

Assessment Report: Assessment Period: Prepared by: Critical Thinking Report Academic Year 2024 Dr. Suzie Park, Interim Assistant VPAA

The following report is based on data from student **electronic writing portfolios** and the most recent cycle of the **National Survey of Student Engagement (NSSE)** administered at Eastern Illinois University. Electronic writing portfolio submissions are required of all EIU undergraduates by their senior year and include **writing samples from their collegiate career**. NSSE data are collected from **first-year students** and **seniors**. While EIU has administered both the Collegiate Learning Assessment (CLA+) and the Watson-Glaser Critical Thinking Appraisal (2000-2016) in years past, in 2022 EIU's General Education Committee advanced a rubric to assess critical thinking evidenced in student writing samples. The use of an internal assessment with NSSE Engagement indicators allows us to compile a more thorough understanding of student critical thinking.

The Critical Thinking Subcommittee of EIU's General Education Committee was tasked with reviewing critical thinking assessment tools in the fall of 2020. After comparing several internal and standardized external assessment options, the Subcommittee submitted their report of recommendations. Following those recommendations, the Subcommittee was asked to develop a rubric to implement as an internal assessment of students' critical thinking skills. Internal assessment, as compared with most external instruments, utilize authentic artifacts from student learning and more directly involve faculty in the assessment process. The Subcommittee adapted a **critical thinking rubric (Appendix 3)** from AAC&U's Critical Thinking VALUE Rubric and the Center for Teaching, Learning, & Technology at Washington State University's Guide to Rating Critical & Integrative Thinking. Electronic Writing Portfolio reviewers employed the rubric in the spring of 2024 to evaluate 88 portfolios.

Liectronic writing portiono (88 portiono evaluations, 5pring 2024)										
		Mast	ering	Deve	loping	Eme	rging	Average	Average	
Rating criteria	n/a	6	5	4	3	2	1	AY24	AY23	
Asks essential questions; engages diverse perspectives	8	5	21	31	15	8	0	3.64	3.53	
Seeks data, information, and knowledge	3	5	18	31	24	5	2	3.73	3.58	
Interprets and critiques relevant data, information, and knowledge	8	5	15	30	20	8	2	3.44	3.25	
Integrates data, information, and knowledge to create new insights	9	2	9	27	23	16	2	3.05	3.25	
Evaluates implications of arguments and conclusions	8	4	17	25	23	9	2	3.39	3.41	
Creates and presents defensible positions and proposals	6	5	23	29	17	6	2	3.70	3.22	
Total	42	26	103	173	122	52	10	3.49	3.37	

Electronic writing portfolio (88 portfolio evaluations, Spring 2024)

Across all rating criteria, most student scores fall in the range of **developing**. Students tended to score slightly higher in *Seeks data, information, and knowledge* and in *Creates and presents defensible positions and proposals*. On average, students scored lowest in *Integrates data, information, and knowledge to create new insights*. EWPs can include writing samples from a student's first year in college through their senior year, and the rubric scores do not separate a student's early writing sample from later in their college career. The full range of scores includes those falling within the emerging skill set up through mastering.

National Survey of Student Engagement (Survey year: 2023)

			Total	Full	
	Response rate	Sampling error	respondents	completions	
First-year students	21%	+/- 6.4%	189	132	
Seniors	24%	+/- 6.0%	206	154	

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 18).

This report includes 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.

Questions correspond to the NSSE survey, listed in **Appendix 1** (page 7). "Peer institutions" indicates similarly-sized public, master's degree-granting institutions. See **Appendix 2** for a specification of peer institutions (page 8).

2023 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's seniors compare 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, EIU first-years performed lower than peer institutions while EIU seniors exceed peer institutions.



<u>2023 detailed picture: reflective & integrative learning</u> 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 similar experiences to peer institutions. EIU students showed statistically more-frequent experiences in the area "Connecting learning to societal problems." In two areas—"Learning something that changed understanding of an issue" and "Connecting course ideas to prior experiences and knowledge"—first-years reported less-frequent exposure than peers.



EIU senior scores are "significantly higher with an effect size less than .3 in magnitude." EIU senior scores lagged peers in no areas, but showed statistically more-frequent experiences in five areas: 1) Connecting learning to societal problems (same as first-years), 2) Including diverse perspectives, 3) Trying to better understand someone

else's views, 4) Learning something that changes your understanding, and 5) Connecting course ideas to prior experiences and knowledge. First-years report less-frequent exposure in the last two categories.

2023 detailed picture: higher-order learning





In most areas of Higher-Order Learning, EIU first-year students report less-frequent exposure to experiences than peer institutions.



EIU senior scores exceeded peers in two areas: "Analyzing an idea, experience, or line of reasoning in depth by examining its parts" and "Evaluating a point of view, decision, or information source. EIU seniors report less-frequent exposure in "Applying facts, theories, or methods to practical problems" and "Forming a new idea or understanding from various pieces of information."

While roughly two-thirds of first-year students and three-quarters of seniors report coursework that emphasizes higher-order learning "very much" and "quite a bit," EWP critical thinking evaluations indicate room for growth, with average scores lying centrally in the **developing** portion of the rating scale.

2023 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?



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

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

Prior-year NSSE participants are identified with an asterisk (*) in the institution lists below.

NSSE Core Survey Comparison Group 1

Name: Great Lakes Public

Number of institutions: 51

How was group constructed? Your institution retained the default comparison group.

Group description: NSSE 2022 and 2023 institutions in same geographic region and sector. List of institutions:

- Bowling Green State University (Bowling Green, OH)
- Central Michigan University (Mount Pleasant, MI)
- Chicago State University (Chicago, IL)
- Ferris State University (Grand Rapids, MI)*
- Governors State University (University Park, IL)*
- Grand Valley State University (Allendale, MI)*
- Illinois State University (Normal, IL)
- Indiana State University (Terre Haute, IN)*
- Indiana University Northwest (Gary, IN)
- Kent State University at Kent (Kent, OH)
- Kent State University at Stark (Canton, OH)
- Kent State University at Trumbull (Warren, OH)
- Miami University-Hamilton (Hamilton, OH)
- Miami University-Middletown (Middletown, OH)
- Miami University-Oxford (Oxford, OH)
- Northeastern Illinois University (Chicago, IL)
- Northern Michigan University (Marquette, MI)
- Oakland University (Rochester Hills, MI)*
- The Ohio State University (Columbus, OH)*
- Ohio State University-Lima Campus (Lima, OH)*
- Ohio State University-Mansfield Campus (Mansfield, OH)*
- Ohio State University-Marion Campus (Marion, OH)*
- The Ohio State University at Newark (Newark, OH)*
- Ohio University (Athens, OH)
- Purdue University Fort Wayne (Fort Wayne, IN)
- Purdue University Global (Davenport, IA)
- Purdue University Northwest (Westville, IN)*
- Saginaw Valley State University (University Center, MI)
- Southern Illinois University Edwardsville (Edwardsville, IL)
- University of Cincinnati (Cincinnati, OH)
- University of Illinois Springfield (Springfield, IL)*
- University of Michigan-Dearborn (Dearborn, MI)*
- University of Southern Indiana (Evansville, IN)
- University of Wisconsin-Eau Claire (Eau Claire, WI)

University of Wisconsin-Green Bay (Green Bay, WI)

- University of Wisconsin-La Crosse (La Crosse, WI)
- University of Wisconsin--Madison (Madison, WI)
- University of Wisconsin-Milwaukee (Milwaukee, WI)
- University of Wisconsin Oshkosh (Oshkosh, WI)
- . University of Wisconsin-Parkside (Kenosha, WI)
- . University of Wisconsin-Platteville (Platteville, WI)
- University of Wisconsin-River Falls (River Falls, WI)
- University of Wisconsin-Stevens Point (Stevens Point, WI)
- University of Wisconsin-Stout (Menomonie, WI)
- University of Wisconsin-Superior (Superior, WI)
- University of Wisconsin-Whitewater (Whitewater, WI)
- Western Illinois University (Macomb, IL)
- Western Michigan University (Kalamazoo, MI)*
- Wright State University (Dayton, OH)
- Wright State University-Lake Campus (Celina, OH)
- Youngstown State University (Youngstown, OH)

NSSE Core Survey Comparison Group 2

Name: Carnegie Class

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Number of institutions: 192

How was group constructed? Your institution retained the default comparison group.

Group description: All other 2022 and 2023 NSSE institutions sharing your institution's 2021 Basic Carnegie Classification "Master's L: Master's Colleges and Universities (larger programs)"