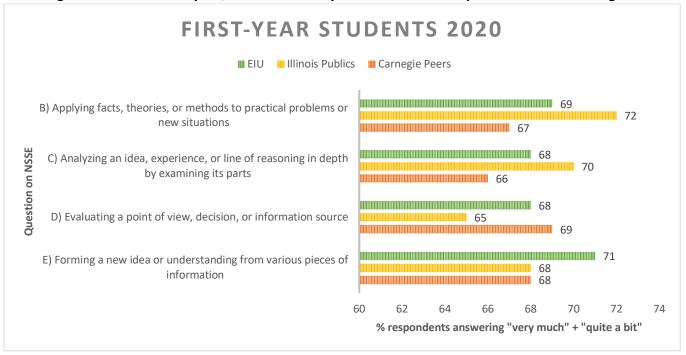
In most areas of Reflective and Integrative Learning, EIU first-year students report very similar experiences to peer institutions. EIU students showed statistically more-frequent experiences than peers in two areas: 1) Connecting learning to societal problems, and 2) Trying to better understand an issue from someone else's perspective. In one area—"Connecting course ideas to prior experiences and knowledge"—EIU first-year students reported less-frequent exposure than peers.



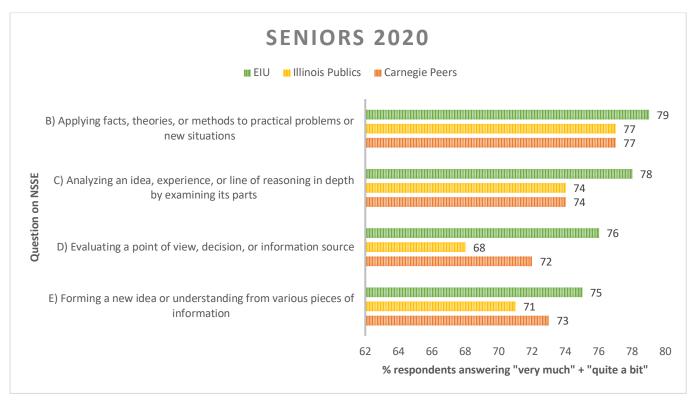
EIU senior scores are "significantly higher with an effect size less than .3 in magnitude." EIU seniors scores lagged peers in no areas, but showed statistically more-frequent experiences in three areas: 1) Connecting learning to societal problems (same as first-years), 2) Including diverse perspectives, and 3) Connecting course ideas to prior experiences and knowledge (the area that first-year students report less-frequent exposure).

2020 detailed picture: higher-order learning

4. During the current school year, how much has your coursework emphasized the following?



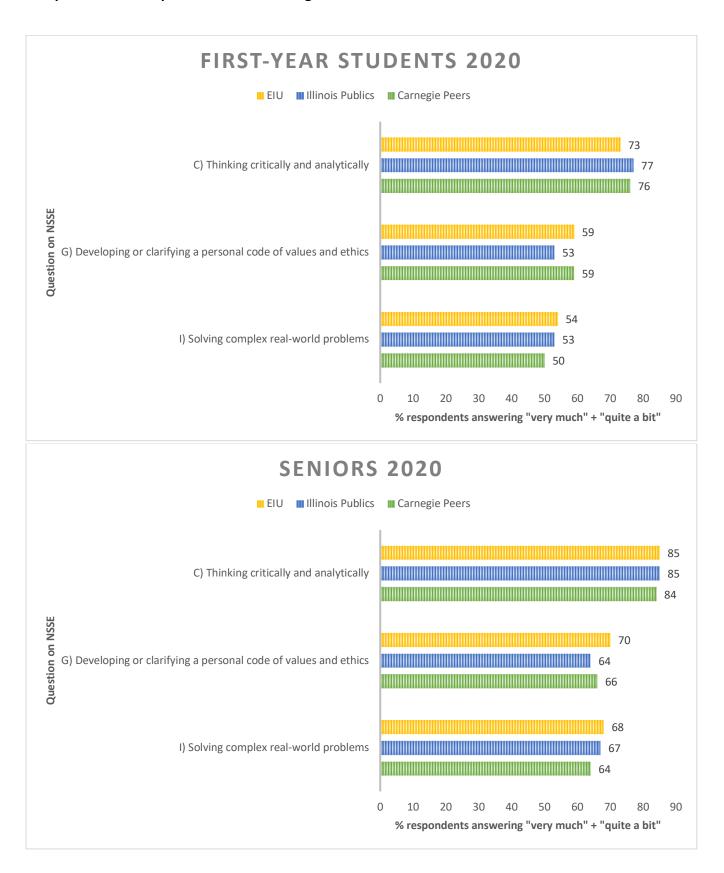
In most areas of Higher-Order Learning, EIU first-year students report very similar experiences to peer institutions, with no statistical divergence from peers.



At the senior level, NSSE reports Higher-Order Learning scores at EIU are "significantly higher with an effect size less than .3 in magnitude." EIU senior scores exceeded peers in all areas, with significantly more-frequent experiences in: 1) Analyzing an idea, experience, or line of reasoning in depth by examining its parts, 2) Evaluating a point of view, decision, or information source, and 3) Forming a new idea or understanding from various pieces of information.

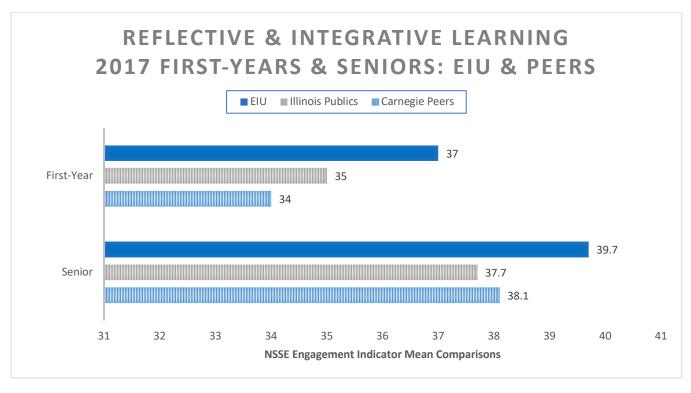
2020 detailed picture: institutional experience

18. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

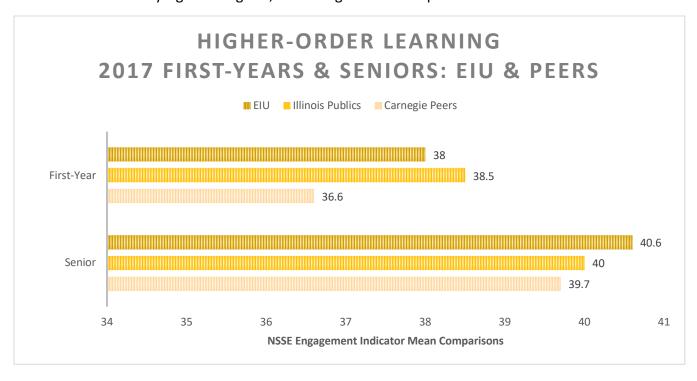


2017 larger picture: EIU & peer institutions

The NSSE Report compiles scores ("Engagement Indicators") in four categories of "deep learning." EIU uses two of these categories—"Reflective & Integrative Learning" and "Higher-Order Learning"—to measure critical thinking. *EIU compares favorably against peer institutions in both categories.* At both first-year and senior levels, NSSE reports that Reflective and Integrative Learning scores at EIU are "significantly higher with an effect size less than .3 in magnitude."

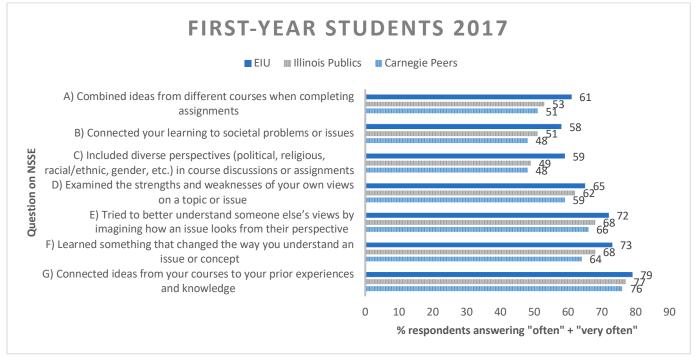


For Higher-Order Learning, EIU first-year students show nearly equivalent mean comparisons to peer institutions (marginally higher than Carnegie peers and marginally lower than Illinois publics), while EIU seniors show relatively significant gains, exceeding both sets of peer institutions.

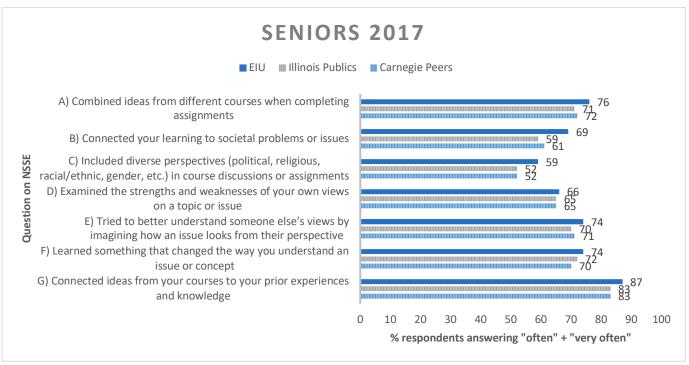


2017 detailed picture: reflective & integrative learning

2. During the current school year, about how often have you done the following?



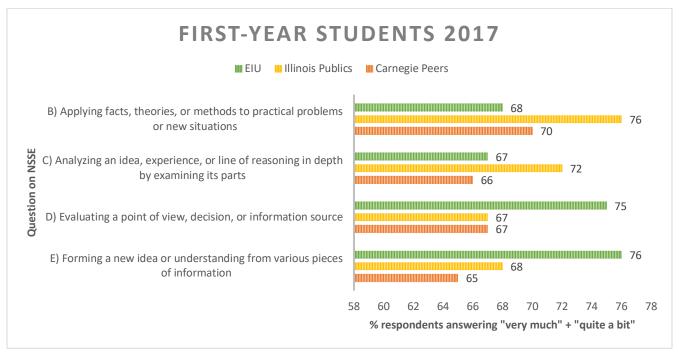
At the first-year level, NSSE reports Reflective and Integrative Learning scores at EIU are "significantly higher with an effect size less than .3 in magnitude." *In three areas, EIU students showed statistically more-frequent experiences than peers:* 1) Combining ideas from different courses, 2) Connecting learning to societal problems, and 3) Including diverse perspectives.



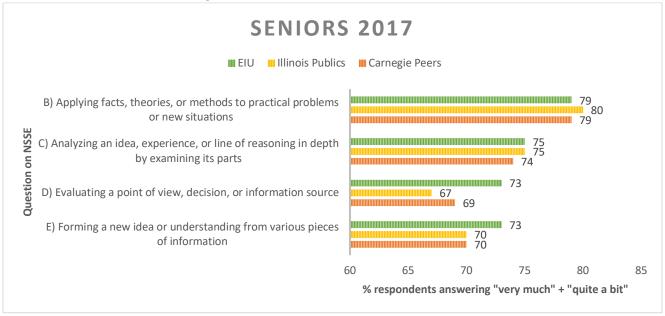
At the senior level, NSSE reports Reflective and Integrative Learning scores at EIU are "significantly higher with an effect size less than .3 in magnitude." *EIU seniors scores lagged peers in no areas, showing statistically more-frequent experiences in four areas:* 1) Combining ideas from different courses, 2) Connecting learning to societal problems, 3) Including diverse perspectives, and 4) Trying to better understand someone else's perspective.

2017 detailed picture: higher-order learning

4. During the current school year, how much has your coursework emphasized the following?



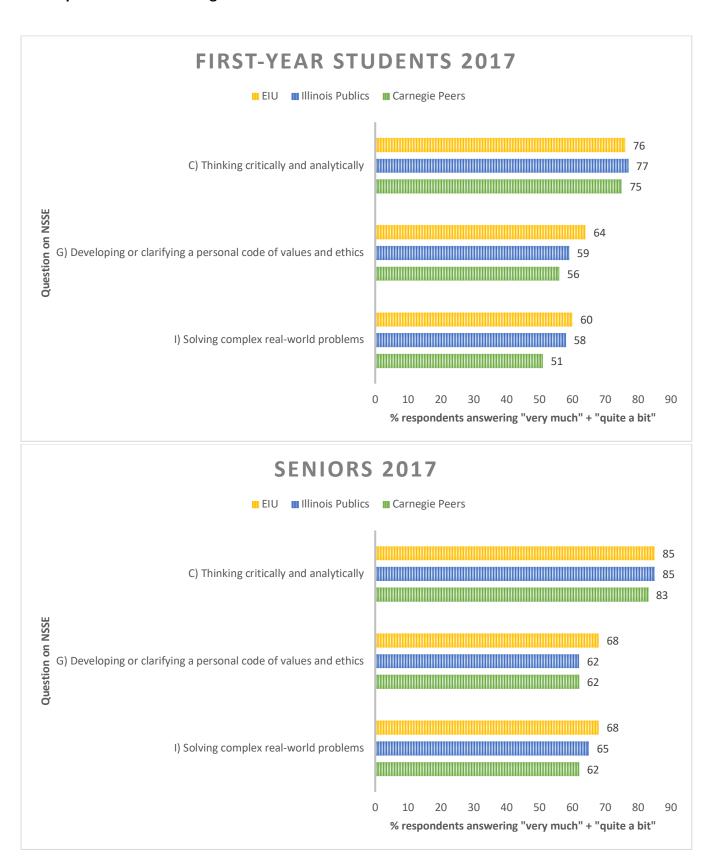
In Higher-Order Learning, EIU first-year students report no statistical divergence from peers overall. In two areas—"Applying facts to new situations" and "Analyzing ideas by examining its parts"—EIU first-year students reported less-frequent exposure than at peer institutions. In the other two areas, EIU first-year students reported significantly more-frequent exposure than peer institutions: "Evaluating a point of view, decision, or information source," and "Forming a new idea."



At the senior level, EIU scores were equivalent to those at peer institutions in two areas: 1) Applying facts to new situations, and 2) Analyzing ideas by examining its parts. EIU seniors reported significantly more-frequent experiences in the other two areas: 1) Evaluating a point of view, decision, or information source, and 2) Forming a new idea or understanding from various pieces of information.

2017 detailed picture: institutional experience

17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?



APPENDIX 1 NSSE survey questions

First-year students and seniors answered the following questions on the NSSE survey:

"Reflective and integrative learning"

2. During the current school year, about how often have you done the following?

- A) Combined ideas from different courses when completing assignments
- B) Connected your learning to societal problems or issues
- C) Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments
- D) Examined the strengths and weaknesses of your own views on a topic or issue
- E) Tried to better understand someone else's views by imagining how an issue looks from their perspective
- F) Learned something that changed the way you understand an issue or concept
- G) Connected ideas from your courses to your prior experiences and knowledge

"Higher-order learning"

4. During the current school year, how much has your coursework emphasized the following?

- B) Applying facts, theories, or methods to practical problems or new situations
- C) Analyzing an idea, experience, or line of reasoning in depth by examining its parts
- D) Evaluating a point of view, decision, or information source
- E) Forming a new idea or understanding from various pieces of information

Institutional experience

17. or 18. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

- C) Thinking critically and analytically
- G) Developing or clarifying a personal code of values and ethics
- I) Solving complex real-world problems

APPENDIX 2 NSSE selected comparison groups

<u>Illinois Publics</u> = University of Illinois system schools, plus Governors State

<u>Carnegie Peers</u> = Master's-granting public universities

For 2017, no "Carnegie Peers" data was specified. For purposes of comparison, this report uses NSSE data for the following 29 institutions: Chicago State U, Eastern Kentucky U, Ferris State U, Governors State U, Indiana U East, Lincoln U, Missouri State U-Springfield, Murray State U, Northeastern Illinois U, Northern Michigan U, Northwest Missouri State U, Saginaw Valley State U, Truman State U, U Central Missouri, U Illinois-Springfield, U Michigan-Dearborn, U Michigan-Flint, U Saint Francis-Fort Wayne, U Southern Indiana, U Wisconsin (UW)-Oshkosh, UW-Eau Claire, UW-Green Bay, UW-La Crosse, UW-Platteville, UW-River Falls, UW-Stevens Point, UW-Stout, UW-Whitewater, Western Illinois U