Critical Thinking Skills Among Hope College Students

Frost Center Friday March 10, 2023



Agenda

- What is critical thinking?
- Why measure critical thinking?
- How we measure critical thinking
- Results
 - Heighten Critical Thinking Assessment
 - National Survey of Student Engagement (NSSE)
- Next Steps with current results
- Discussion, conversation, questions





What is Critical Thinking?

Making reasoned judgements and arguments

Analysis: examine - understand - explain

Synthesis: compare - contrast - classify - divide



Why do we measure critical thinking?

Anchor Plan Learning Outcome 5:

Analyze evidence or data to solve problems, reach informed conclusions or make sound judgments

Program Learning Outcomes:

Critical thinking within academic disciplines



Common Learning Outcome 1:

Think critically and communicate clearly

Common Learning Outcome 4:

Integrate knowledge, experience, and purpose

Our Mission:

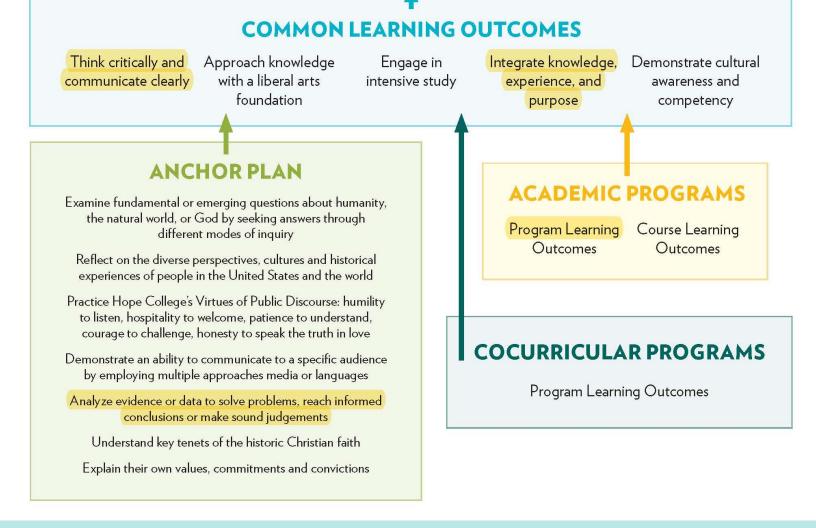
. . . to educate students for lives of leadership and service in a global society through academic and co-curricular programs of recognized excellence <u>in</u> <u>the liberal arts</u> and in the context of the historic Christian faith.





STUDENT LEARNING OUTCOMES

The mission of Hope College is to educate students for lives of leadership and service in a global society through academic and cocurricular programs of recognized excellence in the liberal arts and in the context of the historic Christian faith.



Learn more about Hope student learning outcomes at

hope.edu/assessment



How Hope measures critical thinking

Approach

Measure

Formative (how)

Direct (test/student work)

Heighten Critical Thinking Assessment Height

Heighten Critical Thinking Assessment

Summative (how much) Heighten Critical Thinking Assessment National Survey of Student Engagement (NSSE) **Indirect** (survey)

National Survey of Student Engagement (NSSE)



Critical Thinking- Measurements

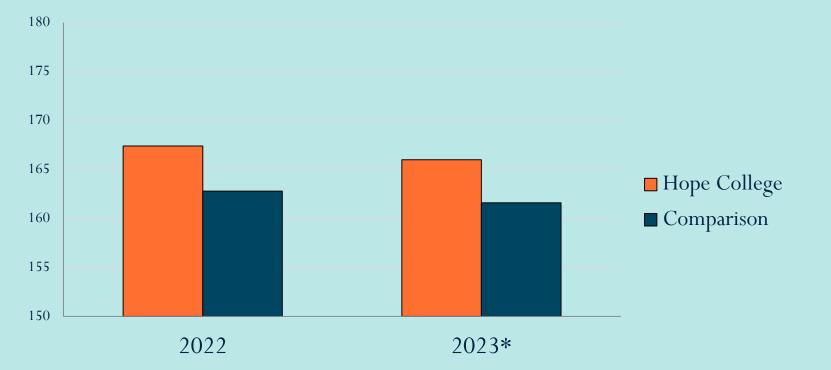
Heighten Critical Thinking Assessment

- Overall critical thinking score
- Analytic and synthetic skills scores



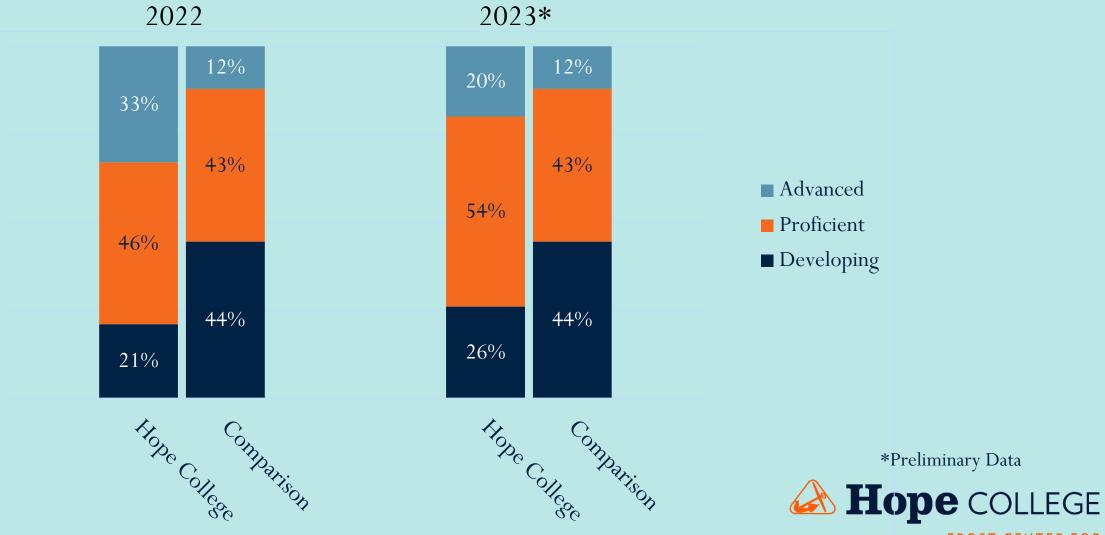
Heighten Critical Thinking

Overall Scaled

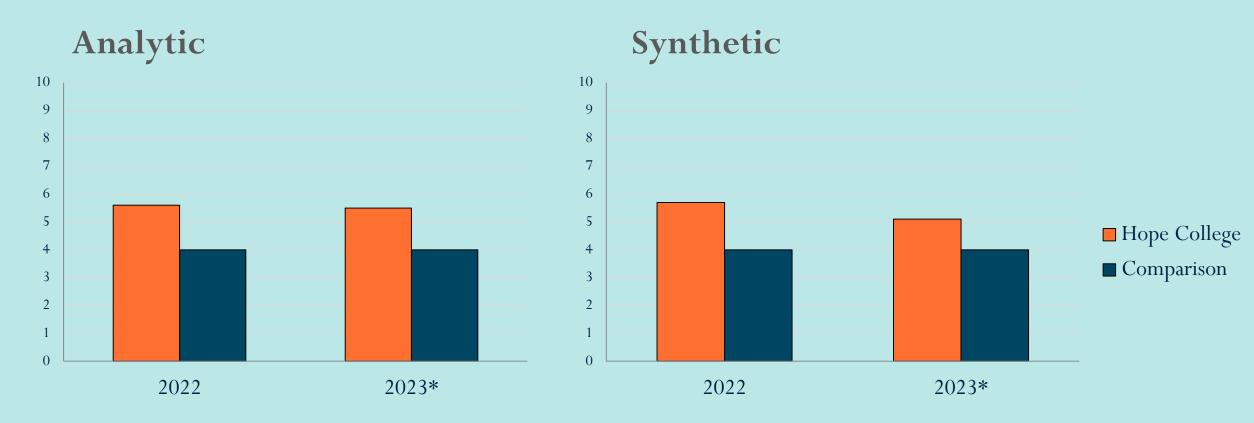




Heighten Critical Thinking



Heighten Critical Thinking



*Preliminary Data



Critical Thinking - Heighten

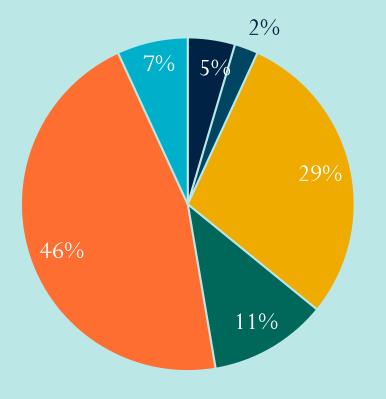
Hope Senior Strengths (2022)

- 79% were either advanced or proficient
 - Benchmark group: 55% (12% and 43%)
- 21% were developing
 - Benchmark group: 44%
- Institutional mean higher (above the middle 80%) than all participating institutions
- Sub scores above 80% of comparison group



Sample Major Distribution-Heighten

Major Distribution- 2023*



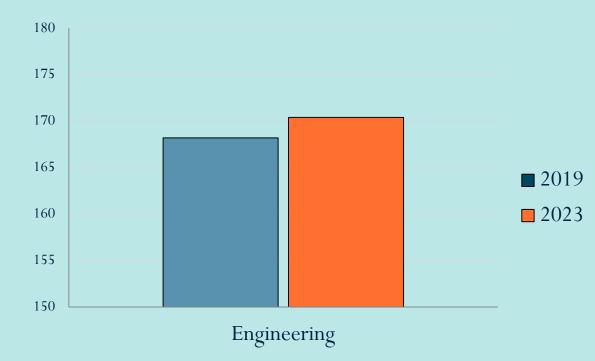
- Arts & Humanities- All
- NAS- Other
- Engineering
- Accounting
- Business
- Social Science- Other

*Preliminary Data



Critical Thinking Cohort Assessment-Case Study Engineering

Cohort size: 32



Difference = +2.34Increase as a percentage = 7.8%



Critical Thinking- Measurements

National Survey of Student Engagement (NSSE)

- Higher Order Learning
- Reflective and Integrative Learning
- Quantitative Reasoning

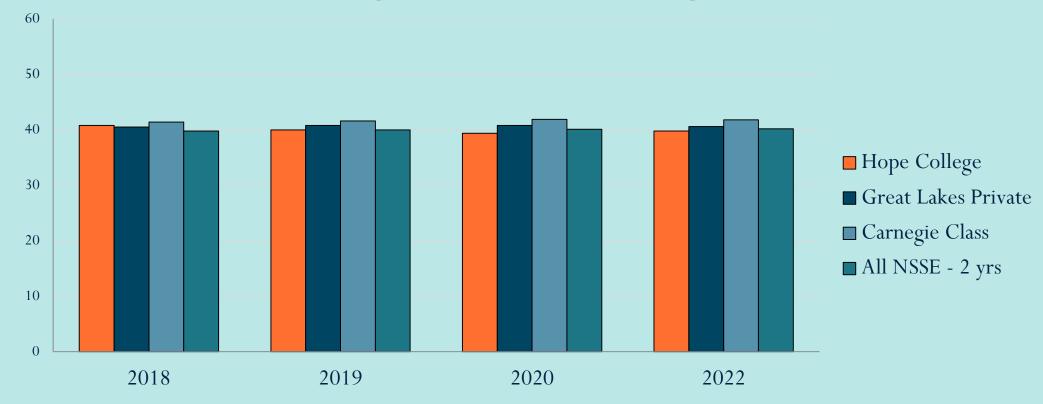
Hope College Seniors

2018 n = 2822019 n = 3242020 n = 3052022 n = 307



Critical Thinking (Seniors)- NSSE

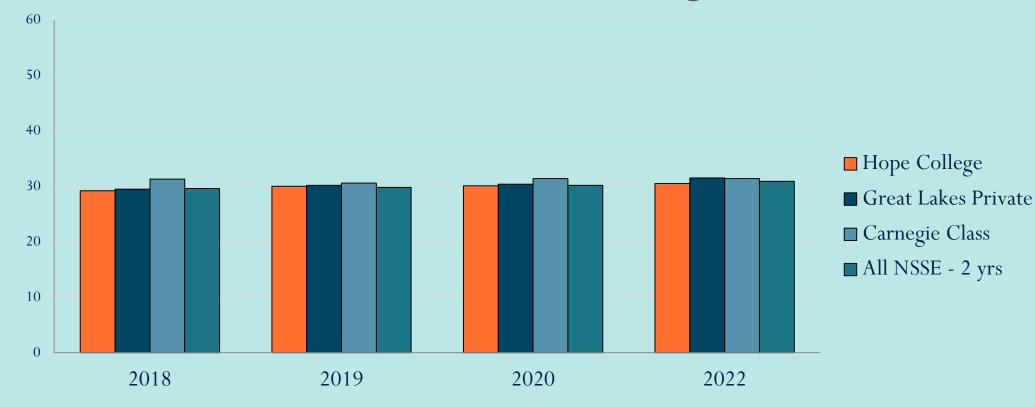
Higher-Order Learning





Critical Thinking (Seniors)- NSSE

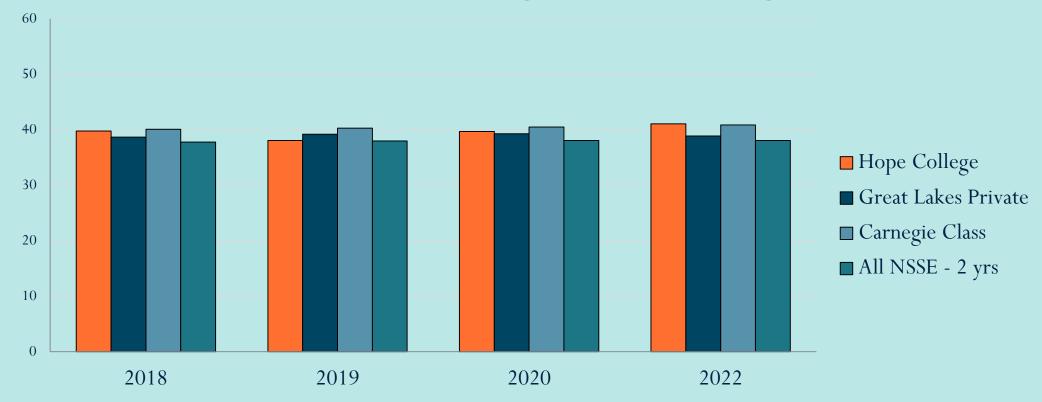
Quantitative Reasoning





Critical Thinking (Seniors)- NSSE

Reflective & Integrative Learning





Recommendations to Support Critical Thinking among Hope Students*

Faculty and Staff

Normalize being comfortable with difference in interpretation

Model tolerance of ambiguity

Take into account sources that are in disagreement

Force critical thinking skills vs. providing the "right answers"

Administration support for broader assessment of critical thinking and professional development for instructors

* Assessment Committee, August 2022 assessment of Common Learning Outcome 1 https://drive.google.com/file/d/1ExqD5QOJO853y_fcrBdQpPmqIZ31pvAg/view?usp=sharing



Contact Information & Resources

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Todd Wiebe, Librarian-Head of Research and Instruction

Kathy Kremer, Senior Director of Assessment and Accreditation

Discussion, Conversation, Questions

• Who at Hope College (positions or departments) would benefit from the information shared today?

- Thinking about your own work at Hope, how might you use what you've learned today?
- How might Hope's critical thinking assessment data continuously inform decisions for the benefit of our students?

