Office of Assessment and Evaluation

Community College of Philadelphia

Manual for Assessing Student Learning Outcomes At the Course, Program and Institutional Levels

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Community College of Philadelphia

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Introduction

Assessment of student learning outcomes is important for improving teaching and learning at Community College of Philadelphia and for expanding access to an excellent education. Beyond being an external requirement by accreditors and others, assessment of student learning is consistent with the mission of providing a quality education. Everyone at the College must embrace assessment as one strategy for achieving excellence and equity. We need to combine what we find out about student learning from assessment with our ability to think creatively about expanding the number of students who achieve significant outcomes as a result of their educational experiences at our College.

The purpose of this manual is to assist those who share the major responsibility for ensuring that we are using assessment effectively and in ways that help us meet our mission. This manual explains assessment of student learning outcomes at the course, program and institutional levels. Everyone needs to be knowledgeable about the multiple ways that we are using assessment to improve student learning outcomes. This knowledge should be shared with the many people who have an interest in the College and in our success, such as students, advisory committee members, and colleagues at partner institutions to name a few. These constituents can be helpful in adding different perspectives to our strategies.

The Office of Assessment and Evaluation, working with the Office of Institutional Research, is prepared to assist the College community in the assessment of student learning. Please do not hesitate to ask for assistance in meeting the College requirements for assessment. Professional development opportunities are available throughout the year and particularly during professional development week (Assessment Tuesday). I encourage you to provide feedback about what is working, not working or challenging about your assessment work as well as what information you need to support your efforts. I know that by working collaboratively we can be a model for excellence in assessment in higher education.

Judith Gay Chief of Staff/Vice President for Strategic Initiatives

Roles and Responsibilities for Assessment of Student Learning

Faculty

Faculty play a central role in assessing student learning and working with colleagues to improve teaching and learning in their areas of expertise. The goal is to improve student learning for all students. All faculty should participate in professional development opportunities to enhance their knowledge and comfort in using assessment to improve teaching and learning. See Appendix J for resource information. Faculty must develop and follow an approved assessment plan and must review assessment information in the College's assessment repository – SharePoint. Faculty should also review assessment information posted by peers at other institutions to provide a perspective on College standards and benchmarks for student learning.

While the major responsibility for assessment rests with full time faculty, part time faculty are required to participate in some assessment tasks and are invited, based on department guidelines, to contribute to others. Required aspects of assessment for part time faculty have an asterisk in the lists below. Faculty whose responsibilities are primarily in providing support for students outside of the classroom should seek guidance from the Office of Assessment and Evaluation to create assessment plans.

Assessment of student learning occurs at the course level, the program level and the institutional level. In addition to gathering information about student learning, the College gathers other information such as enrollment, retention, graduation rates, etc. While all of this information is important, the focus of this document is on the assessment of student learning.

At the course level, faculty are expected to:

- 1. Work collaboratively to identify and agree on student learning outcomes (SLOs) for courses they teach.
- 2. Include approved SLOs on course syllabi.*
- 3. Participate in the development of the course assessment plan and the periodic assessment of the course assessment plan.

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- 4. Work with department colleagues to identify or develop multiple quality assessment tools with an emphasis on direct measures.
- 5. Collect data on student learning as agreed in the department plan and submit information according to the schedule identified.*
- 6. Participate in analysis of course data and discussion of course outcomes.
- 7. Participate in discussion of strategies to improve teaching and learning based on course data.
- 8. Implement department identified strategies to improve teaching and learning.*

At the program level, faculty are expected to:

- 1. Work collaboratively to identify program learning outcomes (PLOs).
- 2. Work collaboratively to identify the courses in the curriculum that contribute to acquisition of the PLOs and map them (curriculum map).
- 3. Participate in the development of the assessment plan for PLOs and the periodic assessment of the plan.
- 4. Communicate program learning information to students including on syllabi.*
- 5. Collect data on student learning at the program level as agreed in the assessment plan and submit information according to the identified schedule.*
- 6. Participate in analysis of program level data and discussion of program level outcomes.
- 7. Participate in discussion of strategies to improve teaching and learning based on program level information.
- 8. Implement program/department identified strategies to improve teaching and learning.*

At the institutional level, faculty participate in assessment of general education/core competencies. Faculty are expected to:

- 1. Provide information on student learning based on the assessment plan for general education/core competencies approved by the department heads.*
- Review the findings and analysis of outcomes of student learning for general education/core competencies.* See Office of Assessment and Evaluation web page <u>http://path.ccp.edu/assessment/assessment-levels.html</u>.

- 3. Participate in department discussions about general education/core competency outcomes.
- 4. Implement strategies identified by department heads, based on faculty feedback, to improve general education/core competency outcomes.*

Department Heads

Department Heads provide leadership for the assessment processes in their departments and serve as a General Education/Core Competency committee. Department Heads should encourage faculty to participate in professional development opportunities to increase knowledge and skill with assessment. Additionally, Department Heads should work to disseminate information about assessment outcomes to interested parties, including students, advisory committee members, and others.

At the course level, Department Heads are expected to:

- 1. Lead collaborative development and review of course level SLOs by department faculty.
- Lead development of assessment plans for all department courses, ensuring that each course has agreed upon student learning outcomes at the course level and that multiple, quality assessments are included.
- 3. Lead assessment of course assessment plans on a periodic basis.
- 4. Ensure implementation of course level assessment plans.
- 5. Ensure that course level SLOs appear on all course syllabi.
- 6. Lead analysis and discussion of course level outcomes and ensure input of information in SharePoint.
- Ensure implementation of department approved strategies for improving teaching and learning.
- 8. Work with the Curriculum Facilitation Office to ensure completion of Commonwealth of Pennsylvania required 335 documentation on the required five year cycle.

At the program level, Department Heads are expected to:

1. Lead collaborative development and review of PLOs by department faculty.

- 2. Lead development of assessment plans for all programs, ensuring that each program has agreed upon student learning outcomes at the program level and that multiple, quality assessments are included.
- 3. Lead assessment of program assessment plans on a periodic basis.
- 4. Ensure implementation of program assessment plans.
- 5. Lead analysis and discussion of program outcome data and ensure input of information in SharePoint.
- 6. Ensure implementation of program approved strategies to improve teaching and learning.
- 7. Complete annual program reviews and share the information with program faculty.
- 8. Work with Assessment and Evaluation Office staff to contribute to program audits, assigning tasks to program faculty as appropriate.

At the institutional level, Department Heads are expected to:

- 1. Agree on the strategies for assessing general education/core competencies.
- Serve as a general education/core competency oversight group to review and discuss results and lead changes to teaching and learning.
- Report on general education/core competency outcomes and discussions to department members and solicit a department point of view to inform discussion by Department Heads.
- 4. Review general education/core competencies and assessment plan on a periodic basis to recommend changes to the requirements and/or process.

See Appendix I for Assessment Checklist for Departments.

Deans

Academic Deans provide oversight for department assessment plans and activities, ensuring that departments have quality plans for assessment, input information in the College repository and engage in discussions to improve teaching and learning. Deans should participate in professional development to ensure that they have the knowledge and skills necessary to assist Department Heads in their work. Deans should make use of College resources to ensure that departments have the support needed to engage in assessment activities that lead to improvements in teaching and learning.

At the course level, Deans are expected to:

- 1. Ensure completion of required 335 documentation in a timely manner.
- 2. Ensure departments have assessment of student learning plans for all courses that results in all learning outcomes being assessed at least once every five years.
- 3. Ensure departments are following the identified plan.
- 4. Ensure departments have identified quality assessments for all courses and the information is in the College catalog.
- 5. Ensure departments have entered information into SharePoint on an annual basis.
- 6. Ensure departments have discussed and identified plans to improve teaching and learning.
- 7. Ensure departments have a plan to review assessment plans on a periodic basis.
- 8. Serve as a resource for faculty and department heads.

At the program level, Deans are expected to:

- 1. Ensure departments have program learning outcomes for each program.
- Ensure departments have a plan to complete a cycle of all program outcomes at least once in time for required program audits (i.e., within five years) and are completing planned assessments.
- 3. Ensure departments have quality assessments for each program.
- 4. Ensure departments review assessment plans on a periodic basis.
- 5. Ensure departments are engaging in discussions and identifying and implementing strategies to improve teaching and learning.
- 6. Submit required information for annual program review.
- 7. Assist in the program audit process as specified in the program audit guidelines.
- 8. Ensure information is submitted in a timely fashion to the Vice President for Academic and Student Success and to the Board of Trustees.

At the institutional level, Deans are expected to:

- 1. Ensure departments are aware of the status of general education/core competency assessments.
- 2. Ensure departments discuss general education/core competency outcomes.

- 3. Ensure implementation of teaching and learning strategies the department heads recommend.
- 4. Support department head review of general education/core competencies.

Vice President for Academic and Student Success

The Vice President for Academic and Student Success is responsible for ensuring that faculty and administrators are engaging in assessment of student learning in ways that improve teaching and learning.

Staff in the Office of Assessment and Evaluation

Staff in the Office of Assessment and Evaluation serve as a resource and support for faculty and administrators in assessing student learning outcomes. Among other activities, staff provide information and technical assistance; provide training and disseminate information about best practices; assist decision-makers in analyzing and interpreting information; collaborate to promote a culture of assessment and continuous improvement.

Assessment of Student Learning at the Course Level

The Commonwealth of Pennsylvania (Act 335) requires that every course be evaluated at least once every five years. The College's Curriculum Facilitation Team (CFT) plays an important role in helping faculty think through the process for development and revision of courses and also tracks compliance with the Act 335 standards. The College has templates for Act 335 evaluation and the CFT created templates for course development and review. The evaluation of courses includes a review of consistency with the College mission, use of resources, etc. An important aspect of course review, development, and revision is assessment of student learning outcomes (SLOs). The process and major responsibility for assessing SLOs rests with the faculty. Faculty within a department or discipline must use the following steps:

 Identify the SLOs for the course. Learning goals/objectives should answer the question, what should students know, be able to do, and/or believe by the end of the course? That is, by virtue of completing the course successfully, how will successful students be different? Once learning goals/objectives are identified, they can be translated into student learning outcomes – measurable statements of the learning goals/objectives. The basic format of a course level SLO is "By the end of the course, successful students will be able to (insert action verb) + (insert the knowledge, skill or attitude). See Appendix A for a list of potential action verbs. Please consult the Office of Assessment and Evaluation for assistance in creating SLOs. See Appendix J for resource information. The SLOs approved by the department must appear on every syllabus. Faculty may not create individual SLOs for courses they teach. The SLOs should be communicated broadly. Students in particular should be aware of what they will learn by virtue of completing a course. Please note that development of learning outcomes, deletions or changes must be made using the College's curriculum development process. Contact the Office of Curriculum Development for clarification or additional information. See Appendix B for a checklist of things to consider after creating course SLOs.

- 2. *Create a timeline for assessment*. All course learning outcomes must be measured at least once every five years. Assessment may be more frequent, however, based on the outcome of the assessment. See Appendix C for a template to use to create a timeline for assessment of SLOs.
- 3. Select measures to find out if students acquire the learning outcomes identified. Assessment measures are broadly categorized as direct and indirect measures. All SLOs must use direct assessment. Direct measures assess actual student learning. Examples include portfolios; pre/posttests; assignments; research projects; etc. The use of rubrics to assess student learning is a popular way of efficiently measuring student learning across multiple sections. Indirect measures may be used to complement direct assessment. Indirect measures are suggestive of course success but do not directly assess student performance. Indirect measures include: course evaluations; number of hours spent on assignments; number of students who complete the course; grade distribution; etc. There is a benefit to using multiple measures to assess learning because all measures have limitations. See Appendix D for examples of direct and indirect measures.
- 4. *Identify the benchmark to determine if the outcomes have been achieved.* There should be a rationale for the benchmark. Examples of benchmarks include an average score on a rubric that identifies student performance as competent and/or the percent of students

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who reach a certain benchmark. You should be prepared to provide a rationale for the benchmark.

- 5. Review data collected based on the assessment plan determined by the department. Faculty must meet to review and discuss results of the assessments. Department discussion must be documented in meeting notes or minutes. See Appendix E for a template for documenting these discussions.
- 6. Develop and implement action steps. Faculty must identify action steps to improve student learning outcomes. The steps may include changes to teaching practices or resources. These decisions must be documented in meeting notes or minutes. The process of gathering assessment information, reviewing it and then making changes to improve teaching and learning demonstrates "closing the loop." The cycle starts again as the faculty review SLOs after implementing changes.
- Communicate results to various constituents. All results of assessments must be available for review by various constituents. Each department must identify faculty who are responsible for entering information based on their assessments in the College's SharePoint electronic repository.

In departments with programs (majors), the course level SLOs may be used to assess program learning goals. If that is the case, plans for assessment should show the relationship between course level and program level assessment in the program curriculum map.

Assessment of Student Learning at the Program Level

Community College of Philadelphia has three categories of assessment at the program level: assessment of faculty-identified program learning outcomes; annual program review using the Quality/Viability Indicators (QVIs); and academic program audits. These assessments are interrelated. Program learning outcomes are identified by program faculty. Faculty are required to identify the direct and indirect assessments to be used to make decisions and improve teaching and learning. Every year, program faculty provide evidence of progress through the annual program review, the QVIs. The QVIs then inform a five year academic program audit. The Commonwealth of Pennsylvania requires that every academic program be reviewed at least once every five years. Between the QVIs and the academic program audits, the College is complying with the current requirements.

Every degree program, academic certificate program, and proficiency certificate must have an assessment plan. Because certificate and degree programs are stackable, the assessment of these different credentials should overlap. Faculty must use the following steps in assessing program learning outcomes:

- 1. Identify the program learning outcomes. Learning goals/objectives should answer the question, what should students know, be able to do and/or believe by the end of the program? That is, by virtue of the program, how will students be different upon completion of their major? Program learning outcomes (PLOs) translate goals/objectives into a measurable format. As with course SLOs, PLOs take the following form: Upon successful completion of the major, successful students will be able to (insert action verb) + (insert knowledge, skill or attitude). Learning outcomes help answer the question, how will we know that students have achieved our program goals? Please consult the Office of Assessment and Evaluation for assistance in creating PLOs. The program goals and outcomes should be communicated broadly. Students in particular should be aware of what they will learn by virtue of completing a major. Please note that development of learning outcomes, deletions or changes must be made using the College's curriculum development process. Contact the Office of Curriculum Development for clarification or additional information. See Appendix B for a checklist of things to consider after creating PLOs and Appendix F for information on developing PLOs from course level SLOs.
- Create a curriculum map to identify where in the curriculum students acquire the program learning outcomes and where you may assess them. All programs have curriculum maps. Faculty may not develop individual PLOs or curriculum maps – this is a collaborative responsibility for full time faculty.
- Create a timeline for assessment. All program learning outcomes must be measured within a five year cycle to correspond to required academic program audits. Outcomes may be measured more frequently based on the results of assessments. See Appendix G for a sample template.

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- 4. Select measures to find out if students acquire the learning outcomes identified. Assessment measures are broadly categorized as direct and indirect. All outcomes require direct assessment. Direct measures assess actual student learning. Examples include capstone experiences; licensure/certification results; employer or clinical supervisor ratings of student performance; pre/posttests; etc. The use of rubrics to assess student learning is a popular way of efficiently measuring student learning. Indirect measures may be used to complement direct assessment. Indirect measures are suggestive of program success but do not directly assess student performance. Indirect measures include: surveys of student perceptions or opinions; enrollment information; retention, graduation and transfer rates; surveys of employers or alumni; job placement rates; advisory committee feedback; course success rates; etc. See Appendix D for examples of direct and indirect assessment.
- 5. *Identify the benchmark to determine if the outcomes have been achieved.* There should be a rationale for the benchmark. Examples of benchmarks include an average score on a rubric that identifies student performance as competent; the percent of students who reach a certain benchmark.
- 6. *Review evidence collected based on the program's plan.* Program faculty must meet to review results of the assessments. Faculty must document their discussions in meeting notes or minutes. If your program does not routinely keep meeting minutes or notes, see Appendix E for a sample template for assessment notes so you can at least document those discussions and decisions.
- 7. Develop and implement action steps. Program faculty must make decisions about action steps to improve student learning outcomes. The steps may include changes to teaching practices or resources or even review of expectations. Faculty must document decisions about actions to improve teaching and learning. The process of identifying outcomes, measures and benchmarks; examining evidence; and making changes constitutes "closing the loop." This cycle continues throughout the effort to achieve greater student outcomes.
- 8. *Communicate results to various constituents*. Students, in particular must be aware of the program learning goals and assessments. All results of assessments must be available for

review by various constituents. Departments must identify the person or persons who are responsible for entering the information in the College's SharePoint repository.

In 2014, the College created a Curriculum Assessment Team (CAT). CAT is a group of faculty who are comfortable with and skilled in assessment. Modeled after the College's successful Curriculum Facilitation Team, CAT faculty serve as knowledgeable peers to assist faculty with assessment work. Access to support by CAT faculty is through the Office of Assessment and Evaluation.

To encourage all program faculty to review data more frequently than every five years, in 2008-2009, Academic Affairs created a rubric, the Quality/Viability Indicators (QVI), for annual program review. The QVIs have the same purposes as the full audits, including compliance with the Commonwealth requirement that all programs be reviewed at least once every five years. Effective 2010-2011, each academic program was required to complete a QVI. Additionally, each program was required to identify student learning outcomes at the program level and each program was required to have a plan for assessment of program level outcomes. Each program level outcome has to be assessed once during the 5-year program audit cycle. The purposes of the annual program review, as identified by the College are:

- to ensure curriculum relevancy;
- to ensure student achievement goals, student enrollment goals, teaching and learning goals, and programmatic goals are achieved;
- to evaluate the assessment of course and program outcomes and assessment practices;
- to assist in meeting compliance standards and requirements;
- to recognize program strengths and yield recommendations for program improvements, changes, and (in some cases) termination.

The department head or his or her designee takes responsibility for completing the QVI. The QVI is then provided to the dean of the division for review and comments. It is expected that the results of the QVI are shared and discussed with program faculty. The results should also be discussed with advisory committees or other relevant constituencies. Once the dean has reviewed the submission, it is provided to the Vice President for Academic and Student Success

(VPASS). The VPASS provides a summary of the information to the Student Outcomes Committee of the Board (SOC).

At least once every five years, each academic degree, academic certificate, and proficiency certificate program is required by the Commonwealth of Pennsylvania to participate in an academic program audit. The purposes of the academic program audit, as identified by the College are:

- to ensure curriculum relevancy;
- to ensure student achievement goals, student enrollment goals, teaching and learning goals, and programmatic goals are achieved;
- to evaluate the assessment of course and program outcomes and assessment practices;
- to assist in meeting compliance standards and requirements;
- to recognize program strengths and yield recommendations for program improvements, changes, and (in some cases) termination.

The academic audit model and guidelines have been revised multiple times. The most recent version of the guidelines is available on the web site for the Office of Assessment and Evaluation. The current five year schedule for academic audits appears in Appendix H.

The College process includes completion of the audit by program faculty in conjunction with staff in the Office of Assessment and Evaluation (OAE). A representative of the department/program works with the OAE staff to complete the audit. The Audit Guidelines describe the responsibilities of the program faculty in more detail. It is available on the web site for the OAE. Audits are reviewed by the dean of the division and then presented at a meeting with the VPASS. Audits approved at that level are sent to the Student Outcomes Committee (SOC) of the Board for review. The SOC trustees make recommendations to the full Board of Trustees. The Board may act to approve the program for up to five years; require a follow up report before approval; or eliminate a program. After the Board of Trustees acts on a program audit, program faculty are responsible for follow up to improve program outcomes.

Assessment of Student Learning at the Institutional Level: General Education/Core Competencies

In Fall 2009, Community College of Philadelphia implemented new general education requirements identified and approved by faculty. The general education requirements at the College apply to all degree students, regardless of the major they choose. Faculty and administrators also worked over a two year period to identify ways to assess whether students actually develop the attitudes, knowledge and behaviors expected through general education. One result of this process was to nest the general education requirements under a set of core competencies. Our core competencies provide a way for the College to review whether students are meeting faculty expectations for general education. Guidelines for General Education are available on the OAE web site.

To meet the general education requirements, all degree-seeking students must complete courses in the following four areas:

1. Courses in Major Areas of Learning

- ENGL101 and ENGL102 or ENGL112
- 3 credit hours in Humanities (ENGL 101, 102, 108, and 112 excluded)
- 3 credit hours in Social Sciences
- 3 credit hours in Mathematics (at Math 118 or above)
- 3 credit hours in Natural Sciences
- 2. Courses in Major Academic Approaches
 - 3 credit hours in a Writing Intensive course
 - 3 credit hours in an Interpretive Studies course
 - 3 credit hours in an American Diversity/Global Diversity Studies course

3. Information Literacy

The current information literacy requirement is met by ENGL 102. However, a curriculum may demonstrate that its students attain Information Literacy within a course or embedded within the curriculum.

4. Technological Competency

The technological competency requirement is met by CIS 103 or by other approved coursework.

The general education requirements are nested under seven core competencies:

- Critical Thinking Responsible Citizenship
- Effective Communication
- Information Literacy

- Scientific Reasoning
- Literacy Technological Competency
- Quantitative Reasoning

The College requirement, then, is for meeting general education/core competencies. Faculty subcommittees created rubrics to directly assess the general education/core competencies. Use of the rubrics is the primary direct assessment of general education/core competencies. However, other assessments such as SAILS for information literacy or a standardized test of scientific reasoning have also been used. In addition, indirect assessment of general education/core competencies is used to supplement the direct assessments. Indirect assessment includes results from the Community College Survey of Student Engagement (CCSSE) and College surveys of current and former students.

Responsible Parties:

Office of Assessment and Evaluation and Department Heads

The College's Director of Assessment and Evaluation is responsible for coordinating assessment of general education/core competencies and for sharing results with constituencies. The emphasis on assessment is direct assessment of student learning outcomes. Academic department heads serve as a general education/core competency oversight group. Department heads review results of assessments and make decisions about follow-up based on the data. Between hearing the results of assessments and making a decision, department heads have time to discuss the data with department faculty and to solicit their feedback. Once a course is approved as meeting a general education requirement, department heads are responsible for ensuring that all faculty teaching the course are adhering to course requirements.

Faculty

While the Director of Assessment and Evaluation has the primary responsibility for coordinating assessment of general education/core competencies, faculty are engaged as needed in the assessment process. Faculty may be asked to administer surveys; assess individual students using a rubric;

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administer approved standardized instruments; make recommendations for improvement; provide feedback, etc. Faculty are expected to respond to department head requests based on the outcomes of the assessments of general education/core competencies. In that way, faculty play a key role in identifying ways to improve teaching and learning related to general education/core competencies. Faculty are also encouraged to share results of the general education/core competency assessments with relevant constituencies.

Review of General Education/Core Competencies

The goal set in 2009 was to assess every general education/core competency at least once in a five year time period. As of fall 2014, every general education/core competency was measured at least once. The guidelines for general education/core competencies stated that every five years, the department heads are expected to identify a committee to review general education/core competency data and requirements and make a recommendation to maintain the requirements or to embark on a revision of the requirements. Department Heads started the review process Fall 2014.

Assessment of Assessment

Best practices in assessment require periodic review of assessment plans and activities. We need to know whether our plans and practices are exemplary. Therefore, every unit should build into its planning a timeframe for review of assessment. Please consult the staff in the Office of Assessment and Evaluation for assistance.

Appendix A: Action Verbs at Different levels of Thinking (modified from Eastern New Mexico University document)

Knowledge	Comprehension	Application
Count	Associate	Add/subtract
Define	Compute	Apply
Describe	Convert	Calculate
Draw	Defend	Change
Identify	Discuss	Classify
Label	Distinguish	Complete
List	Estimate	Compute
Match	Explain	Demonstrate
Name	Extend	Discover
Outline	Extrapolate	Divide
Quote	Generalize	Examine
Read	Give examples	Graph
Recall	Infer	Manipulate
Recite	Paraphrase	Modify
Recognize	Predict	Operate
Record	Rewrite	Prepare
Repeat	Summarize	Produce
Reproduce		Show
Select		Solve
Write		Translate
Analysis	Synthesis	Evaluation
Analysis Analyze	Synthesis Categorize	Evaluation Appraise
-	•	
Analyze	Categorize	Appraise
Analyze Arrange	Categorize Combine	Appraise Assess
Analyze Arrange Breakdown	Categorize Combine Compile	Appraise Assess Compare
Analyze Arrange Breakdown Combine	Categorize Combine Compile Compose	Appraise Assess Compare Conclude
Analyze Arrange Breakdown Combine Design	Categorize Combine Compile Compose Create/transform	Appraise Assess Compare Conclude Contrast
Analyze Arrange Breakdown Combine Design Detect	Categorize Combine Compile Compose Create/transform Design	Appraise Assess Compare Conclude Contrast Criticize
Analyze Arrange Breakdown Combine Design Detect Develop	Categorize Combine Compile Compose Create/transform Design Devise	Appraise Assess Compare Conclude Contrast Criticize Critique
Analyze Arrange Breakdown Combine Design Detect Develop Diagram	Categorize Combine Compile Compose Create/transform Design Devise Explain	Appraise Assess Compare Conclude Contrast Criticize Critique Determine
Analyze Arrange Breakdown Combine Design Detect Develop Diagram Differentiate	Categorize Combine Compile Compose Create/transform Design Devise Explain Generate	Appraise Assess Compare Conclude Contrast Criticize Critique Determine Grade
Analyze Arrange Breakdown Combine Design Detect Develop Diagram Differentiate Discriminate	Categorize Combine Compile Compose Create/transform Design Devise Explain Generate Integrate	Appraise Assess Compare Conclude Contrast Criticize Criticize Critique Determine Grade Interpret
Analyze Arrange Breakdown Combine Design Detect Develop Diagram Differentiate Discriminate Illustrate	Categorize Combine Compile Compose Create/transform Design Devise Explain Generate Integrate Modify	Appraise Assess Compare Conclude Contrast Criticize Critique Determine Grade Interpret Judge
Analyze Arrange Breakdown Combine Design Detect Develop Diagram Differentiate Discriminate Illustrate Infer	Categorize Combine Compile Compose Create/transform Design Devise Explain Generate Integrate Modify Organize	Appraise Assess Compare Conclude Contrast Criticize Critique Determine Grade Interpret Judge Justify
Analyze Arrange Breakdown Combine Design Detect Develop Diagram Differentiate Discriminate Illustrate Infer Outline	Categorize Combine Compile Compose Create/transform Design Devise Explain Generate Integrate Modify Organize Plan	Appraise Assess Compare Conclude Contrast Criticize Critique Determine Grade Interpret Judge Justify Measure
Analyze Arrange Breakdown Combine Design Detect Develop Diagram Differentiate Discriminate Illustrate Infer Outline Point out	Categorize Combine Compile Compose Create/transform Design Devise Explain Generate Integrate Modify Organize Plan Prescribe	Appraise Assess Compare Conclude Contrast Criticize Critique Determine Grade Interpret Judge Justify Measure Rank
Analyze Arrange Breakdown Combine Design Detect Develop Diagram Differentiate Discriminate Illustrate Infer Outline Point out Relate	Categorize Combine Compile Compose Create/transform Design Devise Explain Generate Integrate Modify Organize Plan Prescribe Propose	Appraise Assess Compare Conclude Contrast Criticize Critique Determine Grade Interpret Judge Justify Measure Rank Rate
Analyze Arrange Breakdown Combine Design Detect Develop Diagram Differentiate Discriminate Illustrate Infer Outline Point out Relate Select	Categorize Combine Compile Compose Create/transform Design Devise Explain Generate Integrate Modify Organize Plan Prescribe Propose Rearrange	Appraise Assess Compare Conclude Contrast Criticize Critique Determine Grade Interpret Judge Justify Measure Rank Rate

Appendix B: Checklist for Learning Outcomes (modified from the DQP Roadmap)

Does the outcome describe the knowledge, skills or attitudes students will acquire?

Is the outcome written using an active verb?

Is the outcome measurable using direct evidence? See Appendix D for examples of direct evidence.

Does the outcome align with the discipline faculty's collective intentions in terms of the curriculum and, as applicable, the co-curriculum?

Does the outcome map to curriculum, co-curriculum, and/or respected educational practices?

Is the outcome collaboratively authored and collectively accepted?

Does the outcome incorporate or adapt professional organizations' outcome statements if they exist?

If the outcome represents a change or is new, has it been approved through the College's curriculum development process?

Appendix C: Timeline for Assessment of Course SLOs

Course:

Please enter the course SLO that will be assessed each semester. All SLOs should be included during this five year period. Assessments should also be consistent with the timeframe for Act 335 documentation. Please contact the Curriculum Development Office to verify the timeframe for Act 335 documentation. See Appendix J for resource information.

	SLO1	SLO2	SLO3	SLO4	SLO5
Fall 2014					
Spring 2015					
Fall 2015					
Spring 2016					
Fall 2016					
Spring 2017					
Fall 2017					
Spring 2018					
Fall 2018					
Spring 2019					

Level	Direct Measures	Indirect Measures
Course	Capstone project Pre/post assessment Student research project Exams Quizzes Standardized tests Term papers Observations of clinical or internship experiences Portfolios Case study analysis Presentations Performances Grades mapped to goals	Course grades Grades in one course Course completion rate Course withdrawal rate Hours for service learning Course survey Participation in research project Awards for course achievement Scholarships Time spent on projects Focus group interview Course enrollment
Program	Course assignments License exam pass rates Scores on license exams Capstone project Internship rating by supervisor Portfolio Pre/post scores Employer rating	Job placement rates Alumni survey Student perceptions Gifts Grade distributions Transfer rates Honors Accreditation review

Appendix D: Direct and Indirect Measures of Student Learning

Appendix E: Sample Template for Assessment Notes

Department/Program/Discipline:

Date:

SLO:

Assessment Measure:

Benchmark:

Results/Evidence:

Faculty Discussion/Action Plans:

Appendix F: Developing Program Learning Outcomes from Course Learning Outcomes

Review course documents on file with the Office of Curriculum Development or your department for all of the courses in the program. All of the courses have course learning outcomes and assessment plans. What are the broad goals or learning outcomes that appear? Use this information to create a curriculum map. Review the map for gaps, repetition, etc.

Questions you should be prepared to answer include:

What should a graduate of our program know, be able to do, and or believe? Is the outcome measurable using direct evidence? See Appendix D for examples of direct evidence.

What experiences do students have in the program that are evidence of achievement? What standards do we expect our students to meet?

Appendix G: Timeline for Assessment of PLOs

Department:

Please put an X in the box to show when each program outcome will be assessed. All program outcomes should be included during this five year period. Assessments should also be consistent with the timeframe for your academic program audit. Please check the schedule for your audit with the Office of Assessment and Evaluation.

	PLO1	PLO2	PLO3	PLO4	PLO5
Fall 2014					
Spring 2015					
Fall 2015					
Spring 2016					
Fall 2016					
Spring 2017					
Fall 2017					
Spring 2018					
Fall 2018					
Spring 2019					

2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
BUSN	ARTP	EDEC	LASB	ARCH
BUSA	COMM	EDML	CSCI	INTS
HSVM	CSTP	EDHS	SCIP	ENGL
INTL	LAHO	EDMS	BHHS	THEA
LIBA	MAMD	PSYC	DSCP	ACCT
MUSN	MATH	INTR	HSVC	РНОТ
MUSP	CLTP	BLDG	RTRC	GISC
RLGS	PLST	DMIP	SOCG	GIPC
ENGS	PLPC	FSCI	RTPC	ENTR
ASET	APPC	NURS	SHPC	BIOL
APDP	BMPC	ENCC	CHTE	
AUMM	BTPC		DHYG	
AUTO	CAPC		CRWC	
ASPC	MIPC			
CADT	PSPC			
CADC	P1PC			
CIST				
NSPC				
SDPC				
CSTM				
CULA				
PCPC				
DIGF				
DGVD				
DIPC				
FAMC				
FAMD				
HOSM				
JUST				
JUSC				
RESP				
SRMT				
YOWC				
YWPC				
RCPC				

Appendix H: Five Year Audit Cycle

Appendix I: Assessment Checklist for Departments

T = True; P=Partially true; U=Untrue; NA = Not applicable

- _____Every course in my department has SLOs developed and approved by the faculty.
- _____The department checks syllabi to ensure the correct SLOs appear on each syllabus.
- _____There is a timeline for assessing every course within 5 years (consistent with Act 335).
- _____Every course SLO is measured using direct assessment.
- _____There are department records to document faculty decisions about course outcomes.
- Every certificate and degree offering in my department has program learning outcomes developed and approved by the faculty.
- _____Program learning outcomes measured by courses are mentioned on syllabi.
- _____There is a timeline for assessing every program learning outcome at least once in a 5 year period and consistent with the audit cycle.

- _____There are department records to document faculty decisions about program outcomes.
- _____Results of the QVI are shared and discussed with department faculty.
- _____Audit findings are discussed with faculty.
- _____Results of assessments are shared with students.
- _____Results of assessment are shared beyond the department.
- _____Results of general education/core competency assessments are discussed in the department.
- _____The department has completed all required assessments for 2014-2015.
- _____There is a department plan for all assessment that includes periodic review of the plan.
- _____I know where to get assistance at the College to help me with assessment.

_____Every PLO is measured using direct assessment.

Appendix J: Resource Information

Curriculum Facilitation Office	
http://faculty.ccp.edu/dept/cur_dev/	215-751-8334
Office of Assessment and Evaluation http://path.ccp.edu/assessment/	215-972-6156
Professional Development Faculty Center for Teaching and Learning <u>http://faculty.ccp.edu/dept/teachingcenter/</u>	215-751-8846
Office of Professional Development http://path.ccp.edu/profdevelopment/	215-751-8834