

PROGRAM LEVEL STUDENT LEARNING OUTCOMES ASSESSMENT

6th ANNUAL PROGRESS REPORT
AY 2014-2015



R·I·T

OFFICE OF EDUCATIONAL
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PROVOST'S AWARD FOR EXCELLENCE IN STUDENT LEARNING OUTCOMES

Congratulations to the **AAS Program in Administrative Support Technology** in NTID, recipient of the 2016 annual Provost's Award for Excellence in Student Learning Outcomes.



From left to right: Mary Lou Basile, Mary Beth Parker, Kathleen Szczepanek, Tracy Magin, Adriana Kulakowski

Congratulations to the **Ph.D. Program in Computing and Information Sciences** in GCCIS, recipient of the 2016 Innovation in Student Learning Outcomes Assessment Award.



From left to right, front to back row: Yin Pan, Lorrie Jo Turner, Sumita Mishra, Shanchieh Jay Yang, Pengcheng Shi, Daniel Ashbrook, Minseok Kwon, Edith Hemaspaandra, Peizhao Hu, Stanislaw Radziszowski, Tom Oh, Richard Zanibbi, Matt Huenerfauth, Michael Yacci, Carlos Rivero, Leon Reznik, Carol Romanowski, Linwei Wang, Mohan Kumar

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OVERVIEW

The sixth annual Student Learning Outcomes Assessment Progress Report provides an in-depth look at program level assessment practices and results from AY 2014-15. Results from the Progress Report provide evidence for the university's program level student learning outcomes assessment goals related to: 1) achieving established benchmarks and 2) demonstrating how assessment results are used to continuously improve student learning and programs. The results are also used to guide the Office of Educational Effectiveness Assessment (EEA) in determining how to best support academic programs and enhance campus-wide assessment processes.

Progress Report results are also embedded in annual institutional level processes. These two program outcome results are included on both the Provost's Academic Quality Dashboard and the Academic Program Analysis and Review Dashboard.

UNIVERSITY TRENDS

In general, the percentage of programs assessing student learning and meeting or exceeding benchmarks has been on a steady incline since the first annual Progress Report (AY 2009-10). The AY 2014-15 results indicated a:

- Slight decrease (2%) in the number of programs assessing student learning
- Slight increase (1%) in the number of programs meeting or exceeding benchmarks
- Larger decrease (10%) in the number of programs using results for continuous improvement

University results for AY 2014-2015 (see Figure 1) include academic programs at RIT's international locations for the first time.

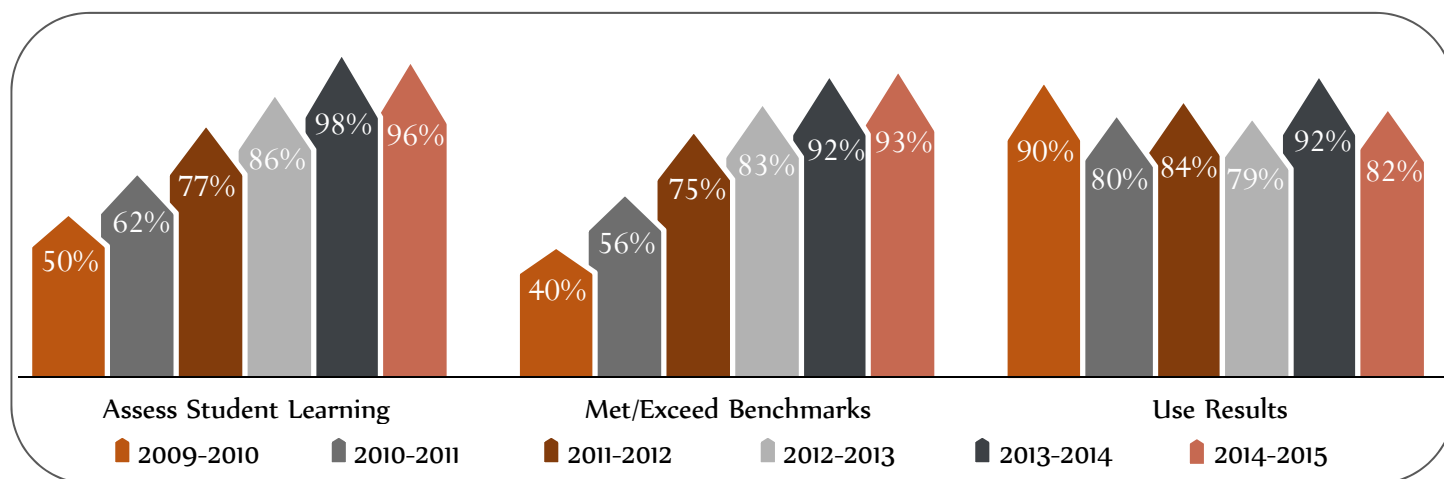


FIGURE 1: UNIVERSITY TRENDS: 2009-2015

RIT Goals

RIT's Strategic Plan includes two goals focused on the percentage of programs meeting or exceeding designated student achievement benchmarks and using student learning outcomes assessment data for continuous improvement.

Below is a comparison of the actual results and the university goals over a six year period. The results for AY 2014-15 include academic programs located at RIT's international locations.

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

RIT exceeded its annually increasing goal for the percentage of programs meeting or exceeding benchmarks for the fifth consecutive year.

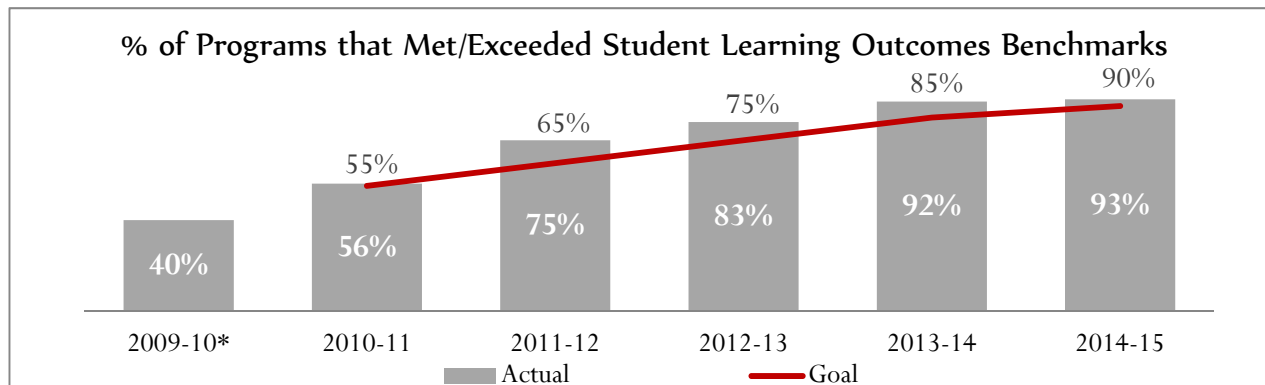


FIGURE 2: GOAL 1: % of programs meeting or exceeding designated student achievement benchmarks
 * Benchmark was established in 2010-2011

Goal 2: % of Programs Practicing Data-Driven Continuous Improvement

This year, RIT experienced the largest decline in programs reporting using results to make improvements. Further analysis of the decline is included in the Continuous Improvement section.

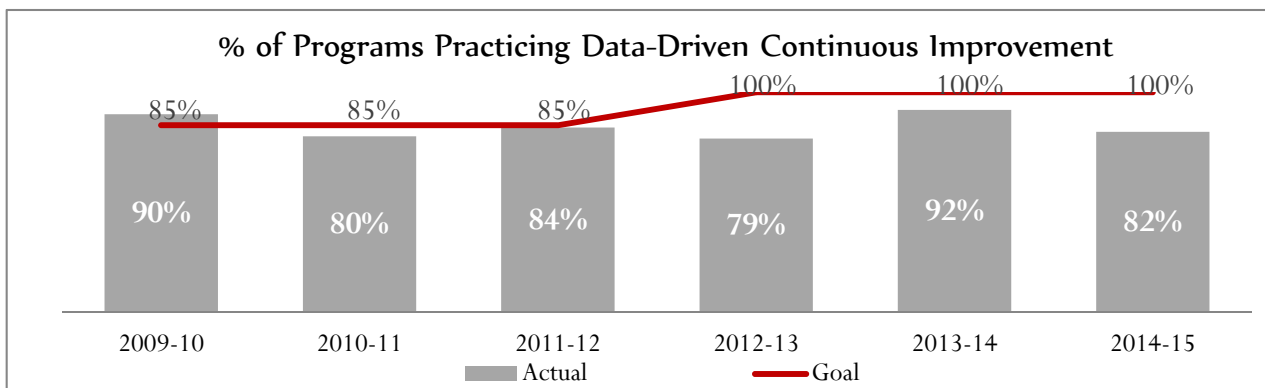


FIGURE 3: GOAL 2: % of programs practicing data-driven continuous improvement

College Level Results

The college and degree granting unit data (see Appendix A) provides a history of program assessment trends for the past six years. Overall, there were three general findings:

1. One college (CHST) and one degree granting unit (GIS) reported 100% of programs meeting benchmarks and using results (four colleges reported 100% the previous year)
2. Seven colleges and degree granting units (64%) showed slight decreases in the percentage of programs using results for improvement
3. Nine colleges and degree granting units (82%) remained the same or increased the percentages of programs meeting or exceeding benchmarks

USING ASSESSMENT RESULTS TO IMPROVE STUDENT LEARNING

RIT's Progress Report is based on a survey that invites programs to provide examples of how they analyzed program level student learning outcomes assessment data and proposed, made changes, or re-assessed the impact of a change based on findings.

The individual reports are then reviewed and assessed using RIT's *Academic Program Assessment Continuous Improvement Rubric* (Appendix B) in order to rate the annual reports and explore how academic programs' use data with an emphasis on continuously improving student learning and guiding program improvements.

The degree to which programs utilize results in a continuous quality improvement way is rated on a four point scale from "0" (No Evidence) to "4" (Advanced). The completed rubrics with feedback are shared with the programs and archived in program workspaces in Taskstream (RIT's Assessment Management System).

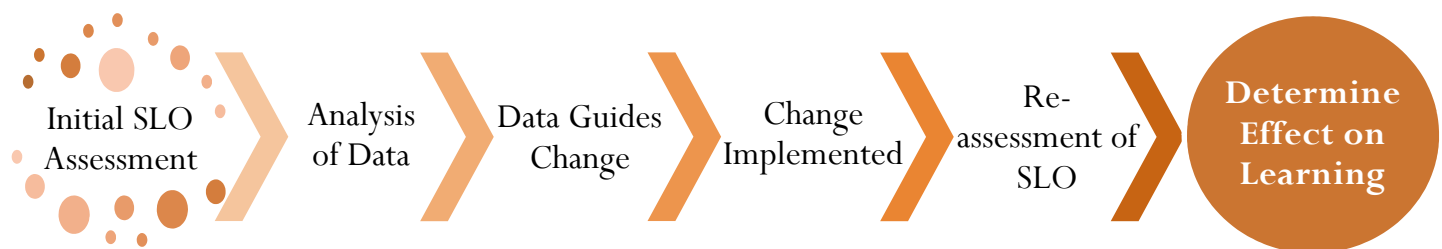
Programs are considered "advanced" if they meet the following criteria:

- Provide an example(s) of analyzing and using assessment results from direct sources to guide changes and improvements
- Explain why changes were needed
- Report on the reassessment of a previous change or improvement

A total of 19 (11%) RIT programs were rated as advanced, based on these criteria. University results from the Academic Program Assessment Continuous Improvement Rubric can be found in Appendix C.

A "closing the loop" component was added to the rubric in the "Advanced" category to emphasize the focus on re-assessment after implementing a change to determine if the change led to student learning improvement.

The graphic below highlights the process used to demonstrate how the assessment of a Student Learning Outcome (SLO) leads to improvement in student learning.



RIT PROGRAMS LEADING THE WAY

Each Progress Report submission provides examples of using assessment results to guide changes to curriculum, instruction, or assessment with the goal of improving student learning. A sampling of these is found in Table 1.

TABLE 1: PROGRAMS USING RESULTS TO IMPROVE STUDENT LEARNING

STUDENT LEARNING OUTCOME (SLO)	DATA ANALYSIS	CHANGE IMPLEMENTED	EFFECT ON LEARNING
BS/MS Physician Assistant (CHST)			
Achieve certification through the National Commission on Certification of Physician Assistants	<ul style="list-style-type: none"> • Benchmark not met: 90% of graduates meet/exceed (>85%) first time board pass rate • Results indicated a downward trend on First Time Board pass scores 	Curriculum and Instruction: Formalized board preparation education as part of the clinical rotation, added content, and added an online self-study tutorial	The self-study tutorial software and formal board review have already been noted as helpful to 5th year students on clinical rotations in 2015-2016 Pass rates will be reviewed in 2016
BS Psychology (CLA)			
Utilize effective presentation skills to present psychology information	<ul style="list-style-type: none"> • Benchmark met: 90% of students will earn a "C" or better) on the Capstone Senior Project • Results indicated 100% earned a "C" or better • Although benchmark was met, the Senior Exit Survey data indicated 18% (4/22) of respondents cited unclear and inconsistent requirements for the Capstone Senior Project 	Assessment: The program implemented a revised rubric for the Capstone Senior Project to improve consistency and clarity of expectations	Reassessment Capstone results: 100% earned a "C" or better on the Senior Capstone project Reassessment Student Survey: Two years of survey results indicated 100% (45) respondents were satisfied with Capstone Senior Project grading and expectations
MFA Visual Communication Design (CIAS)			
Incorporate design history and current issues, theory and methods into research	<ul style="list-style-type: none"> • Benchmark met: 90% of students will meet the satisfactory level on the project • Trend data used to improve curriculum to support research 	Curriculum: IDDA 711 Design Research and Proposal course was developed to support stronger thesis projects	Reassessment: The SLO will be re-evaluated in fall 2016 Goal: students present stronger thesis projects that contribute to the field of visual communication design
BS Game Design and Development (GCCIS)			
Apply knowledge of programming, math, physics, and game design	<ul style="list-style-type: none"> • Benchmark met: 86% of students met the benchmark (85% of students will score 75% or better) on program exam 	Curriculum: Modified two lectures to emphasize fundamental programming concepts	Reassessment results: 89% of students met the benchmark, an increase of 3% Improved results on program exam and non-majors continue to succeed in the courses
MS Telecommunications Engineering (CAST)			
Demonstrate knowledge about the underlying principles of current technologies	<ul style="list-style-type: none"> • Benchmark not met: 80% of students earn at least 60% on the TCET-750 final project • Results indicated 51% of students demonstrated minimum competency 	Assessment: The faculty added a mid-project progress report to provide additional feedback as students completed their final projects	Reassessment results: 74% of students received a competent rating on the TCET-750 final project, a 23% increase from the prior year

CONTINUOUS IMPROVEMENT

A “deeper dive” into Progress Report 6 results was needed to examine why fewer programs demonstrated using assessment results for continuous improvement during this report cycle. The dip in programs reporting use of results was unexpected given the positive trends in the past few years.

This examination revealed that the academic programs rated “no” for continuous improvement were most likely to:

- Describe program improvements without linking to assessment results (35%)
- Describe assessment data collection without providing sufficient evidence of the use of results to improve student learning or program improvement (35%)
- Have been rated as “no” programs for multiple Progress Report cycles (47%)

These findings indicate a need for more systematic and focused assessment practices, especially articulation of data-driven continuous improvement. Additionally, in discussion with the Student Learning Outcomes Assessment Committee (SLOAC), the following factors were identified as influences on the decrease in use of results:

Programs Meeting or Exceeding Benchmarks: There was only a slight overall rise in the percentage of programs reporting meeting or exceeding the program benchmarks, but there may be a correlation between programs that report meeting most or all benchmarks and not reporting using results for continuous improvement. These programs may not make as many recommendations for changes as they are meeting the benchmarks.

Late Submissions: Programs submitting a Progress Report past the deadline were more likely to receive a rating of “0” or “1” compared to programs submitting on time. Programs submitting late Progress Reports may not have the systematic assessment processes in place to yield program assessment data and support annual reporting.

Continuous Improvement Rubric: The rubric criteria were adjusted to reflect slightly higher standards for this year’s review. Programs reporting they analyzed data from indirect sources and decided not to make changes were no longer considered to be using results for continuous improvement. Approximately 3% of programs rated “no” were included in this category.

ACADEMIC PROGRAMS AT RIT INTERNATIONAL LOCATIONS

RIT’s goal of ensuring academic quality includes fostering effective academic program assessment practices across all locations. In addition to main campus program support, each semester there is a university-wide meeting where home and international programs discuss assessment initiatives, analysis, recommendations, and best practices.

All academic programs located at RIT’s international locations participated in the past three annual report cycles (see Table 2). The results reported in Progress Report 6 were positive, with the majority of international programs maintaining or improving their assessment results.

TABLE 2: PROGRESS REPORT RESULTS FOR INTERNATIONAL PROGRAMS

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

Highlights from RIT's international locations include:

- RIT Croatia maintained its percentages in assessing and using results, but decreased in percentage of programs meeting benchmarks
- RIT Dubai results indicated improvements on all indicators from the prior years
- RIT Kosovo's one academic program maintained a consistent 100% for all indicators

ASSESSING ASSESSMENT

Last year, SLOAC members evaluated RITs academic program assessment practices including a review of the instrument, scoring process, and program outreach practices. Recommendations for improvement specific to each college or degree granting unit were made and each college developed an action plan. The following university level recommendations were also made:

Recommendation	Action Taken
Scoring: Revise Continuous Improvement Guidelines for clarity and refine standard to more closely align with best practices	Revised <i>Continuous Improvement Rubric</i> to reflect best practices in the assessment of student learning
Resources: Develop resources for programs that focus on articulating continuous improvement	Developed <i>Best Practices for Articulating the Use of Student Learning Outcomes Assessment Results for Continuous Improvement</i>
Survey Instrument: Revise instrument to improve clarity around language	Revised instrument and clarified framing language

SUMMARY

After six years of annual reporting, the percentage of programs assessing student learning remains high (despite a slight decrease) and the percentage of programs meeting or exceeding benchmarks continues to rise. These findings are evidence that programs are explicit about their program level student learning outcomes and are able to articulate how well students are achieving those outcomes.

The majority of programs report using locally designed performance-based assessment approaches and methods like senior “capstone” projects, juried performances, and written assignments. RIT programs also do well gathering evidence about the level of student achievement of their student learning outcomes.

However, RIT must continue to advance the use of results to guide changes. The assessment is not complete until the recommendations for data-based changes result in future improvements to student learning and or the program. This more complex and multistep element of the assessment process requires time and requires programs to:

- Analyze data to determine if there is a need to make some type of adjustment or change (modify curriculum or design a different or more effective teaching approach or strategy) to the course or program
- Implement the identified change
- Re-assess to determine if the change impacted students’ achievement of the student learning outcome

The assessment cycle and the ability to use assessment findings to improve student learning is still challenging for some programs. These programs may have gaps in their assessment plans or practices. Guidance to programs on this aspect will be the focus for the next year and include:

- Sharing Progress Report feedback (via Taskstream workspace)
- Consulting with programs not reporting assessing student learning or continuous improvement
- Collaborating with colleges and programs to provide tailored faculty development
- Adjusting the Progress Report timeline to help programs focus on prior year data

As we close on the sixth year of reporting and using program level student learning outcomes data, we should celebrate the achievement of consistently providing evidence of assessing and meeting or exceeding standards for student learning. We acknowledge that, “change is a process, not an event.” Our collective work in educational effectiveness assessment continues to advance and evolve towards an embedded model of continuous improvement. RIT’s commitment to demonstrating the use of results to guide curricular and pedagogical changes and program improvements is supported through our overarching goal of academic quality. We recognize the work of our program faculty and celebrate RIT’s achievements in assessing student learning outcomes and using those results to inform and lead change.

APPENDIX A: COLLEGE AND DEGREE GRANTING UNIT RESULTS

COLLEGE OR DEGREE- GRANTING UNIT	MET OR EXCEEDED BENCHMARKS						USE OF RESULTS					
	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
CAST	75%	82%	82%	82%	94%	94%	95%	94%	82%	71%	94%	82%
CHST	N/A	86%	100%	100%	100%	100%	N/A	86%	100%	100%	100%	100%
CIAS	9%	39%	73%	79%	96%	100%	86%	73%	85%	91%	93%	96%
COLA	24%	35%	63%	71%	88%	94%	94%	65%	69%	65%	88%	65%
COS	20%	38%	91%	73%	91%	96%	83%	71%	95%	68%	91%	70%
GCCIS	35%	47%	53%	94%	100%	93%	94%	82%	65%	100%	100%	100%
KGCOE	52%	50%	82%	95%	91%	95%	95%	77%	82%	77%	81%	77%
NTID	88%	100%	100%	100%	100%	100%	94%	100%	100%	100%	87%	94%
SCB	60%	83%	0%	33%	62%	79%	100%	83%	100%	33%	100%	71%
SOIS (CMS)	67%	67%	67%	67%	100%	100%	100%	100%	67%	0%	100%	33%
GIS	0%	100%	50%	100%	100%	100%	0%	100%	50%	100%	100%	100%
TOTAL	40%	56%	75%	83%	92%	95%	90%	80%	84%	79%	92%	82%

APPENDIX B: ACADEMIC PROGRAM ASSESSMENT CONTINUOUS IMPROVEMENT RUBRIC



ACADEMIC PROGRAM ASSESSMENT CONTINUOUS IMPROVEMENT RUBRIC

Program Name/College

No Evidence	Minimal Evidence	Clear Evidence	Advanced
<input type="checkbox"/> Described data collection efforts only OR <input type="checkbox"/> No information provided for current assessment year	<input type="checkbox"/> Described program improvements without linking to assessment results OR <input type="checkbox"/> Analyzed data from indirect sources and decided not to make improvements OR <input type="checkbox"/> Described assessment data collection without providing sufficient evidence of the use of results to improve student learning or program improvement	<input type="checkbox"/> 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 OR <input type="checkbox"/> Analyzed and used program information/data from indirect sources to guide changes to at least one of the following: <input type="checkbox"/> improving student learning <input type="checkbox"/> enhancing or revising curriculum <input type="checkbox"/> developing instructional strategies or conducting professional development activities <input type="checkbox"/> improving assessment processes <input type="checkbox"/> improving academic support services	<input type="checkbox"/> Analyzed and used student learning outcomes assessment results from direct sources to guide a combination of the following: <input type="checkbox"/> improving student learning <input type="checkbox"/> enhancing or revising curriculum <input type="checkbox"/> developing instructional strategies or conducting professional development activities <input type="checkbox"/> improving assessment processes <input type="checkbox"/> improving academic support services AND <input type="checkbox"/> Program explained why changes were needed and described next steps or follow-up assessment AND <input type="checkbox"/> Described looking back on prior assessment results and completing follow-up or "closing the loop" action with a focus on improving student learning
<input type="checkbox"/> No Evidence Overall Comments:	<input type="checkbox"/> Minimal Evidence	<input type="checkbox"/> Clear Evidence (2) <input type="checkbox"/> Clear Evidence (3)	<input type="checkbox"/> Advanced

02.29.2016

RIT Academic Program Assessment

2016



ACADEMIC PROGRAM ASSESSMENT CONTINUOUS IMPROVEMENT RUBRIC

Overview

RIT is committed to ensuring academic quality and continuous progress or improvement in student learning. Annually, RIT academic programs are asked to provide evidence that assessment results were used to improve student learning and guide program improvements. The rubric outlines the conditions programs must meet to effectively demonstrate systematic assessment of student learning and continuous improvement.

Definitions

Continuous Improvement: Systematic use of data to improve student learning and guide planning, decisions, and improvements to the academic program

Direct Assessment of Learning occurs when measures of learning are based on student performance or demonstrates the learning itself. Scoring performance on tests, projects, written assignments, or the execution of lab skills are examples of direct assessment of learning

Indirect Assessment of Learning uses perceptions, reflections or secondary evidence to make inferences about student learning. Surveys of students' perceptions, course grades, focus groups, self-assessment are considered indirect evidence of learning

Program Assessment Data: Information or data collected from all or a sample of students in the program – alumni surveys, student satisfaction surveys, exit surveys. Program information tends to come from indirect sources as evidence of meeting broader program goals

Student Learning Assessment Data: Information or data collected from embedded assessments in courses. Usually course-level information that comes from direct sources (tests, projects, essays) and measures the achievement of the program's goals and student learning outcomes

Framing Language

This rubric is designed to holistically assess academic programs' use of data to continuously improve student learning and guide program improvements. In order for academic programs to demonstrate continuous improvement, each programs annual progress report must include:

- a clearly articulated student learning outcome
- a benchmark
- an implemented strategy to achieve the outcome
- evidence of analysis of the data
- how the program used the results to improve student learning and guide program improvements

RIT academic programs share many common attributes including demonstrating continuous improvement, but we acknowledge each program has unique student learning outcomes and assessment methods appropriate to their curriculum. The rubric provides a holistic approach to identifying and determining continuous improvement for academic programs at RIT. This process is designed to be formative as academic programs will receive feedback on how well the unit demonstrates continuous improvement.

02.29.2016

RIT Academic Program Assessment

2016

APPENDIX C: CONTINUOUS IMPROVEMENT RUBRIC RESULTS*

YES: PROGRAMS PROVIDING EVIDENCE OF PRACTICING DATA-DRIVEN CONTINUOUS IMPROVEMENT REPORT:	
11% (19)	<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>AND</p> <p>Program explained why changes were needed and described next steps or follow-up assessment</p> <p>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>
36% (65)	<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>AND</p> <p>Program explained why changes were needed and described next steps or follow-up assessment</p>
35% (64)	<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>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:	
15% (28)	<p>Minimal Evidence (1): Described program improvements without linking to assessment results</p> <p>OR</p> <p>Analyzed data from indirect sources and decided not to make improvements</p> <p>OR</p> <p>Described assessment data collection without providing sufficient evidence of the use of results to improve student learning or program improvement</p>
3% (5)	<p>No Evidence (0): Described data collection efforts only</p> <p>OR</p> <p>No information provided for current assessment year</p>

* Totals include international locations