

PROGRAM LEVEL STUDENT LEARNING OUTCOMES ASSESSMENT

7th ANNUAL
PROGRESS REPORT
AY 2015-2016





TABLE OF CONTENTS

Overview	1
RIT Annual Student Learning Outcomes Goals and University Trends.....	1
College Level Results	2
Continuous Improvement: Program Rubric Results.....	3
Continuous Improvement: Featured RIT Programs.....	3
Academic Programs at RIT International Locations	5
RIT Educational Goals	6
Summary	6
Appendix A: College and Degree-Granting Unit Results	8
Appendix B: Continuous Improvement Rubric Results	9

OVERVIEW

The assessment of program level student learning outcomes is one of the key indicators used by university leaders and faculty to determine academic quality. Rochester Institute of Technology (RIT) aspires to be a leader in creating intentional, iterative, and reflective assessment practices to demonstrate and guide continuous program improvement. The Annual Student Learning Outcomes Assessment Progress Report remains a strong foundation in this process. It serves as a sustainable practice of reporting and using program level assessment results to inform decisions and changes that lead to improvements at RIT's main campus and international locations.

The Annual Progress Report process continues to provide the university with a consistent method to measure how programs are utilizing data-driven approaches to improve their courses, programs, and ultimately student learning. The university's two program goals to measure academic quality are:

1. Percentage of programs meeting or exceeding designated student achievement benchmarks
2. Percentage of programs practicing data-driven continuous improvement.

These two data sets are embedded annually in the provost's Academic Quality Dashboard and the Academic Program Analysis and Review Dashboard. Annual results affirm the achievement of program level goals and student learning outcomes, guide academic program improvement, and demonstrate the university's commitment to educational effectiveness. This seventh Student Learning Outcomes Assessment Progress Report showcases an in-depth look at AY 2015-2016 program level assessment practices and results at the main campus, RIT Croatia, RIT Dubai, and RIT Kosovo.

RIT'S ANNUAL STUDENT LEARNING OUTCOMES GOALS AND UNIVERSITY TRENDS

The university strives to have 100% of its programs assessing at least one program level goal and student learning outcome annually. The average number of programs achieving this ideal benchmark has been over 90% for the past seven years.

Goal 1: % of programs meeting or exceeding designated student achievement benchmarks

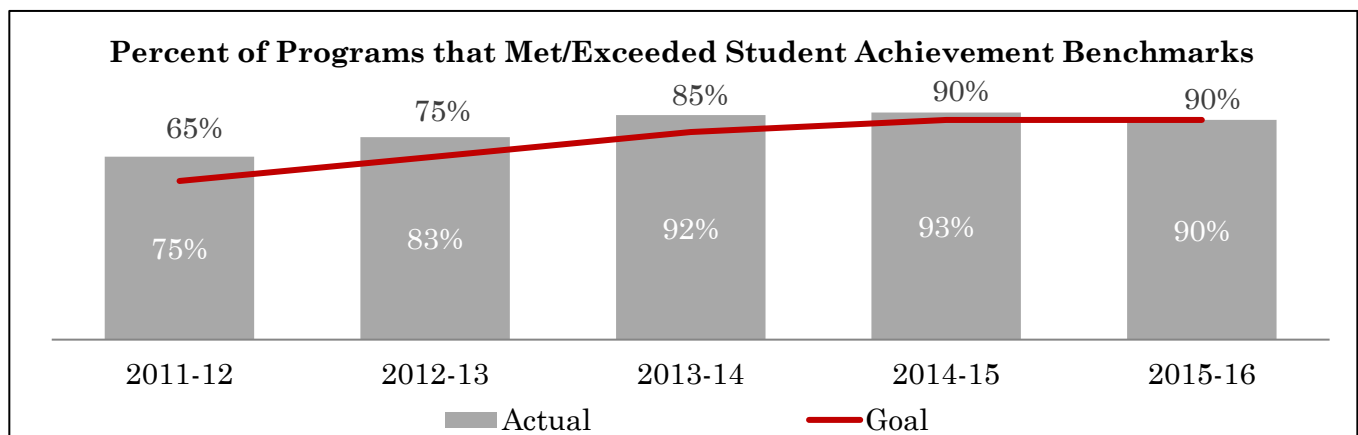


FIGURE 1: GOAL 1: % of programs meeting or exceeding designated student achievement benchmarks

Student achievement benchmarks, established by each program, determine if the selected student learning outcome was met based on assessment results. RIT continues to meet its annual goal for the percentage of programs meeting or exceeding student achievement benchmarks for the fifth consecutive year.

Goal 2: % of programs practicing data-driven continuous improvement

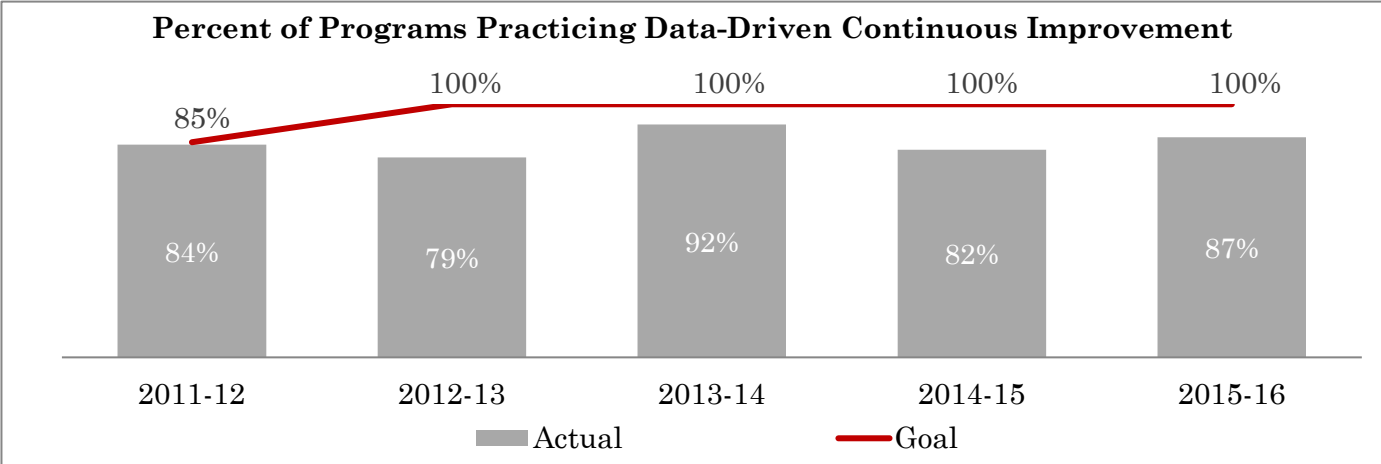


FIGURE 2: Goal 2: % of programs practicing data-driven continuous improvement

This year, there was a 5% increase in the number of programs using results to inform program improvement. This is movement in the right direction if we are to meet our aspirational goal of 100%. We strive to achieve this annual university goal through focused efforts and guidance to programs as they highlight the ways they use evidence to inform continuous improvement.

COLLEGE LEVEL RESULTS

The individual college and degree granting unit data (see Appendix A) provide program assessment trends over the past five years. An analysis of the data revealed the following:

1. Two colleges (CHST, GCCIS) and both degree granting units (GIS, SOIS) reported 100% of programs meeting/exceeding student achievement benchmarks and using results.
2. Three colleges (COLA, COS, CAST) and one degree granting unit (SOIS) showed an increase in the percentage of programs using results for improvement.
3. Two colleges (KGCOE, NTID) were consistent from the previous year in the percentage of programs using results for improvement.
4. One college (SCB) had a decrease in both meeting/exceeding benchmarks and use of results. One college (CIAS) had a decrease in use of results.

Each college and degree granting unit has received their data to review and analyze and determine strengths and focus areas for the next academic year.

CONTINUOUS IMPROVEMENT: PROGRAM RUBRIC RESULTS

Individual program progress reports are reviewed and rated using RIT's Academic Program Assessment Continuous Improvement Rubric. This rubric emphasizes continuous improvement to student learning and program improvements. The degree to which programs utilize results in their continuous quality improvement is rated on a four point scale from No Evidence (0) to Advanced (4).

A total of 37 programs (20%) were rated Advanced in their continuous quality improvement practices in AY 2015-2016, up from 19 programs (11%) in AY 2014-2015.

RIT's data indicate a positive trend in the number of programs practicing data-driven continuous improvement. The number of programs rated Advanced (4) increased by 9% (18 programs). Conversely, the number of programs rated No Evidence (0) and Minimal Evidence (1) decreased by 5% (from 33 to 23 programs) in AY 2015-2016, highlighting improved evidence of data-driven assessment practices across all degree programs.

Faculty outreach, tailored college level meeting presentations, and professional development opportunities lent support to faculty as they worked to provide improved evidence of continuous improvement within their progress reports. A comparison of rubric ratings from the previous two progress report years is provided in Figure 3.

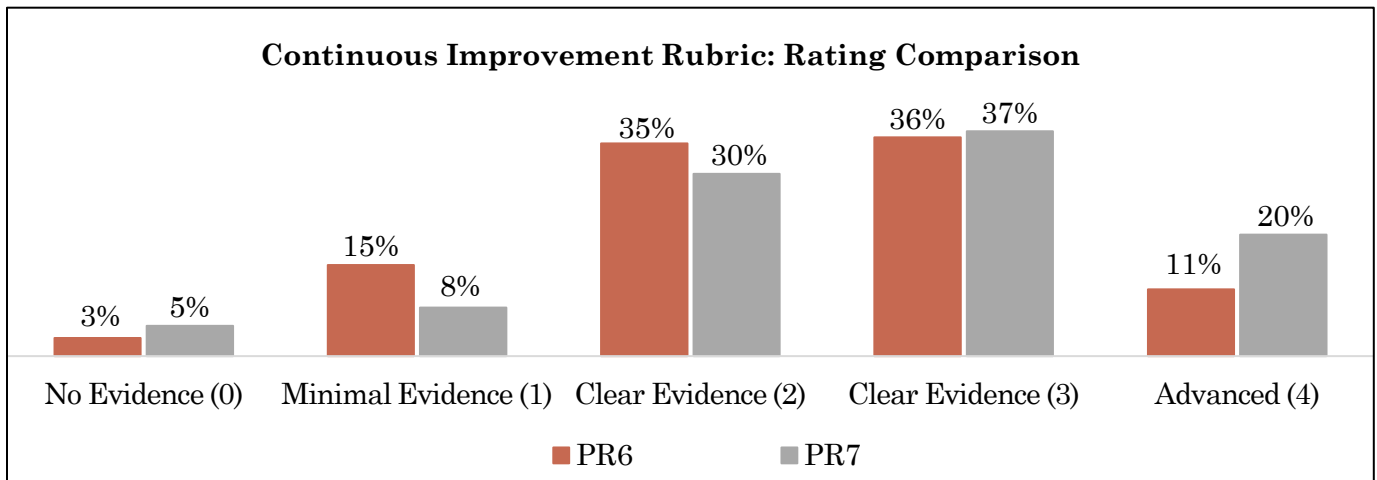


FIGURE 3: Percent of programs providing evidence of practicing data-driven continuous improvement

CONTINUOUS IMPROVEMENT: FEATURED RIT PROGRAMS

Progress Reports provide evidence of using assessment results to guide changes to curriculum, instruction, or assessment with the goal of improving student learning and/or the quality of the academic program. Each of the featured programs below were selected based on demonstrating continuous program improvement through the reassessment of an implemented change and its impact of student learning. Each program received an Advanced (4) rating on their AY 2015-2016 Progress Report.

TABLE 1: Programs Using Results to Improve Student Learning

STUDENT LEARNING OUTCOME (SLO)	DATA ANALYSIS	CHANGE IMPLEMENTED	IMPACT ON LEARNING
BS Physics (COS)			
Apply physical and mathematical principles to conceptualize, formulate, analyze, and solve physics problems.	<p>Benchmark: 80% of students will successfully pass the Sophomore Core Exam on their first attempt.</p> <p>Results: 83% of physics majors (24/29 students) successfully passed the Sophomore Core Exam on their first attempt.</p>	<p>Curriculum: Beginning in AY 2013-2014, physics majors took a new, expanded, and more robust sequence of University Physics (not the standard university sequence) for those majoring in the discipline.</p>	<p>Reassessment: AY 2015-2016 was the first year all physics majors who took the Sophomore Core Exam were exposed to the new sequence in its entirety. 83% passed on their first attempt. This significant rise in the student success rate over the last three years (2013 - 64%, 2014 - 76%, 2015 - 83%) affirms the introduction of the new sequence.</p>
MS Finance (SCB)			
Value Real and Financial Assets: Formulate proper cash flows for project analysis.	<p>Benchmark: 80% of students to score 3 or higher (on 5 point scale).</p> <p>Results: 8/10 students scored 3 or higher on a 5-point scale (Question 1, FINC-790 Field Exam (2155/2158).</p>	<p>Instructional Strategies: Students were having difficulty in formulating project cash flows. The finance faculty introduced a pedagogical modification with the design and implementation of two Capital Budgeting case studies in FINC-721 where this material is taught.</p>	<p>Reassessment: This change in instructional strategy has resulted in an improvement in student performance. Students met the benchmark in AY 2015-2016.</p>
BS Electrical Mechanical Engineering Technology (CAST)			
Measure properties of metals and use the results to select an appropriate metal.	<p>Benchmark: Average assessed score of 70% on final project reports (MCET 111, first-year course) using specific line items in formal rubric.</p> <p>Results: 70% average on 6 final reports (fall 2151).</p>	<p>Instructional Strategies: Although the benchmark was met, course instructors increased detailed instruction and constructive feedback to further develop students' technical abilities.</p>	<p>Reassessment: The same assessment was repeated in spring 2155. Students' average scores improved to 87%.</p>

ACADEMIC PROGRAMS AT RIT INTERNATIONAL LOCATIONS

RIT's goal of ensuring academic quality across all locations is inclusive of RIT Croatia, RIT Dubai, and RIT Kosovo. All academic programs located at these international locations participate in the annual report cycles (see Table 2). AY 2015-2016 Progress Report results were generally positive, with two of the three international locations improving or maintaining their assessment results.

TABLE 2: PROGRESS REPORT RESULTS FOR INTERNATIONAL PROGRAMS

International Locations	ASSESSED SLO'S				MET OR EXCEEDED BENCHMARKS				USE OF RESULTS			
	2012-2013	2013-2014	2014-2015	2015-2016	2012-2013	2013-2014	2014-2015	2015-2016	2012-2013	2013-2014	2014-2015	2015-2016
Croatia	60%	100%	100%	40%	60%	100%	60%	40%	60%	80%	80%	40%
Dubai	0%	55%	82%	100%	0%	55%	82%	100%	0%	55%	73%	100%
Kosovo	0%	100%	100%	100%	0%	100%	100%	100%	0%	100%	100%	100%

Highlights from RIT's international locations include:

RIT Croatia results were lower this year in comparison to previous years due to the transitioning of academic program leaders and a general lack of clarity related to progress report completion. Faculty area heads are currently reviewing their results in preparation for next year's reporting process.

RIT Dubai achieved 100% across all three indicators. Academic leadership and faculty have activated an *Annual Curriculum Assessment Cycle of Program* and use a flow chart and corresponding processes to guide accreditation documents and targeted assessment practices.

RIT Kosovo's one academic program has maintained a consistent 100% over the previous three reporting cycles (2013-2015). Academic leaders continue to incorporate data, reports, and analysis from assessment into each faculty meeting. Reports, as shared with faculty, are used in providing evidence and work plans for local accreditation requirements. RIT Kosovo is further leveraging the self-assessment and program goals in forming its strategic plan.



Analysis from 14 of the 17 international location progress reports identified the use of assessment results to:

- Improve academic support services – 21% (3 programs)
- Improve assessment processes – 21% (3 programs)
- Develop instructional strategies – 21% (3 programs)
- Improve student learning – 50% (7 programs)
- Enhance or revise the curriculum – 36% (5 programs)

Ten of the 14 international location progress reports explained why changes were needed and described next steps.

One-on-one outreach, bi-annual university-wide meetings, and sharing of intercampus program assessment best practices among our main campus and international partners helped enhance and support RIT Croatia, RIT Dubai, and RIT Kosovo assessment processes.

RIT EDUCATIONAL GOALS

For the first time, programs were asked to identify which of RIT’s Educational Goals aligned to the reported program level goal and student learning outcome. RIT’s five Educational Goals are intentionally aligned to the program level goals and ensuing assessment within the programs. This integrated approach helps sustain and embed the assessment of [RIT’s Educational Goals](#): Critical Thinking, Ethical Reasoning, Global Interconnectedness, Creative and Innovative Thinking, and Integrative Literacies (Scientific, Computational/Digital, Mathematical/Numeracy, Communication, Technical, and Aesthetic).

While program level goals and student learning outcomes mapped to multiple educational goals, Critical Thinking was the most frequently selected (67%) followed by Integrative Literacies (13%). Figure 4 represents the percentage of Educational Goals mapped to the reported program goals.

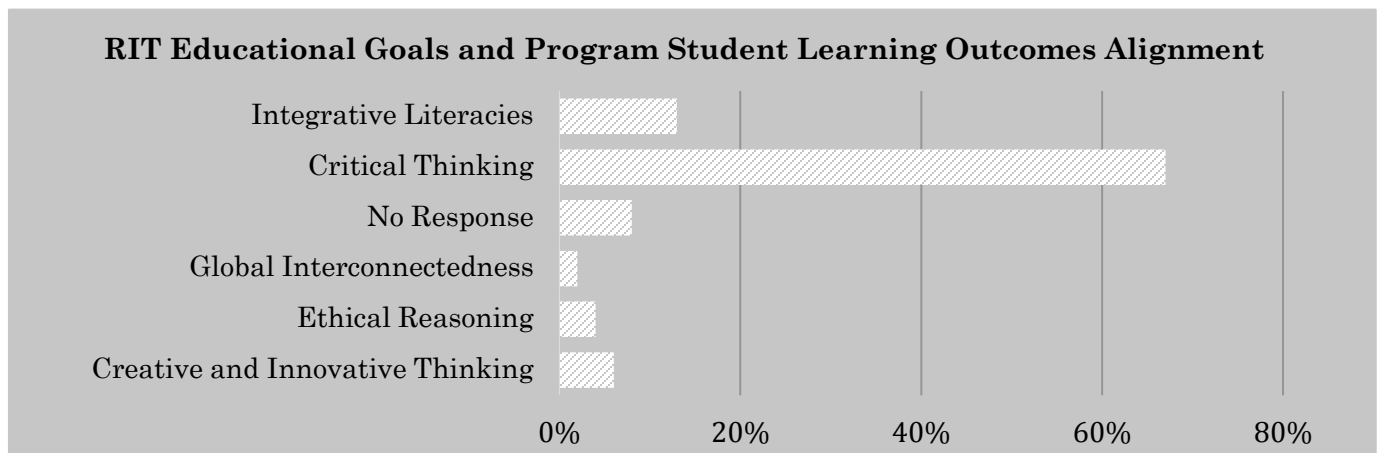


FIGURE 4: RIT Educational Goals and Program Student Learning Outcomes Alignment

SUMMARY

Our annual program level assessment reporting processes continue to provide strong evidence of data-driven continuous improvement practices. The number of programs using results for continuous improvement increased 5% during AY 2015-2016 and met the RIT goal in the percentage of programs meeting or exceeding benchmarks (90%). Reassessing change to determine program and student learning improvements (closing the loop) is not a sustained practice for some programs and remains an area for further development.

Twenty-three programs provided no or minimal evidence of continuous improvement. Analysis of each program's rubric identified three reasons for this: programs described assessment data collection without sufficient evidence of use (10), provided no information for the current assessment period (9), or described program improvement without linking to assessment results (4). These programs are a priority for outreach already initiated at the conclusion of the academic year and focusing on strategies to improve the continuous improvement goal.

Moving forward into the next academic year, we will focus on:

- Consulting with programs not reporting assessing student learning or providing evidence of continuous improvement
- Refining the Progress Report survey based both on reviewer feedback and best assessment practices
- Implementing RIT's Self-Study 2017 suggestions for ongoing continuous improvement of assessment practices
 - *Suggestion 7:* Enhance usage of indirect data by academic programs to support quantitative results on program quality.
 - *Suggestion 8:* Enhance and expand communication of university-wide and program assessment results and the use of results with the campus community.
 - *Suggestion 9:* Develop additional methods to engage, acknowledge, and reward faculty for supporting university and program educational outcomes.
- Utilizing program survey and faculty interview results and findings to inform changes and decisions to improve RIT's assessment management system and assessment practices
- Sharing intercampus program assessment best practices among our main campus and international partners

The annual Program Level Student Learning Outcomes Assessment Progress Report is a key tool to demonstrate RIT's commitment to academic quality. While assessment practices continue to be enhanced, it is also important to reflect on and celebrate RIT's achievement of consistently providing evidence of assessing and meeting or exceeding program goals and student learning outcomes benchmarks. RIT was recently commended "for a mature culture of assessment as evidenced by the yearly exercise of their robust procedures" in the MSCHE final team report. Through the continued dedication of our program faculty and academic leaders, we remain committed to improving student learning by advancing the use of assessment results to inform and guide program improvement and support meaningful assessment practices.

APPENDIX A: COLLEGE AND DEGREE GRANTING UNIT RESULTS

COLLEGE OR DEGREE-GRANTING UNIT	MET OR EXCEEDED BENCHMARKS					USE OF RESULTS				
	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
CAST	82%	82%	94%	94%	94%	82%	71%	94%	82%	94%
CHST	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
CIAS	73%	79%	96%	100%	100%	85%	91%	93%	96%	89%
COLA	63%	71%	88%	94%	100%	69%	65%	88%	65%	94%
COS	91%	73%	91%	96%	83%	95%	68%	91%	70%	87%
GCCIS	53%	94%	100%	93%	100%	65%	100%	100%	100%	100%
KGCOE	82%	95%	91%	95%	91%	82%	77%	81%	77%	77%
NTID	100%	100%	100%	100%	100%	100%	100%	87%	94%	94%
SCB	0%	33%	62%	79%	40%	100%	33%	100%	71%	60%
SOIS	67%	67%	100%	100%	100%	67%	0%	100%	33%	100%
GIS	50%	100%	100%	100%	100%	50%	100%	100%	100%	100%
TOTAL	75%	83%	92%	96%	90%	84%	79%	92%	82%	87%

APPENDIX B: CONTINUOUS IMPROVEMENT RUBRIC RESULTS*

YES: PROGRAMS PROVIDING EVIDENCE OF PRACTICING DATA-DRIVEN CONTINUOUS IMPROVEMENT REPORT:

20% (37)	<p>Advanced (4): Analyzed and used student learning outcomes assessment results from direct sources to guide a combination of the following: improving student learning, enhancing or revising curriculum, developing instructional strategies or conducting professional development activities, improving assessment processes, and improving academic support services</p> <p style="text-align: center;">AND</p> <p>Program explained why changes were needed and described next steps or follow-up assessment</p> <p style="text-align: center;">AND</p> <p>Described looking back on prior assessment results and completing follow-up or “closing the loop” action with a focus on improving student learning</p>
37% (67)	<p>Clear Evidence (3): Analyzed and used student learning outcomes assessment results from direct sources to guide a combination of the following: improving student learning, enhancing or revising curriculum, developing instructional strategies or conducting professional development activities, improving assessment processes, and improving academic support services</p> <p style="text-align: center;">AND</p> <p>Program explained why changes were needed and described next steps or follow-up assessment</p>
30% (55)	<p>Clear Evidence (2): Analyzed and used student learning outcomes assessment results and determined that changes are not needed at this time. Program explained why changes were not needed and described next steps or follow-up assessment</p> <p style="text-align: center;">OR</p> <p>Analyzed and used program information/data from indirect sources to guide changes to at least one of the following: improving student learning, enhancing or revising curriculum, developing instructional strategies or conducting professional development activities, improving assessment processes, improving academic support services</p>

NO: PROGRAMS NOT PROVIDING EVIDENCE OF DATA-DRIVEN CONTINUOUS IMPROVEMENT:

8% (15)	<p>Minimal Evidence (1): Described program improvements without linking to assessment results</p> <p style="text-align: center;">OR</p> <p>Analyzed data from indirect sources and decided not to make improvements</p> <p style="text-align: center;">OR</p> <p>Described assessment data collection without providing sufficient evidence of the use of results to improve student learning or program improvement</p>
5% (8)	<p>No Evidence (0): Described data collection efforts only</p> <p style="text-align: center;">OR</p> <p>No information provided for current assessment year</p>

* Totals include international locations

PROVOST'S AWARD FOR EXCELLENCE IN STUDENT LEARNING OUTCOMES

Congratulations to the **BS Psychology** Program in COLA, recipient of the 2017 annual Provost's Award for Excellence in Student Learning Outcomes.



Dr. Destler presents the 2017 Provost's Award for Excellence in Student Learning Outcomes to BS psychology program faculty representatives Caroline DeLong, Associate Professor/Undergraduate Program Director, and Joseph Baschnagel, Associate Professor/Chair.

Other psychology department faculty are: Suzanne Bamonto, Brian Barry, Robert Bowen, A. Eleanor Chand-Matzke, Jessamy Comer, Kirsten Condry, Nicholas DiFonzo, John Edlund, Stephanie Godleski, Andrew M. Herbert, Rebecca Houston, Jennifer Lukomski, Scott Merydith, Vincent Pandolfi, Susan Powell, Esa Rantanen, Lindsay S. Schenkel, Paula Schneider, Alan Smerbeck, and Tina Sutton.

For further information, contact:
Office of Educational Effectiveness Assessment
Academic Affairs
Rochester Institute of Technology
585.475.2310
rit.edu/outcomes