The

Assessment Handbook

for **The College of Arts and Sciences**
and **The Graduate School, Camden**

Teaching Matters and Assessment Center

Spring 2017

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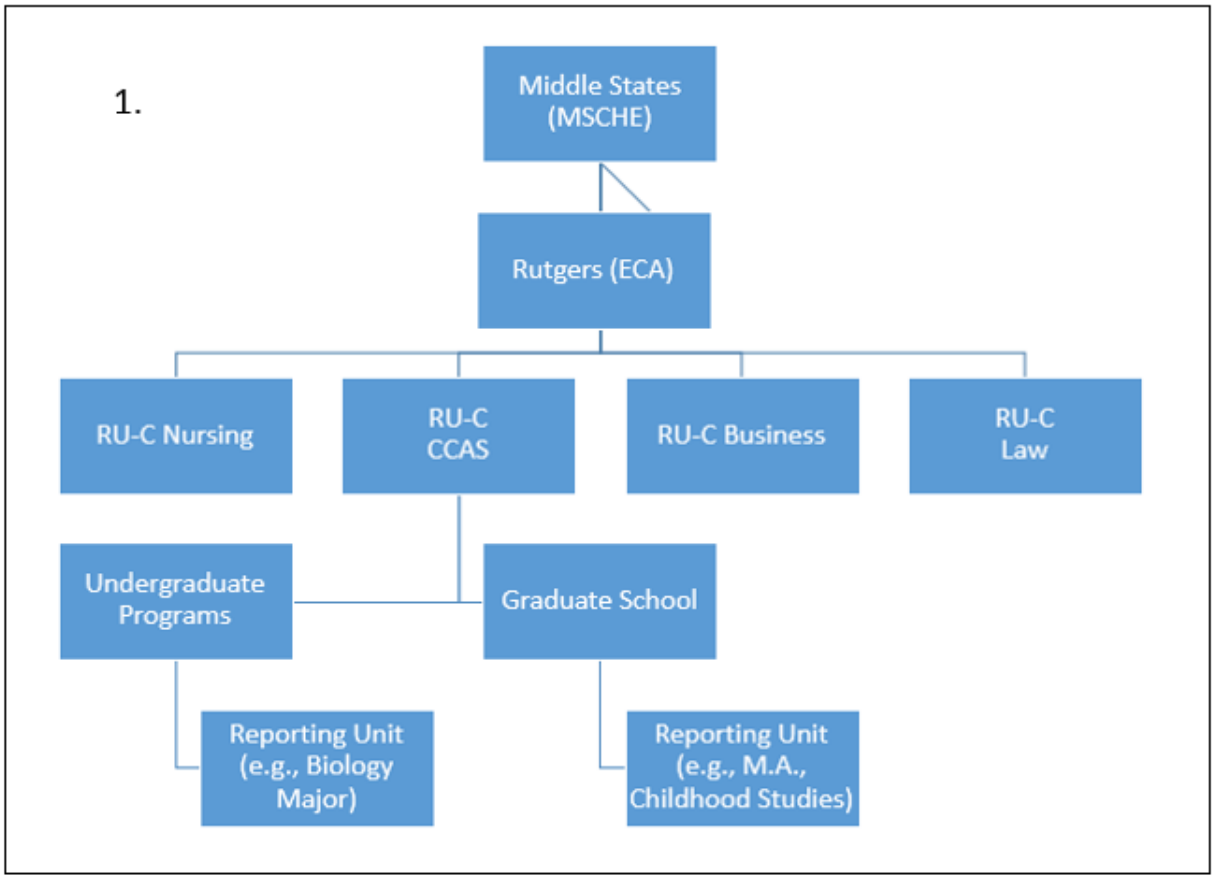
I. What is Assessment?

According to Barbara Walvoord, writing in *Assessment Clear and Simple* (Jossey-Bass, 2010), assessment is "the systematic collection of information, using the time, knowledge, expertise, and resources available, about student learning to inform decisions that affect student learning" (p. 2). Assessment is thus a collective effort to gauge student learning in a way that improves curriculum and instruction. While we measure student learning all the time in our courses (i.e., we give grades), assessment goes beyond individual courses and students to gauge learning at the level of academic program and beyond. The best assessment occurs in a culture of continuous improvement. Of course, they are also constrained by limited resources; there is only so much time we can direct toward collecting, analyzing and acting on information.

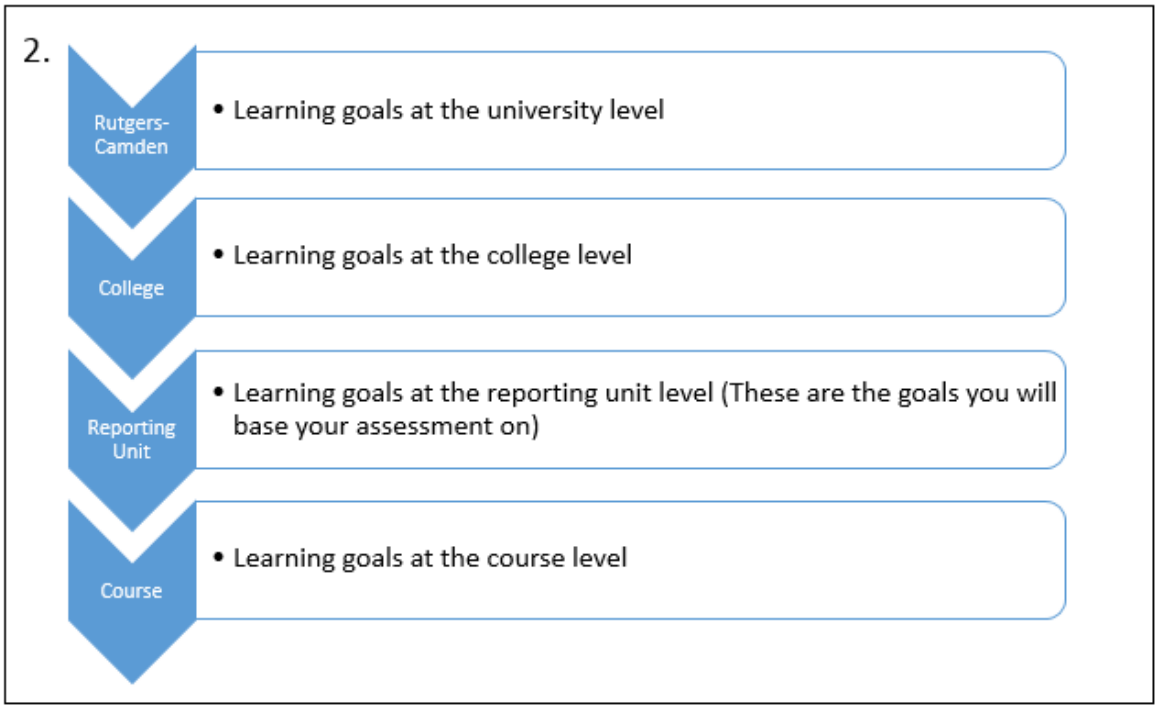
This handbook helps busy academics to do assessment efficiently and well. It explains assessment at Rutgers in its three major phases: developing a plan, implementing that plan, and reporting annually on the plan.

Assessment at Rutgers-Camden: An Institutional Overview

Assessment is required of all accredited colleges and universities. We assess annually to meet standards set forth by the Middle States Commission on Higher Education (MSCHE). The assessment process at Rutgers is overseen at the University level for all academic units by the Executive Council on Assessment (ECA). (See Figure 1).



This hierarchical alignment in reporting structure is also reflected in a hierarchy of student learning goals. Each level–course, academic program, school or college, university–is responsive to the learning goals established by the level of above it. (See Figure 2)



In practical terms, this means that academic programs set students learning goals to which individual courses are responsible. Likewise, they are responsive to student learning goals established by the College of Arts and Sciences. *Note: College-level learning goals serving as an umbrella for both departments and Gen Ed are currently in draft form and under review of the Faculty Senate*. (See Appendix C)

II. Developing Your Assessment Plan

Assessment begins with the development of an assessment plan for each reporting unit (i.e., degree granting program). This plan is not something set a stone but a document that changes over time to reflect changes to your program (e.g., degree requirements) as well as results of past assessments. Consequently, your assessment plan should be reaffirmed or revised yearly. An assessment plan that has not been revised for many years is not serving its purpose.

An assessment plan consists of five parts:

1. Learning goals
2. Methods
3. Standards, benchmarks, and tools
4. Timetable
5. "Closing the feedback loop"

1. Learning Goals:

Learning goals are the building blocks of assessment. Indeed, they are precisely what is assessed. (If it can't be assessed, it's not a learning goal.)

Move the hierarchical section to here.

When creating learning goals for your program, therefore, keep in mind they must be *measurable, manageable*, and *meaningful.*

> *Measurable*: Ask yourself, "How will we determine if students are meeting this goal?"
>
> *Manageable*: It's possible to have too many learning goals. Ideally, a program can assess four to six learning goals manageably.
>
> *Meaningful*: Most importantly, learning goals reflect what you most value as outcomes for your program.

In drafting learning goals, be mindful they are *student centered*. Say what students will learn, not what teachers will teach. Learning goals are not a condensed syllabus or set of degree requirement; they are ends, not means.

Keep in mind that learning goals are a set of desired outcomes that involve three kinds of learning: knowledge, skills and habits of mind. Learning goals address what we want students to know; what we want them to be able to do; and, less tangibly if no less importantly, what attitudes and sensibilities (e.g., curiosity, appreciation of diversity, attention to detail) we think mark success in our fields and in a university education more broadly.

Finally, learning goals are *grounded in continuous improvement*. Students advance toward proficiency in meeting learning goals as they move through a program. Well-designed learning goals let programs measure progress over time. (See Figure 3 for sample learning goals.)

BUREAUCRATIC IMPERATIVE: To meet MSCHE standards, degree-program learning goals must be publicly accessible (e.g., department website). In addition, all syllabi must include course-specific learning goals and, where appropriate (as in Gen Ed courses), relevant program learning goals as well.

3.

Sample Learning Goals: Biochemistry and Molecular Biology

Upon completion of the major, we intend that a BCMB student will...

1. Possess a broad and fundamental understanding of biology and chemistry with particular focus on how molecules found in biological systems confer the properties of living organisms.

2. Be able to perform the common methods and use the tools of the field including laboratory and computational techniques.

3. Have the ability to conduct independent scientific investigation and scientific inquiry.

4. Be able to locate, evaluate, and communicate scientific information effectively both by written and oral presentation.

2. Methods:

Two general methods play a role in assessment: direct and indirect.

> Direct assessment refers to actual student work: tests, papers, licensure exams, portfolios, etc.
>
> Indirect assessment refers to all other forms, including surveys, exit interviews, and placement rates.

Both direct and indirect methods have a role to play in effective assessment.

BUREAUCRATIC IMPERATIVE: All programs must report on at least one direct assessment each year. For instance, you might choose to evaluate a set of final student papers in a given course as it relates to the learning goal you are assessing.

3. Standards, Benchmarks, and Tools:

To see if learning goals are being met, you need assessment standards and, at times, benchmarks. These tools are not always specified in assessment plans, but it is important to determine appropriate measures for assessing a particular learning goal.

Standards measure levels at which learning goals are met (e.g., failing, meeting, exceeded expectations.) Benchmarks make clear what standards of performance are acceptable (e.g., 80% of students will meet or exceed expectations.)

A rubric is a useful tool for applying standards. (See figure 4). Depending on the population size you can apply a rubric (or other standard) to all students or to an appropriately selected sample, (e.g., every fourth paper or test in a

4.

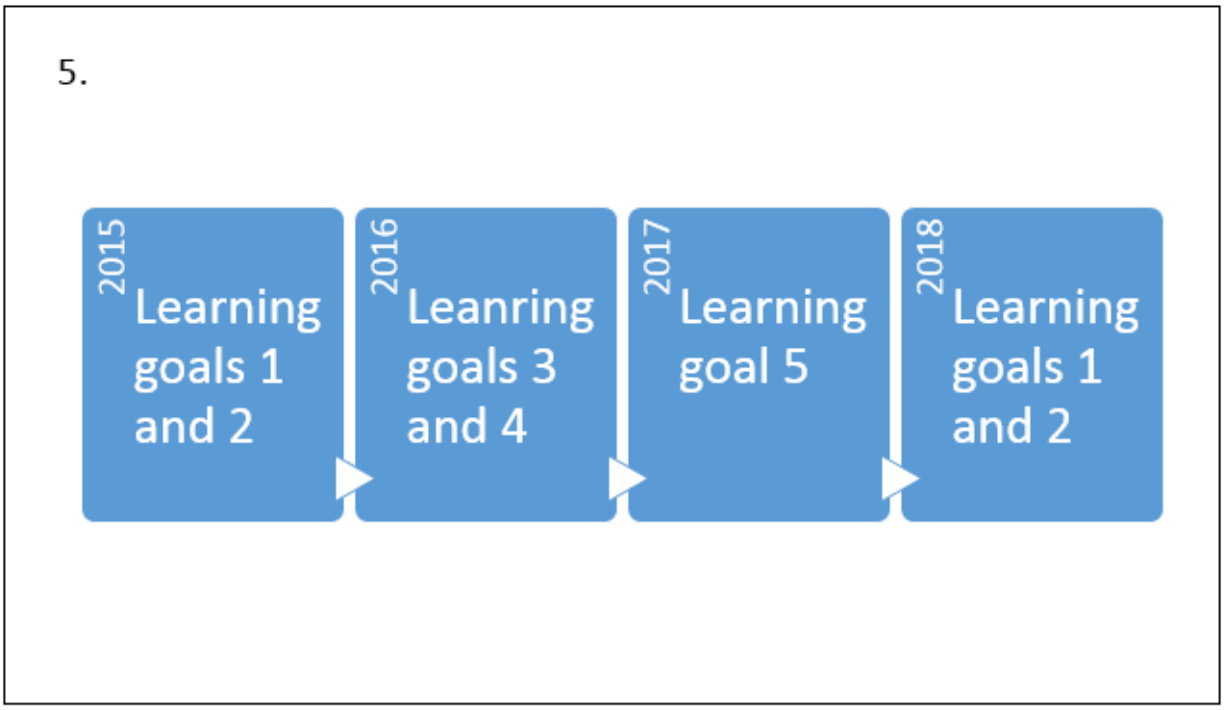
	Fails to meet expectations	Meets expectations	Exceeds expectations
The work is well organized.			
The work uses appropriate analytic techniques.			
The work shows clear understand of basic concepts.			
The application of basic concepts is sensible and reasonable.			

set.

A rubric need not be applied in every case, but some standardized measure is needed when different people do the assessment or when one data set is compared with another (e.g., this year vs. last year). It is vital that standards be applied consistently. Of course, the most valuable result of developing a standard is the conversation required to identify shared expectations.

4. Timetable:

Assessment is cyclical. It is not feasible to assess every learning goal every year. A timetable should identify a two-to-four year cycle in which learning goals are assessed, keeping in mind the requirement to conduct at least one direct assessment each year. (See figure 5).



5*. *"Closing the Feedback Loop":

A complete assessment acts on the information it produces to see what, if anything, has changed. "Closing the feedback loop" means acting on the results of an assessment to spur improvement. It involves three steps:

1. Looking at data in relation to learning goals. Ask: To what degree are we meeting this goal?
2. Identifying ways to address any gaps. Ask: What should we do differently?
3. Looking at later data to see a problem has been addressed. have addressed the problem. Ask: Did anything change?

General example: An assessment identifies a problem in 2012 and you develop a plan to address it in 2013. Only when you re-assess that learning goal in 2014 or beyond have you "closed the feedback loop."

Specific example: You notice that students are not performing well on final papers, so you create a two draft policy to check their progress before they turn in final drafts. Students do better overall after turning in two drafts.

BUREAUCRATIC IMPERATIVE: Because you must compare new information with old, “closing the feedback loop” is necessarily a multi-year process.

III. Implementing Your Assessment Plan

After you have developed an assessment plan, it's time to implement that plan. Implementing an assessment plan consists of five parts:

1. Choosing goals
2. Choosing an assessment committee
3. Collecting information
4. Analyzing information
5. Disseminating the information

1. Choosing which goals to assess:

After consulting your plan to determine which learning goal(s) to assess this year, you discuss the relevance of this assessment to your program and the structures required to do the assessment. For example, if your assessment involves collecting work in a senior capstone course, is that clear to all who will teach the course. Ideally, this discussion occurs in summer or early fall.

2. Choosing an assessment committee:

Assessment is a big task. Thus, an assessment committee must direct annual efforts. It can't be the work of one person, including a busy chair or program director. The committee should meet regularly to steer the work required, mindful of the calendar. It should determine who will do what, including who will collect information and prepare the annual report.

BUREAUCRATIC IMPERATIVE: All reporting units are required to have an assessment committee and to identify its members in their annual report.

3. Gathering information:

A mature assessment plan has established procedures for collecting information. An early assessment plan must develop procedures. They include deciding what information to collect, how to store it, and how to make it accessible to others, especially to those who will analyze it.

The information you collect depends on the method of assessment. Direct assessment typically requires collecting information from multiple courses or instructors. Indirect assessment methods typically require compiling statistical information (e.g., job placement rates). Using either method, it is crucial that the information collected be representative and appropriate to the learning goal assessed. In some cases, information can only be collected annually (e.g., juried exhibition or performance). In other cases, information can be collected over time for future analysis (e.g., one to two years of final exams across multiple semesters.)

4. **Analyzing information:**

Once you have gathered information required to do the assessment, you are ready to analyze it by applying appropriate standards. Here, single points of information (such as grades) hold far less value than multiple criteria (such as seeing how well students draw inferences from conflicting data or chose the best method to solve a problem).

In many ways this analysis is what we think of as “assessment.” The value of this work depends on the coherence of an assessment plan as a whole. It is easy to get “lost” in information or, fearful of the process, conclude that only sophisticated approaches can do the job. In reality, assessment is fairly simple and needs only trained sets of eyes looking carefully at the collected information. It involves figuring out what the information is telling you. What surprises you, what discourages you? What does the information compel you to act on?

BUREAUCRATIC IMPERATIVE: It is especially important that the analysis of information not be the task of a one person acting on behalf of a program. Assessment must involve multiple persons looking (in direct assessment) at actual student work and other information that speaks to a program's effectiveness.

5. **Making sense of and sharing the information:**

What will you do as a result of analyzing information you have collected? As stated, assessment is embedded in a cycle of continuous improvement. It is only "assessment," when you act on the information. Ask: how do we adjust our practices in light of findings about students meeting learning goals?

It is important to have robust information to serve as a warrant to change anything about a curriculum or its methods of instruction. And again, this stage of the assessment process is also collaborative. Assessment requires that a program discuss together the insights raised by analyzing information and to determine together appropriate action.

Once assessment is an established practice, this stage of "making sense of and sharing information" becomes synonymous with "closing the feedback loop." That's because current assessments are built on past assessments. Programs look to see if efforts to address a problem (or opportunity) have been successful. In some cases, assessment moves onto other concerns or perhaps programs raise standards. In other cases, programs direct resources to meet a stubborn challenge. Or they may discover something amiss in one or more learning goals themselves or in the program as a whole (e.g., little connection between learning goals and actual instruction).

BUREAUCRATIC IMPERATIVE: It is easy to conflate assessment of student learning goals with administrative concerns (e.g., is everyone teaching a required course teaching to the same goals?) While valuable, this analysis is

not assessment of student learning goals. It cannot substitute for program-level assessment of student learning outlined in this handbook.

Summary of Best Practices (and their opposites):

The best practices will:	Practices that miss the mark will:
Be a department-wide effort to ensure the assessment plan is being enacted.	Leave all the work and effort of assessment to just one person.
Periodically revise the assessment plan based on program changes or needs.	Disregard any form of an assessment plan or attempt to address assessment using outdated learning goals.
Have an early plan in place to collect, store, and distribute data to those who will analyze it.	Attempt to analyze data from a hastily collected sample group (or no specific sample group at all).
Provide an honest evaluation of data. The analysis of data shows how well students engage with assignments, not how high their grades are.	Refuse or neglect to address data in ways that provide useful information for departmental growth.
Attempt to "make sense of" the data. The data is shared and steps are taken at a departmental level to ensure better in following years.	Do nothing with the data they have analyzed.
Reach out for help from TMAC or other resources when needed.	Disregard resources that will advise the assessment process.

IV. Submitting Your Assessment Report

Each Spring, reporting units document their assessment efforts with an assessment report submitted to the Teaching Matters and Assessment Center (TMAC). On behalf of CCAS and the Graduate School, TMAC produces a summary report for the ECA. This section of the Handbook reviews the submission and review process, the endpoint of annual assessment.

Preparing the assessment report form (see Appendix B) can seem daunting at first, but the information to be included directly tracks your assessment plan and its implementation. The form asks reporting units to identify:

learning goal(s) assessed;
methods used (always to include at least one direct assessment);
relevant standards (e.g., rubrics) and benchmarks applied;
information collected (brief description);
results (brief description);
actions undertaken or planned in response;
evidence of "closing the loop"(reporting on results of past actions).

In addition, the form asks reporting units to identify where learning goals are publicly posted (e.g., URL), your assessment committee, and percentage of your program's course syllabi that include learning goals. (See ???)

After you file your report:

The summary reports that TMAC prepares in summer, for undergraduate and graduate programs respectively, compile this information according to ECA's Assessment Checklist (See Appendix B). A team of ECA reviewers then "assesses the assessment" to determine if we are "in the early stages of the process," "making reasonable progress," or "meeting expectations." (On most criteria, we remain in "early stages.)

As you can see in ECA's Assessment Checklist I, of primary concern is the development of a rigorous approach to using information to improve student achievement in learning goals through "closing the loop" activities." Each year, you must demonstrate progress toward this end.

BUREAUCRATIC IMPERATIVE: All reporting units must file an assessment report annually. The report should substantively address all elements.

V. Assessment Calendar

Assessment is an ongoing process that requires periodic attention from your assessment committee. While most of this work takes place on an internal calendar, two key milestones structure the annual reporting cycle.

mid-February:	Review your assessment plan
late May:	Submit your assessment report

Previously, departments and programs only filed an annual report, at the end of academic year. However, it is clear that most reporting units are still in "early stages" of developing an effective assessment plan and, therefore, benefit from a *new* requirement to review (and, where necessary, revise) their current plan as a step in the implementation process.

In 2016, you are asked to submit your program's assessment plan to TMAC. Beginning in 2017, you will submit a current plan but also note changes to your plan and identify key elements of your implementation process in advance of completing your assessment and reporting on results.

TMAC will thus maintain an up-to-date file of all assessment plans. More importantly, TMAC will be in a position to offer timely advice so that your assessment efforts remain productive and on track.

Note: Beginning in 2016, TMAC will offer constructive feedback to all plans and reports to assist reporting units.

This "ideal" calendar offers a window onto the annual assessment process.

September

Reporting units meet to discuss results of *last* year's assessment report.

This year's learning goals are chosen and an assessment committee is formed.

October

Reporting units decide on appropriate activities to close the feedback loop.

Reporting units invite TMAC to a meeting to discuss approaches.

November

TMAC provides constructive feedback to report units of last year's report.

Assessment committees can meet with TMAC to discuss the process.

December

Reporting units collect info for direct assessment.

TMAC offers a "refresher course" and reminds units about filing a current plan by mid-February.

January

Assessment committees identify tasks for Spring.

Reporting units begin to collect information for indirect assessment and to review benchmarks .

February

Reporting units submit an up-to-date assessment plan.

TMAC files mid-year report with ECA (if requested to do so) with additional data demonstrating progress.

March

Reporting units tweak their assessment plan after feedback from TMAC.

Assessment committees assign tasks for upcoming analysis of collecting info.

April

Reporting units collect and analyze info and begin to draft report.

TMAC fields questions about how to represent info and act on results .

May

Reporting units submit assessment reports.

TMAC helps assessment committees with constructive advice on early drafts.

V. Assessment Resources:

A synopsis of Barbara Walvoord's *Assessment Clear and Simple* (2010) is available in PDF on the TMAC website. There, you'll also find a Power Point, Refresher Course on Assessment, as a companion to this handbook.

Another recommended piece from Barbara Walvoord, is "How To Construct a Simple, Sensible, Useful Departmental Assessment Process"

Rutgers' Executive Council on Assessment also maintains a resource page.

Appendix A: 2016 Reporting Form

Annual Assessment Report Form

Camden College of Arts and Sciences

Academic Year 2016 – 17

Department/Program: _____ **Date:** _____

Submitted by: _____

Major: _____ **Minor:** _____ **or Program** _____ **(specify)**

- What learning goal(s) were assessed this year? (Identify one or more goals from your current assessment plan on file with TMAC.)

- What sites were used for assessment (e.g., specific course, portfolio, internships)?

- Explain how these goals assessed? Describe **at least one** *direct* measure (actual student work on papers, exams, portfolios, etc.) and any *indirect* measures you employed. For each measure, provide relevant standards (i.e., rubrics) and benchmarks and summarize data collected.

- What useful information did this assessment reveal?

- How has your program responded to the results of this assessment? Identify changes, ongoing or anticipated, to address these results, including plans for re-assessment.

- "Closing the loop" activities: Report on results of actions taken from previous assessments.

- What percentage of departmental/program course syllabi include learning goals?

- Where are departmental/program learning goals publicly posted (provide URL)?

- Who conducted this assessment (e.g., members of your assessment committee)?

*****Please return to Dr. William FitzGerald/TMAC by Thursday, June 1st, 2017*****
Email: **teaching.matters@camden.rutgers.edu**

Appendix B: ECA Assessment Checklist

RUTGERS

Assessment Checklist I: Standard

	Annual Report on Assessment · Filed · Comprehensive - includes a report on the various elements below as appropriate

	Learning Goals
	· Clearly defined
	· Publicly posted – provide URL
	· Aligned in hierarchy of learning goals
	  ○ University level
	  ○ Decanal Unit level
	  ○ Program/department level
	  ○ Course level

	Course Syllabi/synopsis/expanded description: · Includes appropriate learning goals · Identifies where or how the goals are met
	Assessment Plan, Structure, and Process: Describes the assessment structure and the process by which the assessment plan was developed and shared within the unit · Efficient · Effective · Sustainable · Reviewed annually
	Assessment Tools/Measures · Includes some direct measures · Tools/measures appropriate to goals · Designed to produce reliable results that can be used for program improvement
	Benchmarks/Standards · Describes the process used define standards, targets, and relevant peer and historical comparisons · Articulates appropriately rigorous standards for judging student achievement of learning goals and identifies unacceptable levels of performance for all learning goals
	Assessment Implementation and Results · Conducted and reports on at least one direct assessment measure of at least one of the primary student learning goals; results included in report

Appendix C: CCAS Learning Goals (draft)

Camden College of Arts and Sciences (CCAS) Learning Goals

(draft, 12.8.15, currently under review by the Faculty Senate)

With a new General Education curriculum to take effect in Fall 2017, the CCAS Faculty Senate is reviewing comprehensive learning goals inclusive of both Gen Ed and departmental curricula. These goals recognize that a Rutgers University-Camden education requires breadth as well as depth to foster the intellectual and social capacities of its graduates.

Committed to the liberal arts, CCAS changes lives with a focus on the knowledge, skills, and habits of mind necessary for graduates to contribute productively to their chosen professions and responsibly to their local and global communities.

All degree programs thus emphasize:

— the critical thinking required to recognize and address complex problems using appropriate tools for analysis;

— the ability to locate and contextualize information and to evaluate evidence for its validity and reliability;

— the facility to communicate clearly and effectively across multiple contexts and purposes using a range of technologies;

— the responsibility to engage the world with empathy and with understanding of the diversity of human experience;

— the capacities of curiosity, persistence and self-efficacy necessary for lifelong learning.

Appendix D: 2016 Examples of Effective Assessment

The entries below outline examples of particularly effective approaches to assessment taken by various CCAS and GSC departments in AY 2015-2016:

CCAS:

Art (Graphic Design)

In his assessment report, Professor Espiritu describes a juried critique of senior graphic design majors by six visiting artists; each student was evaluated by two visitors (direct). In addition, senior surveys serve as indirect assessment. The details provided in his assessment substantiate the claims made in the report.

Biology

Professors Lee and Shain cite use of an anchor-course, Principles and Practices of Biological Research (PPBR), to assess student performance early in the major as well as use of a standardized Biology Competency Test (BCT) to gauge student readiness (direct). Although a specific course (PPBR) is mentioned as a site for assessment, no details are provided regarding that assessment. The use of a competency test to establish a baseline for curricular and instruction is sound.

Childhood Studies

Professor Vallone describes two substantial surveys administered across multiple years to assess learning goals reflecting knowledge and habits of mind, respectively, the Childhood Studies Majors Survey and the Childhood Studies Quality Survey. This report describes the two surveys, provides them in their entirety, and presents raw (unanalyzed) results from 2015-16. This sophisticated longitudinal program study measures growth over time and synthetic learning across courses.

English

Professor Green reports on efforts to pilot portfolio-based assessment in a senior capstone course (direct and indirect). This substantive report shows effective use of performance-based criteria and best practices of collegial assessment. An open question is the relation between departmental learning goals and criteria for assessing portfolios.

Foreign Languages

This department presents a comprehensive overview of assessment for three majors and two programs employing a range of direct and indirect assessment. Most notable in a multi-major department is the development of a common “Rubric for Assessing Foreign Languages Learning Goals.” For a first-time assessment, its scope, thoroughness, and quality is very high.

History

Professor Thomas and committee assessed writing skills by all History majors, including those nominated for an externally-funded prize (direct). Also assessed was "civic ability" through participation in fieldwork and extracurricular activities (indirect). Finally, a survey was administered to all students taking History courses (indirect). This report is exemplary in its clarity and economy as are the activities it describes.

Writing Program

Professor FitzGerald reports on results of a committee formed to assess final papers, randomly collected, in English 102, the culminating course in the composition sequence (direct). Papers were read using a rubric generated by instructors after reading several sample papers, with each paper scored by at least two instructors. Questions to consider further include: Would the rubric be useful for instructors teaching and students taking the course? How do criteria of evaluation articulated on the rubric mesh with stated program leaning goals?

GSC:

Childhood Studies (M.A. & Ph.D.)

Professor Balagopalan describes the assessment process for masters students in a year in which all students were in the doctoral program. She then describes the assessment process for doctoral students and reports on the 18 hour review / qualifying exam, written and oral prelims, and dissertation proposal hearings (direct) as well as transcript review and exit surveys (indirect). The report summarizes survey responses from 6 graduates this year. Childhood Studies continues to set and meet a high mark for assessment.

Computational & Integrative Biology (M.A. & Ph.D.)

Professor Yakoby provides a combined report for the masters and doctoral program which describes coursework, master projects and doctoral qualifying exams (direct) and laboratory practices and publication records (indirect) in relation to learning goals assessed. This report is exceptionally substantive, specific, and thorough. It documents careful, constructive assessment.

English

Professor Ledoux reports on the use of a new course, Writing for Publication, to assess the professionalizing of students in the program (direct) as well as on a wider range of activities, including a one-day professionalization conference, in which students participate and give feedback (indirect). The report identifies portfolio-based assessment of work in the course as well as feedback from students on its perceived value. This is an exceptionally substantive report. Questions to consider going forward include how this assessment might be conducted as a collegial endeavor, particularly when the course at the center of the assessment is taught by the faculty member doing the assessment.

Liberal Studies

Professor Charmé describes the place of research-based writing in the MALS program and reports on assessment of learning goals in 3 online courses: “All three classes used a number of different writing assignments during the semester to engage the students in writing early on and to build skills during the semester.” Descriptions of the courses and their assignments are especially detailed. The report also analyzes the results of a survey (included in the report) of incoming students and records observations of the three instructors who taught he sample courses (indirect). This is a strong, well-written report. The specificity about assignments and testimony of instructors will help support a collegial teaching culture.

Teaching Spanish M.A.T.

Professor Laguna reports on the first assessment of a new program employing an oral proficiency test and a praxis test, objective measures of standards-based performance, as well as program coursework (direct). This detailed, substantive report examines all five learning goals as measured in the performance of 3 students including use of a departmental rubric.