Program Review:

Units Reviews
Academic Programs

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Introduction
The purpose of this handbook is to provide all members of the Paul D. Camp Community College (PDCCC) community with information and resources as it relates to the importance and function of assessment. This handbook provides a framework for ensuring that our assessment processes are both comprehensive and meaningful. This handbook is meant to offer information and guidelines on the annual review process in a succinct and approachable manner. Assessment, through annual reviews, is used to maintain high quality programs and services to support student learning and college operations.

Assessment at PDCCC is done first and foremost to improve student learning. However, assessment has become increasingly important as the debate of educational effectiveness gains momentum. The combination of requirements of accrediting agencies and the interest of the public has increased the accountability for both the resources spent and educational outcomes of those resources.

PDCCC is accredited by the Southern Association of Colleges and Schools Commission of Colleges (SACSCOC). SACSCOC expects that colleges will evaluate the effectiveness of instructional programs by a variety of methods and states that the evaluation should involve gathering and analyzing both quantitative and qualitative data that demonstrate student achievement. “Measures to evaluate academic programs and general education may include the following: evaluation of instructional delivery; adequacy of facilities and equipment; standardized tests; analysis of theses, portfolios and recitals; completion rates; results of admissions tests for students applying to graduate or professional schools; job placement rates; results of licensing examinations; evaluations by employers; follow-up studies of alumni; and performance of student transfers at receiving institutions.” [Criteria for Accreditation, p. 20]

In addition, the State Council of Higher Education for Virginia (SHEV) requires institutions to determine what they want students to know and be able to do as a result of their major and general education programs. Then use assessment to determine whether students generally meet those expectations. As well as how students and alumni rate their skills and abilities. SCHEV notes that assessment should be done systematically and periodically, include all students or an adequate and representative sample, and use both direct and indirect measures of learning. To be effective, assessment must be designed by faculty members with appropriate technical support and the support and leadership of top administrators, who use the information it generates to make decisions.

The Purpose of Assessment- What, Why and Who?

What is Assessment?
Assessment is often defined as the systematic and ongoing method of gathering, analyzing and using information from various sources using measured outcomes in order to improve student learning and services. In order for assessment to be effective it needs to be comprehensive, systematic, continuous, and valued by staff, faculty, and administrators. Purposeful assessment allows faculty, staff, and administrators to make informed and strategic decisions based on evidence and not assumptions.

1 Paul D. Camp Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award Associate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404.679.4500 for questions about the accreditation of Paul D. Camp Community College.
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A comprehensive assessment process aims to:
- Improve- the process should include feedback on how educational programs or units can be improved
- Inform- assessments should inform others at the college of the impact of the program or unit
- Prove- assessment should demonstrate accomplishments of the program or unit
- Support- assessments can support campus decision making as well as external accounting activities such as accreditation

Why we do assessment?
One of the great advantages of assessment is that when done in a systematic way, it has benefits for our students, faculty, staff and administration.

<table>
<thead>
<tr>
<th>Assessment Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For students</strong></td>
</tr>
<tr>
<td>assessment will</td>
</tr>
<tr>
<td>Communicate clear expectations about what’s important in a course or program</td>
</tr>
<tr>
<td>Inform them that they will be evaluated in a consistent and transparent way</td>
</tr>
<tr>
<td>Allow them to make better decisions about programs based on outcomes results measured against a benchmark</td>
</tr>
<tr>
<td><strong>For faculty and staff, participating in assessment will</strong></td>
</tr>
<tr>
<td>Help them determine what’s working and what’s not working in their program or area</td>
</tr>
<tr>
<td>Help them to more efficiently design content, instruction, and evaluation in their program or area</td>
</tr>
<tr>
<td>Provide powerful evidence to justify needed resources to maintain or improve programs or areas</td>
</tr>
<tr>
<td>Allow them to tell their story to individuals outside their area (e.g. administrators, employers, prospective students, transfer institutions)</td>
</tr>
<tr>
<td><strong>For administrators, implementing college-wide assessment will</strong></td>
</tr>
<tr>
<td>Demonstrate an institutional commitment to continually improving the academic programs and services offered by the college</td>
</tr>
<tr>
<td>Provide valuable data to support requests for funds from state and local government and private donors</td>
</tr>
<tr>
<td>Demonstrate accountability to funding sources</td>
</tr>
<tr>
<td>Provide valuable data for academic planning and decision-making</td>
</tr>
<tr>
<td>Enable them to inform elected officials, local businesses, and potential donors about the college’s impact on our students and our community in a very compelling and convincing way</td>
</tr>
<tr>
<td>Meet the systematic assessment requirements for SACSCOC accreditation, SCHEV, VCCS, and IPEDS</td>
</tr>
</tbody>
</table>

Who is responsible for assessment?
Assessment is a college-wide collaborative effort between faculty, staff, and administrators. There is no one person or office solely responsible for assessment, it is a shared responsibility across all areas and levels of the college.

Faculty and staff work to draft and shape their course, program or unit assessment. The Deans and Vice Presidents provide guidance, review and approval of assessment plans. Various
Standing committees are involved in the evaluation of the assessment process and results. Through standing committees, a diverse group of faculty and staff are able to participate in the assessment process. The Academic Programs Committee does an evaluation of all program assessments for continuous improvements; the Educational Support Committee does an evaluation of all educational support units, and the Planning and Effectiveness Committee does an evaluation of all administrative units of the college.

**PDCCC’s Guiding Principles**

PDCCC’s Mission, Goals, Vision, and Strategic Plan form the overall blueprint for the development of institutional goals and assessment, thereby defining the most fundamental criteria for assessing institutional effectiveness.

PDCCC’s Mission, Goals, Values, Vision statement, and Strategic Plan should serve as a basis for your assessment.

**Mission:**

Paul D. Camp Community College provides diverse learning opportunities to enhance the quality of life for students and the community.

**Goals:**

To achieve this mission, the college provides:

- Access to higher education for students and promotes their success and goal attainment
- Curricula in university parallel programs that facilitate transfer to senior institutions
- Career and technical programs that are responsive to the needs of students and employers
- A developmental studies program to help students meet college-level learning expectations
- Workforce training, services and lifelong learning opportunities
- Skills and values students need to function effectively in their world
- Support for partnerships for the development, growth, and renewal of the service region
- Adequate personnel, financial resources, facilities, and technology to support its programs and services
- Emergency preparedness planning, training, and promotion

**Core Values:**

At Paul D. Camp Community College, we are committed to…

- The Value of Each Individual—Each person is important. We appreciate the diversity of our student body and college employees. We seek to understand and respect one another.
- The Development of Talent—Faculty, staff, and students bring knowledge, skills, and abilities to the institution. We encourage them to develop their full potential in order to live responsible and productive lives.
- Teamwork and Community—We accomplish more by working together. Collaboration is an organizational priority for faculty and staff and a learning expectation for students.
- Access and Service—We serve students and each other by working to remove obstacles that threaten success. We challenge students to do the same in their communities.
- Standards of Excellence—We expect each student and college employee to achieve the standards of quality identified for their academic plan or administrative unit.
• Innovation and Risk-taking—We encourage each other to try new ways to address challenges and fulfill the college’s mission.
• Accountability and Improvement—We expect individual students and college employees to fulfill their responsibilities. Meaningful evaluation of student outcomes and other measures of institutional and individual effectiveness are used to improve performance, programs and services.

Vision Statement:
Paul D. camp Community College will be our region’s first choice for high-quality transfer and technical programs, workforce services and training, postsecondary education and community partnerships.

Strategic Plan:
Paul D. Camp Community College’s Strategic Plan 2015-16 to 2017-18 (Appendix A) is driven by the College’s mission, goals, visions and values and is in alignment with the VCCS’s Complete 2021 plan. PDCCC’s Strategic Plan serves as the guiding document for decision-making about programs and services, new initiatives, and allocation of resources. PDCCC’s Strategic Plan centers on three institutional priorities: Programs, Partnerships, and Productivity.

Strategic Planning at PDCCC
Strategic planning at PDCCC is an inclusive and methodical process that considers the College’s mission, goals, vision and values as well as the direction and goals of the Virginia Community College System. The process is led by the College President or his designee, and the President Advisory Council (PAC) every three years. The planning progression is described below:

1. Conduct an internal SCOT (Strengths, Challenges, Opportunities and Threats assessment)
2. Conduct stakeholder information sessions with Faculty and Staff and the Local College Board
3. Conduct a Community Leaders Survey
4. Environmental Scan and review of relevant documents/plans pertaining to critical issues and priorities in community college education, the Virginia Community College System, and the region served by PDCCC.
5. Hold a Strategic Planning Work Session with the Local College Board
6. Identify Institutional Priorities and associated rationale based on stakeholder input and environmental scan. Institutional Priorities are those “big areas” in which the College commits to invest resources and see results.
7. Identify Broad Goals and Expected Outcomes (Objectives) with baseline and targets so that we will know “what success looks like” and Strategic Actions to address those Objectives. Strategic Actions are to be further refined in the college’s annual planning and assessment process and annual budgeting process. In the annual planning and assessment process, administrative units and academic programs identify and assess achievement of functional unit objectives related to programs and services. In the annual budgeting cycle, funding of actions associated with Institutional Priorities receive priority and ideas/requests for funds will be considered in light of Mission and Institutional Priorities.
8. Draft of Plan developed
9. Plan reviewed by President’s Advisory Council and Committees
10. Plan revised and approved by College Leadership
11. Plan reviewed/approved by the Local College Board
Institutional Effectiveness at PDCCC

While SACSCOC, SCHEV and the VCCS provide guidance on assessing institutional effectiveness their guidance is not prescriptive. It is the College that develops the framework for assessing and defining institutional effectiveness at PDCCC. PDCCC’s faculty, staff and administrators take the lead in identifying expected outcomes, measuring these outcomes, and providing evidence for improvement for educational programs, administrative support services, and community/public services. This handbook provides the structure for how we are able to meet the requirements of our accrediting and governing bodies within the parameters that work best for our college. The following sections are designed to address how we assess institutional effectiveness at PDCCC.

Staff Section: Administrative Unit Review

This section addresses the assessment process for administrative units. This section will help you in defining your unit’s purpose, establishing objectives and determining how to measure these objectives.

Where do we start?
As you, the unit administrator or designee, work to complete your unit’s assessment plan keep in mind the following questions:
1. What is your unit trying to do?
2. How well are you doing it?
3. How can you improve?
4. How does your unit’s objectives align with the college’s mission, vision, and strategic plan?

In addition to the aforementioned questions it is recommended that you review your unit’s assessment results from previous years prior to completing your unit’s plan. The following steps outline the unit program review template below and provides you with guidance on completing your units review.

Paul D. Camp Community College
Program Review

Area:
Year:
Purpose:

<table>
<thead>
<tr>
<th>#</th>
<th>Status*</th>
<th>Objective Type*</th>
<th>Objective</th>
<th>Target (What does success look like?)</th>
<th>Measure (Source of Evidence)</th>
<th>Findings</th>
<th>Target Met, Partially Met or Not Met</th>
<th>Analysis</th>
<th>Alignment to Strategic Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td></td>
</tr>
</tbody>
</table>

*Status: New (N), Ongoing (O), Carried Over from Prior Year (PY), Revised from Prior Year (R)
* Objective: Administrative (Admin), Student Outcomes (SO), Student Learning Outcome (SLO)

Plan Prepared by: ___________________________ Date: ___________________________
Plan Approved by Vice President: ________________ Date: ___________________________

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**Action Plan**

Based on the results, what are the strengths and challenges in this area/program/service?

Based on your analysis of the results, what improvements will be implemented in order to improve this area/program/service? Please outline the time frame, person responsible, and resources needed to support these improvements.

Based on the strengths, challenges and proposed improvements what objectives, either existing or new, will be a priority for the next assessment cycle?

Final Report Reviewed by Standing Committee: _________________
Date: ______

Reviewed Report and Approved by Vice President: ________________________
Date: ______

**Part 1: Program Purpose, Objectives, Targets and Measures**

This section, Part I, is to be completed at the beginning of the academic year. Part I needs to be reviewed and approved by your unit’s Vice President. This review ensures alignment with administration expectations.

**Step 1: Program Information**

*Unit Purpose:* The purpose highlights the most important function, service or operation of your unit. In essence, explain what it is your unit does? Also include who your stakeholders are, who are you providing services to? Is it students, faculty, staff, employers, etc.?

**Step 2: Unit Objectives**

*Objective:* This section’s purpose is to outline your unit’s objectives. Objectives are precise and clear statements that describe the desired performance or intended accomplishments of a unit. Keep your objectives short and simple. Don’t forget to link your unit’s objectives with PDCCC’s Strategic Plan (Appendix A).

Objectives should be **SMART- Specific, Measurable, Achievable, Results-oriented, and Time Bound**

- **Specific:** objectives should be distinctive to the unit that is conducting assessment.
- **Measurable:** objectives should be one for which it is feasible to collect accurate and reliable data.
- **Achievable:** objectives should be aggressive but attainable. What is your unit striving for? What would you like to accomplish over the next year and why?
- **Results-oriented:** objectives should identify where program improvements are needed and where you would like to be within a specified time period.
- **Time Bound:** objectives should indicate the timeframe for assessment, e.g., every spring semester.

Objectives should use explicit verbs such as increase, enhance, provide, reduce and promote. For examples and guidance please utilize Bloom’s Taxonomy (Appendix B).

**Objectives Type:** The majority of outcomes for administrative unit reviews will be either

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*Revised 11/4/08, 5/8/14, 3/28/16, 12/8/17*
administrative or student outcomes, few will have student learning outcomes (SLOs)

1. Administrative (Admin) Objective- these are objectives that are processed based. For example: Develop and implement a Dual Enrollment Faculty Orientation by June 30, 2016.

2. Student Outcomes (SO): SOs are objectives that are directly related to students. For example: Increase the number of students receiving tutoring services by 10% during the AY 2015-2016.

3. Student Learning Outcome (SLO): An SLO identifies the measurable knowledge, skills, behaviors, or attitudes of the learner as the result of engaging in a learning activity or program. For example: Student will be able to demonstrate knowledge of the financial aid process after attending a Financial Aid Workshop.

Objectives Status: status can be New (N), Ongoing (O), Carried Over from Prior Year (PY), or Revised from Prior Year (R).

**Step 3: Target- What does success look like?**
Your targets should specify the desired level of performance and allow your objective to be measurable. Essentially, what does success look like? You must ask yourself what level is acceptable and then seek to sustain or enhance that performance.

**Step 4: Measure- Source of Evidence**
Questions to consider when determining your measures include: how will we know if our objectives are have been accomplished and what will provide us this information? Measures can be direct, indirect, qualitative and quantitative. The majority of measures used for unit reviews will be indirect, qualitative and quantitative. Direct measures associated with Student Learning Outcomes.

Below are some examples of the aforementioned measures:
- Direct measures are an objective measure of knowledge or ability. Examples include students’ scores of national standardized exams such as the Core Competencies Assessments, Certification Exams, Pre-test/Post-test Evaluation, Comprehensive Exams, Course-Embedded Assessment, Student Portfolios, Employer evaluations, and Use of Rubrics, etc.

- Indirect measure are subjective measures of beliefs, attitudes and perceptions. Indirect measures are often used to supplement direct measures. Examples include questionnaires and survey of student’s perceptions, such as the CCSSE, graduating Student Questionnaire, Graduate Follow-up Survey, Alumni Survey, Employer surveys, etc.

- Qualitative measures contain non-numerical data such as verbal or written feedback from students/staff/faculty to include focus groups and exit interviews of graduates.

- Quantitative measures collect numerical data that can be analyzed statistically.
Below are examples of objective, measures, and targets for various objectives:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Target (What does success look like?)</th>
<th>Measure (Source of Evidence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop and implement a Dual Enrollment Faculty Orientation by June 30, 2016.</td>
<td>75% of new and current DE faculty attend/receive orientation.</td>
<td>Orientation roster will be compared against DE faculty roster to capture % of faculty who attend orientation.</td>
</tr>
<tr>
<td>Increase the number of students receiving tutoring services by 10% during the AY 2016-2017.</td>
<td>The number of students receiving tutoring will increase from 100 in AY 2015-2016 to 110 in AY 2016-2017.</td>
<td>Tutoring schedules and list of students receiving tutoring will be compared to previous AY.</td>
</tr>
<tr>
<td>Student will be able to demonstrate knowledge of the financial aid process after attending a Financial Aid Workshop.</td>
<td>All workshop participants will answer 7 out of 10 (70%) questions correctly on survey assessment.</td>
<td>A survey instrument will be developed to measure participant knowledge of the key elements of the Financial Aid Workshop.</td>
</tr>
</tbody>
</table>

**Part II: Program Findings and Analysis**

By the end of the academic year the program review template should be completed in its entirety.

**Step 5: Findings** provide the results based on the measure used. The purpose of this section is to determine if your objectives were met. Be sure to discuss your data in relation to objectives and specifically, the target set.

**Step 6: Target** note here if the target was met, partially met or not met.

**Step 6: Analysis and Action Plan** provide a description of the results and is often referred to as “Closing the Loop”. This section is the place to highlight what your area has learned from the assessment process. This is the section to discuss how the results demonstrate achievement of your stated objectives.

If you do not meet the objective and set target don’t fret. This feedback provides data for you to decide what can be done differently. This leads perfectly into your Action Plan. The Action Plan is where you show how you “close the loop”. Essentially how will you use the results and what action will be taken based on your data. Please remember to include any resources needed within your Action Plan.

The following questions are included in the Action Plan section:

1. Based on the results, what are the strengths and challenges in this area/program/service?
2. Based on your analysis of the results, what improvements will be implemented in order to improve this area/program/service? Please outline the time frame, person responsible, and resources needed to support these improvements.
3. Based on the strengths, challenges and proposed improvements what objectives, either existing or new, will be a priority for the next assessment cycle?

Closing the loop is the most difficult step and is typically where assessment can break down. Assessment is of little value if it is not used as a tool for improvement.
Timeline
Due to revisions in the institutional effectiveness process, the current process makes it easier to centralize the college's objectives. It also makes it easier to monitor the status of each objective during the year.

By September 30, of each academic year, the Office of Institutional Research and Assessment will email, to the unit administrator or designee, the annual review template.

Within 30 days, the unit administrator or designee will 1) define unit objectives, (2) state performance target for each objective, and (3) state how you plan to measure each objective and its target. In addition the completed information must be reviewed and approved by the Vice President who oversees the unit.

By May 15, of each academic year, the annual review template needs to be completed in its entirety. There are certain departments that will submit their reviews at the end of the fiscal year dependent on VCCS reporting requirements. The findings and results from the measurements chosen by for each objective should be completed along with the questions that are a part of the Action Plan section. Once completed please email the template to the Office of Institutional Research and Assessment.

The Office of Institutional Research and Assessment will collect and compile all templates and present them to the respective standing committee by their second fall meeting.

Faculty Section: Educational Program Review

The primary goal of the College is to help students learn. In order to do this the material taught must be relevant, comprehensive, and current. The order in which the courses are sequenced in programs must be coherent. Course and program objectives must be established and designed to prepare students to achieve their educational goals, whether that be employment or transfer.

Responsibility
The assessment process at PDCCC involves a wide array of individuals. This ensures that important insights and experience is shared and it promotes broader ownership in the assessment process. At PDCCC the faculty take the lead in completing program reviews with the academic deans playing a vital supportive and supervisory role.

Assessing student outcomes for programs is the most effective way to determine whether PDCCC's programs are accomplishing the goals and objectives set forth for each program's review. A careful analysis of the results of the students' assessment lets faculty and administration know where improvements need to be made.

Educational Program Review

Educational Program review is an opportunity to consider where programs need to be and to decide what needs to be done now to make sure programs continue to meet the needs of students and employers. It validates that students are learning what we say they are learning. The program review is based on five-years of student outcomes assessments.
When assessing your program, you should incorporate in the program assessment any additional factors and/or disciplines affecting the program. These factors to assess could include: off-campus/distance learning courses, transfer of students from your program to other institutions, dual credit, vocational articulation agreements, and the effectiveness of student development services or developmental courses.

The program review process addresses program productivity, goals and objectives, student outcomes, the curriculum, and instruction. It assists the program lead faculty in evaluating the program and seeing how it interrelates with other areas of the college.

The assessment of educational programs process includes:
- Establishing measurable student learning outcomes (SLO)- all of PDCCC programs have established SLOs but they should be continuously reviewed and refined
- Ensuring that students have sufficient opportunities to achieve those outcomes
- Gathering, analyzing, and interpreting evidence to determine how well student learning matches the expected SLOs
- Using the collected information to improve student learning

Please reference the following appendixes as you work through the educational program review process:

Appendix B: Bloom’s Taxonomy
Appendix C: Development Student Learning Outcomes
Appendix D: Assessment of Student Learning
Appendix E: Creating Student Learning Outcomes with Bloom’s Taxonomy
Appendix H: Academic Program Review Template

The following will walk you through each section of the Academic Program Review Template (Appendix H).

**Section I: Program Review Summary**
This section provides information on the program review process and provides a succinct and clear overview of the data and summary that will be completed in the subsequent sections. Although this section appears first in the template it should be the final piece of the template completed.

**Section II: Program Purpose**
All educational programs and academic plans have an established program purpose. If the program purpose exists it will be preloaded onto your template by the Office of Institutional Research and Assessment. Review the plan purpose for accuracy and relevancy.

Indicate if the program prepares students for transfer or employment and the characteristics of students for whom this program is designed. If your program is a transfer program list articulation agreements that exist with four-year institutions. If your program is a career and technical education (CTE) program and designed for employment, provide the occupations for which your program prepares students.

**Section III: Program Productivity**
The data in this section will be furnished and preloaded onto the template. Please review all the information and present any questions to the Office of Institutional Research and Assessment.
The data presented in this section includes: program enrollment, program retention, graduates, and course completion rates.

In addition, the State Council of Higher Education (SCHEV) productivity data is provided. SCHEV defines productivity of degree programs and certificates in terms of the number of graduates and FTE production. Degree, Certificates and Career Studies Certificate programs must meet the SCHEV productivity guidelines. Below are the standards that have been set by SCHEV for institutions under 1,800 FTES:

<table>
<thead>
<tr>
<th>SCHEV’s Standards for VCCS Degree and Certificate Programs For Institutions under 1800 FTES</th>
<th>FTES</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer (AA&amp;S)</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>AAS Agriculture &amp; Natural Resources, Business, Arts &amp; Design, Public Service Technologies</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>AAS Engineering, Mechanical, and Industrial Technologies</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>AAS Health Technologies</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Certificates &amp; Diplomas</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: Degree Production = the minimum annual average number of graduates, over 3 years
FTE Production = the minimum annual average number of full-time equivalent students enrolled, over 3 years

**Section IV: Student Learning**

SLOs will be provided on the template. Please take the time to ensure that the SLOs are accurate, current, and relevant. The following information should be used when reviewing, creating, updating or modifying any of your program’s SLOs. If your program does not have defined SLOs or you would like to add additional SLO please see Appendix B, C, D, and F on guidance on developing SLOs.

An SLO identifies the specific measurable knowledge, skills, behaviors, attitudes, or values that students should possess upon completion of their program. Typically, SLOs are composed with the stem, “The student will…”. It is important to develop assessment tools that measure these, in a way that does not hinder individual teaching styles or methods and promotes sharing of best practice and good ideas.

Much like Section I, Section IV should be completed at the end of the program review process and provides a summary of the results as it relates to SLOs.

As directed on the Program Review Template you are asked to complete Appendix A.1 prior to completing section IV. Appendix A.1, see below, provides the avenue for you to state each SLO, the status of that SLO, a target, measure, and report on your findings.

**APPENDIX A.1**

<table>
<thead>
<tr>
<th>SLO#</th>
<th>Status*</th>
<th>Student Learning Outcome</th>
<th>Target (What does success look like?)</th>
<th>Measure (Source of Evidence)</th>
<th>Findings</th>
</tr>
</thead>
</table>

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The status of your SLO can be New (N), Ongoing (O), Carried Over from Prior Year (PY) or Revised from Prior Year (R).

**Section V: Target- What does success look like?**
The target is the level of performance on the given measure that you will use as a threshold for achievement of the outcome. Targets should be realistic, yet aspirational. Typically, targets include a numeric value.

**Section VI: Measures-Source of Evidence**
Measures are the sources of evidence you will use to determine the extent to which your program is achieving its SLOs. Measures can be direct, indirect, qualitative and quantitative.

Below are some examples of the types of measures you might use:
- Direct measures—objective measures of knowledge or ability. Examples include students’ scores on national standardized exams such as the Core Competencies Assessments, Certification Exams, Pre-test/Post-test Evaluation, Comprehensive Exams, Course-Embedded Assessment, Student Portfolios, Employer evaluations, Use of Rubrics, etc.
- Indirect measure—subjective measures of beliefs, attitudes and perceptions. Indirect measures are often used to supplement direct measures. Examples include questionnaires and survey of student’s perceptions, such as the CCSSE, graduating Student Questionnaire, Graduate Follow-up Survey, Alumni Survey, Employer surveys, etc.
- Qualitative—measures that contain non-numerical data such as verbal or written feedback from students/staff/faculty and can include focus groups and exit interviews of graduates.
- Quantitative—measures that collect numerical data that can be analyzed statistically.

Below are examples of outcomes, measures, and targets:

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Target (What does success look like?)</th>
<th>Measure (Source of Evidence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates from the EMS program will demonstrate the ability to comprehend, apply, and evaluate clinical information relative to his/her role as an entry-level EMT-intermediate or Paramedic</td>
<td>90% of graduates who attempt the licensure exam will pass</td>
<td>Licensure exam</td>
</tr>
<tr>
<td>90% pass rate (C or better)</td>
<td>Exit Exam (comprehensive program examination administered at the end of last semester)</td>
<td></td>
</tr>
<tr>
<td>Graduates will demonstrate competency in oral communication skills.</td>
<td>85% of oral presentations rated by a panel of reviewers will be scored at or above the “Acceptable” level, using a rubric developed by the lead faculty.</td>
<td>Faculty Developed Rubric</td>
</tr>
<tr>
<td>80% of returned employer surveys positively evaluate</td>
<td>Alumni employer surveys</td>
<td></td>
</tr>
</tbody>
</table>

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| Industrial Technology graduates will demonstrate critical thinking skills necessary for competency in their major. | Students will score in the 70th percentile or better on the critical thinking portion of the Exit Exam taken in their capstone course. | Scores on the Major Field Test |

**Section VII: General Education**

The Virginia Community College System (VCCS) defines general education as "...that portion of the collegiate experience that addresses the knowledge, skills, attitudes, and values characteristic of educated persons. It is unbounded by disciplines and honors the connections among bodies of knowledge. VCCS degree graduates will demonstrate competency in the following general education areas: communication, critical thinking, cultural and social understanding, information literacy, personal development, quantitative reasoning, and scientific reasoning." [VCCS Policy Manual Section 5.0.2].

All potential degree candidates participate in core competency assessed in the semester in which they graduate (See Appendix I: Core Competency Assessment Timeline). The results of these core competency assessments are included in this section.

Results of these assessment and pertinent results from the Graduate Survey are made available for each degree program.

The specific general education goals and student learning outcomes that all VCCS degree graduates will be able to demonstrate competency and that each community college needs to assess are the following:

**Communication (written and oral communication):**
A competent communicator can interact with others using all forms of communication, resulting in understanding and being understood. Degree graduates will demonstrate the ability to: (a) understand and interpret complex materials; (b) assimilate, organize, develop, and present an idea formally and informally; (c) use standard English; (d) use appropriate verbal and non-verbal responses in interpersonal relations and group discussions; (e) use listening skills; and (f) recognize the role of culture in communication.

**Critical Thinking:**
A competent critical thinker evaluates evidence carefully and applies reasoning to decide what to believe and how to act. Degree graduates will demonstrate the ability to: (a) discriminate among degrees of credibility, accuracy, and reliability of inferences drawn from given data; (b) recognize parallels, assumptions, or presuppositions in any given source of information; (c) evaluate the strengths and relevance of arguments on a particular question or issue; (d) weight evidence and decide if generalizations or conclusions based on the given data are warranted; (e) determine whether certain conclusions or consequences are supported by the information provided, and (f) use problem solving skills.

**Cultural and Social Understanding:**
A culturally and socially competent person possesses an awareness, understanding, and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national, and global communities. Degree graduates will demonstrate the
ability to: (a) assess the impact that social institutions have on individuals and culture-past, present, and future; (b) describe their own as well as others' personal ethical systems and values within social institutions; (c) recognize the impact that arts and humanities have upon individuals and cultures; (d) recognize the role of language in social and cultural contexts; and (e) recognize the interdependence of distinctive world-wide social, economic, geo-political, and cultural systems.

Information Literacy:
A person who is competent in information literacy recognizes when information is needed and has the ability to locate, evaluate, and use it effectively (adapted from the American Library Association definition). Degree graduates will demonstrate the ability to: (a) determine the nature and extent of the information needed; (b) assess needed information effectively and efficiently; (c) evaluate information and its sources critically and incorporate selected information into his or her knowledge base; (d) use information effectively, individually or as a member of a group, to accomplish a specific purpose; and (e) understand many of the economic, legal, and social issues surrounding the use of information and access and use information ethically and legally.

Personal Development:
An individual engaged in personal development strives for physical well-being and emotional maturity. Degree graduates will demonstrate the ability to: (a) develop and/or refine personal wellness goals; and (b) develop and/or enhance the knowledge, skills, and understanding to make informed academic, social, personal, career, and interpersonal decisions.

Quantitative Reasoning:
A person who is competent in quantitative reasoning possesses the skills and knowledge necessary to apply the use of logic, numbers, and mathematics to deal effectively with common problems and issues. A person who is quantitatively literate can use numerical, geometric, and measurement data and concepts, mathematical skills, and principles of mathematical reasoning to draw logical conclusions and to make well-reasoned decisions. Degree graduates will demonstrate the ability to: (a) use logical and mathematical reasoning within the context of various disciplines; (b) interpret and use mathematical formulas; (c) interpret mathematical models such as graphs, tables and schematics and draw inferences form them; (d) use graphical, symbolic, and numerical methods to analyze, organize, and interpret data; (e) estimate and consider answers to mathematical problems in order to determine reasonableness; and (f) represent mathematical information numerically, symbolically, and visually, using graphs and charts.

Scientific Reasoning:
A person who is competent in scientific reasoning adheres to a self-correcting system of inquire (the scientific method) and relies on empirical evidence to describe, understand, predict, and control natural phenomena. Degree graduates will demonstrate the ability to: (a) generate an empirically evidenced and logical argument; (b) distinguish a scientific argument from a non-scientific argument; (c) reason by deduction, induction and analogy; (d) distinguish between causal and correlational relationships; and (e) recognize methods of inquiry that lead to scientific knowledge.

Section VIII: Student Outcome
This section provide information on student outcomes and is designed to help faculty determine whether PDCCC's programs are accomplishing program goals as it relates to the transferability or employment of its graduates. The data in this section will be provided by the Office of

11/05/03
Employment: For CTE programs the focus is on the employment status of program graduates. Through an agreement between the VCCS and the Virginia Employment Commission (VEC), VCCS colleges are able to obtain employment information for individuals previously enrolled at a VCCS college. All PDCCC graduates of CTE programs are queried against VEC data. The purpose of the query is to determine the employment status of CTE graduates in the two quarters following their graduation from PDCCC.

It is important to note that there are limitations to the VEC data that include: (1) the exclusion of Federal employees, farm workers, military, incarcerated, and self-employed, (2) limited data on individuals employed in states outside of Virginia, (3) exclusion of date of hire, occupation, hourly wages, or time worked, (4) the employer addresses do not necessarily provide the Virginia location of an individual’s employment, but rather a mailing address for the employer which could be in another state or even another country, and (5) students who do not provide their social security numbers cannot be linked to the data.

For Transfer programs the focus is obviously transferring to a four year institution. Through the National Student Clearinghouse (NSC) a list of PDCCC graduates are submitted and queried against other participating NSC institutions to obtain subsequent college enrollment, transfer and degree data.

Subsequent Enrollment: Subsequent enrollment is enrollment at an institution of higher education in the semester following graduation. Subsequent enrollment can include enrollment at either a four year or two year institution, including re-enrollment at PDCCC.

Transfer Information: Transfer enrollment varies from subsequent enrollment in that transfer enrollment are those students who enroll at a four year institution the semester following graduation. Transfer enrollment is specific to four-year institutions and does not include enrollment at two-year institutions including PDCCC.

Section IX: Student Satisfaction and Perception of Program Quality
This section provides feedback from your program graduates on their experiences in the academic program. Currently feedback is collected on course availability, faculty advising, instruction, job placement and overall academic experience. Additional items were added to the Graduate Survey so that more feedback will be available.

Section X: Use of Assessment Findings to Improve Instruction
In this section you are asked to address what, if any, changes that have occurred since the last time your program was reviewed and what the results were. Specifically how the assessment findings were used to improve the quality of instruction and student services in the program. In addition, you are asked to describe the extent to which students achieve current program goals, describing at least one way in which an external measure is used to document student achievement of the program goals.

The same question is asked as it relates to your program’s SLOs. Describe the extent to which students achieve current student-learning outcomes, describing at least one way in which an external measure is used to document student achievement of the student-learning outcomes.

Section XI: Review of Curriculum
A series of questions are presented to assess the process for curriculum review. The section is divided into two parts, the first set of questions are designed specifically for CTE programs and the second set are for transfer programs.

Review of Curriculum for CTE Programs questions include:
1. Does this program meet the workforce needs of local employers?
2. Do graduates find employment in the field the program(s) prepared them for?
3. What problems, if any, do graduates encounter as they enter the workforce?
4. Do local employers have unmet training/educational needs that this program could/should meet?
5. Does the job market data from PDCCC’s service region indicate that a need continues to exist for this program?
6. If PDCCC did not have this program, what would the impact be on our service region?
7. What is the plan for the future direction of this program?
8. Please review the minutes of your advisory committee for the last year – are there any trends, any concerns, and if so what has been addressed?

Advisory committees for CTE programs should be involved in reviewing curriculum (See Appendix J: Program Advisory Committee Checklist). Often advisory committees can give valuable insight by reviewing the goals and objectives to help plan future directions of a program. By utilizing the advisory committee, local business/industry are getting a voice in whether the curriculum is meeting their needs. Copies of the Program Advisory Committee minutes should be easily available as supporting documentation of the assessment process. Be sure to also include its recommendations under the action plan.

Review of Curriculum for Transfer Programs questions include:
1. Describe the formal articulation agreements that exist between PDCCC and transfer institutions for this program(s).
2. Do students successfully transfer to four-year schools?
3. What problems, if any, do students encounter as they transfer to four-year colleges/universities?
4. Describe the trends in transfer rates to the major four-year colleges/universities to which PDCCC transfer.
5. Are there unmet transfer needs that this program(s) should/could meet?
6. Does the transfer information indicate that a need continues to exist for this program(s)?
7. If PDCCC did not have this program(s), what would be the impact on our service region?

Section XII: Program Strengths and Weaknesses
This section is self-explanatory, based on the data provided and collected identify your programs strengths and weaknesses.

Section XIII: Action Plan
An action plan for implementing improvements should be developed and documented in this section. The action plan should address the strengths and weaknesses outlined in the previous section. Action plans should include specific plans for implementing improvements, expected outcomes, timelines, person responsible, the resources needed and the measure. The action plan is where you show how you “closed the loop”. Essentially how will you use the results and what action will be taken based on your data. Closing the loop is the most difficult step and is typically where assessment can break down. Assessment is of little value if it is not used as a tool for improvement.
Below is the Action Plan section taken from the program review template:

<table>
<thead>
<tr>
<th>Action Plan</th>
</tr>
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<tbody>
<tr>
<td>List specific actions that will be taken to maintain program strengths and address program weaknesses. Describe what steps will be taken in the next three years to advance the program. For each action, specify the expected outcome, the expected time line for completion, the person(s) who will be responsible, the resources needed, and the criterion/criteria that will be used to determine if the action was effective. At least once action plan should address program SLOs. You will be asked to provide a status update on all action plans.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Issue/Concern</th>
<th>Specific Action(s)</th>
<th>Expected Outcomes</th>
<th>Time Frame</th>
<th>Person(s) Responsible</th>
<th>Resources Needed</th>
<th>Measures</th>
<th>Status of Action Plan</th>
</tr>
</thead>
</table>

**Section XIV: Dean Input**

This section is where your academic dean will provide feedback and comments on the targets and measures you set for your programs SLOs, the program’s strengths and weakness, and the action plans you established.

**Timeline**

Due to revisions in the institutional effectiveness process, the current process makes it easier to centralize the college’s goals and objectives. It also makes it easier to monitor the status of each objective during the year.

By September 30, of each academic year, the Office of Institutional Research and Assessment will email to the program lead faculty the program review template.

Within 30 days of receipt program lead faculty will 1) review/define the program’s student learning outcomes, (2) state performance target for each outcome, and (3) state how one plans to measure each outcome and its target. This completed information will be reviewed and approved by the Academic Dean who oversees the unit.

By May 15 of each academic year, the program review template needs to be completed in its entirety. This includes a report on the finding, all questions should be addressed and answered, and an action plan completed. The completed template should be emailed to the Office of Institutional Research and Assessment Office.

The Office of Institutional Research and Assessment will collect and compile all review and present them to the respective standing committee by their first fall meeting.
Appendix A: PDCCC Strategic Plan Goals, Objectives and Strategic Actions

Goal I: New and revised academic programs, including “signature” programs, producing graduates/completers who are prepared for in-demand careers in the regional workforce or successful transfer to other two-year or four-year institutions.

Objective A
By June 2018, PDCCC will have implemented at least six (6) new degrees, certificates, career studies certificates, or non-credit workforce industry trainings leading to a credential.

SA 1 Obtain VCCS and SCHEV approval for Mechatronics degree. [Dean of CTE Programs, VP A&SD]
SA 2 Obtain SCHEV approval for PDCCC’s General Studies degree as a Transfer Degree. [Dean, Transfer Programs; VP A&SD]
SA 3 Gain approval for implementation of EMS-Paramedic program. [Dean, Nursing & Allied Health]
SA 4 Explore and pursue development/expansion of credit and non-credit programs in the following disciplines: Agriculture/Agribusiness, Customer Service (addressing business, job readiness and employability skills), Manufacturing Technician 1, Machining, Instrumentation, Industrial Systems/Maintenance, Information Technology, Expanded Truck Driver Training, Green Energy/Sustainability, Cybersecurity, Culinary, Physical Therapy Assistant, Carpentry, Masonry, Plumbing, Construction Trades, Sales/Retail and Hospitality, and other programs as recommended by the Regional Workforce Development Council, Program Advisory Committees, Educational Programs Committee, and President’s Advisory Council. [Deans, VP Workforce Development, VP A&SD]
SA 5 As programs are developed, explore transferability, partnerships, and new or revised articulation and transfer agreements with four-year institutions that will enhance and increase the transfer options available to PDCCC students. [Deans, VP A&SD]
SA 6 Identify at least one program to develop as a “signature” program, and associated marketing and recruitment strategies. [VP A&SD, Deans, VP IA]

Objective B
Refine PDCCC’s program offerings such that its Degrees, Certificates, and Career Studies Certificates meet PDCCC projections (for new and revitalized programs) and VCCS and SCHEV expectations for productivity.

SA 1 Discontinue programs that no longer meet productivity criteria and regional workforce needs. Programs for consideration include American Sign Language, Religious Studies, Legal Office, Warehouse and Distribution and other programs as determined by the Educational Programs Committee, A&SD Leadership Team, and Presidents Advisory Council. [VP A&SD]
SA 2 Revitalize “young” programs that are struggling to meet enrollment and completion targets, including trades, logistics management, robotics, electronic health records, and warehouse and distribution. [Lead Faculty, Deans]

Objective C
Implement at least 2 additional ‘1+1’ programs.
SA 1 Work with other VCCS community colleges to develop agreements similar to the agreement with TCC for Studio Arts. [Deans, VP A&SD]
**Objective D** Implement a Zx23 Certificate and Zx23 Degree by Spring 2018, utilizing Open Educational Resources, in order to provide two programs with classes for which there are no associated textbook costs.

- **SA 1** Participate in the VCCS Zx23 project in 2015-16 to develop PDCCC’s General Education Certificate as a “Z_Degree” to be implemented in Spring 2016. [Project Lead, VP A&SD]
- **SA 2** Identify an associate degree program to develop as a Z_Degree and secure funding for development. [Deans, Lead Faculty, VP A&SD, Grants Coordinator]

**Objective E** Pilot integration of “employability skills” development into all CTE programs developed over the next three years.

- **SA 1** Develop and pilot a plan based on findings and recommendations of VCCS workgroup. [TBD]

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**Goal II** Increased enrollment, retention, and completion rates.

**Objective A** Increase PDCCC’s credit application yield for program-seeking students from 41% to the VCCS target of 60% by 2017-18.

- **SA 1** Employ a Full Time Recruitment and Admissions Specialist [Dean, Student Services]
- **SA 2** Develop, implement, and manage a system of proactive follow-up with prospective students from point of interest, through application, to registration. [Recruitment and Admissions Specialist]
- **SA 3** Aggressively market and promote new programs, programs targeted with Perkins funding, and programs targeted for revitalization. [VP IA, Lead Faculty]

**Objective B1** Increase PDCCC’s total annual headcount from 1813 (2014-15 baseline) to 1995 by the end of the 2017-18 academic year.

**Objective B2** Increase PDCCC’s total annual FTE from 780 (2014-15 baseline) to 858 by the end of the 2017-2018 academic year.

**Objective B3** Increase PDCCC’s total fall to spring retention rate for program-placed students from 72.8% (2014-15 baseline) to 75% or greater by Spring 2018.

**Objective B4** Increase PDCCC’s total fall to fall retention rate for program-placed students from 31% (F13 to F14 baseline) to 43% (F16 to F17).

**Objective B5** Increase the number of credit degrees, certificates, and career studies certificates awarded from 296 (2014-15 baseline) to 340 (2017-18).

**Objective B6** Increase the number of annual graduates from 217 in 2014-15 to 262 in 2017-18.

- **SA 1** Fully implement High School Career Coach and GED strategies and meet all obligations under the MOU as a pilot college for the Rural Virginia Horseshoe Initiative. [VP A&SD, VP IA, VP Workforce Development, Admissions and Recruitment Specialist, HS Career Coach Supervisor]
- **SA 2** Seek a Title III Strengthening Institutions grant in the 2016 submission cycle for retention-focused initiatives that include scaling up the effective strategies implemented by the College Success Coaches program and the Student Support Services Program [VP A&SD, Grants Coordinator]
- **SA 3** Continue to provide intensive services to at-risk students through the Success Coach Program; the Student Support Services Program (tutoring, academic counseling, career counseling, financial aid counseling, cultural enrichment, and transfer counseling; and expansion of SAILS (early alert) implementation to all courses. [Dean, Student Services; Director, SSS Program; SAILS Implementation Liaison]
- **SA 4** Implement processes to confer degrees and certificates at the conclusion of each summer, fall, and spring term (rather than in May only). [Dean, Student Services]
SA 5 Fully implement participation in the federal loan program in 2015-16. [Director, Financial Aid, VP A&T]

**Objective C1** Grow the number of scholarships available to students from 40 in 2014-15 to 45 in 2017-18

**Objective C2** Increase the funds available for scholarships from $50,000 to in 2014-15 to $60,000 in 2017-18.

**Objective C3** Secure $16,000 per year for endowed scholarships.

SA 1 Seek additional unrestricted funds for scholarships from individual and business donors. [VP IA]

**Objective E** Pilot a childcare partnership

SA 1 Identify a business or community organization willing to partner with PDCCC in providing childcare to students, and develop an agreement to pilot a childcare opportunity with a specific group of students. [VP A&T]

SA 2 Identify a business or community organization(s) willing to partner with PDCCC to create additional educational opportunities for PDCCC students studying early childhood education. [Dean, Occupational and Technical Programs]

**Objective F** Pilot a weekend program in which students can earn a career studies certificate, certificate, or degree by taking classes taking classes on a compressed weekend schedule.

SA 1 Identify an academic program to pilot on a weekend schedule. [Deans, VP A&SD].

SA 2 Develop schedule and implementation plan. [Dean and Lead Faculty]

**Objective G** Pilot a partnership to provide transportation between campuses.

SA 1 Explore options for providing affordable transportation between campuses, including partnering with regional transportation providers for reduced rate or voucher for PDCCC students. [VP A&T]

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**Goal III** Thriving Dual Enrollment Program in partnership with regional public and private schools, and the homeschool community.


**Objective A2** Increase dual enrollment FTE from 149 in 2014-15 to 170 in 2017-18.

**Objective B** Increase the number of degrees and certificates awarded to DE students from 18 in 2014-15 to 36 in 2017-18.

SA 1 Establish dual enrollment agreements with two additional schools/academies. [VP A&SD, Dual Enrollment Coordinator]

SA 2 In partnership with Isle of Wight County Public Schools, establish dual enrollment offerings for their proposed STEM Early College initiative. [Deans, Dual Enrollment Coordinator]

SA 3 Fully implement the principles detailed in the Governing Principles for Dual Enrollment between Virginia’s Public Schools and the Virginia Community College System. [VP, A&SD; Deans, Dual Enrollment Coordinator]

SA 4 Implement additional programs in 3 public or private schools/school systems in which students can earn a degree, certificate, career studies certificate or industry certification concurrent with high school graduation. [Deans, DE Coordinator, VP Workforce, VP A&SD]

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**Goal IV** A successful Compliance Certification and QEP submitted to SACSCOC in March 2018.

**Objective A** PDCCC’s Compliance Certification will be submitted complete and on-time, and in compliance with all standards.
SA 1 Conduct an internal compliance audit in FY 2016. [Compliance Certification Coordinator, VPs, President]

SA 2 Review and revise shared services MOUs as needed to delineate the expectations for assessment/institutional effectiveness and other reporting that will be needed for SACSCOC reporting. [VP Administration and Technology]

SA 3 Implement complete cycles of assessment of all units and all academic programs. [Unit Supervisors, Academic Program Lead Faculty, Coordinator of Institutional Research and Assessment]

SA 4 Implement complete cycles of assessment of general education. [Dean, Transfer Programs; General Education Faculty, Coordinator of Institutional Research and Assessment]

Objective B PDCCC’s Quality Enhancement Plan (QEP) will be of high-quality, submitted complete, on-time, and in accordance with SACSCOC requirements.

SA 1 Develop and implement an inclusive process and timeline for QEP development in accordance with SACSCOC guidelines in Fall 2015. [VP A&SD and SACSCOC Compliance Certification Coordinator]

Goal V Budgetary and staffing stability and growth.

Objective A Reduce the number of currently grant-funded full-time positions from 13 to 6 by FY 2018.

SA 1 Increase tuition revenue, unrestricted gifts, and productivity relative to the objectives based funding formula. (See Goals I, II, and III)

Objective B Secure $50,000 per year in unrestricted funding for new program startup.

Objective C Secure $3000 in unrestricted funding for faculty and staff professional development

Objective D Secure $25,000 per year of the RVHI to support GED Scholarships

Objective E Secure $125,000 per year of the RVHI to support RVHI Coaches

SA 1 Employ a FT grants professional. [VP IA]

SA 2 Review and revise, as needed, all policies and procedures pertaining to faculty and staff professional development to identify sources of funding, amount of funds, opportunities routinely supported by the college and at what level, etc. [VP Administration and Technology]

Goal VI College is involved in local and regional economic development initiatives to recruit, retain, and expand local businesses and industries.

Objective A Increase the number of employers served through customized courses, open enrollment, and consulting services from 38 in 2014-15 to 60 in 2017-18.

SA 1 Support local, regional, and state economic development partners by presenting at business recruitment session presentations and follow-up meetings. [VP Workforce Development]

SA 2 Collaborate with regional workforce partners to design a “training to job” format to ensure high quality job candidates, a program that can be replicated and customized throughout multiple business sectors. [VP Workforce Development]

SA 3 Collaborate with regional workforce partners to implement an Employability Skills program throughout the PDCCC Service Region. [VP Workforce Development]

Objective B Increase the number of non-credit credentials earned from 208 in 2014-15 to 230 in 2017-18.

SA 1 Based on input from the Regional Workforce Development Council, regional and local economic development leaders, and the region’s Workforce Investment Board,
identify, design, and provide training that leads directly to enhanced employment opportunities through graduates’ success in acquiring industry-recognized credentials. [VP Workforce Development, VP A&SD]

**Goal VII** Efficient and effective services and facilities that support enrollment, retention, and completion.

- **Objective A** Fully participate in shared services per the VCCS timeline for implementation.
- **Objective B** Upgrade facilities to enhance programs and services.
  - **SA 1** Pursue facilities upgrades to Franklin Campus. [VP A&T]
  - **SA 2** Pursue facilities upgrades to Suffolk Campus to enhance CTE programs. [VP A&T]
Appendix B: Bloom’s Taxonomy

Bloom’s taxonomy is a classification system used to define and distinguish different levels of cognition, i.e., thinking, learning, and understanding. Cognitive learning is demonstrated by knowledge recall and the intellectual skills: comprehending information, organizing ideas, analyzing and synthesizing data, applying knowledge, choosing among alternatives in problem-solving and evaluating ideas or actions. The original Bloom’s taxonomy was published in 1956 and in 2001 a revised version was released.

![Diagram of Bloom’s Taxonomy](image-url)
### Bloom's Taxonomy of Measurable Verbs

<table>
<thead>
<tr>
<th>Remembering (Knowledge): can the student recall or remember the information?</th>
<th><strong>Level I: The student will be able to:</strong> Acquire, Arrange, Collect, Count, Define, Describe, Distinguish, Draw, Duplicate, Examine, Identify, Indicate, Label, List, Locate, Memorize, Name, Quote, Read, Recall, Recite, Recognize, Record, Relate, Repeat, Reproduce, Select, Show, State, Tabulate, Tell, Trace, Write.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding (Comprehension): can the student explain ideas or concepts?</td>
<td><strong>Level II: The student will be able to:</strong> Associate, Change, Classify, Compute, Conclude, Contrast, Convert, Demonstrate, Describe, Determine, Differentiate, Discuss, Distinguish, Draw, Estimate, Explain, Extend, Extrapolate, Give an example, Fill in, Identify, Illustrate, Infer, Interpolate, Interpret, Locate, Make, Paraphrase, Predict, Prepare, Read, Rearrange, Reorder, Recognize, Rephrase, Report, Represent, Restate, Review, Revise, Rewrite, Select, Simplify, Summarize, transform, Translate.</td>
</tr>
<tr>
<td>Applying (Application): can the student use the information in a new way?</td>
<td><strong>Level III: The student will be able to:</strong> Apply, Calculate, Change, Chart, Choose, Chose procedures, Classify, Collect information, Complete, Construct, Contribute, Demonstrate, Develop, Discover, Dramatize, Employ, Establish, Examine, Experiment, Find solutions, Generalize, Illustrate, Implement, Interpret, Modify, Operate, Order, Organize, Perform, Predict, Prepare, Relate, Report, Restate, Restructure, Review, Produce Project, Provide, Schedule, Show, Sketch, Solve, Transfer, Translate, Use, Utilize, Write.</td>
</tr>
<tr>
<td>Analyzing (Analysis): can the student distinguish between the different parts?</td>
<td><strong>Level IV: The student will be able to:</strong> Analyze, Break down, Appraise, Arrange, Conclude, Contract, Categorize, Classify, Compare, Connect, Contrast, Correlate, Criticize, Debate, Deduce, Detect, Determine, Diagram, Differentiate, Discriminate, Distinguish, Divide, Examine, Experiment, Explain, Generalize, Identify, Infer, Inspect, Inventory, Order, Organize, Outline, Prioritize, Question, Recognize, Select, Separate, Solve, Summarize, Test.</td>
</tr>
<tr>
<td>Evaluating (Synthesis): can the student justify a stand or decision?</td>
<td><strong>Level V: The student will be able to:</strong> Appraise, Argue, Assemble, Build, Collaborate, Classify, Collect, Combine, Compile, Compose, Construct, Create, Deduce, Defend, Derive, Design, Devise, Detect, Develop, Document, Evaluate, Facilitate, Formulate, Generate, Generalize, Integrate, Invent, Judge, Select, Support, Manage, Modify, Negotiate, Organize, Originate, Plan, Prepare, Prescribe, Produce, Propose, Rearrange, Relate, Reorganize, Rewrite, Specify, Substitute, Synthesize, tell, Transmit, Unite, Value, Write.</td>
</tr>
<tr>
<td>Creating (Evaluation): can the student create new product or point of view?</td>
<td><strong>Level VI: The student will be able to:</strong> Assemble, Appraise, Argue, Assess, Choose, Compare, Conclude, Consider, Construct, Contrast, Convince, Create, Critique, Decide, Defend, Determine, Discriminate, Develop, Estimate, Evaluate, Explain, Formulate, Grade, Judge, Justify, Measure, Predict, Rank, Rate, Recommend, Revise, Score, Select, Standardize, Summarize, Support, Test, Validate, Verify, Write.</td>
</tr>
</tbody>
</table>
**Watch Out for Verbs that are not Measurable:** In order for an objective to give maximum structure to instruction it should be free of vague or ambiguous words or phrases. The following lists notoriously ambiguous words or phrases which should be avoided so that the intended outcome is concise and explicit.

**Words to Avoid:** Believe, Hear, Realize, Capacity, Intelligence, Recognize, Comprehend, Know, See, Conceptualize, Listen, Self-Actualize, Depth, Memorize, Think, Experience, Perceive, Understand, Feel.

**Phrases to Avoid:** Evidence a (n), To Become, To Reduce, Appreciation for ..., Acquainted with ..., Anxiety, Attitude of ..., Adjusted to ..., Immaturity, Awareness of ..., Cognizant of ..., Enjoyment of ..., Conscious of ..., Feeling for ..., Familiar with ..., Interest in ..., Interested in ..., Knowledge of ..., Knowledgeable about ..., Understanding of ..., Self-Confident in ....


Appendix C: Developing Student Learning Outcomes

How do you write SLOs?

A student learning outcome statement needs to specify who is to perform (student), what action they are to take, and some result that must come from their action. A student learning outcome (SLOs) should:

- Refer to the College’s strategic goals when setting outcomes/objectives to ensure they reflect the College mission and purposes.
- Be written in terms of what the student/graduate will be able to do at the end of the course/program/academic year
- Keep them short and simple
- Make them specific, measurable, attainable, realistic, and timely (S.M.A.R.T)
- Establish a target performance level for success (i.e. 75% will…)
- Keep the assessment process manageable and meaningful
- You don’t have to nor should you assess everything every year.
- Assess outcomes that are meaningful. Assess enough, often enough, to demonstrate continuous improvement. Ensure that your targets are meaningful. It is okay to revise your targets to reflect progress and increased expectations of performance over time.
- Use Bloom’s Taxonomy and active verbs (create, analyze, demonstrate, etc.) (See Appendix A: Bloom’s Taxonomy)
- Reflect a combination of higher order thinking skills and supporting or enabling skills
- Be written in the positive instead of the negative
- Reflect measurable standards or reflect the basic knowledge and skills to which the student/unit will be held accountable
- For each outcome/objective, define one or more measures—triangulate. The more measures you define, the more data (evidence) you will gather.
- Use rubrics to help with analysis and action plan (See Appendix I: How to Design Rubrics for Assessment)

Lower order vs. higher order thinking skills

When defining SLOs to assess, concentrate on the skills and knowledge which are essential for a student to be considered competent at the end of the academic program.

Lower order thinking: while basic recall of facts is important to any program, your assessment results will be more meaningful if you have chosen a more complex skill. Moreover, it will likely reflect what is truly important in your program. Often facts are important because we want students to be able to do something with that information. Lower order types of leaning outcomes may be essential to reaching higher level outcomes. Make sure that you define a range of outcomes which reflect higher order, complex application tasks in addition to any essential supporting learning outcomes which may reflect lower order thinking skills.

Higher order thinking: SLOs which reflect higher order thinking skills use action verbs that are observable and measurable, as well as ones that reflect higher order skills. Examples of such verbs are solve, design, write, compare, apply, decide, draw, persuade, investigate, and evaluate.

What are some basic examples of well-defined student learning outcomes?

Unclear student learning outcome statement:
The students will understand democracies.
The students will appreciate art from other cultures.
The students will learn about the law of relativity.

The above statements are not well-defined learning outcomes since they are not measurable. However, these statements can be modified to become well-defined learning outcomes as follows:

The students will be able to describe the major theories of democracy.
The students will be able to identify the characteristics of art from other cultures.
The students will be able to explain the major tenets of the law of relativity.

Models to assist in creating and writing student outcome assessments include the A-B-C-D Model (see below).

### A-B-C-D Model

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> = Audience</td>
<td>Who is performing the action? Learning objectives are always stated in terms of student outcomes.</td>
<td>Following completion of the Science program, the student should be able to plot a quadratic equation using a graphing calculator in two minutes or less.</td>
</tr>
<tr>
<td><strong>B</strong> = Behavior</td>
<td>What will the student be able to do? Use Bloom’s Taxonomy and action verb that describe an accomplishment that is measurable.</td>
<td>Following completion of the Science program, the student should be able to plot a quadratic equation using a graphing calculator in two minutes or less.</td>
</tr>
<tr>
<td><strong>C</strong> = Condition</td>
<td>Give the conditions under which the performance will occur. Be specific.</td>
<td>Following completion of the Science program, the student should be able to plot a quadratic equation using a graphing calculator in two minutes or less.</td>
</tr>
<tr>
<td><strong>D</strong> = Degree</td>
<td>Describe the minimum criteria for acceptable student performance.</td>
<td>Following completion of the Science program, the student should be able to plot a quadratic equation using a graphing calculator in two minutes or less.</td>
</tr>
</tbody>
</table>

Writing objectives isn’t creative writing: Just follow a formula!

Given [Conditions] the [Audience] will [Behavior] by [Degree].

[Audience] will [Behavior] to [Standard] when provided [Conditions].

How do we choose which SLOs to assess?
To select SLOs to assess for this process, consider the following questions:

What are most crucial outcomes for the program?
Are there topic areas or where students struggle on a regular basis?
Do you have questions about a particular area of student achievement?
Are there outcomes which reflect skills or knowledge students will need in future courses or careers?
Are there outcomes which reflect Gen Ed competencies?

Identifying outcomes which reflect any of these characteristics would be a place to start. Ultimately the outcomes you select:

- Should reflect higher order thinking skills (application of knowledge or skills)
- Be agreed upon as essential and core to the program
- Be meaningful to the discipline

**How do we include a Gen Ed (Core Competency) in our SLOs?**
For courses which have a primary Gen Ed (Core Competency) component, one or two of your outcomes should reflect this competency. The outcome should also be more specific as to how the students are expected to use that skill in your program.

Five key things to remember about college-wide common core student learning outcomes for a course include the following:

- Select outcomes to assess because they are meaningful, not because they are easy to measure.
- Make sure your outcomes are expressed in terms of how students are impacted by your program.
- Make sure that your common core outcomes reflect a faculty consensus in your discipline.
- Where possible, have your outcomes reflect higher order thinking skills.
Appendix D: Assessment of Student Learning Outcomes

Part of the outcome assessment plan is choosing an assessment method and writing an assessment instrument. The assessment method is the general type of tool you will use to assess the SLO. The instrument is the actual assignment, quiz, exam, or project you will use to complete the assessment. First, you should determine what method you want to use, and then, you will develop the actual tool.

**How do we choose an assessment method and develop an assessment instrument?**
Common assessment methods include test questions (multiple choice, short answer, essay), formal writing assignments (essays, research papers, reaction/review papers), performances, and portfolios. You will need to consider a variety of factors as you choose your method, including alignment with the outcome, ability to get faculty consensus, and ease of scoring. It is difficult to separate the method from the instrument; however, it is useful to step back at this point and consider the method separately from the actual assignment. Considering the general approach to the assessment will allow you to determine the most useful method and develop a useful assessment instrument.

**Alignment**
Probably the most important consideration when choosing or developing an assessment method is whether it is aligned with the SLO. In other words, is what you are asking the students to do in your assessment going to provide you with solid evidence about whether or not they have achieved the desired outcome? If your outcome deals with a student’s ability to make a persuasive speech, a research paper is not a good instrument to measure this outcome. If you are assessing a quantitative reasoning outcome which speaks to students’ ability to interpret some particular statistical information, simply asking them to calculate something correctly will not tell you whether they have achieved that outcome.
Aligning outcomes with methods may seem like an obvious recommendation, but it is not uncommon to see a disconnect between the outcome and the assessment instrument when faculty are in the early stages of writing their outcome assessment plans. In some instances faculty end up revising their outcomes after working on their assessment instrument and that is okay.

**Ease of scoring**
We all know that writing good multiple choice questions takes a lot of time, but scoring them is fast. Writing a good essay question is less time-consuming than grading a stack of student essays. With everything we do, we need to consider how much time it will take; you should consider the time involved in scoring the instrument and reporting the data. When choosing an assessment method you must weigh time against meaningful results. It may be challenging to find the balance, but the efforts of going through an outcome assessment plan won’t be worth much if you cannot use the results to make decisions about the strengths and weaknesses of your course/program.

**Assessment Techniques**

There are many techniques that may be used to assess student learning outcomes. In a number of cases, these assessment techniques may be embedded in course assignments or activities as measures of students’ achievement of program goals as well as their attainment of the college’s general education goals.
What is the difference between direct and indirect assessment?

Direct Assessment Methods: Direct assessment methods give instructors measurable data to study. Some examples are written exams, oral exams, performance assessments, standardized tests, licensure exams, oral presentations, projects, demonstrations, case studies, simulations, and portfolios.

Indirect Assessment Methods: Indirect assessment methods provide extra information that may be used to make changes. Examples include questionnaires, interviews, focus groups, employer satisfaction studies, observations of advisory boards, and job/transfer school placement data.

<table>
<thead>
<tr>
<th>Writing</th>
<th>Performing</th>
<th>Creating/Developing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essay</td>
<td>Demonstration</td>
<td>Video</td>
</tr>
<tr>
<td>Report</td>
<td>Role play</td>
<td>Poster</td>
</tr>
<tr>
<td>Journal/reflective writing</td>
<td>Experiment</td>
<td>Manual or brochure</td>
</tr>
<tr>
<td>Book review</td>
<td>Simulation exercises</td>
<td>Portfolio</td>
</tr>
<tr>
<td>Letter of advice</td>
<td>Performance</td>
<td>Make a list</td>
</tr>
<tr>
<td>Newspaper article</td>
<td>Presentation</td>
<td>Experiment/hypothesis test</td>
</tr>
<tr>
<td>Lab report</td>
<td>Debate</td>
<td>Concept map</td>
</tr>
<tr>
<td>In-class writing exercise</td>
<td>Interviews</td>
<td>Assignments: Capstone course/project/experience</td>
</tr>
<tr>
<td>Annotated bibliography</td>
<td>Fieldwork/internship/lab/clinical evaluation</td>
<td>Survey</td>
</tr>
<tr>
<td>Evaluate accuracy of …</td>
<td>Testing</td>
<td>Projects: group or individual</td>
</tr>
<tr>
<td>This Abstract</td>
<td>Written tests: objective</td>
<td>Analyzing</td>
</tr>
<tr>
<td>Research paper</td>
<td>Written tests: essay</td>
<td>Case study</td>
</tr>
<tr>
<td>Internship/field experience/clinical report</td>
<td>Oral test</td>
<td>Product analysis</td>
</tr>
<tr>
<td>Position paper</td>
<td>Problem set</td>
<td>Discussing</td>
</tr>
<tr>
<td>Critique</td>
<td>Quizzes</td>
<td>Discussion: classroom or online</td>
</tr>
<tr>
<td>Log</td>
<td>Standardized assessment test of subject</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Certification tests</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lab practical</td>
<td></td>
</tr>
</tbody>
</table>

Many assessment methods are applicable to more than one category
## Appendix E: Creating Student Learning Outcomes with Bloom’s Taxonomy

To model writing student learning objectives in a straightforward and non-threatening manner, the following chart uses levels of understanding from Bloom’s Taxonomy, combines them with action verbs, and provides examples for a variety of disciplines.

### Student Learning Objectives (SLO)

<table>
<thead>
<tr>
<th>If I want to measure</th>
<th>Knowledge outcomes, I might write…</th>
<th>The student/graduate will…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Describe the basic components of empirical research. Give examples of major themes or styles in music, art, or theatre. Recognize in complex text local, rhetorical, and metaphorical patterns.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If I want to measure</th>
<th>Comprehension outcomes, I might write…</th>
<th>The student/graduate will…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correctly classify a variety of plant specimens. Explain the scientific method of inquiry. Summarize the important intellectual, historical, and cultural traditions in music, art, or theatre from the renaissance to modern times.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If I want to measure</th>
<th>Application outcomes, I might write…</th>
<th>The student/graduate will…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Demonstrate in the laboratory a working knowledge of lab safety procedures. Apply oral communication principles in making a speech. Compute the area of a room. Use editing symbols and printers’ marks.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If I want to measure</th>
<th>Analysis outcomes, I might write…</th>
<th>The student/graduate will…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Distinguish between primary and secondary literature. Diagram a sentence. Listen to others and analyze their presentations. Differentiate between historical facts and trivia.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If I want to measure</th>
<th>Synthesis outcomes, I might write…</th>
<th>The student/graduate will…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Revise faulty copy for a news story. Formulate hypothesis to guide a research study. Create a poem, painting, and design for a building.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If I want to measure</th>
<th>Evaluation outcomes, I might write…</th>
<th>The student/graduate will…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Compare art forms of two diverse cultures. Critically assess an oral presentation. State traditional and personal criteria for evaluating works of art. Draw conclusions from experimental results.</td>
<td></td>
</tr>
</tbody>
</table>

11/05/03
Appendix F – Classroom Assessment Techniques
A Short Summary²

Assessing Students’ Prior Knowledge, Recall, and Understanding:
Background Knowledge Probe – to assess students’ knowledge or misconceptions of topics in an upcoming unit of study, the faculty member prepares 2-3 open-ended questions and a few short-answer questions about the topics or 10 multiple-choice questions about the topics; before introducing the unit of study, students fill in their answers to the questions; the faculty member uses these responses to determine areas of emphasis on topics during the unit and misconceptions that should be addressed.

Minute Paper – at the beginning or end of a class session, the faculty member asks students to take a few minutes (10 or less) to respond to one or two of the following questions: “What was the most important thing you learned during this class?” and “What important question remains unanswered?” The faculty member uses these responses to determine which questions in students’ minds need to be addressed.

Assessing Students’ Skills in Analysis and Critical Thinking:
Categorizing Grid – to assess students’ level of basic analytical thinking, the faculty member selects 2-3 related categories that are useful for organizing information being presented in class. Then a list of items that belong in each category is created, making sure that each item belongs to only one category, and that the items should be easily recognizable to students from homework and class discussions. A grid is created (on paper, chalkboard, or transparency) with the categories at the top and the items on the side. Students must decide which items belong in which categories, and be prepared to state their reasoning behind their choices.

Pro and Con Grid – select a decision, judgment, dilemma, or issue that has teaching/learning implications in your class; write a statement or question that will elicit thoughtful pros and cons, indicating if possible the point of view that you wish students to take (for example, in a parent-child conflict, should they take the parent’s point of view, or the child’s?); have students come up with a list of pros and cons (limit the number that you expect them to list): use these to analyze whether students are considering all of the points that you expected them to think about.

Assessing Students’ Skills in Synthesis and Creative Thinking:
One-Sentence Summary – the faculty member chooses a topic or work that students have recently studied and should be able to summarize; the faculty member answers the questions “Who Did/Does What to Whom, When, Where, How, and Why?” in relation to the topic – note the amount of time taken; the faculty member turns the answer into a sentence that follows the pattern of the question above; allowing students twice as long, the faculty member gives the exercise to the students, checking the results for quality of response to each part.
Annotated Portfolios – the faculty member chooses a central topic, question or problem dealt with in the course; students are invited to respond with two or three samples of their work on this topic; the students are asked to explain how the work in their portfolio relates to the topic; all of the work and explanations are turned in via a folder, binder, etc., for assessment.

² The Classroom Assessment Techniques (CATs) summarized below are taken from Classroom Assessment Techniques: A Handbook for College Teachers, 2nd Edition, by K. Patricia Cross and Thomas A. Angelo.

11/05/03
Assessing Students’ Skills in Problem Solving:

Problem Recognition Tasks – the faculty member selects examples of several different but related problem types that students have trouble distinguishing (each example should fall into only one problem type); make up a short Problem Recognition Task form, with problem types and the examples given; students match the examples to the problem type, explaining the reasoning behind their choices.

Documented Problem Solutions – the faculty member selects 1-3 representative problems from among those which students have studied over a period of time (if more than one is chosen, they should vary in difficulty and be progressively more challenging to the students); solve the problems chosen and document your solutions in writing – when you have problems you can solve in this way in 30 minutes, write them up for the students; give the problems to the students, usually as homework, and give them a maximum amount of time that they should spend on the problems (usually about twice as long as it took the faculty member).

Assessing Students’ Skills in Application and Performance:

Applications Cards – the faculty member identifies an important principle, theory, or procedure that is applicable to areas outside the classroom and how many applications to ask students to generate (usually no more than 3, giving students 3-5 minutes total for the exercise); the faculty member writes a prompt before class and gives it out in class, along with small index cards or slips of paper; students are requested to come up with fresh “new” applications of the principle, theory, or procedure, not just repeat those they may have read about in the text or heard about in class; faculty member collects and analyzes the cards.

Student-Generated Test Questions – the faculty member focuses on an exam that is 3 weeks to a month away, and writes specifications for the types of questions he/she wants to put on the exam; have students write test questions according to their specifications and supply answers to those questions (may want to have students work in groups for this exercise).

With all of these techniques, Cross and Angelo strongly encourage faculty to explain clearly to students that these exercises are not part of their grade in the class, but are designed to assist students in learning and succeeding in the course. Also, they stress the necessity of giving students feedback on the results of these activities – such feedback is crucial to having students get the most out of these activities and fostering a climate of trust between the faculty member and the students.
Appendix G: How to Design Rubrics for Assessment

How to Design Rubrics for Scoring Essays, Projects, and Performances

Follow These Steps
1. Decide whether you want a holistic or analytic rubric.
2. Construct a primary trait scale (a rubric).
3. Obtain consistency in instructions and conditions.
4. Norm the scorers.

A scoring rubric applied consistently by faculty teaching the course is a good way to assess essays, projects, and performances. A rubric describes the primary traits of a high-level essay or project, a poor essay or project, and the levels in between. That is, a rubric lists the criteria for an A, a B, a C, etc., or for a score of 6, 5, 4, etc.—depending on how many levels of differentiation are desired. Instructors use the rubric to score the essay, project, or performance.

1. Decide whether you want a holistic or analytic rubric.
An analytic rubric measures each part of the student work separately; a holistic rubric combines them. To illustrate, here are analytic and holistic rubrics to assess Spanish journals in a beginning Spanish course:

<table>
<thead>
<tr>
<th>Analytic Rubric for Spanish Journal</th>
<th>Holistic Rubric for Spanish Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensibility</td>
<td>Note that several traits (comprehensibility, usage, risk taking, and variety of subject and form) have been combined into a single scale.</td>
</tr>
<tr>
<td>4. Entries are completely understandable.</td>
<td>4. The content of the journal is comprehensible. Although there are errors, verb tenses, sentence structure, and vocabulary are correctly used. The author has taken some chances, employing sentence structures or expressing thoughts that are on the edge of what we have been studying. The entries are varied in subject and form.</td>
</tr>
<tr>
<td>3. Entries are usually understandable.</td>
<td>3. There is some use of appropriate verb tenses and correct Spanish sentence structure and vocabulary, but incorrect usage or vocabulary interferes with the reader’s comprehension.</td>
</tr>
<tr>
<td>2. Entries are difficult to understand.</td>
<td>2. The reader finds many of the entries difficult to understand, or many entries are simplistic or repetitious.</td>
</tr>
<tr>
<td>1. Majority of entries are incomprehensible.</td>
<td>1. The majority of entries are incomprehensible.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Usage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Although there are a few errors, verb tenses, sentence structure, and vocabulary are correctly used.</td>
<td>4. The content of the journal is comprehensible. Although there are errors, verb tenses, sentence structure, and vocabulary are correctly used. The author has taken some chances, employing sentence structures or expressing thoughts that are on the edge of what we have been studying. The entries are varied in subject and form.</td>
</tr>
<tr>
<td>3. Some use of appropriate verb tenses and correct sentence structure and vocabulary, but incorrect usage or vocabulary interfere.</td>
<td>3. There is some use of appropriate verb tenses and correct Spanish sentence structure and vocabulary, but incorrect usage or vocabulary interferes with the reader’s comprehension.</td>
</tr>
<tr>
<td>2. Many errors make comprehension difficult.</td>
<td>2. The reader finds many of the entries difficult to understand, or many entries are simplistic or repetitious.</td>
</tr>
<tr>
<td>1. The majority of entries are incomprehensible.</td>
<td>1. The majority of entries are incomprehensible.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Taking</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Student has taken some chances, employing sentence structures on the edge of what we have been studying.</td>
<td>4. The content of the journal is comprehensible. Although there are errors, verb tenses, sentence structure, and vocabulary are correctly used. The author has taken some chances, employing sentence structures or expressing thoughts that are on the edge of what we have been studying. The entries are varied in subject and form.</td>
</tr>
<tr>
<td>3. Student writes mostly safe entries, but is generally current with the textbook.</td>
<td>3. There is some use of appropriate verb tenses and correct Spanish sentence structure and vocabulary, but incorrect usage or vocabulary interferes with the reader’s comprehension.</td>
</tr>
<tr>
<td>2. Student writes only safe entries, and is not current with the textbook.</td>
<td>2. The reader finds many of the entries difficult to understand, or many entries are simplistic or repetitious.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source of holistic rubric: Barbara Walvoord and Virginia Anderson, Effective Grading:
| 1. Student writes only simple structures.          | Variety |
| 2. Entries show only a little variety in subject and form. | A Tool for Learning and Assessment, 1998. |
| 3. Entries are somewhat varied in subject and form. |         |
| 4. Entries are highly varied in subject and form.  |         |
Appendix H: Program Review Template

### Program Review Summary

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rating</th>
<th>Comments on Strengths/Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Productivity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment Retention Graduates</td>
<td>Satisfactory</td>
<td>Needs Improvement</td>
</tr>
<tr>
<td></td>
<td>Satisfactory</td>
<td>Needs Improvement</td>
</tr>
<tr>
<td></td>
<td>Needs Improvement</td>
<td></td>
</tr>
<tr>
<td><strong>Student Learning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the Program</td>
<td>Satisfactory</td>
<td>Needs Improvement</td>
</tr>
<tr>
<td>In General Education</td>
<td>Satisfactory</td>
<td>Needs Improvement</td>
</tr>
<tr>
<td>In Courses</td>
<td>Satisfactory</td>
<td>Needs Improvement</td>
</tr>
<tr>
<td><strong>Student Outcomes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>Satisfactory</td>
<td>Needs Improvement</td>
</tr>
<tr>
<td>Subsequent Enrollment</td>
<td>Satisfactory</td>
<td>Needs Improvement</td>
</tr>
<tr>
<td>Transfer Success</td>
<td>Satisfactory</td>
<td>Needs Improvement</td>
</tr>
<tr>
<td><strong>Student Satisfaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employment Outlook</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td># Jobs/Job Growth</td>
<td>Strong</td>
<td>Moderate</td>
</tr>
<tr>
<td>Employer Connections</td>
<td>Strong</td>
<td>Moderate</td>
</tr>
<tr>
<td>Internship Opportunities</td>
<td>Strong</td>
<td>Moderate</td>
</tr>
<tr>
<td>Overall need for program in Service Region</td>
<td>Strong</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Plan for Future of the Program:
Program Purpose

This program prepares students for:  
☐ Transfer  ☐ Employment

1. What are the categories or characteristics of students for whom this program is designed?

2. If transfer, list any specific articulation agreements with four-year institutions:

3. If employment, list the occupations for which this program prepares students:

Program Productivity

Program productivity data was retrieved from three primary sources, QUINN, SIS (Query) and annual reports furnished by the Virginia Community College System (VCCS). It should be noted that QUINN and VCCS data have limitations in that only a student’s primary academic plan is captured and reported. While PDCCC permits students to choose multiple plans headcount and FTE data are based on the student’s primary academic plan.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Headcount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The program generated % of PDCCC’s FTE in 2014-15.

<table>
<thead>
<tr>
<th>Program Retention</th>
<th>Fall 2010 Retained in Spring 2011</th>
<th>Fall 2011 Retained in Spring 2012</th>
<th>Fall 2012 Retained in Spring 2013</th>
<th>Fall 2013 Retained in Spring 2014</th>
<th>Spring 2014 Retained in Fall 2015</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduates</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15</th>
<th>5 Year Average</th>
</tr>
</thead>
<tbody>
<tr>
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*Program retention data pulled from QUINN
**Certificates and CSC retention rates are based on fall to spring enrollment

SCHEV Productivity:

The program meets/does not meet the SCHEV three year productivity standards.

The SCHEV productivity standards are based on the size (FTE) of the college and the type of degree program and certificate. The standard for transfer programs is 17 FTE and 12 graduates. The standard for AAS programs is 13 FTE and 8 graduates. The standard for
Certificate programs is 7 FTE and 5 graduates. SCHEV combines all Career Studies Certificates, as such productivity data is not calculated specifically for each CSC.

Completion Rates: The completion rates below are for those specific courses required for the program. The completion rates are defined as the number of students who successfully completed, with a grade of A, B, or C, the course.

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Student Learning

Student Learning Objectives and Outcomes

The program identifies several student learning objectives for graduates of the program. Student-learning outcomes are the educational goals for graduates. Outcomes describe the knowledge, skills, attitudes, behaviors, and values graduates should know or will be able to do upon completion of the program. Course objectives are not the same as program student learning outcomes. Please complete the worksheet located in Appendix A. prior to completing assessment results summary section below.

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Met?</th>
<th>Assessment Results Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td></td>
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<tr>
<td></td>
<td>Partially</td>
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<td>No</td>
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<td>Partially</td>
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<td>No</td>
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<td></td>
<td>Yes</td>
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<td></td>
<td>Partially</td>
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<td></td>
<td>No</td>
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</table>

11/05/03
General Education Summary for Degree Seeking Students:

Each semester, applicants for graduation are required to take one or more of six general education (core competency) assessments. Assessment results for ______ program graduates, compared to all AS graduates who have taken assessments are summarized below.

Communication: Written and Oral

Critical Thinking:

Information Literacy:

Quantitative Reasoning:

Scientific Reasoning:

Cultural and Social Understanding:

Personal Development:

On the Graduate Survey, graduates are asked to indicate their skill level and knowledge and skills as they prepare to graduate. Responses are provided on a five-point scale with 5 = excellent, 4 = good, 3 = average, 2 = below average, and 1 = poor. Mean responses for graduates are presented in the table below.

<table>
<thead>
<tr>
<th>Knowledge Skill</th>
<th>Program Graduates</th>
<th>All Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to write clearly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to apply mathematical &amp; quantitative reasoning skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to apply critical thinking &amp; problem-solving skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to apply scientific reasoning skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to apply information literacy and library skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to apply oral communication skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding culture &amp; society</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to demonstrate wellness skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to use basic computer technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to demonstrate effective study skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to apply workforce skills (resume writing, interview skills, etc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifelong Learning skills</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Student Outcomes**

Employment Data Non-Transfer/CTE Programs Only

Through an agreement between the VCCS and the Virginia Employment Commission (VEC), VCCS colleges are able to obtain employment information for individuals previously enrolled at a VCCS college. All PDCCC graduates of career and technical educational (CTE)/non-transfer programs, over the last five years, were queried against VEC data. The purpose of the query was to determine the employment status of CTE graduates in two quarters following their graduation from PDCCC. It is important to note that there are limitations to the VEC data that include: (1) the exclusion of Federal employees, farm workers, military, incarcerated, and self-employed, (2) limited data on individuals employed in states outside of Virginia, (3) exclusion of date of hire, occupation, hourly wages, or time worked, and (4) students who do not provide their social security numbers cannot be linked to the data.

Subsequent and Transfer Data
Through the National Student Clearinghouse (NSC) a list of PDCCC graduates are submitted and queried against other participating NSC institutions to obtain subsequent college enrollment, transfer and degree data.

**Subsequent Enrollment:** Subsequent enrollment at an institution of higher education in the semester following graduation. At the time of this program review, PDCCC only graduates students during the traditional spring semester. As such the data below is based on fall semester enrollment for each corresponding year. Subsequent enrollment can include enrollment at either a four year or two year institution, including PDCCC.

<table>
<thead>
<tr>
<th>Subsequent Enrollment</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15</th>
<th>2015-16</th>
<th>5Year Average</th>
</tr>
</thead>
</table>

**Transfer Information:** Transfer enrollment varies from subsequent enrollment in that transfer enrollment are those students who enroll at a four year institution the semester following graduation. Transfer enrollment is specific to four year institutions and does not include enrollment at two year institutions including PDCCC.

**Student Satisfaction and Perceptions of Program Quality**

On the **Graduate Exit Survey**, graduates rate various aspects of their academic experience on a five-point scale where 5 = excellent, 4 = very good, 3 = good, 2 = fair, and 1 = poor. Mean ratings for program graduates and all graduates are shown in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Program Graduates</th>
<th>All Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Availability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Advising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Placement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Academic Experience</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Use of Assessment Findings to Improve Instruction

What changes have occurred since the last program review? What were the results? Describe how assessment findings were used to improve the quality of instruction and student services in the program.

Describe the extent to which students achieve current program goals. Describe at least one way in which an external measure is used to document student achievement of the program goals.

Describe the extent to which students achieve current student-learning outcomes. Describe at least one way in which an external measure is used to document student achievement of the student-learning outcomes.

Review of Curriculum: Non-Transfer/CTE Programs

Does this program meet the workforce needs of local employers

Do graduates find employment in the field the program(s) prepared them for?

What problems, if any, do graduates encounter as they enter the workforce?

Do local employers have unmet training/educational needs that this program could/should meet?

Does the job market data from PDCCC’s service region indicate that a need continues to exist for this program?

If PDCCC did not have this program, what would the impact be on our service region?

What is the plan for the future direction of this program?

Please review the minutes of your advisory committee for the last year – are there any trends, any concerns, and if so what has been addressed?

Review of Curriculum: Transfer Programs

Describe the formal articulation agreements that exist between PDCCC and transfer institutions for this program(s).

Do students successfully transfer to four-year schools?

What problems, if any, do students encounter as they transfer to four-year colleges/universities?
Describe the trends in transfer rates to the major four-year colleges/universities to which PDCCC transfer.

Are there unmet transfer needs that this program(s) should/could meet?

Does the transfer information indicate that a need continues to exist for this program(s)?

If PDCCC did not have this program(s), what would be the impact on our service region?

Program Strengths and Weaknesses

Based on the data collected, identify program strengths and weaknesses.

Action Plan

List specific actions that will be taken to maintain program strengths and address program weaknesses. Describe what steps will be taken in the next three years to advance the program. For each action, specify the expected outcome, the expected time line for completion, the person(s) who will be responsible, the resources needed, and the criterion/criteria that will be used to determine if the action was effective. At least one action plan should address SLOs. Please provide a status update on all previous action plans.

<table>
<thead>
<tr>
<th>Issue/Concern</th>
<th>Specific Action(s)</th>
<th>Expected Outcomes</th>
<th>Time Frame</th>
<th>Person(s) Responsible</th>
<th>Resources Needed</th>
<th>Measures</th>
<th>Status of Action Plan</th>
</tr>
</thead>
</table>

Dean Input

Please provide your feedback and comments on appendix A, the program’s strengths, weaknesses, and the action plan(s) established in the previous section:
## APPENDIX A.1

<table>
<thead>
<tr>
<th>SLO#</th>
<th>Status*</th>
<th>Student Learning Outcome</th>
<th>Target (What does success look like?)</th>
<th>Measure (Source of Evidence)</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<tr>
<td>2</td>
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<tr>
<td>3</td>
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</tbody>
</table>

*New (N), Ongoing (O), Carried Over from Prior Year (PY), Revised from Prior Year (R)
# Appendix I: Core Competency Assessment Timeline

## PDCCC General Education Timeline

<table>
<thead>
<tr>
<th>Core Competency Assessment</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Writing</td>
<td>VPT- Writing Prompt</td>
<td>STAGE</td>
<td>STAGE</td>
<td>ETS HEighten Outcome</td>
<td>ETS Proficiency Profile</td>
</tr>
<tr>
<td></td>
<td>STAGE Graduate Survey</td>
<td>Graduate Survey</td>
<td>CCSSE Graduate Survey</td>
<td>Graduate Survey</td>
<td>STAGE Graduate Survey</td>
</tr>
<tr>
<td>Communication Oral</td>
<td>STAGE</td>
<td>Madison Assessment Test of Oral Communication (TOCS2)</td>
<td>STAGE</td>
<td>STAGE</td>
<td>Madison Assessment Test of Oral Communication (TOCS2)</td>
</tr>
<tr>
<td></td>
<td>Graduate Survey</td>
<td>Graduate Survey</td>
<td>Graduate Survey</td>
<td>Graduate Survey</td>
<td>Graduate Survey</td>
</tr>
<tr>
<td></td>
<td>STAGE</td>
<td>CCSSE</td>
<td>CCSSE</td>
<td>CCSSE</td>
<td></td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>STAGE</td>
<td>STAGE</td>
<td>ETS HEighten Outcome</td>
<td>STAGE</td>
<td>STAGE</td>
</tr>
<tr>
<td></td>
<td>Graduate Survey</td>
<td>Graduate Survey</td>
<td>Graduate Survey</td>
<td>Graduate Survey</td>
<td>Graduate Survey</td>
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<tr>
<td></td>
<td>STAGE</td>
<td>Graduate Survey</td>
<td>CCSSE</td>
<td>CCSSE</td>
<td></td>
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<tr>
<td>Information Literacy</td>
<td>STAGE</td>
<td>Madison Assessment-Information Literacy Test (ILT)</td>
<td>STAGE</td>
<td>STAGE</td>
<td>Madison Assessment-Information Literacy Test (ILT)</td>
</tr>
<tr>
<td></td>
<td>Graduate Survey</td>
<td>Graduate Survey</td>
<td>CCSSE</td>
<td>CCSSE</td>
<td>Graduate Survey</td>
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11/05/03
Revised 11/4/08, 5/8/14, 3/28/16
<table>
<thead>
<tr>
<th>Stage</th>
<th>Quantitative Reasoning</th>
<th>STAGE Graduate Survey</th>
<th>STAGE Graduate Survey</th>
<th>STAGE Graduate Survey</th>
<th>STAGE Graduate Survey</th>
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</thead>
<tbody>
<tr>
<td>Scientific Reasoning</td>
<td>Madison Assessments-Scientific Reasoning (SR)</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
</tr>
<tr>
<td>Cultural &amp; Social Understanding</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
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<tr>
<td>Personal Development</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
<td>STAGE Graduate Survey</td>
</tr>
</tbody>
</table>

**STAGE:** Shock-Tucker Assessment of General Education developed by IR staff members from Virginia Community College System

**Madison Assessment:** Madison Assessment distributes computer-based assessment tests developed by the James Madison University’s Center for Assessment and Research Studies

**ETS:** ETS is nonprofit organization that provides academic assessment.

**CCSSE:** Community College Survey of Student Engagement
Appendix J: Program Advisory Committee Checklist

Program goals and their alignment with industry goals and standards
Review the program’s goals and assure that they are relevant to the standards of industry.

Student outcomes objectives, including General Education objectives
Describe what students should achieve as a result of the program in specific measurable terms. (Example – “80% of students will achieve a C or better on written exam” “80% of the students will meet or exceed the regional average Work Keys” or the success rate of students on Capstone, Exit exams, portfolio or exit interview.)

Program alignment with standards of accrediting bodies, the state of Virginia, and PDCCC
Confirm that the program is in alignment with SCHEV, VCCS and PDCCC standards of curriculum design, as well as any standards of applicable regulatory agencies or accrediting agencies (e.g., Board of Nursing) including general education core requirements and O/T objectives.

State and local employer needs
Describe the extent to which the program curriculum meets state and local employer needs.

What sources of information do you use?

Has the program been modified in response to this input?

Support of General Education/Core Competencies outcomes within program-specific courses
Consult the General Education Matrix of the VCCS Assessment Report to determine the general education objectives/elements that are supported in program-specific courses. (Example: Writing reports in a technology laboratory course helps support writing competence.)

Student progress toward program completion
Review the length of time students take to complete the program and address methods of assisting students towards a more timely completion of the program.
Assess graduate competence.

Curricular Development
Review the program curriculum and determine the need for changes due to technology innovations or industry standards.
Appendix K: Definitions

Action Plan
This is where you show how you “closed the loop.” You must answer the following: How will you use the results? What actions were taken or will be taken based on your data?

Advisory Curriculum Review
This is a common assessment activity used by a number of occupational/technical programs. The Advisory Committee is particularly useful in curriculum review because they are generally practicing in the field and are aware of advances or changes. Often the advisory committee can give valuable insight by reviewing the goals and objectives to help plan future directions of a program. Tying a curriculum to a national standard may be a particularly valuable assessment technique.

Assessment
Assessment is the systematic collection and analysis of information to improve student learning and program viability. Assessment is “…the process of gathering evidence to make inferences about…how students are progressing toward specific goals” (National Standards, quote from Pennington, 2001, p. 206).

Capstone Courses
Capstone courses are designed to enable students to review, evaluate, integrate, and synthesize information and skills gained from other courses in the program or major. These courses are the optimum place to assess many program or major goals and general education goals. A capstone course is one which completing students take as a culminating experience that gives them the opportunity to tie together the knowledge and skills of other program courses. If your program has such a course, you may want to consider the performance in this type of capstone course as an assessment method. Likewise, some programs assign a capstone project which can be evaluated.

Case Study
Presented with a realistic example of an application in the field, students must respond with an analysis that demonstrates their mastery of course content and their ability to apply the information and skills they have learned. A case study is an examination of a specific phenomenon such as a program, an event, a person, a process, an institution, or a social group. The end product of a case study is a rich, thick description of the phenomenon being studied that illuminates the student's understanding of the phenomenon through the application of the knowledge and skills they have gained.

Certification Tests
Programs in which a student must pass a certification examination in order to be certified to work in the field, such as nursing, may want to consider using the results of that test as an assessment technique.

Course Assessment
Course assessment measures the student learning that takes place in ALL class sections of a course for the entire college. A course assessment consists of all the classes (sections) being taught; for example, ENG 111. A class assessment is one section of a course, ENG 111-51A or ENG 111-61B. Course assessment focuses on the question of “how can the course be strengthened based on how well students are mastering course objectives?”.

Course-embedded Assessment
Program or major goals and general education goals may be assessed through assignments embedded in required courses. For example, writing assignments, such as summaries or reports, and oral presentations may be used to assess student mastery of course content as well as their writing, reading, critical thinking or speaking skills and use of the library or other information source.

**Direct Assessment Methods:** Direct assessment methods give instructors measurable data to study. Some examples are written exams, oral exams, performance assessments, standardized tests, licensure exams, oral presentations, projects, demonstrations, case studies, simulations, portfolios, and juried activities with outside panels.

**Direct Measures**
Objective measures of knowledge or ability. This is the most important measure for a Student Learning Outcome (SLO). Examples include students’ scores on national standardized exams such as the Core Competencies Assessments, Program Exit, or Certification Exams, Pre-test/Post-test Evaluation, Comprehensive Exams, Capstone Course Evaluation, Course-Embedded Assessment, Student Portfolios, Employer Evaluations, Use of Rubrics, etc.

**Exit Interviews**
There are different types of exit interviews, but they commonly fall into two categories. In one type of exit interview the program head and students discuss topics similar to those found on student surveys. The other type of exit interview is actually more like an oral examination in where the interviews are conducted by a panel made up of advisory committee members. It has the advantage of giving students practice in the kind of interviews that they face for the hiring process and future promotion boards and also assessed their proficiency in both oral communication and knowledge of their subject area.

**Findings/Results**
List the results based on the measure (methods & tools) used. The purpose of this section is to determine if your Outcome/Objectives were met. Be sure to discuss your data in relation to Outcome/Objectives and specifically, the Target set in Measures.

**Focus Groups**
Focus groups are structured but informal discussions with small groups of students. Students may be asked about issues that are pertinent to the program. Focus groups can also be conducted with faculty, advisory committees, administrators and other employees.

**Grades**
Grades can be used to assess student learning by using primary trait analysis to identify the factors that count for scoring and explicitly stating the criteria for the evaluation of the assignment, project, presentation, product in the form of a rubric.

**Indirect Assessment Methods:** Indirect assessment methods provide extra information that may be used to make changes. Examples include questionnaires, interviews, focus groups, employer satisfaction studies, observations of advisory boards, and job/transfer school placement data.

**Indirect Measures**
Subjective measures of beliefs, attitudes and perceptions. Indirect measures are often used to supplement direct measures. Examples include questionnaires and surveys of student’s perceptions such as the CCSSE, Graduating Student Questionnaire, Graduate Follow-up Survey, Alumni Survey, Employer Surveys, etc. Additional measures could include focus groups, exit interviews of graduates, employment data, graduation rates, and transfer rates.

11/05/03
Revised 11/4/08, 5/8/14, 3/28/16
Institutional Effectiveness
Institutional effectiveness is when achievements and outcomes indicate how well the College’s mission is being fulfilled.

Internships, Field experiences, Clinical Evaluations
Internships, field, or clinical experiences are also ideal for assessing many program or major and general education goals. When these occur at the end of the program or major, they often serve as capstone experiences. It is especially useful to have external experts assess the performance of your students.

Journals
Journals or learning logs have been used in composition courses for years as a tool for increasing student writing and motivation for writing and for assessing students’ writing skills. However, a journal that focuses on students’ social and educational attitudes and values may be also useful to assess students’ achievement of general education goals. Journals may also be used to assess student attainment of program or major goals.

Measure
A measure is a tool(s) used to determine if you have met your expected outcome. To increase the likelihood of valid results, you should strive to use more than one measure for each outcome/objective if possible,--triangulate. If you are struggling to identify a measure ask the following questions about your outcome/objective: How will we know if this is being accomplished? What will provide us this information?

Purpose
This is the overall purpose of your program/unit, showing how you connect and contribute to the College’s overall work.

Outcomes/Objectives
Outcomes/Objectives are brief, clear statements that describe desired outcomes in relation to broader goals.

Oral Presentations/ Oral Exams
Depending on the nature and content of the course, oral presentations can be tailored not only to assess students’ mastery of course content but also their attainment of general education goals such as critical thinking, general knowledge and historical consciousness, understanding the impact of science and technology, and educational and social values. Oral presentations based on course content can be used as a direct measure of students’ communication skills.

Program Assessment
Program assessment focuses on student learning outcomes for the program as a whole, as well as productivity measures related to the viability and effectiveness of a degree or certificate program.

Portfolios
An accumulation of student-produced work, a portfolio may be designed to assess a student’s attainment of program or major goals. The same portfolio may also be used to assess general education goals such as communication skills or the development of skills to enhance life-long learning, such as the ability to use the library and other appropriate sources to retrieve information. Portfolios that contain early or unrevised work as well as later or revised work can assess the growth of skill development. Rubrics to judge portfolios must be clear and shared with the student.
Qualitative
Measures that contain non-numerical data such as verbal or written feedback from students/staff/faculty, etc.

Quantitative
Measures that collect numerical data that can be analyzed statistically.

Rubrics
For scoring consistency with longer open-ended assignments such as essays, research papers, or performances, a rubric should be developed. A rubric is a criterion based scoring tool that specifies levels of achievement (e.g. exemplary, satisfactory, and unsatisfactory) for each dimension of the outcome. As part of the rubric, criteria are provided that describe what constitutes the different levels of achievement.

Standardized Tests
Standardized tests are nationally normed and may also be used to assess students’ perception of their attainment of general education goals. These tests best assess reading comprehension, critical thinking, scientific reasoning, the ability to solve math problems, and writing skills such as knowledge of grammar and correct usage. Additionally, there are major field tests which may be used to assess student learning.

Strategic Planning
Strategic planning focuses on the actions that are taken to implement the institutional mission, while institutional effectiveness planning focuses on the end result to determine how the institutional mission is being fulfilled. Strategic planning is means/process oriented, meaning it focuses on actions to improve processes or make a unit operate more efficiently.

Student Learning Outcome (SLO)
Student learning outcome (SLO) identifies the measurable knowledge, skills, behavior, or attitudes of the learner as the result of engaging in a learning activity or program. Typically, SLOs are composed with the stem, “The student will…”.

Surveys
Surveys may be used to assess the degree to which students perceived that they have attained program or major goals as well as certain general education goals. Items that elicit this information may be included on surveys developed by program or major faculty and administered to current and/or prior students and on surveys sent to employers of program or major graduates.

The use of surveys is a way to gain information that may directly impact a program. There are many types of surveys. The ones most often used are graduate surveys, employer surveys and student surveys. Surveys allow you to get direct feedback from a number of perspectives such as employers and graduates. Results sometimes raise issues that would not be apparent in other types of assessment. One disadvantage is that it is often time-consuming and expensive. It requires careful planning since a survey that is not thought through thoroughly may give you little useful information.

Target
Target allows you to establish a specific criterion for success. This will allow your objective/Outcome to be measurable. You must ask yourself what level is acceptable and then seek to sustain or enhance that performance.
Writing Samples
Writing assignments can be used as a measure of students’ mastery of course content and attainment of program or major goals. Such assignments may also be used as a direct measure of the general education communication skills goal as well as an indirect assessment of critical thinking skills. Examples of writing samples include essays, research or term papers, answers to essay questions on tests, book reports, summaries, lab reports, and the like.
Appendix L: Institutional Effectiveness Model

The Institutional Effectiveness Model

College Mission and Strategic Goals

Institutional Adjustments

Resource Availability Decisions

Use of Results: “Closing The Loop”

Program & Services Improvements/Modifications

Development of Unit Assessment Plans
  ~ Student Outcomes for Educational Programs
  ~ Administrative and Educational Support Services Objectives

Feedback of Assessment Results

Assessment Activities

Implementation of Unit Assessment Plans

Appendix M: PDCCC Teaching Resources Available Through PDCCC Library Learning Commons


Cushman, Kathleen. First in the Family: Advice about College from First-Generation Students; Your College Years. Providence, RI: Next Generation, 2006.


