



The Annual Report for Applied Critical Thinking at RIT

for

2022 - 2023

Dr. Jennifer L. Schneider, CIH

Eugene H. Fram Chair in Applied Critical Thinking

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Contents

Executive Summary	2
Purpose and Guiding Aims.....	3
Initiative Framing and Rationale.....	3
2022-23 Management & Structure of the Initiative:.....	4
Fram Advisory Board (FAB).....	5
International Fram Advisory Board (IFAB).....	5
Fram Executive Advisory Board (FEAB).....	6
General Education and Program Student Learning Outcomes.....	7
Applied Critical Thinking Strategic Action Plan (2022-25)	8
Highlights of Accomplishments in 2022-2023	8
Events	9
Management & Engagement.....	10
2023 Fram Award at Imagine	10
Pedagogy, Teaching and Learning	10
Practice and Assessment	11
Fram Badge & the Mind Field	12
Scholarship.....	14
External Funding and Partnerships.....	15
Integration with RIT's Major Goals.....	15
Challenges to ACT Integration	15
ACT Recommendations.....	16
Conclusion	16
Appendix 1: History	17
Appendix 2: Learning Outcomes.....	20
Appendix 3: Documenting Critically Thinking about our Covid Stories.....	26
Appendix 4: Fram Award for Excellence in Applied Critical Thinking at Imagine	30
Appendix 5: RIT Global Humanities Conference.....	33

Executive Summary

In 2022-23, the Applied Critical Thinking initiative at the Rochester Institute of Technology (ACT@RIT) continued under the leadership of Dr. Jennifer L. Schneider. ACT@RIT has begun a new phase of refinement and expansion. Of particular note is the pilot implementation of uniquely focused MIND Field critical thinking experiences for students and new professional audiences. With the Mind Field, RIT advances critical thinking beyond the course, teaching and guiding individuals to use these skills on present, pressing challenges in a focused format.

This year, we hosted 15 cosponsored Fram events, including two Institute-wide speaker events, in partnership with the College of Science and College of Liberal Arts that were successful, with almost 1100 registered participants. For all events, in-person and real-time attendance dropped, but later viewing increased as asynchronous engagement became an increasing part of the model. Post-pandemic, this new type of participant-controlled engagement has become part of the new normal. Applied Critical Thinking Scholarship is an important component of RIT. For this academic year, faculty produced 797 scholarly artifacts. Of those artifacts, faculty designated 156 (20%) artifacts as ACT. The opportunity to leverage our ACT@RIT initiative to advance RIT on many fronts is apparent. The academic year 2023-2024 focus areas will be:

- **Continuous improvement:** Guided by data, the updated Fram strategic action plan and the three Fram advisory boards advance actions to achieve ACT goals.
- **Student success:** Leverage, benchmark data, and create models to support university goals for student retention and success; Engage with the RIT Assessment Office to plan, conduct and evaluate student success related to the critical thinking outcomes and improvement plans;
- **Graduate education:** Continue to expand the ACT model through integration of critical thinking into graduate programming; Guide implementation of GTA training and preparedness; Support grad writing (G-Paw) implementation; Assess the graduate PLOAP (program metrics) for efficacy in documenting student success.
- **Internal Partnerships and Collaborations:** Increase connections between traditional and unique educational experiences across RIT with ACT as the key lynchpin for major RIT initiatives (KEEN, Growth mindset, Grand Challenges, Tech, Art & Design, etc.).
- **Complementary learning:** Leverage the applied critical thinking process for the growth of RIT Certified and other complementary ways of learning; continue to build the Mind Field opportunity and collaborative programming for other RIT entities (The SHED, 365, etc.).
- **External Partnerships:** Continue to develop and export the RIT ACT model beyond RIT, including the development of partnerships and seeking external funding opportunities.
- **Expand visibility:** Continue to build ACT recognition through events, programming, communications, and awards integrated with the RIT brand.

Purpose and Guiding Aims

The purpose of this report is to summarize the ACT efforts and accomplishments for the 2022-23 academic year, list recommendations for future efforts, and define benchmarks for the ongoing evaluation of our progress. Establishing the reputation of RIT as a national leader in Applied Critical Thinking relies upon a university-wide commitment coupled with a notable external contribution to the development of Applied Critical Thinking. To ensure success, the university is (1) continuously improving a process grounded in performance measures and student achievement assessment, (2) continually seeking and sharing best practices and opportunities with internal and external partners, (3) integrating high-quality ACT learning opportunities across the student and community experience, and (4) facilitating excellence in the development of Applied Critical Thinking in our students and our world.

Initiative Framing and Rationale

Our global society has high expectations. Decision makers must think critically to assess and strategize within complex, interconnected systems; continually adapt to rapidly evolving technological, aesthetic, and social environments; and manifest new ideas, both individually and collectively. In response, RIT created the **Applied Critical Thinking (ACT@RIT)** initiative to foster the application of critical thinking – in short, *the exercising of effective thinking in any context*. **Application of critical thinking connects this performance chain of knowing-doing-creating.** The initiative is guided by several working definitions, including:

- **RIT University Education Goal and Essential Program Outcome: Critical Thinking** refers to those processes required to understand and evaluate complex claims of various sorts. It involves the evaluation of information, evidence, arguments, theories, and the contexts in which these are encountered. It entails questioning different and competing perspectives and challenging the (sometimes hidden) assumptions and inferences that determine what will count as evidence or argument. Critical thinking is learning to think in a disciplined and evaluative manner, to analyze and interpret the processes by which various claims are made and reliable conclusions are reached ([RIT Essential Outcomes](#)).
- **Critical Thinking Across the Curriculum: Critical thinking** is “the ability to identify, analyze, construct, and evaluate evidence and arguments in a deliberate and rigorous way” or “The growth of educated thinking.” (C. Sheffield, Critical Thinking Across the Curriculum Report, 2014).
- **Fram Advisory Board:** “At RIT, ACT is an active form of engagement, drawing from our diverse domains and deep expertise to address the questions and challenges that we face. As the uncertainties and the magnitude of impacts increase in our complex world, we must now consider a wider range of possible outcomes. To do this well, we need to employ thinking that draws from multiple, diverse environments to more fully inform our evaluation and resultant strategies.” (Fram Advisory Board. [Fram Award at Imagine](#)).

RIT systematically integrates critical thinking across the student experience to develop critical thinking in diverse settings. ACT@RIT is cultivated through learning the value of *defining* the quality of information, *analyzing*, and *developing* a point of view, *solving* complex problems, and *creation*. These elements are embedded into our curriculum and practiced intentionally in ever-broadening and diverse environments of experiential learning. RIT's renowned experiential learning program, the prolific use of projects and teams, community service programs, international experiences and programs, entrepreneurship and research opportunities, and participation in student groups in and out of the classroom are all valuable to the initiative. The ACT skills students develop transfer into every other area of life and are the impetus for growth, professionalism, and creative expression, empowering our alums to realize their unique contribution to our world through whatever path they choose or create. The visual map of the effort is below:

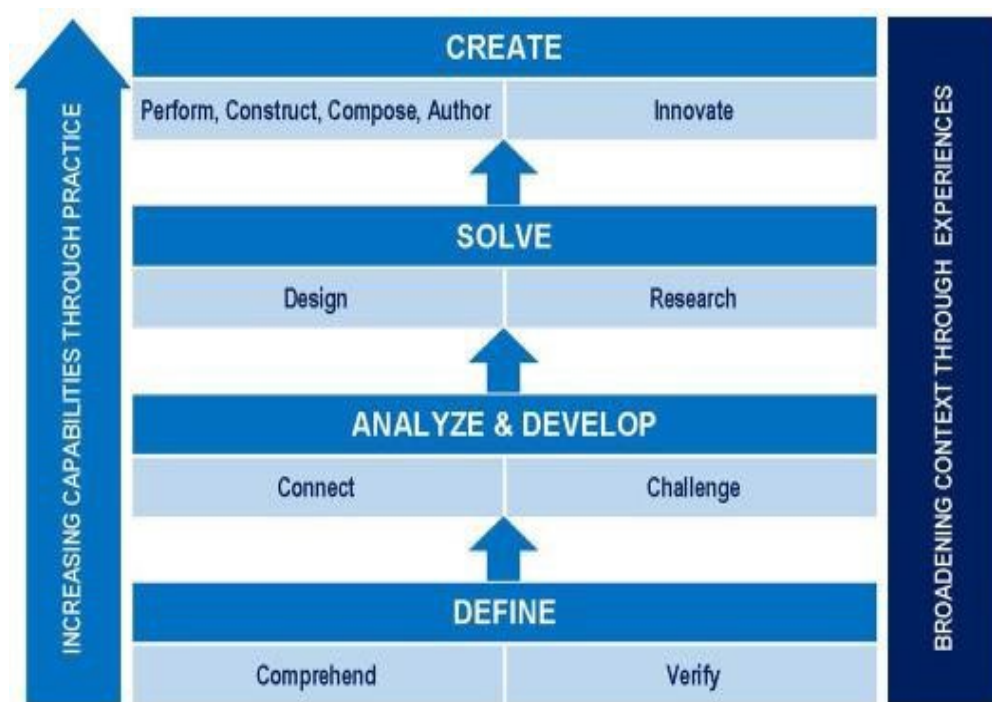


Figure 1: ACT Skill Development Map

2022-23 Management & Structure of the Initiative:

The ACT initiative is led and the report is compiled by the Eugene H. Fram Chair in Applied Critical Thinking (Fram Chair), Dr. Jennifer L. Schneider, CIH. In addition to her role as the Fram Chair, Dr. Schneider is also a professor in Civil Engineering Technology, Environmental Management and Safety within the College of Engineering Technology at RIT and leads the cross-disciplinary Collaboratory for Resiliency & Recovery at RIT. She has expertise in HAZMAT, risk-based decision-making, and global resilience. The internal Fram Advisory Board (FAB) of Rochester faculty and staff, the Fram alumni-driven Executive Advisory Board (FEAB), and the International Fram Advisory Board (IFAB) all advise Dr. Schneider. Ms. Jennifer DiLucia, Senior Staff Assistant, provided part-time administrative support. Further information on the history of the Fram/ACT initiative can be found in Appendix 1.

Fram Advisory Board (FAB)

Most members of the Fram Advisory Board chose to remain on the board for 2022-23 (Table 1). This board has representation from the colleges, degree-granting units, and Student Affairs. The duties of the board members are to guide Rochester-based ACT efforts and advocate for/be a conduit for ACT@RIT.

Table 1: 2022-23 Fram Advisory Board		
<u>Name</u>	<u>Replaced by</u>	<u>Dept./College</u>
Heath Boice-Pardee	Daniele Brown, 2023	Student Affairs
Corey Crane		College of Health and Sciences Technology
Mike Eastman		College of Engineering Technology/Associate Dean Representative
Christine Keiner		College of Liberal Arts
Heidi Schlegel	Gina Ferrari, 2022	College of Art & Design
Rachel Mazique	Shannon Connell	National Technical Institute for the Deaf
Sylvia Perez-Hardy		Golisano College of Computing & Information Sciences
David Ross	Tony Harkin and Greg Babbitt, 2022	College of Science
Brian Thorn		Kate Gleason College of Engineering
Rick Lagiewski		Saunders College of Business

International Fram Advisory Board (IFAB)

The International Fram Advisory Board represents RIT's international campuses (Table 3). These board members bring an international point of view and guidance to the initiative. The current members serving renewable terms are:

Table 3: 2022-23 International Fram Advisory Board	
<u>Name</u>	<u>Campus</u>
Albina Balidemaj	RIT Kosovo
Francis Brassard	RIT Croatia
Jamaal Pitt	RIT Dubai
Jude Okpala	RIT China

Fram Executive Advisory Board (FEAB)


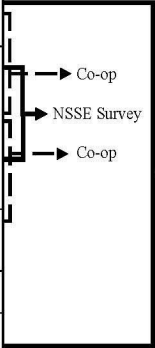
The Fram Executive Advisory Board is selected from RIT's notable alumni (Table 2). These board members bring an external point of view and guidance to the initiative. The current members are:

Table 2: 2022-23 Fram Executive Advisory Board		
Name	College/Degree	-
Peter Bealo	College of Art and Design(former College of Graphic Arts & Photography), Photographic Science, BS 1980	Consultant in Data Analysis, Public Education Policy, Marketing & Project Management
Joseph Boyd	COS, College of Science, Chemistry, BS 1977	CEO, Financial Advisor, Boyd Capital
Robert Jacoby	Civil Engineering Technology, BS 1977	Consultant, Former Global Manager at Royal Dutch Shell
Ellen Moser	Computer Technology, Software Science, BS 1981	Treasurer, East County Fellowship Former Executive Director, Kaiser Permanente
Chris Petescia	College of Art and Design, Graphic Design, BFA 2005	Owner, Kessel Run Ventures
William Standwill	College of Graphic Arts & Photography, Printing Management & Sciences, Graphic Communications, BS 1988	Head of Commercial, Sherlock Biosciences
Krista Vardabash	Saunders College of Business, EMBA 2012	Business Development Manager - Exec Education, RIT Saunders College of Business
Amanda J. Weissman	College of Engineering, Electrical Engineering; College of Science Materials Science, BS/MS 2009	Lead Systems Engineer, Lockheed Martin

General Education and Program Student Learning Outcomes

The teaching and assessment of ACT@RIT is managed through a comprehensive general education and program strategy founded on student learning and program goals. General education outcomes are codified by governing committees and adopted. The abbreviated outcomes are listed in the professional practice column of the chart below because these inform the building of a competent, professional, and capable critical thinker. The full description of ACT student learning outcomes are in Appendix 2. RIT measures student critical thinking at several opportunities along the student experience as follows:

- University-level Essential Program Outcomes assessed in designated general education courses
- Program learning outcomes
- Cooperative employer feedback
- National Survey of Student Engagement
- RIT's alumni survey

Academic Year	Outcomes		Professional Practice	Bloom's Taxonomy	Assessment	
Year 4&5	General Education & Program		Demonstrate Creative or Innovative Approaches	Creating		
Year 3&4	Program		Problem Solving Through Integration	Evaluating		
Year 1-3	General Education		Reach Conclusions Based on Evidence			
Year 1&2	General Education & Program		Analyze & Construct Arguments	Analyzing		
			Information Literacy	Applying		
			Use & Construct Evidence	Understanding		

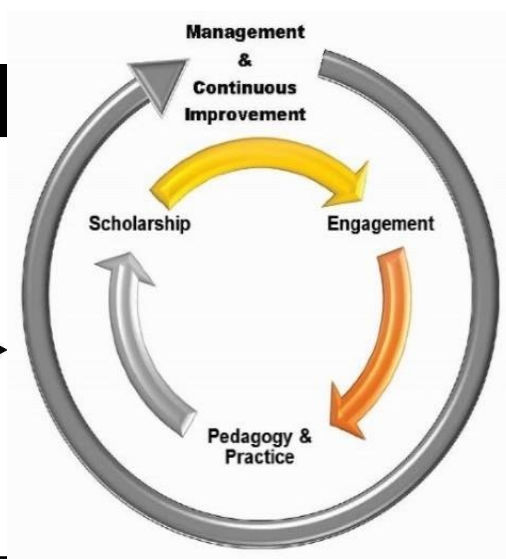


Figure 2: ACT Outcomes Map

Applied Critical Thinking Strategic Action Plan (2022-25)

[The Applied Critical Thinking \(ACT\) Strategic Action Plan \(SAP\) for 2022 -25](#) is meant to guide the ACT initiative and reflect ACT related goals of the Rochester Institute of Technology (RIT) Strategic Plan for 2025. As an initiative focused on a core 21st century skill uniquely manifested by RIT, the ACT effort directly supports university goals and the growth of the university programming and reputation. It is also crucial to the blending and growth of the unique capabilities of RIT. ACT plays a particular formative role in these university goals:

- **GOAL 1:** Enroll and support a diverse mix of increasingly creative, multi-talented students.
- **GOAL 4:** Continue to attract and retain world-class faculty committed to elevating RIT's collective excellence in scholarship, teaching, and service.
- **GOAL 8:** Design and integrate unique curricular experiences at the intersection of RIT's programs in Technology, Art, and Design (TAD). Design new and revise existing programs in non-STEM disciplines that increase enrollment through this same distinctive integrated core.
- **GOAL 16:** Create a distinctive RIT brand and develop a supporting content marketing strategy that makes use of all relevant media.

The Strategic Action Plan (SAP) is through 2025 and corresponds to the university's strategic plan. The SAP is a guidance document reflected in the annual plans of work for the Fram Chair office.

Highlights of Accomplishments in 2022-2023

Accomplishments include 15 total events with almost 1100 participants with the same operational budget first allocated in 2011. In a new model, we seek to support a broad range of ACT that increases both our impact and our reputation across the campus as a partner in the advancement of applied critical thinking in each domain and across domains. Using the results gathered from the March 2023 COVID Stories event, the Fram Office partnered with the Museum Studies program to create an interactive exhibit on our shared experience. The Fram Office then created a web home [HERE](#) for these materials as well as a portal to engage more participants. This new model aims to create 'legs' and document the ongoing impact of our events. See Appendix 3 for exhibits from documenting our Covid Stories.

Events

Events are an important visible mechanism to support engagement both for the RIT community and for the wider community. We had 15 events with almost 1100 participants (not including virtual).

Date	Event Title	Event partner	Registered
9/26/22 – 9/27/22	Signature Event--Poster Sessions	College of Science	29 students presented posters
9/26/22	Signature Speaker visited classes	College of Science	102 (5 classes)
9/27/22	Signature Event -- Lecture & Reception	College of Science	380
10/21/22 – 10/22/22	Thought at Work Conference	Ind. Design	85
12/1/22	Grand Thinking	KEEN	35
1/30/23	STS Speaker Series Irus Braverman	COLA	45
2/10/23	All the Thinks You'll Think	RIT Kosovo	25
3/28/23	Speaker Event--Spring Lecture & Reception	COLA	120 for lecture + 4 associated events (70)
4/4/23	How Thinking?	Grad School	9
4/15/23	2023 RIT Student Game Showcase and Expo	Gaming/GCCIS	130
4/17/23 – 4/21/23	Global Humanities Conference	International campuses	20
9/9/22, 1/13/23, 4/3/23, 4/5/23	Four Mind Field events	Saunders/Exec Ed	33
Total	Not including virtual	15 events	1087

Other events included the following: The Fram Office of Applied Critical Thinking was proud to be a sponsor for the [2023 Student Showcase and Expo](#). The categories for the Showcase were analog game design, excellence in audio, excellence in design, excellence in narrative, excellence in visual art, technical excellence, game impact, game experimental, biggest dreamers, and the grand prize. Our office sponsored the Game Impact category. Winning teams select the charity of their choice to receive a donation in their honor. In 2023, David Green, Justin Walraven, and Tanessa Howard won the “game impact” with their game, “Being Human,” and chose *The Trevor Project* to receive the \$100 donation.

Emerging issues: In 2022, the Fram initiative examined information acuity and news sources, especially in our Signature events. In fall 2022, with the heralded release of AI tools such as Chat GPT, it was apparent that this conversation about information sources and how we use them to support our thinking, teaching, and learning and produce outcomes is evolving rapidly. In spring 2023, Fram collaborated with the Center for Teaching and Learning and selected faculty to produce initial guidance and FAQs around these crucial tools and continues to engage in offering events and sources in the future. Clearly, the emergence of AI capacity to the masses will change how we provide and assess our capacity as a beacon of critical thinking education.

Management & Engagement

Communication Plan: Ten issues of the Fram Focus newsletter were published, with 20 Community of Practice members featured. These newsletters highlight upcoming Fram events, co-sponsored events, our Community of Practice, and feature relevant news and scholarly articles selected by Eugene H. Fram. The Fram Chair Office was featured in two articles:

- Warren, J. (2022, September 13) [Speaker focuses on critical thinking to combat misinformation](#)
- Lewke, J. (2023, February 23) [News10NBC Investigates: Train trouble. What happens if a train derails locally?](#), *News 10 NBC*

Social Media: Fram's social media account with Twitter consisted of 152 tweets, over 1,500 profile visits, 7 new followers, 8,131 tweet impressions, and 19 mentions.

2023 Fram Award at Imagine

These awards highlight student achievements in critical thinking for their critical thinking in the development of the exhibit. The annual awards are presented for both small group and large group categories. See Appendix 4 for award winners and abstracts.

Pedagogy, Teaching and Learning

Year One/365 course: Dr. Schneider continued her association with Year One or 365 by serving on their advisory board. Content related to ACT is integrated into the 365 curriculum, and students complete a baseline perception assessment of their ACT skillset. This supports our ability to develop measures to evaluate their ACT growth over their RIT time. The Fram Office will collect final year data from students and use the analysis to support continuous improvement.

Teaching Circle: The Teaching Circle was discontinued in the fall of 2022. This teaching circle focused on ACT (Applied Critical Thinking) with particular emphasis on developing best practices for (1) student capacity to evaluate information quality and use information from various sources across the disciplines, and (2) practicing the art of collegial conversations and critique in the disciplines.

Information acuity is a crucial skill broadly developed in general education. In addition to supporting that, this teaching circle aimed to address the need to translate foundational ACT also into discipline-based thinking. Exploration included:

- How do we define information?
- How do we evaluate the claims and data behind the scientific headlines?
- How does public perception impact the view and success of technology and innovation?
- How can we develop skills for conversations and discourse across opposing views?
- Can the skill of critique in art lead us toward more fruitful interactions in other arenas?
- How has our emerging style of knowledge consumption driven differing views of what constitutes fact?
- How should we “research” facts from a variety of sources, including social media?

RIT edX : The RIT edX course, Critical Thinking and Problem-Solving launched in 2017 as part of the Soft Skills Professional Certificate program, which was retired in 2020. The course has been available through the Leadership Essentials Professional Certificate program since July of 2020.

RITx COURSES:

- **CRITICAL THINKING & PROBLEM SOLVING**
Total Enrollments: 13,449
Verified (Paid) Enrollments: 1,190
- **DESIGN THINKING FUNDEMENTALS**
Total Enrollments: 8,791
Verified (Paid) Enrollments: 260
- **DESIGN THINKING: Empathizing to Understand the Problem**
Total Enrollments: 1,685
Verified (Paid) Enrollments: 115
- **DESIGN THINKING: Ideation, Iteration, and Communication**
Total Enrollments: 2,889
Verified (Paid) Enrollments: 101
- **DESIGN THINKING: Prototyping and User Testing**
Total Enrollments: 1,245
Verified (Paid) Enrollments: 80
- **DESIGN THINKING: Capstone**
Total Enrollments: 178
Verified (Paid) Enrollments: 25

Practice and Assessment

Community of Practice & Exemplars: Our current Community of Practice (CoP) membership now includes 91 RIT faculty and staff members in the ongoing CoP, CoP of Teaching and Learning and CoP Disaster and some of these individuals retired or left RIT.

Assessment: There are more than 600 general education courses with confirmed ACT components and many program-level courses that support ACT@ RIT, by continuing to build our assessment strategy for ACT through these courses. Examples include:

Longitudinal Study: The assessment processes for ACT continued to be an area of growth. This data examines the growth of student ability to apply critical thinking across their RIT student experience.

Student Learning Outcomes & Rubrics: (See Appendix 2). [Assessment results for each outcome are available online](#). Dr. Schneider serves on the General Education Assessment Advisory Board and makes recommendations related to faculty engagement and recognition. Additionally, the council recommended a move to a new assessment schedule in which all four critical thinking outcomes will be assessed in 2023-24. As a part of this work, the Assessment Office and Fram Office will implement a new model in 2023-24, where two of four outcomes will be assessed in program courses, expanding the ACT impact analysis further across the student experience. This is particularly important for the creation/innovation learning outcome, which will be measured in the capstone experience.

International Campus efforts: Each campus has engaged in applied critical thinking through their representative.

- **Rochester Institute of Technology – Kosovo:** The Fram Chair hosted an engaging workshop on the teaching and learning of ACT attended by 25 faculty. “All the Things You’ll Think” on February 10th, 2023.
- **Rochester Institute of Technology – Dubai:** The main critical thinking effort for RIT Dubai this year has been the expansion of the Ethics course offerings (adding PHIL 305: Philosophy of Peace and PHIL 403: Social and Political Philosophy) including opening an official Ethics Immersion. RIT Dubai is creating a shared critical thinking repository for and by faculty.
- **Rochester Institute of Technology – Croatia:** RIT Croatia featured a series of faculty workshops regarding ChatGPT and other AI products and their impact on the teaching and learning process. ACT plays a critical role here, especially in assessing the source and validity of information, as well as the process for generating conclusions.
- **Rochester Institute of Technology – China Research Consortium:** RIT China held a successful research consortium that allowed two groups of students (5 students each) to develop projects on how to help the elderly. The students developed apps the elderly could use to navigate through daily chores like medication, fraud, and transportation. To the benefit of the consortium and the students, they presented their work at the Global Humanities Conference and the Imagine RIT (See Appendix 5).

Fram Badge & the Mind Field

Working with the FEAB, our office continued development of a new experiential opportunity for professionals and students, nominally called the Fram Badge in ACT. Phase 1 of this effort is the creation of the [Mind Field experiences](#) which are focused learning events that are run in a workshop fashion, focused on a particular question the group would like to critically examine in an active format using the ACT learning skills. These facilitated Mind Fields support participant learning in a safe and productive space and inculcate the ACT skill process while also addressing an issue or question in an applied format. While still in the pilot stage, Mind Fields have become an addition to the Saunders College of Business Exec Ed portfolio that returns external (paid participation) resources to the Fram budget. In addition to the external offering, Fram has also created a process to apply for internal Mind Field funding to implement these focused critical thinking learning opportunities for students. The goal is to support student success by building from Mind Fields into a full (recognition) certification (badge) for participation.

RIT Critical Thinking Certification

Initial Certification Track Ideas

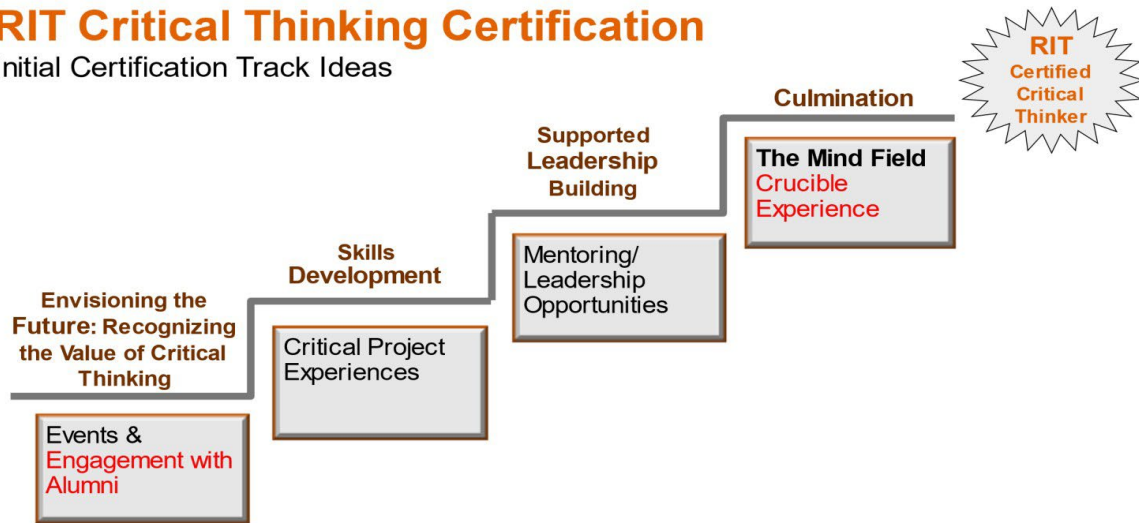


Figure 3: ACT Fram Badge

The Mind field and eventual Fram Badge is an exciting new initiative in the Fram Portfolio. At its core, the Badge will be earned upon completion of a process that includes: 1) engagement with alumni and attendance at events with speakers of significance; and 2) demonstrated development of ACT as part of project and team experiences and completion of a MIND field experience, centered around wrestling with a complex problem for which there is no clear answer nor path to follow, especially in a group inter-major or cultural capacity.

2022-23 External Mind Fields:

- June 27th: Technical business 1- Board of Directors. 9:00AM – 4:00PM @ RIT – 9-member Board of Directors; Mind Field Foundations to include Team DISC review, Applied Critical Thinking Aspects for board functions, development of critical org questions.
- September 9th Technical business 1- Board of Directors - 9:30AM-2:00PM @ RIT – Mind Field Facilitation - focus on critical org. question with follow-up documentation.
- January 13th : Technical business 1- Board of Directors 11:30AM-4:00PM @ RIT – Mind Field Follow-Up
- April 3rd : Technical Consulting business 2 - 5 developing leaders – Fundamentals of ACT
- April 5th : Technical Consulting business 2 -10 leaders – Mind Field Facilitation – focus on critical org question
- November 2023: CEO Group – 10 CEOs – Mind Field Facilitation

2023 Internal Mind Field:

Jude Chudi Okpala, Lecturer/ RIT China, Nickalus Rupert, and Jonathan Riccio: “The Hero’s Journey” - This project is part of a course, Mythology and Literature that has enrollment of 110 students—three sections of the course. This project offers students an opportunity to reflect on their experiences and chart them according to the stages in the monomyth. Here are the main questions students will answer, and they will do so in groups of 4 or 5: Using the structures of monomyth, explain how your lives are moving in the path of heroism. How do you encounter and overcome struggles? What do you consider success and how do you achieve it? How do you see yourself as a hero/leader? This assignment leads students to operate at the highest level of Bloom’s taxonomy: creation of thought; it equally admits of both creative and critical thinking as it requires students to reflect on their experiences and use the same to develop an argument on how their experiences match the hero’s journey. Accordingly, this project fosters critical thinking as it builds on skills of evaluation, reflection, and creation.

Scholarship

During this year, there were 797 scholarly artifacts. Of those artifacts, faculty designated 156 (20%) artifacts as ACT. Examples include:

- Huang, Linda. "The Uncertain Body: Lin Tianmiao, “Mother Machine and Postsocialist Biopolitics." *Art Journal* 81. 1 (2011): 96-115. Print.
- Zhao, Junru, et al. "Child exposure to community violence in an at-risk sample: Developmental trajectories, caregiving risks, and the role of child temperament." *Psychology of Violence* 12. 6 (2022): 382-392. Print.
- Worden, Daniel. "Maus in Comics History: From Funny Animals to the Classroom." *Maus Symposium*. St. John Fisher University. Rochester, NY. 5 Apr. 2022. Keynote Speech.

External Funding and Partnerships

Grant Proposal: During this academic year, Dr. Schneider submitted a pre-proposal to the Army Research Institute, ‘Mastering Cyber Security Skills Using Resilience Games with Applied Critical Thinking’ for \$600,000 in collaboration with faculty from GCCIS and the RIT Cyber range. Unfortunately, the proposal was not advanced.

External Engagement Efforts

RIT continued to engage externally in many efforts, and have begun making strides in creating external partnerships and building its reputation over the past year, including:

- Continued a collaborative relationship with the University of South Florida – **A. Helene Robinson, Ed.D., Ed.S.** Director of Critical, Creative, & Design Thinking Program, Arts Integration Coordinator/[USFSM Incredi-Bull](#) Faculty Member, Department of Curriculum, Instruction & Learning/College of Education, to share assessment systems, policies, and strategy. In 2023, USFSM and RIT Fram have drafted a conference proposal for NSF, titled, “Proposal for a CCDT (Critical, Creative and Design Thinking) conference”. We have had feedback from the program officer and are in final preparation mode for submission summer 2023.
- **University partner support:** Provided materials to peer university partners upon request. Coming out of the pandemic, it has been extremely challenging for universities to advance teaching and learning initiatives and sharing and benchmarking of efforts is key to success. As a result, we began to share our methodology and tools with similar efforts.
- **Alumni Relations:** Alumni Relations continues to build programming and engagement opportunities for alumni that is relevant to their goals and creates a relationship to the university. Alumni function as the Fram Executive Advisory Board and participate in Fram events. Working with Alumni Relations, Fram has also featured alumni as presenters at Fram events.
- **Mind Fields** (described in section Fram Badge and Mind Fields).

Integration with RIT’s Major Goals

The importance of ACT in RIT’s long-term strategy is evident. Development of leaders within and at the intersection of technology, art and design requires fostering complex visionary thinking that is grounded in ACT skills. Applied Critical thinking has a role to play in the integrative learning path with RIT, and this effort continues to increase the impact of the ACT effort.

Challenges to ACT Integration

The ACT at RIT initiative faces challenges that must be overcome collaboratively. RIT must continue to foster engagement of our own RIT community by establishing both top-down and bottom-up support and build connections at both the general education and program level, and through extracurricular activities outside degree programs. Advancing RIT’s reputation in the university community is of paramount importance. It is a simple truth that there are many priorities and distractions on a college campus that make it difficult to emerge from the crowd of opportunities, particularly without a clear connection to the disciplines that attracted students to RIT. The popular media paints a somewhat negative picture of college students’ ability to think and focus beyond self. RIT is proof that our students can and do practice wide critical thinking.

Further, learning and practicing critical thinking is difficult, takes time, and is resource-intensive for faculty, students, and classes, requiring a significant commitment on the part of all, including the university itself. ACT must be an expected *and* obvious part of each student's experience, so that the students see and understand their role in developing their own capabilities.

ACT Recommendations

Our efforts in ACT now give us the opportunity to make a significant impact both inside and outside of RIT. The processes, engagement and curricular structures, and best practices are now in place to allow our effort to mature and evolve. The Fram Chair is ultimately responsible for the leadership of the ACT initiative by creating community engagement and integration across the student experience. Our immediate goal is to increase faculty, staff, and student capacity to practice ACT by significantly enriching (or expanding) the student impact.

The opportunity to leverage our ACT@RIT initiative to advance RIT on many fronts is apparent. The academic year 2023-2024 is focused on student success across our campuses, faculty teaching and learning of critical thinking, and advancement of internal and external partnerships:

- **Continuous improvement:** Guided by data, the updated Fram strategic action plan and the three Fram advisory boards, advance actions to achieve ACT goals.
- **Student success:** Leverage, benchmark data and create models to support university goals for student retention and success; Engage with the RIT Assessment Office to plan, conduct and evaluate student success related to the critical thinking outcomes and improvement plans;
- **Graduate education:** Continue to expand the ACT model through integration of critical thinking into graduate programming; Guide implementation of GTA training and preparedness; Support grad writing (G-Paw) implementation; Assess the graduate PLOAP (program metrics) for efficacy in documenting student success.
- **Internal Partnerships and Collaborations:** Increase connections between traditional and unique educational experiences across RIT with ACT as the key lynchpin for major RIT initiatives (KEEN, Growth mindset, Grand Challenges, Tech, Art & Design, etc.).
- **Complementary learning:** Leverage the applied critical thinking process for the growth of RIT Certified and other complementary ways of learning; continue to build the Mind Field opportunity and collaborative programming for other RIT entities (The SHED, 365, etc.).
- **External Partnerships:** Continue develop and export the RIT ACT model beyond RIT, including development of partnerships and seeking external funding opportunities.
- **Expand visibility:** Continue to build ACT recognition through events, programming, communications and awards integrated with the RIT brand.

Conclusion

The Applied Critical Thinking initiative has the required components in place to achieve our goals of creating an environment that cultivates advanced critical thinking skills for RIT students and alumni and establishes national prominence and recognition for RIT.

Fram/ACT will continue to cultivate an integrated and future-minded presence at RIT and beyond. This initiative is more important than ever to develop and support effective citizen-leaders that can successfully face the challenges of our evolving world and create a compelling future.

Appendix 1: History

The Eugene H. Fram Chair in Applied Critical Thinking was funded in 2011 by an anonymous RIT alumnus to honor Professor Eugene H. Fram. Gene Fram is a Professor Emeritus of Marketing who retired from RIT in 2008 after 51 years of teaching at Saunders College of Business. He is known for his expertise in the study of retail malls and shopping, Internet retailing, nonprofit and corporate governance, and advertising. Professor Fram received his Ed.D. in Higher Education from the State University of New York at Buffalo, his MS degree in retailing from the University of Pittsburgh, and served as the J. Warren McClure Research Professor of Marketing at RIT. Gene is the recipient of the 1997 Eisenhart Award for Outstanding Teaching and the RIT Presidential Medallion in 2008.

Dr. Clarence Sheffield served as the inaugural Fram Chair from 2012 to 2015, and laid the foundation for the effort, including establishing the first faculty advisory board, writing of the *Critical Thinking across the Curriculum* report, adoption of general education student learning outcomes for critical thinking, engaging faculty and students through small group events and hosting of five speakers.

The effort was reorganized in 2015-16 with the appointment of Dr. Schneider, with the goal of impacting the student experience through faculty engagement and transparent communication. Since that time, major accomplishments have included the seating of three advisory boards comprised of Rochester faculty and staff, international campus faculty, and an external alumni advisory board; creation of two successive action plans that dovetail with university strategy; ongoing measurement and continuous improvement of student critical thinking through data gathering and analysis; implementation of a communication plan including the Fram Focus Newsletter, website, and social media; support of learning initiatives for faculty and students both on campus and through distance learning; and the establishment of the Fram Awards at RIT Imagine. In 2015-16, Dr. Schneider was also supported part-time by Dr. Evelyn Brister of COLA, Philosophy, who created a new course in 'Responsible Knowing'. Dr. Schneider initiated and continues the practice of disseminating an ACT annual report that summarizes efforts and accomplishments. This initiative expanded in 2016-17 with increasing engagement and integration of the effort on the Rochester campus.

External and internal engagement accomplishments include establishment of the Fram External Advisory Board, a social media presence on Facebook and Twitter, a new student-directed introductory video, and a partnership with University News as part of an expanding external outreach effort. The internal curricular efforts include three applied critical thinking experimental courses, an updated information literacy rubric and implementation of an argumentation rubric. Significant campus engagement resulted from fourteen events, Fram signature and collaborative programming, and the beginnings of a faculty/ staff community of practice. In addition to the regular applied critical thinking programming at RIT, more than 600 participants actively engaged in specific Fram opportunities over the course of the academic year.

2017- 2018 saw substantial increase of social media presence on both Facebook and Twitter, proposal of an Association of Independent Technological Universities (AITU) Applied Critical Thinking summit with peer university administrators for 2019, publishing of papers related to the implementation and evaluation of applied critical thinking at RIT, and a critical thinking-centric

proposal to Misk-Gates Foundation. Internal efforts include establishment of the International Fram advisory board (IFAB) that includes members from our international campus locations, the very first Provost's Learning Innovations Grants (PLIG) awards, and creation of rubrics for ACT-related analysis and evaluation of creativity and innovation student learning outcomes. Thirteen Fram events and collaborative programming created significant campus engagement. The year-over-year participation increased 4%, more than 850 participants actively engaged in specific Fram opportunities.

In 2018-19, the maturation and integration of the Applied Critical Thinking initiative at the Rochester Institute of Technology (ACT@RIT) continued under the leadership of Dr. Jennifer L. Schneider. Applied Critical Thinking at RIT is framed, functional, and ready to meet greater challenges. We have entered a new phase of ACT efforts on the national stage and were poised to deepen our efforts to fulfill university goals. We have increased on-campus participation 700% over the last 5 years. We hosted 12 college-focused Fram events, and an institute-wide spring lecture and fall signature event set that were very successful. The year-over-year participation increased 61% to an all-time high of 1400 attendees despite the ongoing challenge of capturing interest on our busy campus.

Engagement is more than event attendance, but strategic refinement of university systems for student success. Notable accomplishments are measurable at all RIT campuses, including: implementation of the suite of rubrics for ACT-related student learning outcomes, and initiation of data informed ACT process evaluation; completion of a first-year student perception survey for Rochester that forms a baseline for longitudinal student assessment; establishment of a relationship for future RIT4LIFE opportunities; continued successful university-level offerings including the graduate 'Worldmaking' salon and a critical thinking course through RIT edX; growth in faculty support including resources, rubrics, teaching circle and workshop offerings; initiation of participation and feedback survey for RIT international campuses; and successful planning for the first of its kind Association of Independent Technological Universities (AITU) Applied Critical Thinking Summit, attracting participation for our peer institutions for a summit in August 2019.

In 2019-20, the maturation and integration of the Applied Critical Thinking initiative at the Rochester Institute of Technology (ACT@RIT) continued under the leadership of Dr. Jennifer L. Schneider. ACT@RIT is framed, functional, and ready to meet greater challenges. We have entered a new phase of ACT efforts on the national stage and are also poised to deepen our efforts to fulfill university goals. We have increased on-campus participation 700% over the last 5 years. This year, we hosted 24 cosponsored Fram events, and an Institute-wide fall signature event that was very successful. The year over-year participation increased 64.6% to an all-time high of nearly 2500 attendees despite the challenge of the COVID-19 Pandemic. The measure of our success is not limited to event attendance but defined by our level of engagement and strategic refinement of university systems for student success. Notable accomplishments are measurable at all RIT campuses, including:

- Successful AITU summit of peer universities in August 2019
- Development of unique webinar event series with Alumni Relations and several colleges related to the pandemic (capitalizing on the RIT4Life model).
- Establishment of a unique Community of Practice Disasters that highlighted professors that contribute in this important area.
- Continued growth in faculty support including resources, rubrics, and workshop offerings.
- Initiation of support and engagement of RIT international campus faculty.

In 2020-21, we hosted 18 cosponsored Fram events, and an Institute-wide spring speaker event that was successful. Nearly 1000 attended Fram events this year despite the ongoing challenge of the COVID-19 Pandemic. Temporary administrative support was provided by Linda Lagree, through Datrose, RIT's temporary staffing agency. Linda's temporary assignment ended June 30, 2021 and Ms. Tamaira Brown worked for the Fram chair from August 2021- to July 2022. Ms. Lagree was then rehired to support the chairship in summer and fall 2022. Jennifer DiLucia began working for the Fram Chair in December of 2022 – present.

In 2022-23, we hosted 15 events with almost 1100 participants (not including virtual participants) and expanded the ACT effort and reputation further through implementation of internal and external partnerships with a broad group of collaborators, successful piloting and implementation of the unique internal and external Mind Fields and the integration of GTA training.

Appendix 2: Learning Outcomes

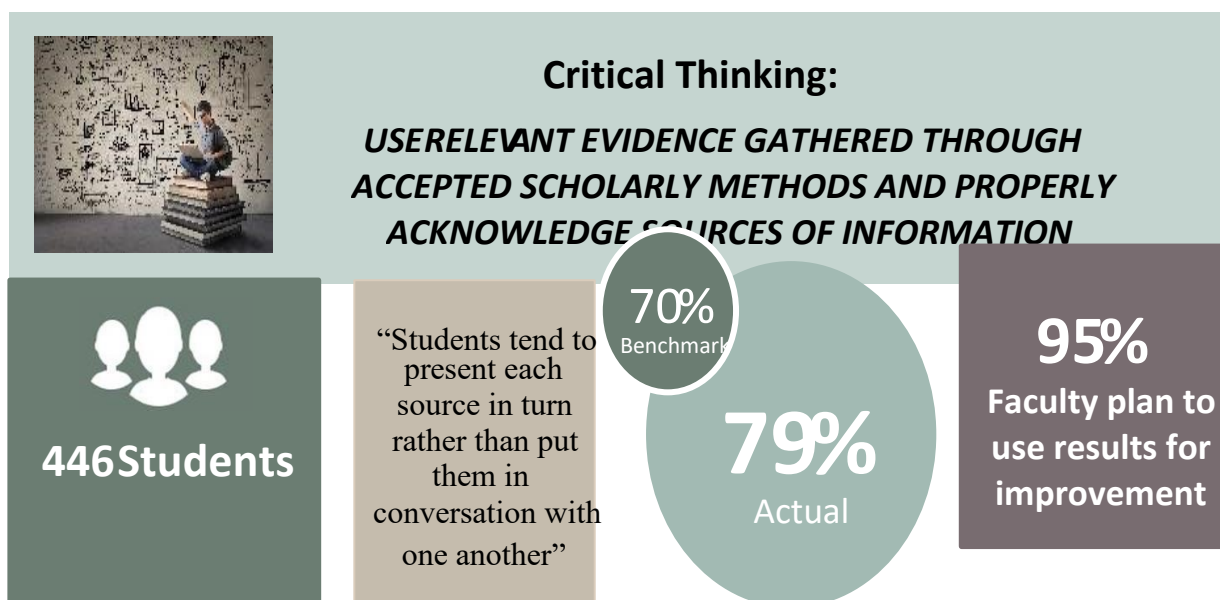
<p>Critical Thinking refers to those processes required to understand and evaluate complex claims of various sorts. It involves the evaluation of information, evidence, arguments, and theories, and the contexts in which these are encountered. It entails the questioning of different and competing perspectives, and challenging the (sometimes hidden) assumptions and inferences that determine what will count as evidence or argument. Critical thinking is learning to think in a disciplined and evaluative manner, to analyze and interpret the processes by which various claims are made and reliable conclusions are reached. (Source: RIT current Educational Goals Definition)</p>			
	Academic Programs	Co-op Employer Evaluation 2016-18	NSSE 2015
Measure and Results	100% of programs identified at least one program goal/student learning outcome	<p>Critical Thinking:</p> <p>Information Literacy: <i>Accesses and synthesizes information from appropriate sources</i> 4.4 out of 5.0 Met (n=624)</p> <p>Creative/Innovative Synthesizes existing ideas, images, or expertise in original ways 4.3/5.0</p>	<p>NSSE 4b. <i>Applying facts, theories, or methods to practical problems or new solutions</i> Senior Approaching RIT 3.0, AITU Peer 3.1</p> <p>NSSE 4c. <i>Analyzing an idea, experience, or line of reasoning in depth by examining its parts</i> Senior Met RIT 2.9, AITU Peer 2.9</p> <p>NSSE 4d. <i>Evaluating a point of view, decision, or information source</i> Senior Met RIT 2.6, AITU Peer 2.6</p> <p>NSSE 4e. <i>Forming a new idea or understanding from various pieces of information</i> Senior Met RIT 2.8, AITU Peer 2.7</p>
University Level Benchmark	100% of programs will identify at least one program goal/student learning outcome aligned to Critical Thinking	Employers will rate RIT students 4.0 or higher Scale 1(poor) – 5 (excellent)	RIT Seniors will report a mean that is higher than or on par with their AITU Peers (n= 800 RIT seniors, ~1800 AITU)
Preliminary Action Items	Develop faculty team to determine criteria, core assignment(s) and set benchmark	Review/analyze co-op student evaluation responses to qualitative questions re: Critical Thinking	Ongoing review of NSSE data for trends

General Education Student Learning Outcomes Proposed Assessment Schedule 2020-2026*													
Framework	General Education Student Learning Outcome	2020.21 Assessment		2021.22 Assessment		2022.23 Assessment		2023.24 Assessment		2024.25 Assessment		2025.26 Assessment	
		Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Communication	Express oneself effectively in common college-level written forms				X							X	
	Revise and improve written products			X									X
	Express oneself effectively in presentations, either in American English or American Sign Language			X								X	
	Demonstrate comprehension of information and ideas accessed through reading				X								X
Critical Thinking	Use relevant evidence gathered through accepted scholarly methods and properly acknowledge sources of information							X					
	Analyze or construct arguments considering their premises, assumptions, contexts, and conclusions, and anticipating counterarguments							X					
	Reach sound conclusions based on logical analysis of evidence								X				
	Demonstrate creative or innovative approaches to assignments or projects								X				
Ethical	Identify contemporary ethical questions and relevant positions						X						
Artistic	Interpret and evaluate artistic expression considering the cultural context in which it was created						X						
Global	Examine connections among the world's populations		X**			X							
Social	Analyze similarities and differences in human social experiences and evaluate the consequences					X							
Natural Science Inquiry	Demonstrate knowledge of basic principles and concepts of one of the natural sciences		X**							X			
Scientific Principles	Apply methods of scientific inquiry and problem solving to contemporary issues and scientific questions		X**							X			
Mathematical	Comprehend and evaluate mathematical or statistical information	X									X		
Mathematical	Perform college-level mathematical operations or apply statistical techniques	X									X		

* Schedule may be revised based on achievement of the General Education Student Learning Outcomes

** Spring 2020 outcome assessment postponed

Revised 2023 Office of Educational Effectiveness Assessment / Academic Affairs



RIT students' ability to *Use relevant evidence gathered through accepted scholarly methods and properly acknowledge sources of information* was measured in a spring 2018 course-embedded assessment utilizing a university developed rubric. Additionally, RIT senior scores from the National Survey of Student Engagement were analyzed and compared to senior mean scores from peer institutions. This report provides results, trends, and faculty recommendations to improve student learning.

Results & Trends

RIT's achievement benchmark was exceeded, as 79% of students scored a Competent (3) or higher on the rubric. The results (Figure 1) show that students scored the highest on the rubric performance criterion "*Identify Problem Scope*" and lowest on their ability to "*Integrate Sources*." One faculty member noted that "*students tend to present each source in turn rather than put them in conversation with one another.*"

Trend data is not available for this outcome because the rubric was revised before this assessment. Revisions included changes to the criteria, language, performance ratings, and benchmark. The purpose of this revision was to make the rubric broadly applicable to a larger variety of disciplines and assignment approaches as well as to simplify scoring and align with other RIT General Education rubrics. The benchmark was not met in the prior assessment, in which faculty scored student portfolios collected from First-year writing (UWRT 150).

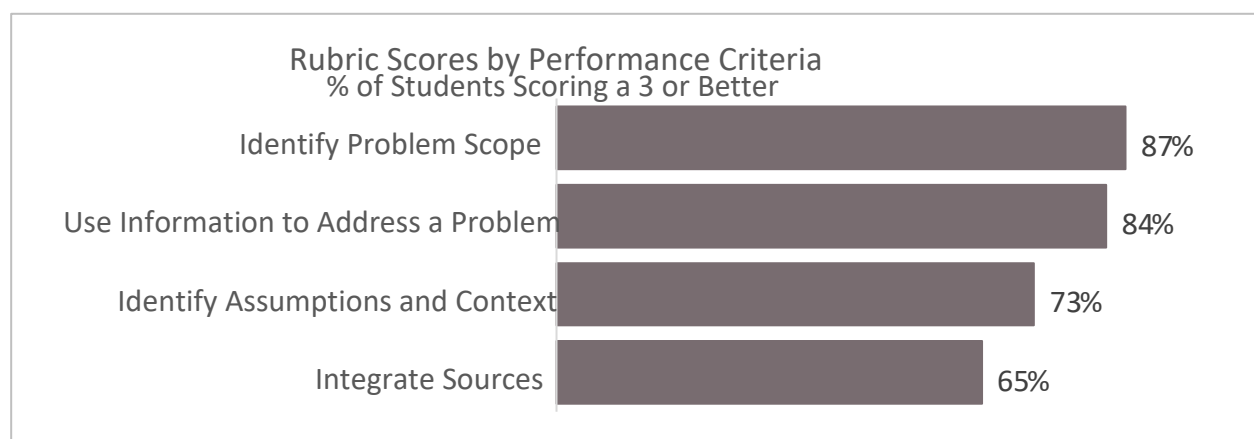


Figure 1: Use Evidence Rubric Scores by Criteria

Faculty shared instructional and assignment design strategies that help students achieve this outcome and noted areas where students could improve (Table 1). The ability to *Integrate Sources* was the area of greatest challenge for students. However, responses and recommendations from faculty pointed to additional areas for improvement. Interestingly, all the rubric criteria were mentioned as pain points at least once, and students' ability to *Identify Assumptions and Contexts of Information* was cited by faculty as frequently as their ability to *Integrate Sources*.

Table 1: Strengths and Opportunities Related to the Use of Relevant Evidence

What Works	What Needs More Work
<ul style="list-style-type: none"> • Feedback: provide students with feedback (from faculty, peers, and the writing commons) and the opportunity to make revisions based on the feedback • Scaffolded Assignments: which break down projects or research papers into steps; a crucial step is asking students to examine the way they use sources • Annotated Bibliography: or other method where students break down sources, consider how they are using them, and the context • Research: conduct their research to develop an awareness of assumptions, biases, etc. 	<p>Critical Reading and Analysis: help students integrate sources and identify assumptions and context</p> <p>Library and Database Use: provide training in library resources and reference databases early in student's college career</p> <p>Proper Citation: provide additional guidance and add clarity to expectations regarding proper citation methods and use of citations for internet sources and paraphrasing</p>

Additional Data: Co-op Employer Evaluation

Students participating in an RIT co-op experience are rated by their supervisors on the Co-op Employer Evaluation after their co-op experience. RIT established a benchmark that employers would rate RIT students' Information Literacy skills as a 4 (Exceeds Expectations) or greater out of 5. The results show the students meeting the benchmark, with a mean rating of over 4 for this item (see Table 2).

Table 2: Co-op Employer Evaluation Results for Information Literacy

Co-op Employer Evaluation Item	# Of Evaluations	Benchmark	Mean Rating AY 2016-18 (1-5)*
Information Literacy: Accesses and synthesizes information from appropriate sources (CHST, CLA, COS, CAD)	624	Met	4.4/5

Additional Data: National Survey of Student Engagement (NSSE)

NSSE measures the extent to which first-year students and seniors are engaged in educational practices associated with student success. Self-reported scores from the 2017 administration of NSSE which are mapped to this outcome, were also examined to gather insights into student achievement related to this outcome. The RIT benchmark is as follows: the senior mean score on the selected NSSE item is on par with or higher than their AITU or Transferable Skills Module peer mean score.

NSSE results show RIT Seniors meeting the benchmark for one survey item but falling below the benchmark for the other item (Table 3).

Table 3: NSSE Results Mapped to Outcome

Use relevant evidence gathered through accepted scholarly methods and properly acknowledge sources			
During the current school year, how much has your coursework emphasized the following?	Benchmark	2017 RIT Senior Mean	2017 AITU Senior Mean
		(1= <i>Very Little</i> , 4= <i>Very Much</i>)	
4d. Evaluating a point of view, decision, or information source	Met	2.7	2.7
NSSE (2017 Transferable Skills Module) How often have you written something (paper, report, article, blog, etc.)?	Benchmark	2017 RIT Senior Mean	2017 Senior Module Mean
		(1= <i>Never</i> , 4= <i>Very Often</i>)	
TRN02b. Assessed the conclusions of a published work	Not Met	2.4	2.8***

Continuous Improvement

Based on the results, faculty members shared plans to modify curriculum and instruction, or made recommendations regarding changes RIT can make at the course, program, or university level to improve student learning for this outcome:

<i>Curriculum</i>	<i>Instruction</i>
<ul style="list-style-type: none">□ <i>Incorporate "low-stakes" writing assignments that ask students to find, evaluate, and use source material.</i>□ <i>Include a graded draft of the annotated bibliography for the final project.</i>	<ul style="list-style-type: none">□ Provide additional instruction in locating, using, and citing academic sources.□ Offer more feedback and opportunity for revision.

University-level recommendations for improvement made by faculty include the following:

- Emphasize a university-level focus on the proper use of citations, including when a citation is needed.
- Provide training to all students in the use of library resources and reference databases early in their college career.

Although the benchmark was met for the direct assessment, feedback and recommendations from participating faculty indicate that additional focus on the use of source data in student writing at the course and university level is needed. Feedback from faculty emphasized the efficacy of prior modifications to pedagogy and assignments completed as a result of assessment. Examples of modifications include the use of scaffolded or step-based assignments and annotated bibliographies. Although findings were specific to courses and assignments, several themes emerged regarding what works well for helping students achieve this outcome and areas where additional focus is needed.

This outcome is closely related to RIT's Communication Student Learning Outcomes, especially *Demonstrate Comprehension of Information and Ideas Accessed through Reading*, also assessed in spring 2018. Faculty feedback from this assessment was also related to critical reading and analysis skills. RIT should consider looking at Communication and Critical Thinking outcomes holistically, especially when sharing results and determining the next steps.

Appendix 3: Documenting Critically Thinking about our Covid Stories





COMBATING MISINFORMATION














TODAY THERE
 IS PUBLIC
 DISTRUST
 OF SCIENCE



SCIENCE
AND ITS
RELATIONSHIP
TO MIS/DIS

...ALL SCIENCE
...has an IDE

PRE-BUSINESS VS. BUSINESS MORAL OBLIGATION



RIT

**Eugene H. Fram Chair in
Applied Critical Thinking**

@RITFRAMCHAIR #COVIDSTORIES
#CRITICALTHINKING #RITFRAM

VISUAL NOTES BY

KINGMAN INK
2022

... **FUNDING** ...
WE need more \$

SCIENTIFIC

CONSENSUS!!

COVID

OF SCIENCE...
SPEAK and instead
USE EMOTIONAL
LANGUAGE!

“IF YOU DON'T
GET VACCINATED THINK
OF ALL THE INFANTS WHO
WILL DIE....”

RESEARCH, RESEARCH, RESEARCH!

CRITICAL THINKING IS **KEY**!

WRAP-UP Insights

WHAT ARE THE DIAMONDS WE GATHERED?



CRISIS CREATES OPPORTUNITY



WE LEARN AS WE GO

FORGIVENESS

COMPASSION



WE ARE SO PROUD OF OUR PEOPLE

COMMUNITY BRINGS US TOGETHER

HOPE



Empathy

WE NEED TO...
BALANCE BOTH...
EMPATHY & ACCOUNTABILITY

LEARNINGS

WE HAVE ALL GONE THROUGH SO MUCH LOSS!

PANDEMIC CREATED OPPORTUNITIES & MANY CHALLENGES

WHAT IS THE WORK/LIFE BALANCE WE WANT?

LEARNING NEW TOOLS FOR TEACHING & LEARNING, BUT STUDENTS ARE STRUGGLING

SHARING OUR STORIES

STUDENTS NEED

HOPE

IDENTIFYING THE EXPECTATIONS BETWEEN TEACHERS & STUDENTS

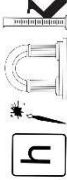
IN ANY DISASTER THERE WILL BE POLITICS AND ALAS COVID IS NO DIFFERENT

RESILIENCE!

VISUAL NOTES BY

KINGMAN INK 2022

@RITFRAMCHAIR #COVIDSTORIES
#CRITICALTHINKING #RITFRAM



Eugene H. Fram Chair in Applied Critical Thinking

RIT

Appendix 4: Fram Award for Excellence in Applied Critical Thinking at Imagine

Since applied critical thinking at RIT is an active process, awards are based upon the applicant's ability in their response to show evidence of the quality of the critical thinking process used to arrive at the final outcome of the exhibit. Responses are evaluated to the degree to which they demonstrate excellence in applied critical thinking. <https://www.rit.edu/criticalthinking/fram-chair-award>.

Fram Award for Excellence in Applied Critical Thinking at Imagine Aware Winners are:

2023 Small Group Award: G.L.O.V.E: Assistive Kitchen and Bathroom Gloves



Team: Max Likens, Shannon Martin Ignaffo, Ri Adukure, and Parker Herman

Abstract: The kitchen is one of the toughest rooms in a given household to manage, and increasingly so if disabled or elderly. The goal of this project is to design an adaptive glove to provide enhanced grip strength and fine motor control in order to improve safety, efficiency, and accessibility of household tasks such as food prep, cooking, eating, cleaning, and carrying. The Grip and Lifestyle Optimization Vambrace Enhancements (G.L.O.V.E.s) are intended to provide a food safe, hypoallergenic tool that is designed to be operable for users with low manual dexterity, low grip strength, one sided impairments (such as strokes, cerebral palsy, etc.), and those who need additional assistance gripping smooth or wet surfaces. The end product costs users less than \$75 dollars for a pair of assistive gloves, and can be easily maintained/used independently by users without the need for caretakers or assistants.

2023 Large Group Award: Alt-Andalus: An Exhibit of a Medieval World That Never Existed



Team: Trent Hergenrader, Annie Barber, Willow Collopy, Ryker D'Angelo, Jess Edwards, Juliana Falcon, Ace Gray, Justin Kennedy, Nic Lande, Miranda Lenaghan, Patrick Mitchell, Zoe Nast, Taode Ogden, Henry Orsagh, Emily O'Shea, Marlowe Pagerey, David Sterling, Quinn Sullivan, TK Sylvester, Aubrey Tarmu, Beau Wacker, Rainey Walker, Maddy Whelan

Abstract: In January 2023, students enrolled in ENGL 511 - Advanced Topics in Creative Writing: World-building Based on Historical Worlds will visit several sites in Andalucía in southern Spain to learn about the Moorish kingdom of Al-Andalus and the relationships between Muslims, Christians, and Jews. Using the historical fantasy novel *The Lions of Al-Russian* as our guide, students will spend the spring semester building a fictional world, an “alt-Andalus,” that will include fiction, visual art, and physical objects created at the Construct @ RIT. This Imagine RIT Exhibit will introduce visitors to the world of Alt-Andalus and allow them to learn about the people, places, and things in this marvelous world that never was. This interactive exhibit highlights the use of technology-based behavioral health tools including a behavioral health avatar coach, a 3D substance use prevention tool, and a digital emotion measurement tool.

The Fram Advisory Board also recognizes these teams as Honorable Mentions:

- **Greater Fuel Efficiency Through Vaporization:** Team: Carson Tosta
- **Painted World: Neo-Versailles:** Team: James Zilberman, Evan Riley, Megan Schier, Lucas Diamond, Chase Call, Alec Carter, and Holly Allen
- **CGM for Cats and Dogs:** Team: Joey Testa, Renee Banagan, Anya Fiolsi, Ryan Snyder, Lauren Zeglen, and Lily Mussallem
- **Magnetic Radiation Shielding for Space Applications:** Team: Max Wolbeck, Tevin Hendess, Benjamin Stuhr, Joshua Yoder, Samuel Cashook, Claire Kreisel, Coby Asselin, Connor Levine, Will Wright, and Braley Lanchner
- **Marketplace Melee:** Team: H Rose, Josh Clemens, Jay Sanford, Nic Lande, and Tyler Palmiter

- **Information Assistance System for the Elderly:** Team: Jude Chudi Okpala, Hu Shaohua, Liu Zhuodong, Zhang Bohan, and Shi Angye
- **The Nine Dot Problem:** Team: Alances Vargas
- **Making Technology Accessible to the Elderly:** Team: Jude Chudi Okpala, Jiang Hanzheng, Dong Hanfeng, Hao Jiafu, Wang Yanhe, and Li Fangrui
- **Project G.A.R.D.E.N.S:** Team: Hannah Bailin, Sebastian Moreano-Mesa, and Emily O'Shea
- **We're Ready for Science! The Best of Friends: Biology and Art:** Team: Elizabeth Perry, Tassia Garrison, Maya Sullum, Lauren Schack-Sehlmeyer, David Brassies, Hailey Shepherd, Karthikha Sri Indran, Maya Quaranta, Ella Lewis, Jack Herz, Sasha Markle, and Aalisah Wynn

Appendix 5: RIT Global Humanities Conference



3rd Annual Global Humanities Conference

Life for the world's aging populations

The population of the elderly is increasing astronomically across the globe, and the system of care for the population does not match their numbers. Medical problems among them abound, dementia, heart disease, diabetes, arthritis, falls, coupled with poly-pharmaceutical conditions. There is also the problem of absence of care. COVID-19 led to multiple narratives of suffering and destitute among the geriatric population and thereby exacerbated their living condition. Yet, COVID-19 forces us to think afresh about the nature and quality of life for the geriatric population. What is quality life for the geriatric population? How do we maintain the humanity of geriatric population? In the tradition of RIT Undergraduate Global Humanities Conference, this conference brings students from RIT Global Campuses--China, Croatia, Dubai, Kosovo, Rochester--and beyond to engage in the question of quality of life for geriatric population.

RIT | Rochester Institute
of Technology

April 17-20, 2023

April 17, 2023

Keynote Address

Zoom Link - <https://rit.zoom.us/j/92633009081>

Time	Speaker
9:00-9:05 AM Rochester	Opening Remarks LIU, Ying Dean of Weihai International College and Executive President of Weihai Campus Management Committee
9:05-9:15 AM Rochester	Keynote Speaker Dr. Victor Perotti Benjamin Forman Collaborative Research Professorship in Saunders College, RIT Rochester
9:15-9:20 AM Rochester	Respondent Chen Runnan RIT China

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RIT | Global

April 17, 2023 – Technology and Privacy Protection

Zoom Link - <https://rit.zoom.us/j/92633009081>

Moderator – Christine Mortimer

Time	Speaker
9:25-9:40 AM Rochester	Zhang Jiaxin – RIT China Privacy Technology
9:45-10:00 AM Rochester	Zeyu Huang – RIT China Multilevel Data Privacy Protection and Streamlined Secure Systems for the Elderly
10:05-10:25 AM Rochester	Hanzheng Jiang et al., RIT China Making Technology Accessible to the Elderly
10:30-10:45 AM Rochester	Hu Shaohua et al. RIT China Information assistance system for the elderly
10:50-11:00 AM Rochester	Discussion

April 18, 2023 - Aging Population and Society

Zoom Link - <https://rit.zoom.us/j/92633009081>

Moderator – SUN Junwei

Time	Speaker
9:05-9:25 AM Rochester	Syed Hamza Bilal Hussaini, RIT Dubai Financial Stability as a Source of Autonomy for the Geriatric Population
9:30-9:50 AM Rochester	Song Yiting, RIT China Loneliness concerning an Aging Population in China
9:55-10:15 AM Rochester	Ly Pin, RIT China The Elderly and the Family
10:20-10:40 AM Rochester	Jingyi Peng, RIT China Preserving Quality Life for the elderly
10:45-11:00 AM Rochester	Discussion

9-11am Rochester / 3-5 pm Kosovo & Croatia / 5-7 pm Dubai / 9-11pm Weihai

RIT Global

April 19, 2023 - Elderly Health and Medical Care

Zoom Link - <https://rit.zoom.us/j/92633009081>

Moderator - Ruiying Jin

Time	Speaker
9:05-9:25 AM Rochester	Zhou You, RIT Rochester Health Code Problem
9:30-9:50 AM Rochester	Xiaojia Wang, Jiaying Hou, Jun Ma, RIT China Coordination Scheme of Health Monitoring and Information Privacy Protection for The Elderly Under the Current Medical Technology
9:55-10:15 AM Rochester	Joyce James Keeriath, RIT Dubai A New Approach for Preventing Alzheimer's Progression
10:20-10:40AM Rochester	Daisy Cao Experience of dignity-conserving care in palliative care
10:30-11:00 AM Rochester	Discussion

April 20, 2023 - Culture and Progress

Zoom Link - <https://rit.zoom.us/j/92633009081>

Moderator – Hillary McCormick

Time	Speaker
9:05-9:20 AM Rochester	Ziyi Lv, RIT China Cultural heritage tourism: Enriching the lives of geriatric population or exploiting their values?
9:25-9:40 AM Rochester	Jingdan Su, RIT China Tech-cultural Tourism
9:45-10:00 AM Rochester	Li Yicheng, RIT China A Brief Analysis of Global Population Aging
10:05-10:20AM Rochester	Xun Zhang, RIT China “Wetogether”: Lifelong learning
10:20-10:30 AM Rochester	Discussion

9 -11am Rochester / 3 -5 pm Kosovo & Croatia / 5 -7 pm Dubai / 9 -11pm Weihai

April 20, 2023

Plenary Speaker

Zoom Link - <https://rit.zoom.us/j/92633009081>

Time	Speaker
10:35-10:40 AM <small>Rochester</small>	Introduction of the Plenary Speaker Hillary McCormick
10:40-10:50 AM <small>Rochester</small>	Dr. Francis Brassard RIT Croatia
10:50-11:00 AM <small>Rochester</small>	Discussion and Reflection

9 -11am Rochester / 3 -5 pm Kosovo & Croatia / 5 -7 pm Dubai / 9 -11pm Weihai