

# Assessment of Student Learning 2022 Annual Report

# Compiled by

# Liz Medendorp

Director of Assessment of Student Learning English Instructor

and

# **Amanda Mayes**

Assessment of Student Learning Committee Chair Science Faculty

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# Attachments:

- Attachment 1: Program-Level Student Learning Outcomes
- Attachment 2: 2022 Improvement Plans

#### I. Executive Summary

2022 marked another year of continual improvement and success in assessment of student learning at Pueblo Community College. As we continue to return to normalcy following the COVID-19 pandemic and widespread staffing changes, the priority for assessment continued to be maintaining stability and sustaining the progress made over the past several years. Building further on the many improvements we have accomplished, including the ISLO rubrics, our 5-year plan, and more streamlined data load process, along with continued offerings of wide range of training opportunities, we seem to have found our footing in a consistent and cohesive approach to assessment that has become part of the culture at PCC.

Throughout the 2022 annual cycle, we continued to develop program- and course-level assessment, promote excellence in teaching and learning resulting in impressive performance rates, and provide timely and relevant support, training, and resources to faculty and instructors on assessment of student learning. In addition, the primary new initiative for assessment in 2022 was the development and implementation of a new 5-year plan for institutional assessment, including the review and revision of our college-wide assessment rubrics.

## A. Year-to-Year Trends

We have seen consistent growth in multiple areas related to the assessment of student learning at Pueblo Community College each year, as reflected by the year-to-year trends from 2016 until now. Just in the past year, overall participation rates have increased by a staggering 12%, and while student performance has declined by 4.4% since 2021, with 71.8% of students achieving a 3 "Accomplished" or 4 "Exemplary level of mastery across all Institutional Student Learning Outcomes (ISLOs), we are still above our target performance rate of 70%. The number of scores collected also increased our sample sizes by 3.6%, and although the number of

completed PSLO assessments decreased, progress has been made on actually building the structure for program-level assessment, with the addition of 29 new Program-level Student Learning Outcomes and new mapping established for 32 PSLOs.

### 1. Participation Rates

Figure 1.1 Year-to-Year Participation Trends

Participation	2016	2017	2018	2019	2020	2021	2022
PT Participation	8.63%	16.93%	28.33%	31.40%	26.83%	26.13%	38.46%
FT Participation	83.81%	79.82%	90.48%	80.87%	75.00%	80.20%	78.30%
Total Participation	31.60%	33.18%	44.72%	43.79%	39.09%	39.42%	51.38%
Sections Assessed	175	385	520	609	566	591	557
Courses Assessed	117	186	252	281	240	266	273
Completed Assessments	225	467	585	680	605	648	601

Over the 2022 calendar year, PCC employed an instructional staff of 327 total, consisting of 106 full-time faculty and 221 part-time instructors. Of that instructional staff, we had a total of 168 participants in assessment, including 83 full-time faculty and 85 part-time instructors. While full-time participation has dipped slightly (-1.9%), 78.3% of full-time faculty are still consistently conducting assessments and entering scores into eLumen, and our efforts to promote part-time participation in assessment have proven effective, increasing 12.3% from 2021 to 2022. While we did see an expected dip in participation in 2020 (-4.7%) in the wake of the COVID-19 pandemic, participation rates began to stabilize in 2021 (+0.33%), and we have now reached our highest overall participation rate in 7 years (51.4%, an increase of nearly 12% in one year).

#### 2. Performance Target Achievement

Figure 1.2 Year-to-Year Performance Trends

ISLO	2016	2017	2018	2019	2020	2021	2022
1: Critical Thinking	65.14%	63.85%	69.29%	67.68%	68.19%	71.08%	72.92%
2: Communication	58.74%	67.24%	64.14%	77.50%	79.44%	76.47%	71.14%
3: Quantitative Reasoning	71.43%	73.59%	77.68%	78.72%	76.71%	79.76%	72.44%
4: Literacy	60.94%	73.58%	69.44%	70.63%	75.53%	74.46%	69.86%
5: Professionalism	84.06%	77.82%	76.46%	77.92%	78.31%	79.15%	73.50%
6: Social Consciousness	N/A	N/A	N/A	N/A	N/A	N/A	69.07%
All ISLOs	72.63%	70.26%	70.53%	73.50%	75.40%	76.20%	71.83%

Student performance rates have decreased for all but one of our six Institutional Student Learning Outcomes (cumulative decrease of 4.4%), but we still reached our target of 70% overall (71.8%). The Literacy and Social Consciousness ISLOs were the only two that did not meet the performance target, but both were still within 1% of that goal (69.9% and 69.1%, respectively). The most significant decline in performance rate was in the area of Quantitative Reasoning (72.4%, -7.3% since 2021), followed by Professionalism (73.5%, -5.7% since 2021) and Communication (71.1%, -5.3% since 2021). The only ISLO category that experienced an increase in student performance was Critical Thinking, continuing the impressive improvement seen from 2020 to 2021 and increasing by another 1.8% to reach 73.0%.

# 3. Sample Sizes

Figure 1.3 Year-to-Year Sampling Trends

ISLO	2016	2017	2018	2019	2020	2021	2022
1: Critical Thinking	5,596	10,002	11,316	11,932	8,704	6,167	7,606
2: Communication	3,117	5,262	7,209	8,570	8,676	7,030	5,959
3: Quantitative Reasoning	28	4,514	2,648	3,487	5,724	4,724	4,565
4: Literacy	64	5,322	7,892	5,741	4,278	6,493	5,916
5: Professionalism	7,524	6,266	8,393	7,559	6,809	6,064	6,343
6: Social Consciousness	N/A	N/A	N/A	N/A	N/A	N/A	2,118
PCC Flex Self-Assessment	N/A	N/A	N/A	N/A	1,645	1,412	532
All ISLOs	16,329	31,366	37,458	37,289	35,836	31,890	33,039

Sample sizes increased overall (3.6% increase from 2021), with the largest increase in scores collected on Critical Thinking (+23.3%), followed by Professionalism (+4.6%). The other 3 ISLO categories experienced a decrease in sampling, most notably in the area of Effective Communication (-15.2%), and smaller decreases in Literacy (-8.9%) and Quantitative Reasoning (-3.4%). In addition, the PCC Flex Self-Assessment introduced in 2020 resulted in a sample size of 532 scores, a reduction of 62.3% by comparison to 2021. As we gradually return more classes to the traditional face-to-face or fully online formats, we anticipate a continued decrease in data

collected through this assessment project moving forward, so we will be phasing out the PCC Flex Self-Assessment in the coming year.

#### 4. Program-Level Assessment

Figure 1.4 Year-to-Year Program-Level Assessment Trends

Program Progress	2017	2018	2019	2020	2021	2022
Prefixes with PSLOs	62/90	68/88	75/84	76/88	79/89	76/93
Total PSLOs	437	452	517	604	623	652
Mapped PSLOs	115	301	420	447	461	493
PSLOs with Rubrics	193	200	240	334	326	320
Completed PSLO Assessments	177	332	384	302	387	327
Courses	71	160	137	107	152	146
Sections	140	413	322	288	344	293

As pointed out in previous annual reports, tracking progress on and development of program-level assessment is somewhat challenging due to fluctuations in organizational structure and curriculum changes. However, with the promised reinstatement of Division Leads, we anticipate that more personalized attention will help guide program- and course-level assessment efforts more successfully, and we will be able to gather qualitative analyses first-hand from the faculty who assume the Lead responsibilities to better inform our understanding of assessment efforts within our varied programs.

## B. Areas of Opportunity

For 2023, then, the Assessment committee will guide PCC faculty in several important areas of improvement:

1. **Participation:** While we saw an increase in participation overall, as part of our 5-Year Plan (see Figure 2.4), our goal for 2023 is to reevaluate participation expectations and implement scaled or adjusted expectations. Particularly as we saw a decrease in full-time faculty participation, this will be a crucial subject of conversation, which has already

been initiated with an open forum on March 10<sup>th</sup>, 2022 to begin the discussion of what reasonable expectations for participation in assessment should be moving forward. We will continue to promote further part-time instructor participation as well, continuing the momentum we've gathered in 2022, when we exceeded our goal of 30% part-time participation by 8.5%.

- 2. **Performance:** Overall, despite an average decrease in target achievement rate of 4.4%, there are no significant concerns with student performance rates from the 2022 calendar year, as we still reached our performance target of 70% overall. While they are only slightly below that target, we should still stay vigilant with regard to the lowest scoring areas (Social Consciousness & Literacy). More concerning would be the areas that showed a decrease in performance, even though they still exceeded the target; namely, Quantitative Reasoning showed the largest decline (-7.32%), so further opportunities for students to develop and demonstrate these skills should be pursued in the coming year.
- 3. Sample Sizes: Our data collection has equalized across all of our existing 5 ISLOs, while sampling for the newly introduced Social Consciousness ISLO was quite limited, as expected given that the new rubric was only formally piloted for one semester. Promoting use of the new Social Consciousness rubric should be a top priority for 2023 to establish more accurate baseline data on this ISLO. Additionally, summer sample sizes are historically low, and we will continue to further efforts to increase assessment activities for summer course offerings.
- 4. **Program-Level Assessment:** With the anticipated reinstatement of the Division Lead role, we have an opportunity to establish new processes for guiding program-level assessment and the development of assessment methods and activities on a more

personalized level. Training for Division Leads will be essential in that effort, especially with regard to best practices for assessment, effective use of eLumen's features and tracking functionalities, and leadership strategies for guiding departments and faculty in their assessment projects. In the coming year, Division Leads will need to be identified and trained through regular meetings with the Director of Assessment and the Assessment Committee Chair.

- 5. **Co-Curricular Assessment:** Initial efforts to establish co-curricular assessment practices have begun, but there is still much room to grow. A select few student services offices have been identified for possible assessment of student learning, most of which have at least developed Student Services Learning Outcomes (SSLOs) and even some corresponding assessment rubrics, but data collection has been minimal thus far. Focused efforts to develop further assessment activities and more consistently collect assessment data on student learning that occurs through our co-curricular and non-academic services should be a priority for 2023.
- \* Note: There may be some slight discrepancies among figures included in this report for similar data points, which are a result of additional data being entered into eLumen after the initial reports were generated; none of these discrepancies have been determined to be statistically significant.

#### **II. Assessment of Student Learning Process**

#### A. Annual Cycle

PCC's assessment cycle follows the calendar year and includes four key phases that guide our assessment activities over the course of each year (see Figure 2.1 below):

- 1. Plan (Goal Setting and Development Phase)
- 2. Assess (Implementation and Data Collection Phase)
- 3. Report (Interpretation and Documentation Phase)
- 4. Improve (Closing the Loop Phase)

While academic departments submit their official Improvement Plans only once annually—toward the start of the spring semester, kicking off the new annual cycle with concrete action steps developed in direct response to the previous cycle's results—all four phases of the assessment cycle are in fact completed every semester: chairs, faculty, and instructors (1) plan their assessment activities (what learning outcomes they will assess, with what measurement tools/rubrics, and in which classes), (2) collect and submit student performance data before the end of the term (the established grading deadline), (3) review the results to identify areas of opportunity, and (4) develop a plan for changes to instruction, curriculum, assessment methods, and/or support services directed toward improving student learning and to be implemented during the following semester.

However, the final two steps in this cycle—reporting results and planning improvements—have historically been seen as separate processes, when in reality, assessment results and any improvements that might be made based on those results are intrinsically intertwined, and efforts to "close the assessment loop" are only effective when these two endeavors are seen as interconnected and inseparable.

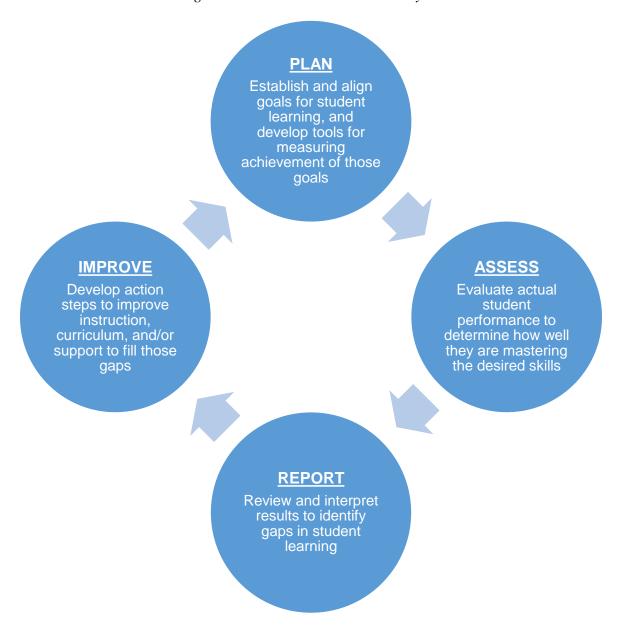


Figure 2.1 Traditional Assessment Cycle

Concerted efforts were therefore made to unify the process of "reporting" with that of "closing the loop," and as such, these two activities have been reconceptualized as one and the same "phase" of the assessment cycle (see Figure 2.2 for a diagram of this Restructured Assessment Cycle). Each phase of our restructured annual assessment cycle is described in greater detail below.

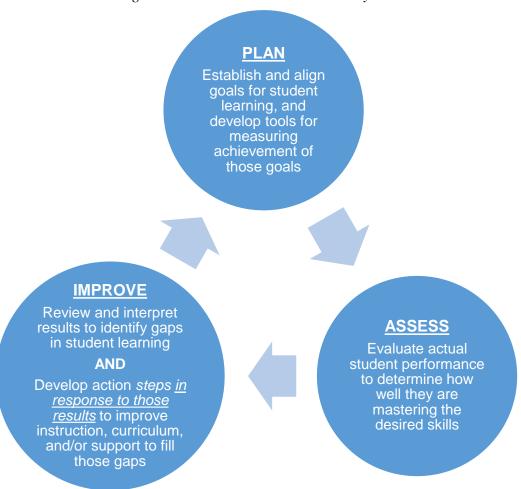


Figure 2.2 Restructured Assessment Cycle

# 1. Planning: Setting Goals

Institution-Level Planning: All planning decisions related to college-wide assessment of student learning activities are driven by faculty values and input, including the identification of shared goals and the establishment of institution-level learning outcomes, the development and approval of common rubrics for assessing these outcomes, and the mapping of alignment between course-, program-, and institution-level assessment across disciplines. Faculty input is actively sought and collected via a range of methods, including surveys, All Faculty meetings, open discussion sessions, workshop evaluations, informal conversations, formal votes, and feedback reflections embedded into eLumen and linked to every college-wide assessment rubric.

<u>Program- and Course-Level Planning</u>: Department Chairs continue to oversee course- and program-level assessment activities for their respective disciplines, including the development and planning of assessments for student learning outcomes at these levels. Based on their faculty and instructors' goals and preferences, Department Chairs distribute rubrics (or "Plan" assessments) to active course offerings each semester using the eLumen Planner tool. All instructional staff are able to select any of our five common institutional rubrics to assess student performance in their classes, and most departments also have a number of program-specific rubrics available for use as well.

#### 2. Assess: Evaluating Performance

Implementation of the planned assessment activities occurs each semester, including ongoing training opportunities made available to all faculty and instructors in multiple formats on using the eLumen assessment platform, best practices for designing assessment methods, norming and calibration to ensure scoring consistency and accuracy, and additional on-demand support and guidance as needed. The Assessment Director, Chair, and Division Leads (as available) support departments and faculty in developing assessment rubrics in accordance with best practices for identifying observable, measurable behaviors that reflect student learning, building them into the online assessment platform, and linking ("Planning") them the appropriate classes and instructors each semester using the eLumen Planner.

Faculty then enter Activity Information (title and brief description of the assignment, project, or activity through which they will assess student performance on the designated learning outcomes) and record scores on a four-point scale representing various levels of mastery of these skills for each enrolled student. All instructional staff—full-time and part-time—are expected to complete at least one assessment in at least one class each semester that they teach,

and for the sake of consistency, the scoring deadline coincides with the grading deadline each term, making assessment part of the usual teaching routine for any given semester.

### 3/4. Improving: Reporting/Closing the Loop

# **Improvement Planning**

In 2017, the paper form known as the "Assessment Plan & Report" was revamped and rebranded with a new name—Improvement Plan—in order to refocus attention on the essential purpose of assessment, which is not to merely collect and report data, but rather to *improve* student learning. In 2018, the Annual Improvement Plan underwent minor revisions in response to faculty suggestions and feedback, but it retained the same essential format, containing the following three sections:

- 1) What Did You Do? Overview of Assessment Activities & Participation
- 2) What Did You Learn? Student Performance Data & Key Findings
- 3) What Will You Do Next? Concrete Action Steps for Improving Student Learning in the Upcoming Assessment Cycle

In 2019, the Improvement Plan was further refined in moving it to a fully electronic format, directly embedded into eLumen so that data could be automatically generated for each department, allowing faculty and Department Chairs to focus on the narrative portions of their Improvement Plans. In the years since, we replicated the same process using the same electronic format for annual Improvement Plans, continuously collecting further feedback and suggestions on how to improve the template and make revisions accordingly.

Faculty are both invited and strongly encouraged to contribute directly to the drafting of their departments' Annual Improvement Plans. The instructions for each section of the Improvement Plan template primarily consist of questions for discussion, addressing both long-term and short-term goals for student learning, opportunities to refine assessment methods and tools, and strategies for promoting participation in and contributions to departmental assessment

efforts to help work toward those goals. In this process, faculty reflect on past assessment results and processes to identify areas of strength and opportunity and share ideas for future changes to instruction, curriculum, and/or support services to improve student learning as well as possible adjustments to assessment procedures and methods.

Since PCC adopted the eLumen assessment management platform in fall 2016, all assessment planning and reporting has been conducted through eLumen, resulting in cohesive practices across the institution as well as streamlined assessment for faculty. This strategy promotes unity (alignment with institutional goals), consistency (uniform format and process), and quality control (any assessment methods or tools are reviewed by assessment leadership before being entered into the system). Additionally, reports generated by eLumen automatically de-identify and tabulate data, ensuring confidentiality while also providing an institution-wide overview of student performance and faculty participation as well as break-downs of these figures for each division and department.

# Reporting Chain

While the method of submitting, reviewing, and compiling assessment results is now completely electronic, the reporting chain (see Figure 2.3) has remained the same. Faculty submit their assessment data via eLumen, after which Department Chairs review the overall results and compose the corresponding narrative using the Improvement Plan template. Previously, Division Leads would then review completed Improvement Plans and provide comments directly via the electronic template; starting in 2020, however, in the absence of Division Leads, the Assessment Committee coordinated efforts to have committee members review Improvement Plans. Once tagged as approved by these reviewers, the Director of

Assessment is able to download the finalized Improvement Plans directly from the system for final review and compilation for inclusion in the Annual Assessment Report (see Attachment 2).

Figure 2.3 Reporting Chain



Departmental results, participation reports, and institution-wide trends are included in the final version of this report, posted on the U: drive, and distributed to the college Deans, Division Leads, and Department Chairs to be reviewed and discussed with faculty. Assessment plans and reports dating back to 2012 are available on the <a href="Pueblo Community College website">Pueblo Community College website</a>, and reports from earlier years can be accessed by all PCC administrators, instructors, and staff through an internal college network drive. Upon completion and approval by the Assessment of Student Learning Committee, the final version of this report will be posted on the U: Drive, and upon administrative approval, it will also be posted on the <a href="Assessment @PCC Blog">Assessment @PCC Blog</a> along with all attachments and appendices.

# B. Five-Year Plan

We are now entering a new five-year plan for assessment, and the goals for the next five years have been discussed and established by the Assessment of Student Learning Committee. Our first task for the 2023 calendar year is to review our five college-wide ISLO rubrics, collect faculty feedback and input on opportunities for improvement, and revise/approve new versions of these essential assessments. See Figure 2.4 below for an outline of the goals established as part of this new Five-Year Plan.

2022 2023 2024 Review & 2025 Revise Evaluate & 2026 College-Level Implement Review Rubrics Scaled Program-Level Participation Develop & Learning Expectations Integrate Outcomes & Expand & Student Mapping Promote Services Opportunities Assessment for Norming/ Calibration

Figure 2.4 Five-Year Plan

# C. Assessment Timeline

As of 2016, Assessment of Student Learning follows a calendar year cycle for planning and reporting; concurrently, departments follow a semesterly cycle of distributing assessment rubrics and submitting data for each term (see Figure 2.5 for these concurrent timeline details).

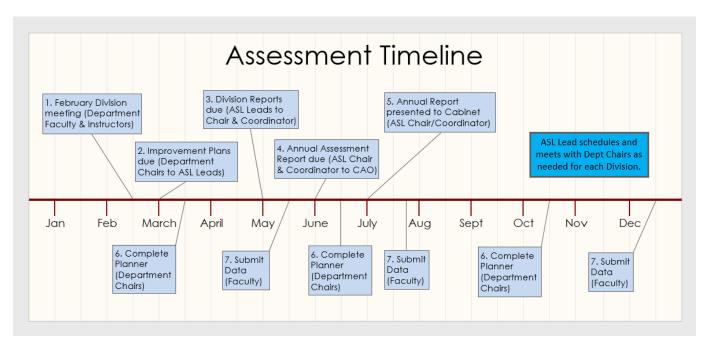


Figure 2.5 Assessment Timeline

- 1. February Division meeting set aside for reviewing past results and discussing next steps within departments
- 2. Improvement Plans for previous calendar year due to ASL lead by the end of February
- 3. ASL Leads compile and send Division Reports to ASL Chair & Coordinator by the end of April
- 4. ASL Chair & Coordinator compile and send Annual Assessment Report to CAO by the end of May
- 5. ASL Chair and/or Coordinator present the Annual Report to President's Cabinet during the summer
- 6. Department Chairs distribute rubrics using the eLumen Planner by mid-semester March, June, & October
- 7. Faculty submit assessment data in elumen by the grading deadline each semester -May, July, & December

Additionally, "Task Checklist" was developed in Fall 2016 to clarify the steps each department should be taking provide a suggested time frame for completing each task. After receiving numerous requests for a task checklist for the Spring 2017 semester, we designed a more comprehensive Semesterly Task Checklist that could be used from semester to semester without needing updates to the specific goals or projects undertaken during a particular cycle or term (see Figure 2.6 for a condensed overview).

Figure 2.6 Semesterly Task Checklist Overview

When	What	
Week 4	Communicate expectations for participation, department goals	
week 4	and plans, and training opportunities to faculty and instructors	Ī
	Review pact results, identify key findings, and discuss next	

Who Department Chairs Within Review past results, identify key findings, and discuss next Week 6 steps and opportunities for improvement Departments Establish the plan for current semester assessment activities Within Week 8 (who, what, and in which classes) Departments Complete the eLumen Planner by distributing rubrics to Department Week 10 courses according to the established plan Chairs Grading Evaluate current students' performance on planned All Instructional Deadline assessments and submit rubric scores in eLumen Staff

Over the past several years, we have reinforced the changes made to the annual cycle timeline and continued to refine our processes by eliminating unnecessary steps, simplifying reporting procedures, and clarifying semesterly expectations. In particular:

- Division Meeting: We received approval to move the Division Meeting time dedicated to assessment work from March to February moving forward; providing this time to review results and discuss next times earlier in the semester has proven to make it more feasible to implement planned improvements in the spring semester and also gives departments the opportunity to work on completing their Improvement Plans together before the deadline. This change was met with an overwhelmingly positive response as it gave the divisions more time to work on their Improvement Plans.
- Electronic Submission of Improvement Plans: In 2017, we developed and piloted a new "Improvement Plan" form designed to replace the cumbersome Assessment Plan & Report; instead of two submission deadlines for the same form, combining the review of the previous cycle's results with the planning of next steps for improvement into one step both streamlines the reporting process and emphasizes the importance "closing the loop" by making data-driven decisions about curricular and instructional changes directly based on findings from the previous cycle's results. (See <a href="section II">section II</a>, part A, item #3/4 for further details on the electronic submission process and the motivations behind this change).
- Expectations and Deadlines: In conjunction with efforts to increase part-time instructor participation, we clarified the expectations associated with assessment on multiple occasions, including presentations at Part-Time Instructor Orientation sessions, D2L announcements, and email reminders sent to all faculty and all instructor distribution lists. In particular, we reiterated that all instructional staff—whether full-time or part-time—are expected to complete at least one assessment in at least one class each semester that they teach, and assessment scores must be submitted via eLumen by the corresponding grading deadline for the course. This had a positive impact on overall

participation rates (see <u>Appendix B, Table B2</u> for more detailed participation rate figures), but Department Chairs and Program Coordinators need to keep a focus on Part-Time participation moving forward.

# D. Roles & Responsibilities

All instructional staff, including any and all willing part-time instructors, contribute to the development of program-level procedures, including developing student learning outcomes, establishing the mapping/alignment of those outcomes, and designing program-level assessment rubrics. The primary Assessment roles at Pueblo Community College are defined as follows:

- Full-Time Faculty complete eLumen Basic Training, assess evidence of student work in at least one section of one course each semester using at least one of our common ISLO rubric(s) OR aligned PSLO/CSLO rubric(s) by entering scores into eLumen by the grading deadline, and contribute to program-level planning, development, and improvements within their departments.
- Part-Time Instructors ideally complete eLumen Basic Training, assess evidence of
  student work in at least one section of one course each semester using at least one of our
  common ISLO rubric(s) OR aligned PSLO/CSLO rubric(s) by entering scores into
  eLumen by the grading deadline, and contribute to program-level planning, development,
  and improvements within their departments.
- Department Chairs distribute assessment rubrics to faculty using the eLumen planner, encourage part-time instructor involvement in assessment, and facilitate discussions to interpret results and develop improvement plans detailing changes to curriculum, instruction, and assessment procedures based on the results.

Assessment Leads assist the ASL Director and Committee Chair in coordinating assessment practices across all of PCC's academic divisions and campuses through communicating requirements and expectations, answering faculty questions, and compiling results. In 2020, the Lead position was eliminated as it was no longer feasible to offer release time to these full-time faculty. While we continued without Division Leads in 2022, it became clear that this role is crucial to the long-term sustainability of assessment efforts, and the Assessment Committee will continue to petition college leadership to restore the Assessment Division Leads in the future. As part of that effort, the Assessment Committee partnered with the Faculty Salary & Load Committee to draft revised Protocol 212 on Faculty Workload, which was approved by Faculty Council and the President's Cabinet as of May 1<sup>st</sup>, 2023. The revised protocol includes an explicit provision of reassigned time for the Assessment Chair and Division Leads, so we are hopeful that these positions will be fully reinstated by the start of the upcoming 2023-2024 academic year.

# **III. Ongoing Projects**

#### A. Part-Time Instructor Participation

Since 2017, per an HLC recommendation, PCC has been increasing our part-time instructor participation. Specific counts of part-time instructors vary, not just from semester to semester, but within semesters themselves, making it difficult to get a firm grasp on any official numbers from which to evaluate participation rates, or even set improvement goals.

After exploring several counting methods that proved to be inconsistent in terms of accuracy, we arrived at what seems to be the most reasonable means tabulating the number of part-time instructors and full-time faculty employed at PCC during each semester, which is twofold:

- Timing: The data load from Banner into eLumen is performed immediately after the
  census date for full term classes, maximizing the accuracy of the student rosters,
  instructors of record, and classes offered as they appear in the system.
- 2. Review: A report containing the complete list of all "evaluators" (instructors) loaded into eLumen is generated, sorted by Division, and submitted for review to the corresponding Deans and AEA's, who record part-time and full-time status for each individual listed and return them to the Director of Assessment.

Consequently, the participation rate figures documented in the Annual Assessment Report are calculated based on the number of part-time instructors established in these lists each term. There are still some inevitable discrepancies, especially with regard to identifying "course-responsible" instructors, and we continue to work toward a solution in terms of identifying non-course-responsible instructors (e.g. clinical, lab, etc.) more consistently.

#### 1. Communications Plan

The ASL Committee's plan for clear, regular, and timely communication follows consistent and expected methods for distributing information in multiple formats, including establishing specific individuals and platforms as the primary sources of specific types of assessment-related materials, instructions, and reminders:

- <u>Dedicated Contact</u>: While the usual primary points of contact, the Division Leads, are no
  longer available as a resource, the dedicated eLumen Support email account (managed by
  the Director of Assessment), Department Chairs, and the ASL Chair and Director are
  clearly established as the primary sources of support and key informational
  communications pertaining to assessment.
- Newsletter: Distributed on a bimonthly basis with archives of past issues available on
  multiple platforms, the Assessment of Student Learning Newsletter contains recent news
  and accomplishments, reminders of upcoming tasks and deadlines, and clarifications
  regarding terminology, best practices, eLumen features, and FAQs.
- <u>Division Meetings</u>: Assessment Committee Updates are a standing item on the agenda for
  monthly Division Meetings in order to share recent updates, current projects, and
  upcoming assessment deadlines. This monthly opportunity to communicate directly with
  all full-time faculty was invaluable in ensuring that everyone was fully informed
  regarding assessment activities and also allowed faculty to ask questions and receive
  immediate clarification and support.
- <u>Branch Campus Involvement</u>: A concerted effort is made to offer all training, goal setting, and assessment discussions in-person at the branch campuses to ensure that all

- faculty had an equal opportunity to receive key information and contribute to the assessment process without the impediments of distance and technology.
- Training & Resources: In addition to a wide range of assessment events and workshops that have been offered on a range of topics, comprehensive assessment resources are available to faculty and staff in several centralized locations, including the shared college network U: drive, an Assessment Resources D2L course, and a comprehensive archive of materials posted on the Assessment @PCC Blog. By providing the full range of resources for assessment support (training guides, common rubrics, current forms, results reports, past newsletters, support guides including templates, worksheets, and examples, and opportunities to discuss projects and receive feedback) via several platforms, we can ensure that they are easily accessed no matter which method each individual prefers.

# 2. Part-Time Participation Rates

During the 2022 cycle, a total of 168 *unique* individuals participated in assessment by entering scores in eLumen at least once during the calendar year (see Figure 3.1 for total participation figures by term and status). 85 of those were part-time instructors, representing approximately 38.46% of our part-time instructors across all three campuses and 50.6% of all individuals participating in assessment throughout the calendar year. Between the 2021 and 2022 cycles, we recorded a noticeable decrease in the number of part-time instructors employed at PCC (310 to 221), but the number of those completing assessments in eLumen stayed consistent, resulting in a 12.3% increase in part-time participation rates overall. (See <u>Appendix B, Table B2</u> for more detailed figures on participation rates by status for each department and division.)

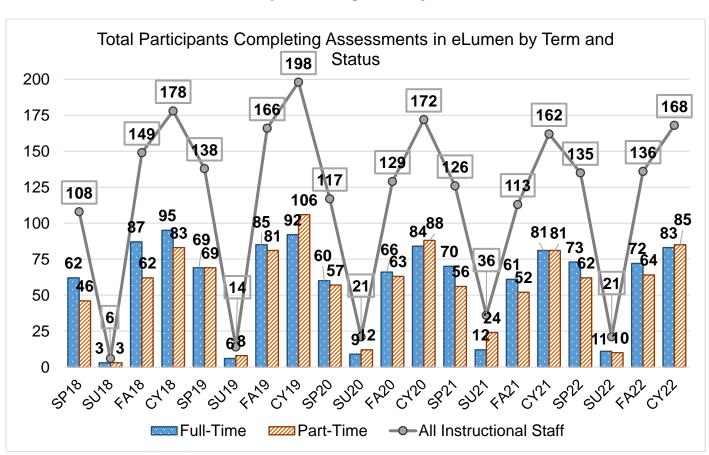


Figure 3.1 Unique Participants

# B. Program-Level Assessment

Figure 3.2 Program-Level Assessment Development Progress

DEPARTMENT	PREFIXES	w/PSLOS	PSLOS	w/MAPPING	w/RUBRIC
Arts & Sciences	42	37	352	237	190
CRJ	1	1	12	12	9
ECE	3	3	40	14	8
ENG	8	7	114	86	84
FAH	6	6	77	42	45
MAT	1	1	12	6	7
MGD	4	4	40	39	5
SCI	10	7	10	9	5
SOC	9	8	47	29	27
Business & Technology	27	20	150	126	59
ASE	4	1	11	11	5
BUS	9	6	33	33	0
CIS	4	3	23	18	7
HIT	1	1	6	6	6
MAC	8	8	69	53	33
WEL	1	1	8	5	8
Health & Public Safety	17	14	99	86	53
COS	4	3	6	3	0
DEH	1	1	23	22	6
EMS	1	1	11	10	11
FST	2	1	6	6	6
HPR	1	1	2	2	1
LEA	1	1	5	3	0
OTA	1	1	6	6	6
PHT	2	1	5	3	1
PTA	1	1	12	12	5
RCA	1	1	7	3	4
RTE	2	2	16	16	13
Medical & Behavioral Health	7	5	51	44	18
CSL	1	0	0	0	0
MAP	2	2	12	6	0
NUA	1	1	9	9	4
NUR	3	1	21	20	10
STE	1	1	9	9	4
Institution Totals	93	76	652	493	320

Development of program-level assessment continues to progress steadily. Out of 93 prefixes, 76 have PSLOs associated with them, for a total of 652 PSLOs (increase from 623 in 2021), 493 of which are mapped (increase from 461 in 2021). Out of those, 320 have rubrics associated with them (decrease from 326 in 2021, likely due to the closure of some programs, especially Culinary Arts, which has historically been one of our more active departments for assessment. See Attachment 1: Program-Level Assessment for a complete listing of PSLOs.

#### C. Improvement Planning

The new Improvement Plan is more streamlined and intuitive than any of its previous iterations, facilitated by its new electronic format. The new form contains three sections (see Section II A, #3/4 for further specifics on each section) and presents the results up front, with performance data auto-generated for each Student Learning Outcome assessed, accompanied by a brief narrative overview on any performance trends that were noted, a summary of the assessment procedures, and any comments or clarifications needed to explain or explore factors that may have affected the assessment procedures or student performance.

Once the results figures are generated in the plan, faculty in each department is given the Division Meeting time in February to meet and discuss the results as part of the improvement plan process. Faculty are tasked with examining the data and answering questions regarding the instructional, curricular, and procedural improvements they need to make in the upcoming year as a follow-up on their assessment results from the previous cycle. In other words, faculty are the ones charged with developing a concrete plan to close the loop. The third part of the form, then, is the plan for the following calendar year's assessment, which includes the next steps to be taken in assessment, the desired improvement goal, the timeframe in which this will be achieved, and the participants in each assessment from within the department.

Now that the Improvement Plan has been transferred to an electronic format directly embedded into eLumen, it allows the system to automatically generate key performance data in a clean and condensed format. This new streamlined process for submitting and collecting assessment data has proved to be much faster, easier, and less frustrating by comparison to previous reporting methods, which often required Department Chairs to expend most of their efforts on the time-consuming and tedious tasks of compiling reports from various sources, extrapolating information submitted in inconsistent formats, and tabulating data to calculate results. Consequently, whereas assessment was often previously associated with the idea of meaningless data collection and the essential purpose of assessment—to improve student learning—was largely lost in the shuffle, the response to the electronic template has been resoundingly positive, with Department Chairs and faculty alike touting its simplicity and ease of use, allowing them to focus their energies on actually interpreting the data and planning meaningful improvements.

## D. PCC Flex Self-Assessment

The introduction of the PCC Flex format in 2020 led to conversations and concerns about the efficacy of the previously untested hybrid instructional model that allows students the flexibility to attend class remotely or (in limited numbers) face-to-face in the traditional classroom. There were understandably many questions about what kind of impact the Flex model would have on quality of education, student performance and attainment of core learning outcomes, and the learning experience as a whole. A new institution-level assessment emerged from these conversations, focusing on those core ISLOs that are most relevant or impacted by the change in instructional format, which are assessed in comparison to performance in traditional face-to-face classes at PCC. Ultimately, through several iterations and revisions based on

feedback, the PCC Flex Self-Assessment was developed and piloted in the Fall 2020 semester. By asking students to honestly (and anonymously, if they choose) evaluate their own performance in their PCC Flex classes as well as compare it to past performance in traditional courses, we were able to capture some very interesting findings about how the Flex format has impacted student learning in both expected and unexpected ways.

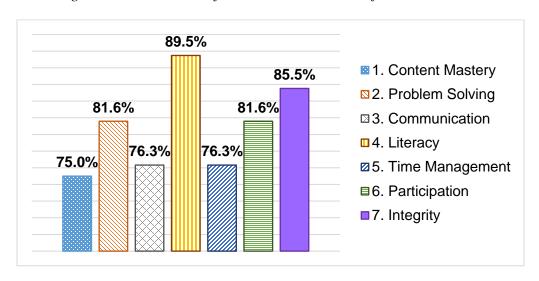


Figure 3.3 PCC Flex Self-Assessment – 2022 Performance Results

Approximately 76 students completed the PCC Flex Self-Assessment over the 2022 calendar year. In general, they rated their performance in this format fairly well, exceeding our performance target of 70% on all 7 of the learning outcomes assessed (see Figure 4.1 below for overall performance rates on each ISLO). Surprisingly, we saw a significant increase in those areas students previously reported as underperforming in 2021, such as Content Mastery (64.4% to 75.0%), Problem Solving (72.8% to 81.6%) and Participation (71.2% to 81.6%). This may indicate that students are now becoming much more comfortable with online and hybrid learning in general, and the PCC Flex model enabled them to develop these especially challenging skills to teach and learn in a brand new and unfamiliar learning environment.

Even more interestingly, students scored themselves highest on Literacy/Finding Resources (89.5%) and Integrity of Work (85.5%). Concerns had been expressed about these areas with regard to the greater independence and reduced supervision involved with remote learning, yet students consistently scored their performance on these skills highly—and in fact higher than in traditional face-to-face classes. Overall, 88.9% of students felt that they performed the same or better on average on the 7 ISLOs assessed. Even on the skills that students felt they struggled with the most, they still rated their performance in PCC Flex model as generally comparable to their past performance in traditional classes. See Figure 4.2 below for the percentage of students rating their performance in PCC Flex classes better, the same, or worse by comparison to previous traditional (face-to-face) classes taken at PCC.

Figure 3.4 Comparison of Performance in PCC Flex vs. Traditional (Face-to-Face) Courses

ISLO	Better	Same	Worse	Same or Better
Flex 1. Content Mastery (1a)	35.82%	58.21%	5.97%	94.03%
Flex 2. Problem Solving (1d)	26.87%	67.16%	5.97%	94.03%
Flex 3. Effective Communication (2c)	34.33%	55.22%	10.45%	89.55%
Flex 4. Finding Resources (4b)	33.82%	44.12%	22.06%	77.94%
Flex 5. Time Management (5a-1)	32.84%	58.21%	8.96%	91.04%
Flex 6. Participation (5a-2)	35.82%	47.76%	16.42%	83.58%
Flex 7. Integrity of Work (5a-3)	35.82%	56.72%	7.46%	92.54%
Total	33.62%	55.32%	11.06%	88.94%

Moving forward, we plan to dial back on assessing PCC Flex classes with this method as we reduce the number of courses offered in this format, with 2022 representing a transitional year for ph4asing out this assessment initiative.

#### IV. New Initiatives

# A. Historical Participation Trends

In support of the Destination 2022 Strategic Plan, Strategic Imperative Five, Strategy 1, KPI 2 (increase the number of reports that are used for decision-making by 3% annually), the Director of Assessment of Student Learning developed new report detailing the history of full-time and part-time instructor participation trends over the past 5 years. The goal was to use this data to track spikes in participation and identify possible causes in hopes that we can replicate strategies that were successful in the past to implement again, especially in response to the stagnant participation rates over the past 2 years. The acquisition of eLumen in 2016 proved an invaluable resource for tracking assessment activities and participation rates with longitudinal data, allowing us to identify important shifts and posit probable causes, therefore informing strategies for promoting greater participation in assessment moving forward.

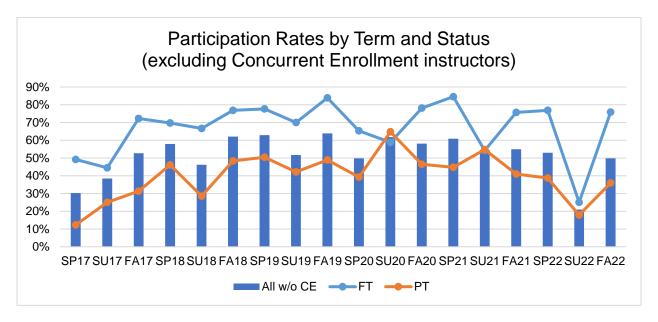


Figure 4.1 Faculty/Instructor Participation Rates by Term and Status

The key finding here reflects the change and uncertainty beginning in 2020 with the COVID-19 pandemic. In particular, we saw a steady increase in participation rates among both full-time

faculty and part-time instructors from 2017 to 2019, and then various peaks and valleys thereafter. In particular, the overall decrease in participation seems to parallel the removal of Division Leads for assessment in 2020. While we were able to recover somewhat in 2021, and that progress has continued among part-time instructors, but it is stagnating among full-time faculty. With the recent vote to reinstate Division Leads, we are hopeful that this trend will start to be reversed. Also of note is the general decrease in participation during the summer semester, which is also reflected in sample size trends (see Figure 5.6).

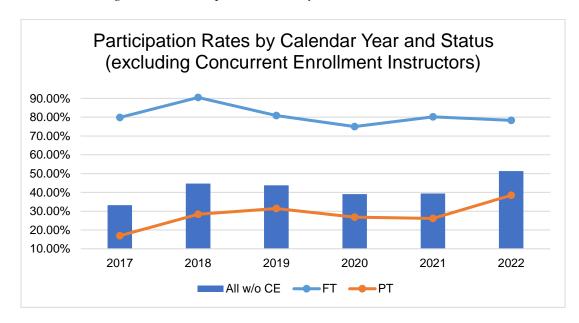


Figure 4.2 Participation Rates by Calendar Year and Status

#### B. College-Wide Rubric Review

One of our primary goals as part of our new 5-Year Plan for assessment is to review all of our college-level assessment rubrics, collect feedback from faculty and instructors on their strengths and weaknesses, and implement revisions as needed. The purpose of this project is to ensure that our college-wide rubrics maintain currency, relevance, and applicability from year to year, and we anticipate ongoing review of our assessment processes in the ongoing pursuit of continuous improvement. As of the publication of this annual report, 3 of our existing 5 college-

wide ISLO rubrics have been reviewed, revised, approved, and implemented. The rubrics for <a href="Critical Thinking-Problem Solving">Critical Thinking-Problem Solving</a>, <a href="Effective Communication">Effective Communication</a>, and <a href="Quantitative Reasoning">Quantitative Reasoning</a>, were available for use in eLumen in the Fall of 2022. The <a href="Literacy">Literacy</a>, and <a href="Professionalism">Professionalism</a> rubrics were available for use in eLumen in the Spring of 2023.

The assessment committee also developed the new Social Consciousness ISLO rubric in support of a renewed focus on Diversity, Equity, and Inclusion as part of the college's new Strategic Plan. This rubric was presented at PCC's Institutional Effectiveness Day and at the CORAC conference at Red Rocks Community College in the Spring of 2023. The rubric for Social Consciousness and the newly revised rubrics can be found on our Assessment @PCC Blog. The collaborative creation of this new DEI-specific institutional learning outcome also fulfilled the goal set in the new Destination 2027 Strategic Plan, specifically Criterion 4, Strategy 4, KPI 4: "Add 1 DEI-specific Institutional Student Learning Outcome that promotes a shared cultural understanding across the student body." Moreover, this goal was surpassed, in that we not only added the ISLO, but we also developed a new college-wide rubric corresponding to this new ISLO for Social Consciousness.

#### C. Co-Curricular Assessment

In 2022, the Director of Assessment of Student Learning partnered with the Vice President of Student Services to begin identifying opportunities for assessing student learning through our various co-curricular programs and student service offices. After initial discussions, we identified a total of 18 potential areas that would be well-suited to assessing student learning with a particular focus on student learning outcomes rather than program or office outcomes. These 18 areas were built into eLumen within a newly created Student Services "department" according to the codes listed below:

- Admissions and Records—ADM
- Advising & Success Coaches—ADV
- Children First—CHF\*
- Concurrent Enrollment—COE
- Dean of Students—DOS
- Disability Resources—DRC
- Financial Aid—FIN
- Library—LIB
- OPTICA—OPT

- Recruitment—RCR\*
- Return to Earn—RER
- Student Life—LIF
- Fremont & SW—FRSW
- Testing—TES\*
- The Learning Center—TLC
- TRIO Support Services—TRO
- Tutoring—TUT\*
- Upward Bound—UPB

Through collaborative, hands-on working sessions with the directors of each area, including training and guidelines for developing Student Services Learning Outcomes (SSLOs) and their corresponding assessment rubrics, in total, 28 SSLOs and 8 rubrics have now been developed in the following student services areas: Dean of Students, Disability Resources Center, Financial Aid (Student Loans and VA rubrics), Library, Return-to Earn, Student Life, and TRIO Upward Bound. Of those 8 assessments, 1—the Library Orientation Pre- and Post-Test assessment—has been piloted in 2019 and now again, with some minor revisions in the process, in 2022. Below are the initial results of this pilot co-curricular assessment:

Figure 4.3 Library Orientation Assessment Results

Term	<b>Scores Collected</b>	N/A Scores	TA%
Spring 2019	75	0	76.00%
Fall 2019	1,113	141	71.70%
Spring 2022	216	69	91.67%
Fall 2022	1,272	462	83.02%

<sup>\*</sup>Assessment on hold for the time being as we develop the process for our other student services.

#### V. 2022 Assessment Results

Past assessment plans and reports can be accessed by all PCC administrators, instructors, and staff through an internal college network drive (U:\Assessment of Student Learning).

Additionally, this report contains an overview of key institution-level results, while department-specific results, including course- and program-level data, are included as supplemental attachments along with departmental Improvement Plans are included in the Appendices. Upon completion and approval by the Assessment of Student Learning Committee, the final version of this report will be posted under the 2022 annual cycle folder. Upon administrative approval, the report will also be accessible through the PCC portal, via the PCC website, and on the Assessment @PCC Blog.

## A. Completion/Participation Rates

Assessments were planned for 916 sections of 357 different courses, and scoring was completed in eLumen for 557 of those sections in 273 courses, amounting to a total of 601 unique assessments completed of the 1,042 planned, (see <a href="Appendix B, Table B1">Appendix B, Table B1</a>). As in previous years, the completion rate is not the most accurate measure of overall participation, as many departments "planned" additional assessments in eLumen in order to offer faculty the option of which assessment they would like to complete.

Figure 5.1 Participation	Rates	by	Status	and	Semester

	Full-Time Faculty			Part-Time Instructors			ctors All Instructional Staff		
Term	Total	Out of	Rate	Total	Out of	Rate	Total	Out of	Rate
SP22	73	95	76.84%	62	160	38.75%	135	255	52.94%
SU22	11	44	25.00%	10	56	17.86%	21	100	21.00%
FA22	72	95	75.79%	64	178	35.96%	136	273	49.82%
CY22	83	106	78.30%	85	221	38.46%	168	327	51.38%

A total of 168 individuals participated in institution-level assessment (increase from 162 in 2021, 172 in 2020, and 198 in 2019), including 83 full-time faculty and 85 part-time instructors, representing a 78.3% full-time participation rate (decrease from 80.2% in 2021) and a 38.46% part-time participation rate (increase from 26.13% in 2021), with 51.38% participation overall (increase from 39.4% in 2021). See <u>Appendix B, Table 2</u> for participation rates and sample sizes by department.

We have seen a steady increase in the number of programs participating in institution-level assessment over the past several years, from 32 disciplines in 2015 to 57 in 2022. In the past year, courses were offered in several new prefixes, and a total of 64.77% of all disciplines (57 out of 88) participated in assessment in 2022. Assessments were completed in the following disciplines (prefixes newly assessed in 2022 in bold):

Figure 5.2 Programs Participating in 2021 Institutional Assessment

- AAA Advanced Academic Achievement
- ACC Accounting
- AGB Agriculture Business
- ART Art
- ASC Animal Science
- ASE Automotive Technology
- AST Astronomy
- BIO Biology
- BUS Business
- CAD Computer Aided Drafting
- CHE Chemistry
- CIS Computer Information Systems
- COM Communication
- COS Cosmetology
- CRJ Criminal Justice
- CSC Computer Science
- CWB Computer Web-Based
- DEH Dental Hygiene
- DMS Diagnostic Medical Sonography
- ECO Economics

- EMS Emergency Medical Services
- ENG English
- ENV Environmental Studies
- EST Esthetician
- FST Fire Science Technology
- GEY Geology
- HIT Health Information Technology
- HPR Health Professional
- HUM Humanities
- JOU Journalism
- LEA Law Enforcement Academy
- LTN Library Technician
- MAC Machining Technology
- MAN Management
- MAP Medical Assisting Profession
- MAT Mathematics
- MGD Multimedia and Graphic Design

- MOT Medical Office Terminology
- MTE Manufacturing Technology
- MUS Music
- NAT Manicurist
- NUA Nursing Aide
- NUR Nursing
- OTA Occupational Therapy Assistant
- PHI Philosophy
- PHY Physics
- POS Political Science
- PSV Public Service
- PSY Psychology
- PTA Physical Therapist Assistant
- PTE Psychiatric Technician
- RCA Respiratory Care
- RTE Radiologic Technology
- SOC Sociology
- SPA Spanish
- STE Surgical Technology
- WEL Welding Technology

# B. Sample Sizes

We ultimately collected assessment data from 557 sections of 273 different courses in 57 prefixes across 28 departments (see <u>Appendix B1</u> for complete figures on participation rates and sample sizes for each prefix department). Counting duplicates from students who were assessed on multiple SLOs and/or in multiple courses, a total of 7,613 students were assessed across the institution during the 2022 calendar year:

Figure 5.3 Sample Sizes by Division

Division	Courses	Sections	Students	Assessments
PCC Overall	273	557	8,696	648
A&S	74	206	2,439	215
BAT	96	186	2,778	193
HPS	55	76	1,018	81
MBH	48	89	1,404	112

Figure 5.4 Total Students Assessed by Level & Division

Level	All	ISLO	PSLO	CSLO	
PCC Overall	7,639	3,085	3,542	1,462	
A&S	2,439	1,008	1,027	624	
BAT	2,778	1,484	1,040	309	
HPS	1,018	315	324	414	
MBH	1,404	278	1,151	115	

Figure 5.5 Total Scores Collected (Directly & Indirectly) by ISLO & Division

	PCC		A&S		BAT		HPS		MBH	
ISLO	Scores	N/A's								
Critical Thinking	7,606	1,224	3,040	624	2,389	263	964	27	1,213	310
Effective Communication	5,959	1,416	3,119	1,023	1,307	208	391	37	1,142	148
Quantitative Reasoning	4,565	2,208	2,664	2,007	1,294	124	72	6	535	71
Textual Literacy	5,916	1,181	1,853	514	2,917	471	185	102	961	94
Professionalism	6,343	1,126	2,438	666	2,000	301	585	25	1,320	134
Social Consciousness	2,118	242	907	206	32	1	398	15	781	20
PCC Flex	532	658	112	133	385	385	-	1	35	140
All ISLOs	33,039	8,055	14,133	5,173	10,324	1,753	2,595	212	5,987	917

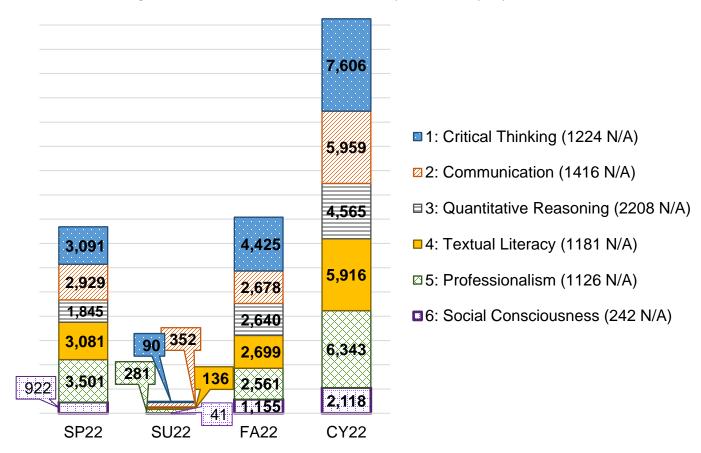


Figure 5.6 Total Scores Collected (Directly & Indirectly) by ISLO & Term

Figure 5.7 Proportion of Total Scores Collected for Each ISLO

ISLO	PCC	A&S	BAT	HPS	MBH
1: Critical Thinking & Problem Solving	23.02%	21.51%	23.14%	37.15%	20.26%
2: Effective Communication	18.04%	22.07%	12.66%	15.07%	19.07%
3: Quantitative Reasoning	13.82%	18.85%	12.53%	2.77%	8.94%
4: Textual Literacy	17.91%	13.11%	28.25%	7.13%	16.05%
5: Professionalism	19.20%	17.25%	19.37%	22.54%	22.05%
6: Social Consciousness	6.41%	6.42%	0.31%	15.34%	13.04%
PCC Flex Self-Assessment	1.61%	0.79%	3.73%	0.00%	0.58%

Figure 5.8 Proportion of N/A ("Not Assessed") Scores Recorded by ISLO

ISLO	SP22	SU22	FA22	CY22
1: Critical Thinking	14.90%	37.93%	12.43%	13.86%
2: Communication	17.79%	34.45%	18.23%	19.20%
3: Quantitative Reasoning	38.68%	11.11%	28.14%	32.60%
4: Textual Literacy	16.35%	30.26%	16.15%	16.64%
5: Professionalism	16.50%	14.85%	13.07%	15.08%
6: Social Consciousness	9.52%	31.67%	9.84%	10.25%
PCC Flex Self-Assessment	52.94%	-	60.78%	55.29%
All ISLOs	20.93%	27.78%	17.71%	19.60%

With regard to these data on 2022 sample sizes, several noteworthy observations can be made:

#### 1. Score Distributions

The distribution of scores collected for each ISLO has not changed significantly over the past several years, and proportions continue to equalize, with some minor disparities:

- The sample size for Quantitative Reasoning has historically been quite small in comparison to the other ISLOs, due in part to the nature of PCC's course offerings, many of which do not include an emphasis on quantitative reasoning in their core learning outcomes, and as such it makes less sense to assess this ISLO in many of our classes.
- Similarly, sample sizes for Literacy have also been on the smaller side, primarily because this newer ISLO was introduced later than the rest, but now that instructors have had time to familiarize themselves with the new learning outcome and its rubric, sample sizes have now increased to a proportionate level.
- Most noteworthy is the very small proportion of scores collected on the new Social Consciousness ISLO—this is to be expected, especially as only initial data were collected throughout the majority of the year, and the new Social Consciousness rubric was only officially rolled out for implementation in Fall 2022. That being said, we will make concerted efforts to promote the new ISLO rubric among faculty and instructors to increase the amount of data collected.

#### 2. Summer Assessment

While it is to be expected that there is less data to be collected during the summer semester given that fewer classes are offered, and it is true that the raw number of scores collected is much lower than the spring or fall semesters, the sample size for summer

2022 assessments has actually decreased after last year's moderate improvement. By comparison to the overall year's sample size (33.9% of courses and 20.4% of sections offered over the course of the entire year), 19.9% of courses offered during the summer semester and 14.7% of sections were assessed. See Figure 5.9 for a brief overview of how summer assessment activities have changed over the past several years.

Figure 5.9 Proportion of Courses & Sections Assessed during Summer Terms

ISLO	SU18	SU19	SU20	SU21	SU22
Courses	4.96%	9.46%	16.13%	33.30%	19.85%
Sections	3.52%	8.30%	15.50%	25.90%	14.65%

Efforts to increase summer semester assessment seem have had a positive impact, and it is important that we maintain this positive momentum by continuing to communicate and reiterate the expectation that all instructional staff will complete at least one assessment every semester they teach, *including* the summer.

#### 3. N/A Proportion

The average proportion of N/A ("Not Assessed") scores for most ISLOs were well within a reasonable range of approximately 20% or lower, indicating that instructors felt they were able to accurately assign numerical scores to the majority of their students on all of the criteria described in these rubrics. Quantitative Reasoning is the primary outlier here, with an N/A proportion of 32.6% (2019 = 28.1%; 2020 = 19.1%; 2021 = 29.3%). This is most likely due to the fact that only a small portion of our course offerings have a primary focus on quantitative reasoning skills, and we have been encouraging instructors in other disciplines to participate in assessing this ISLO in the small ways that it is applicable to their courses. This often means that not all components of the Quantitative Reasoning ISLO Rubric will be able to be assessed reasonably in all courses, thus an increase in sample size overall will necessarily entail an increase in N/A scores as well.

#### C. Performance Trends

Institution-level results revealed that the performance target—70% of students achieving "Accomplished" (3) or "Exemplary" (4) level of mastery—was met for our ISLOs overall (71.8% average). PCC students are demonstrating impressive performance in all areas, but especially in the skills of Professionalism (73.5%), Critical Thinking (72.9%), and Quantitative Reasoning (72.44%) (see Figure 5.10 below).

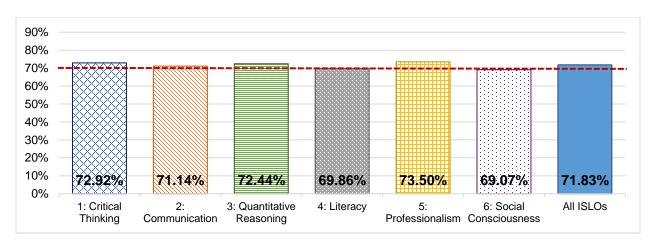


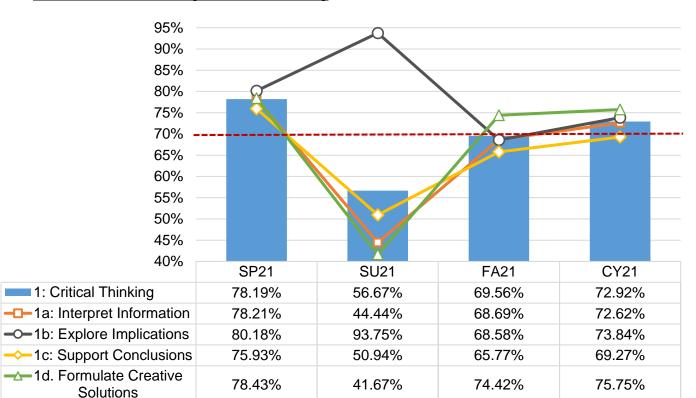
Figure 5.10 Overall ISLO Performance Target Achievement Rates

These results are largely consistent with previous assessment cycles, with some slight decreases in most ISLO categories. By comparison to 2021, Critical Thinking was the only area that showed an increase in performance (+2.0%), while the remaining 4 preexisting ISLOs decreased: Effective Communication (-5.2%), Quantitative Reasoning (-5.8%), Literacy (-4.4%), and Professionalism (0-6.9%). Even still, our students continued to meet our performance target overall (71.8%), despite an average decrease of 4.1% since 2021. All ISLOs were either above the 70% performance target or within 1 percentage point of that target; the two ISLOs that fell just short of the 70% target were Literacy (69.9%) and the new Social Consciousness ISLO (69.1%), which is understandable especially for the latter, given the very small sample size collected with just one semester since implementation of the new Social Consciousness rubric.

It is also noteworthy that there was also a high level of success in both Professionalism (73.5%) and Critical Thinking (72.9%), which are arguably two of the most important ISLOs for our student population, especially according to community and workforce partners. This is due to intense efforts to offer opportunities for our students to be introduced to, develop, and deepen their interpersonal skills and professional behaviors as well as their analytical reasoning and problem-solving skills through coursework across our academic programs and student services.

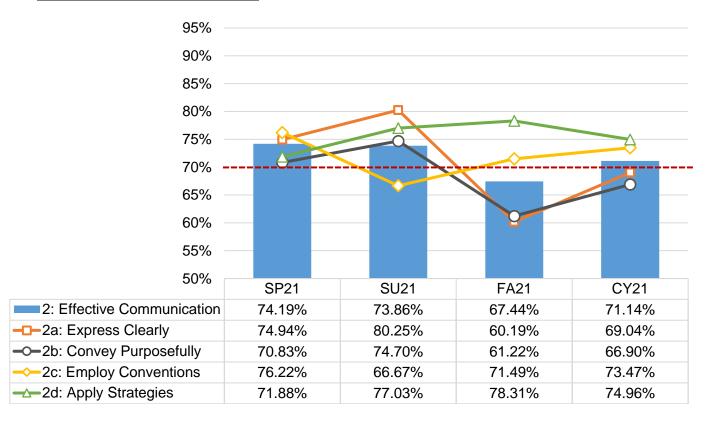
Because several of the results are hovering just at or just above their performance targets, these rubrics will be revisited for review and revision by the Assessment Committee in 2023 to determine what, if anything, needs to be done to revise these performance targets as part of continuous improvement of assessment.

Figure 5.11 ISLO Performance by Rubric Criterion

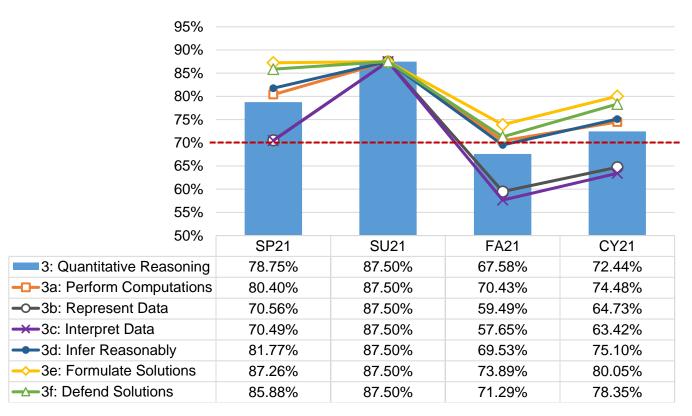


ISLO 1: Critical Thinking & Problem Solving

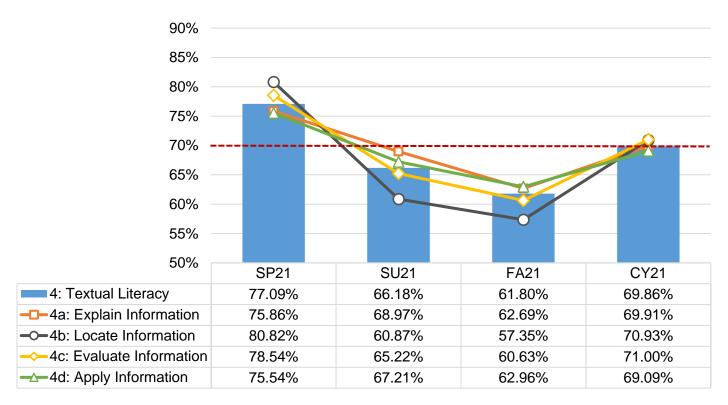
ISLO 2: Effective Communication



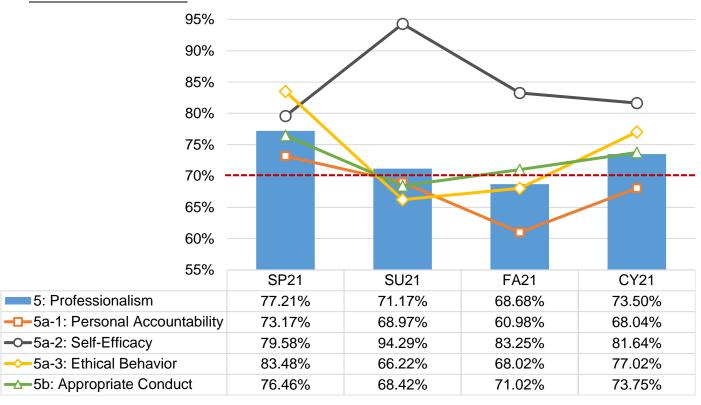
**ISLO 3: Quantitative Reasoning** 



**ISLO 4: Textual Literacy** 



ISLO 5: Professionalism





ISLO 6: Social Consciousness

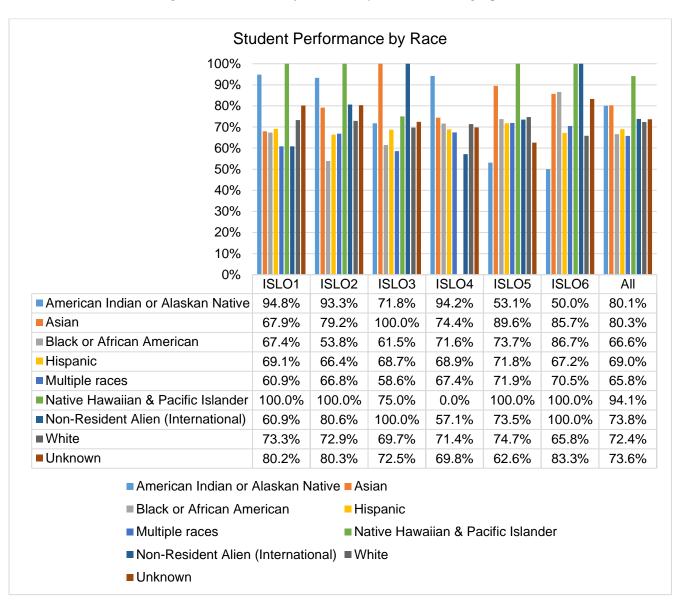
See Appendix B, Table B4 for specific score counts for each ISLO and criterion.

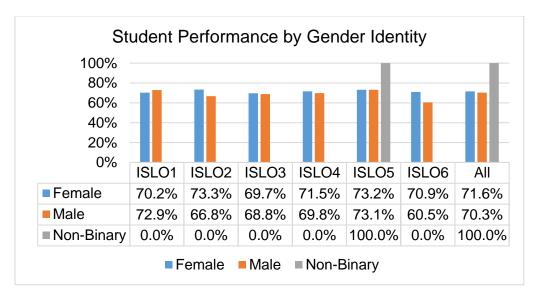
The performance trends for most of the ISLOs have consistently decreased to varying degrees from Spring to Fall, ranging from -6.8% to -15.3%, and an average of -10.0% across all ISLOs. While summer results are expected to be somewhat anomalous given the smaller sample sizes which can overemphasize outliers, the difference between spring and summer semester results should be examined more closely in the coming year, especially to determine if it is a result of students becoming more familiar with the college environment, varying course difficulties, or some other factors that we have not previously considered. For further details on performance rates for specific Divisions or Criteria, see Appendix B, <u>Table B3 (Performance by Division)</u> and <u>Table B5 (Performance by Criterion)</u>.

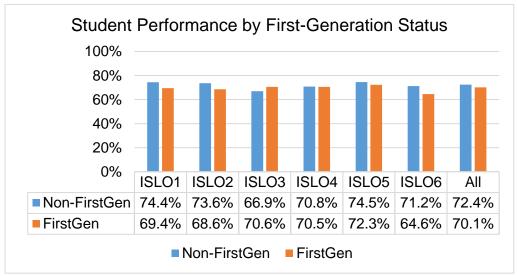
Figure 5.12 ISLO Performance by Course Level

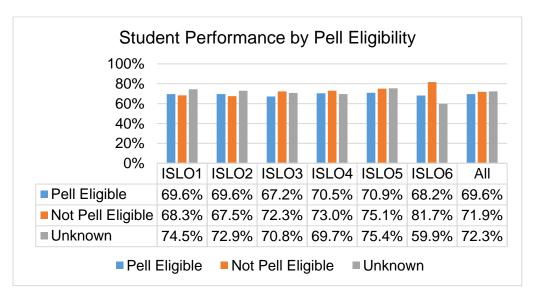
ISLO	Developmental	100 Level	200 Level	300/400 Level
ISLO1: Critical Thinking & Problem Solving	N/A	68.78%	75.75%	42.22%
ISLO2: Effective Communication	N/A	69.96%	77.43%	42.64%
ISLO3: Quantitative Reasoning	N/A	70.66%	76.66%	47.33%
ISLO4: Textual Literacy	75.00%	69.52%	74.12%	61.90%
ISLO5: Professionalism	N/A	70.01%	84.53%	76.92%
ISLO6: Social Consciousness	N/A	63.88%	84.86%	N/A
PCC Flex Self-Assessment	N/A	76.46%	82.99%	100.00%
All ISLOs	75.00%	69.67%	77.83%	50.92%

Figure 5.13 ISLO Performance by Student Demographics









#### VI. Conclusions & Next Steps

At the core, the Assessment of Student Learning is all about continuous improvement—of student learning, but also of the practices and tools used to assess that learning. Now that we have built a sustainable framework for institution-wide assessment at Pueblo Community College, most of the next steps and recommendations detailed below address our assessment practices themselves as we continue to track longitudinal data on student performance on our college-wide learning outcomes.

Figure 6.1 College-Wide Accomplishments, Recommendations & Next Steps

Conclusions	Accomplishments	Opportunities	Recommendations & Next Steps
Faculty Participation	<ul> <li>Faculty and instructor participation in assessment increased overall (39.4% to 51.4%).</li> <li>We saw a particularly impressive growth in part-time instructor participation (26.1% to 38.5%).</li> </ul>	<ul> <li>A small but significant decrease in full-time faculty participation in assessment (80.2% to 78.3%) brought us to our lowest full-time participation rate in the past 7 years.</li> <li>As part of the 5-Year Plan for Assessment of Student Learning, our primary goal for the 2023 calendar year is to reevaluate participation expectations and implement modified or scaled requirements.</li> </ul>	<ul> <li>Continue open forum discussions (following initial session held on 03/10/23) about reasonable and appropriate expectations for participation in assessment.</li> <li>Revise faculty contract to clarify what exactly the essential function of participation in assessment of student learning entails.</li> <li>Revise instructor contract to include essential function of participation in assessment and what that entails.</li> </ul>

Conclusions	Accomplishments	Opportunities	Recommendations & Next Steps
Student Performance	<ul> <li>Students reached the performance target on all ISLOs overall (71.8%).</li> <li>The performance target was met for 4 out of 6 ISLOs, and those that were below the 70% target were still within 1% of that goal.</li> </ul>	<ul> <li>Student performance decreased overall by 4.4% from 2021.</li> <li>The lowest-scoring of our original 5 ISLOs¹ was Literacy (69.9%).</li> <li>Performance on Quantitative Reasoning declined the most (-7.3%)</li> </ul>	<ul> <li>Review the distribution of ISLOs being assessed in different disciplines to determine whether the most relevant skills are being sufficiently assessed.</li> <li>Identify relevant departments and faculty to discuss possible reasons for decrease in Quantitative Reasoning performance.</li> </ul>
Sample Sizes	• The distribution of scores collected across our 5 preexisting ISLOs has equalized—the most scores were collected for Critical Thinking (23.0%), and the smallest sample² was for Quantitative Reasoning (13.9%), but this distribution is reflective of our course offerings and their most relevant learning outcomes. • The total scores collected overall increased by 3.6% (31,890 to 33,039).	<ul> <li>There was very limited sampling for Social Consciousness (only 2,118 scores, or 6.41% of all scores collected), but this is due to the newness of the ISLO and corresponding assessment rubric.</li> <li>Data collected for summer classes continues to be very limited (only 19.9% of courses offered, as opposed to 33.3% in Summer 2021).</li> <li>New reports are being developed for additional key metrics, especially performance by student demographic.</li> </ul>	<ul> <li>Implement a communications plan to promote assessment of the Social Consciousness ISLO with the newly developed corresponding college-wide rubric, as a top priority for 2023.</li> <li>In partnership with Institutional Research, identify possible attributes to build into the eLumen Data Load process for additional relevant metrics (e.g. campus, adult learners, demographic elements beyond gender, race, and Pell/first-gen).</li> <li>Phase out the PCC Flex Self-Assessment as course offerings in that format are reduced.</li> </ul>

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<sup>&</sup>lt;sup>1</sup> Technically the new Social Consciousness ISLO scored lowest at 69.1%, but this is likely due to limited data collection and thus this figure is not yet wholly reliable until we reach a statistically significant sample size to establish a baseline.

<sup>&</sup>lt;sup>2</sup> Technically the new Social Consciousness ISLO had the smallest sample size (6.41% of all scores collected), but this was expected given that the new ISLO rubric was only implemented over the course of one pilot semester.

Conclusions	Accomplishments	Opportunities	Recommendations & Next Steps
Workshops & Training	We continued to offer regular workshops on a wide range of topics, including but not limited to:  • eLumen Basic Training/Refresher,  • D2L/eLumen LTI Integration,  • Running Reports,  • Improvement Planning,  • Rubric Development,  • Open Scoring,  • as well as numerous individual/small group workshops.	<ul> <li>Attendance at formally scheduled workshops was fairly limited; there continues to be a greater interest in one-on-one, impromptu, or small-group sessions.</li> <li>The most popular topics were:         Improvement Planning D2L/eLumen LTI integration, Running Reports (especially for Department Chairs).     </li> <li>Only one individual is familiar with many essential tasks related to managing the eLumen platform and reporting processes.</li> </ul>	<ul> <li>Continue holding annual (at a minimum) checkins with each Department Chair, to include more focused training on relevant features in eLumen, especially running reports.</li> <li>Provide regular Division Lead training and guidance through monthly (at a minimum) meetings with the Assessment Chair and Director.</li> <li>Make use of newly purchased eLumen Service Credits to schedule training for alternate Data Stewards.</li> </ul>
Co- Curricular Assessment	Initial efforts to establish co-curricular assessment practices have begun: • 19 offices identified as candidates for assessment of student learning; 14 of which have created Student Services Learning Outcomes (SSLOs). • 28 SSLOs were created and mapped to PCC's ISLOs. • 8 SSLO rubrics were developed, 4 of which are built into eLumen.	<ul> <li>Data collection for cocurricular/student services/non-academic assessment of student learning has been very minimal thus far.</li> <li>Only one service area (the PCC Library) has collected assessment data and entered it into eLumen.</li> <li>3 other service areas have a process in place for collecting data, but have not yet submitted any to be imported into eLumen.</li> </ul>	<ul> <li>Continue working with student services to develop further SSLOs and rubrics to assess student learning that occurs through engagement with their offices and events.</li> <li>Develop a process that includes timelines and a system of accountability to more consistently collect assessment data on student learning that occurs through our co-curricular and non-academic services.</li> </ul>

## VII. Appendices

# Appendix A: Historical Overview of Assessment of Student Learning at PCC

Table A1: Assessment Events/Changes/Progress by Year

Year	Assessment Events/Changes/Progress
1999-2000	PCC adopted formal Assessment of Student Learning (ASL) system; entire process was
1999-2000	managed by faculty committee thorough bi-monthly meetings
	Assessment oversight was assigned to Assessment Coordinator, a faculty member with
	.5 release time. Series of coordinators chaired the ASL committee. Coordinator
2001-2008	gradually inherited more and more responsibility for collecting, reviewing, and
	reporting all assessment data. Committee met, but gradually became less actively
	involved in review process of plans and reports.
	Direction of ASL shifted from course level to program level assessment. Administration
	directed Dept. Chairs to implement overall program review. Faculty were confused by
2008-2010	mixed messages and grappled with differences between course, program, and
	institutional SLOs. With many changes in top administrators, consistent leadership in
	assessment processes and research practices was needed.
	The 2010-11 academic year was a year of transition as the committee struggled with
	how to improve ASL participation and also to best manage the process. While most
	departments participated in the planning process, submission of final reports was
	inconsistent; thus, the college-wide report was also delayed. Three co-leaders
2010-2012	(Assessment Faculty Leads), one from each academic division of the college, lead the
	assessment process. Job descriptions were developed, new Operating Procedures were
	drafted, and three Assessment Faculty Leads were identified to lead the assessment
	process the following year. New assessment forms were developed that focused more
	on significant and useful data and less on anecdotal evidence.
	Significantly increased participation under the Faculty Lead system occurred. In 2012-
	13, the number of disciplines participating in ASL increased by 66%. The Arts &
2012-2013	Sciences Division faculty under the guidance of their Lead, modified the assessment
	cycle so that data collection occurred primarily in the fall with analysis and reporting in
	the spring. The new approach helped address the need for timely reporting of results.
	In 2013-14, several other departments from the other divisions adopted the practice of
	assessing in the fall and reporting in the spring. Faculty Leads were also much more
	proactive during the fall semester, scheduling individual meetings and follow-up
2013-2015	meetings with department chairs to assist with development of assessment plans. They
	also set spring deadlines within their own divisions with support from each of the
	academic deans. Those who needed help with the reporting were provided with
	additional support.

Year	Assessment Events/Changes/Progress
	Course-level and program-level assessment processes remained fundamentally the
	same. During Spring 2015, in order to streamline the assessment reporting process, the
	Arts and Sciences and Business & Advanced Technology Divisions elected to change
	their assessment cycle from academic year to a calendar year. During Fall of 2015, the
2015	Health & Public Safety Division also adopted the calendar year cycle. The ASL
	Committee began the process of reviewing commercial assessment programs to elevate
	the ASL process and expedite the ability to collect, compare, and analyze longitudinal
	data. Also during Fall 2015, the three academic divisions of the college participated in a
	formalized attempt to collect raw data on Critical Thinking at the institutional level.
	The Assessment of Student Learning Coordinator position created and filled, five-year
	assessment plan developed, ASL Sub-committees established, ISLOs revised and
2016	institution-level rubrics developed, eLumen implementation and training conducted,
	development and integration of program-level assessment into eLumen initiated, ASL
	Newsletter, Assessment Showcase, and Assessment @PCC Blog introduced.
	The HLC Site Visit preparation was the primary focus, preparing PCC faculty and staff
	to answer any potential questions about assessment during the visit. HLC was satisfied
	with our assessment progress, though they wanted to see more part-time instructor
	involvement in the assessment of student learning. Developed and implemented ideas to
2017	increase part-time instructor involvement in assessment of student learning. Marketed
	the idea of "Closing the Loop" as part of the continuous cycle of assessment. Created a
	new Improvement Plan Form for reporting 2017 results and creating 2018 plan.
	Continued progress on increasing the number of Program-Level Student Learning
	Outcomes reported in eLumen, with an initial goal of one PSLO per prefix.
	Migrated Improvement Plan form to eLumen, with data in the form collated directly
	from eLumen and displayed for easier accessibility by faculty, department chairs and
2018	program chairs. Continued building Program-level and Course level outcomes into
	eLumen and assessing them. Continued momentum for increased faculty and adjunct
	instructor involvement in assessment.
	Completed minor revisions to the Improvement Plan based on experience and feedback
	from the 2018 planning process. Continued building Program-level and Course level
	outcomes into eLumen and assessing them. Continued momentum for increased faculty
	and adjunct instructor involvement in assessment. Reviewed the mapping of PSLOs to
2019	ISLOs for logic and clarity and passed recommendations for changes on to department
	and program chairs. Began the process of revising CSLOs. Hosted the 2019 annual
	conference for the Colorado Regional Assessment Council, which was well-attended
	and well-received. Approached about taking on the responsibilities of running CoRAC
	for the state, and after discussion, voted to accept the operations of CoRAC.

Year	Assessment Events/Changes/Progress
	Developed the PCC Flex Self-Assessment as a new institution-level tool for evaluating
	the learning experience in the new hybrid/flex instructional model. Following the
2020	decision by administration to withdraw support for the Division Lead role, the
2020	Assessment of Student Learning Committee reviewed the bylaws and discussed
	possibilities for redistribution of responsibilities, but concluded that the Division Leads
	are essential to the success of the college's assessment activities.
	Developed a new 5-Year Plan for assessment, and began working toward the goal of
	reviewing all of PCC's ISLOs and corresponding college-wide rubrics, including
2021	collecting feedback from instructors on opportunities for improvement. Produced a new
	comprehensive report of Historical Assessment Trends over the past 5 years, and
	designed a more streamlined and accurate approach to the data load process.
	Developed the new Social Consciousness Institutional Student Learning Outcome, and
2022	in collaboration with the Assessment of Student Learning Committee, designed a
	corresponding college-wide rubric for assessing the new Social Consciousness ISLO.

## Appendix B: Institution-Wide Assessment Data – Detailed Results

# 1. Completion, Participation, & Sampling

Table B1: Planned & Scored Assessments by Discipline

	Sprir	ng 2022	Sumn	ner 2022	Fall	2022	CY	2022
Prefix	Planned	Completed	Planned	Completed	Planned	Completed	Planned	Completed
AAA	1	1	5	4	0	0	6	5
ACC	8	5	5	4	0	0	13	9
AEC	4	0	-	-	-	-	4	0
AGB	0	0	3	2	-	-	3	2
ANT	0	0	ı	-	ı	-	0	0
ART	6	5	11	6	1	1	18	12
ASC	-	-	4	2	-	-	4	2
ASE	27	27	21	21	4	3	52	51
ASL	0	0	0	0	-	-	0	0
AST	2	1	3	3	2	1	7	5
BAR	-	-	ı	-	0	0	0	0
BIO	15	14	12	10	0	0	27	24
BTE	0	0	ı	-	ı	-	0	0
BUS	2	2	4	2	1	1	7	5
CAD	9	0	12	2	ı	-	21	2
CCR	-	-	0	0	ı	-	0	0
CHE	4	4	3	2	•	-	7	6
CIS	6	6	9	6	1	1	16	13
CNG	0	0	0	0	•	-	0	0
COM	36	1	34	5	2	2	72	8
CON	3	0	ı	-	ı	-	3	0
COS	2	2	4	4	ı	-	6	6
CRJ	3	1	1	1	0	0	4	2
CSC	0	0	2	2	0	0	2	2
CSL	0	0	0	0	0	0	0	0
CWB	0	0	1	1	-	-	1	1
DEH	12	12	8	7	1	1	21	20
DMS	1	1	1	1	0	0	2	2
ECE	0	0	5	0	0	0	5	0
ECO	7	6	6	5	0	0	13	11
EDU	0	0	0	0	-	-	0	0
EGG	1	0	1	0	-	-	2	0
EGT	0	0	-	-	-	-	0	0
ELT	16	0	5	0	ı	-	21	0
EMS	5	5	15	4	15	0	35	9
ENG	20	16	21	16	4	3	45	35
ENP	0	0	-	-	-	-	0	0
ENV	2	1	0	0	-	-	2	1
EST	2	2	0	0	-	-	2	2
ETH	0	0	0	0	-	-	0	0
FST	1	1	1	0	0	0	2	1

	Sprir	ng 2022	Sumn	ner 2022	Fall	2022	CY	2022
Prefix	Planned	Completed	Planned	Completed	Planned	Completed	Planned	Completed
FSW	0	0	0	0	-	-	0	0
GEO	0	0	0	0	1	-	0	0
GEY	0	0	2	2	ı	-	2	2
HIS	11	0	0	0	0	0	11	0
HIT	13	13	12	12	4	4	29	29
HPR	3	2	4	4	0	0	7	6
HUM	2	2	2	2	0	0	4	4
HWE	0	0	0	0	0	0	0	0
JOU	0	0	1	1	-	-	1	1
LEA	0	0	1	1	-	-	1	1
LIT	0	0	0	0	0	0	0	0
LTN	2	2	8	2	0	0	10	4
MAC	16	6	9	6	0	0	25	12
MAN	4	4	1	1	-	-	5	5
MAP	4	4	4	4	2	2	10	10
MAR	0	0	0	0	-	-	0	0
MAT	83	19	56	17	6	1	145	37
MGD	8	8	8	8	3	3	19	19
MOT	3	3	-	-	-	-	3	3
MTE	11	1	1	0	-	-	12	1
MUS	1	1	2	2	0	0	3	3
NAT	1	1	0	0	-	-	1	1
NUA	16	2	22	17	0	0	38	19
NUR	53	34	48	27	0	0	101	61
OSH	0	0	-	-	0	0	0	0
OTA	6	6	8	8	0	0	14	14
PHI	6	5	6	5	0	0	12	10
PHT	0	0	0	0	-	-	0	0
PHY	1	1	1	1	-	-	2	2
POS	6	3	0	0	-	-	6	3
PSV	-	-	1	1	-	-	1	1
PSY	11	10	15	13	0	0	26	23
PTA	1	1	1	1	0	0	2	2
PTE	0	0	2	2	-	-	2	2
RCA	4	4	5	3	3	3	12	10
RTE	8	5	8	5	1	1	17	11
RTV	0	0	0	0	-	-	0	0
SCI	-	-	0	0	-	-	0	0
SOC	4	2	2	2	1	1	7	5
SPA	1	1	1	1	-	-	2	2
STE	9	6	9	7	2	2	20	15
SWK	0	0	0	0	-	-	0	0
THE	0	0	0	0	-	-	0	0
UAS	0	0	-	-	-	-	0	0
WEL	34	25	35	22	0	0	69	47
WST	0	0	0	0	-	-	0	0
All	517	284	472	287	53	30	1042	601

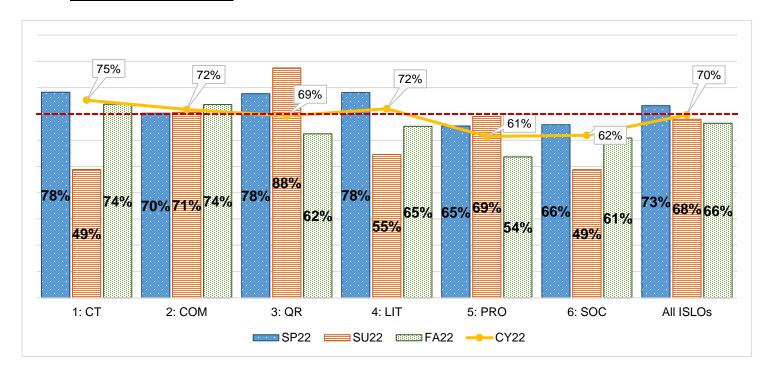
Table B2: Participation Rates & Sample Sizes by Department

	P	articipatio	n		Sample Siz	е	Asses	sments
Division/Department	Total	FΤ	PT	Courses	Sections	Students	Planned	Completed
Arts & Sciences	61/156	22/37	39/119	75	207	2551	448	216
Biological & Physical Sciences	10/23	8/11	2/12	14	38	498	51	42
Early Childhood Education	2/9	0/2	2/7	3	4	83	15	4
English & Communication	16/49	6/11	10/38	12	58	652	135	58
Fine Arts & Humanities	9/15	1/1	8/14	11	21	266	27	21
Mathematics	10/18	3/5	7/13	11	37	312	145	37
Media Communications	2/8	2/3	0/5	11	17	228	21	21
Social Sciences	12/34	2/4	10/30	13	32	512	54	33
Business & Technology	48/79	20/27	28/52	96	185	2666	300	192
Automotive Technology	4/6	3/4	1/2	29	51	594	52	51
Business & Accounting	14/19	4/4	10/15	14	31	330	42	33
Computer Information Systems	10/21	3/7	7/14	21	42	1188	49	46
Machining & Industrial Technology Maintenance	5/11	2/3	3/8	12	14	111	88	15
Welding	15/22	8/9	7/13	20	47	443	69	47
Health & Public Safety	35/71	23/33	12/38	55	76	1018	118	81
Cosmetology	4/4	3/3	1/1	7	9	140	9	9
Dental Hygiene	7/7	6/6	1/1	15	20	310	21	20
Emergency Medical Services	5/16	5/5	0/11	6	9	102	35	9
Fire Science Technology	1/5	0/2	1/3	1	1	17	2	1
Health Professional	1/8	0/0	1/8	1	2	33	3	2
Law Enforcement Academy	1/3	1/3	0/0	1	1	13	1	1
Occupational Therapy Assistant	5/6	2/2	3/4	7	9	121	14	14
Pharmacy & Phlebotomy	0/0	0/0	0/0	0	0	0	0	0
Physical Therapist Assistant	2/5	1/3	1/2	2	2	22	2	2
Respiratory Care	2/8	2/6	0/2	6	10	108	12	10
Radiologic Technology	7/9	3/3	4/6	9	13	152	19	13
Nursing	28/38	19/20	9/18	48	89	1404	176	112
Counseling	1/3	0/0	1/3	2	2	56	2	2
Medical Assisting	2/2	1/1	1/1	11	15	151	15	15
Nursing Aide	4/8	2/2	2/6	2	11	64	38	19
Nursing	16/20	13/14	3/6	23	46	925	101	61
Psychiatric Technician	0/0	0/0	0/0	0	0	0	0	0
Surgical Technology	5/5	3/3	2/2	10	15	208	20	15
Pueblo Community College	168/327	83/106	85/221	274	557	7639	1042	601

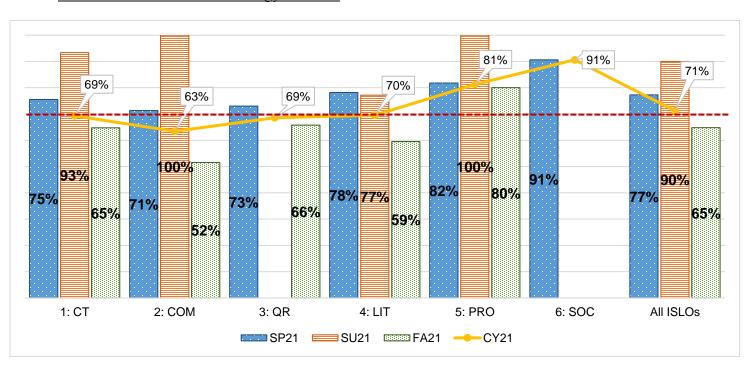
#### 2. Performance Trends

Table B3: Performance Target Achievement Rates by Division

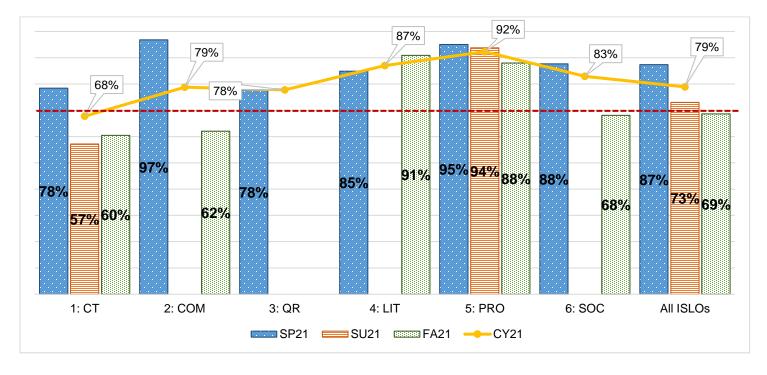
## Arts & Sciences Division



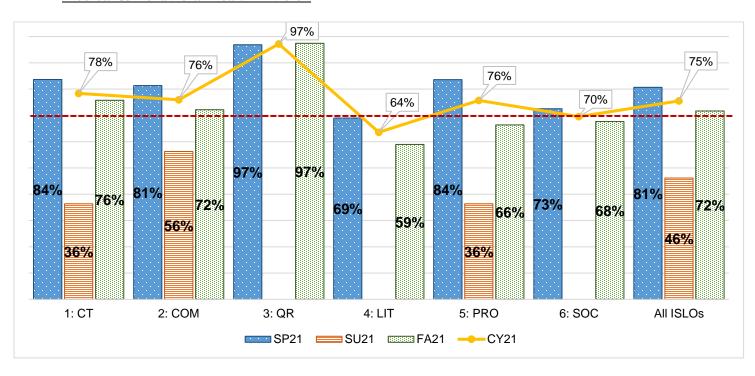
## Business & Advanced Technology Division



Health & Public Safety Division



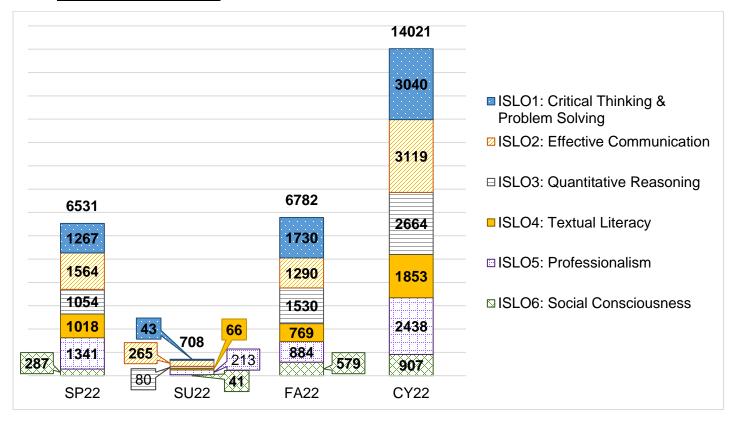
Medical & Behavioral Health Division



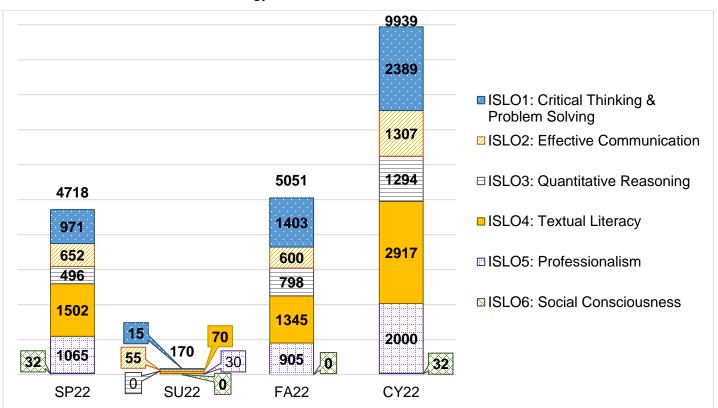
#### 3. Sample Sizes

Table B4: Scores Collected by ISLO & Division

#### Arts & Sciences Division

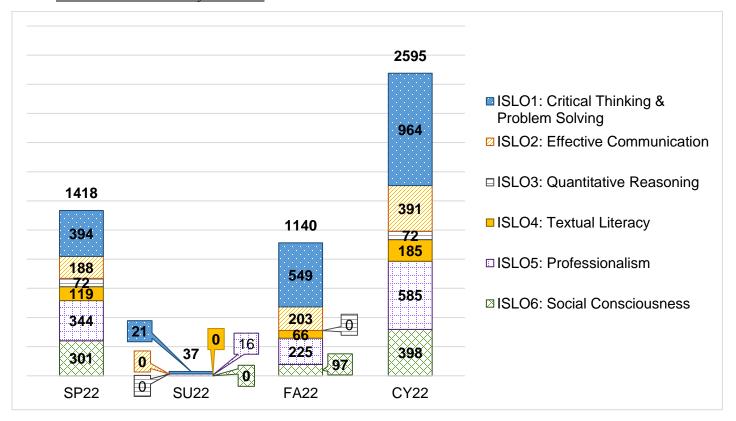


#### Business & Advanced Technology Division



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Health & Public Safety Division



Medical & Behavioral Health Division

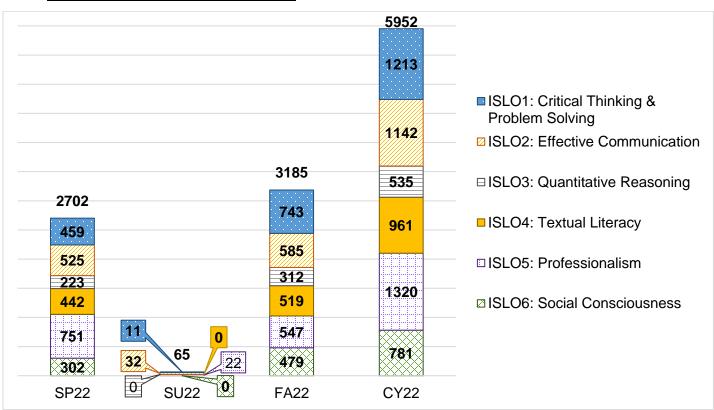


Table B5: Institution-Level Performance by Skills Dimension/Criterion\*

ISLO	4 (#)	4 (%)	3 (#)	3 (%)	2 (#)	2 (%)	1 (#)	1 (%)	N/A* (#)	N/A (%)	Total	TA%
ISLO1: Critical Thinking & Problem Solving	3009	39.56%	2537	33.36%	1493	19.63%	567	7.45%	1224	13.86%	7606	72.92%
1a: Interpret, analyze, and assess available evidence, information, and ideas	1011	42.86%	702	29.76%	471	19.97%	175	7.42%	345	12.76%	2359	72.62%
1b: Explore implications, inferences, assumptions, and alternate solutions	613	39.40%	536	34.45%	292	18.77%	115	7.39%	238	13.27%	1556	73.84%
1c: Construct and defend logical conclusions that are firmly supported by sufficient and relevant evidence	570	32.99%	627	36.28%	407	23.55%	124	7.18%	259	13.03%	1728	69.27%
1d: Formulate creative solutions in consideration of and in response to relevant contexts, opinions, and opposition	815	41.52%	672	34.23%	323	16.45%	153	7.79%	382	16.29%	1963	75.75%
ISLO2: Effective Communication	2412	40.48%	1827	30.66%	1240	20.81%	480	8.06%	1416	19.20%	5959	71.14%
2a: Organize and express ideas clearly in both written and oral communication	541	36.73%	476	32.32%	360	24.44%	96	6.52%	352	19.29%	1473	69.04%
2b: Convey ideas purposefully (persuasive, informative, etc.) and with a clear focus	428	33.41%	429	33.49%	343	26.78%	81	6.32%	270	17.41%	1281	66.90%
2c: Employ conventions of communication in accordance with disciplinary and/or professional expectations	1115	44.35%	732	29.12%	407	16.19%	260	10.34%	593	19.09%	2514	73.47%
2d: Select and apply compelling and appropriate communication strategies that attend to the values, knowledge, interests, and needs of the audience	328	47.47%	190	27.50%	130	18.81%	43	6.22%	201	22.53%	691	74.96%
ISLO3: Quantitative Reasoning	1867	40.90%	1440	31.54%	831	18.20%	427	9.35%	2208	32.60%	4565	72.44%
3a: Select appropriate numerical data, functions, and formulae to perform accurate computations	1039	45.10%	677	29.38%	424	18.40%	164	7.12%	419	15.39%	2304	74.48%
3b: Represent information as numerical data, functions, and formulae	181	31.92%	186	32.80%	130	22.93%	70	12.35%	317	35.86%	567	64.73%

<sup>\*</sup> For our purposes, N/A stands for "Not Assessed," meaning that evidence of student learning and performance on the associated outcome/skill was not available to be assessed. Reasons for N/A scores might include: student withdrew from class, student did not complete the assessed activity/assignment, or the assessed activity/assignment did not give students the opportunity to demonstrate the specified outcome/skill.

ISLO	4 (#)	4 (%)	3 (#)	3 (%)	2 (#)	2 (%)	1 (#)	1 (%)	N/A* (#)	N/A (%)	Total	TA%
3c: Interpret and explain information presented as numerical data, functions, and formulae	196	31.31%	201	32.11%	158	25.24%	71	11.34%	330	34.52%	626	63.42%
3d: Formulate reasonable solutions and draw logical conclusions from numerical data	206	41.37%	168	33.73%	62	12.45%	62	12.45%	497	49.95%	498	75.10%
3e: Identify, evaluate, and infer reasonable assumptions based on quantitative information	168	44.68%	133	35.37%	38	10.11%	37	9.84%	447	54.31%	376	80.05%
3f: Interpret numerical data and calculations in defense of an argument	77	39.69%	75	38.66%	19	9.79%	23	11.86%	198	50.51%	194	78.35%
ISLO4: Textual Literacy	2233	37.75%	1900	32.12%	1227	20.74%	556	9.40%	1181	16.64%	5916	69.86%
4a: Recognize, summarize, and explain central and supporting ideas as well as implied and abstract ideas	393	42.53%	253	27.38%	178	19.26%	100	10.82%	218	19.09%	924	69.91%
4b: Locate applicable information or materials from relevant resources as appropriate to the task	292	34.23%	313	36.69%	212	24.85%	36	4.22%	246	22.38%	853	70.93%
4c: Evaluate the validity and reliability of information and its appropriateness for the context	440	37.64%	390	33.36%	263	22.50%	76	6.50%	164	12.30%	1169	71.00%
4d: Select suitable information and materials and apply proper methods in order to accomplish tasks	1108	37.31%	944	31.78%	574	19.33%	344	11.58%	553	15.70%	2970	69.09%
ISLO5: Professionalism	2622	41.34%	2040	32.16%	1087	17.14%	594	9.36%	1126	15.08%	6343	73.50%
5a: Demonstrate personal accountability through time management, preparedness, and honoring commitments	634	35.42%	584	32.63%	325	18.16%	247	13.80%	305	14.56%	1790	68.04%
5b: Exhibit self-efficacy by growing personally in response to constructive criticism, demonstrating persistence, and utilizing support resources as needed	274	44.12%	233	37.52%	91	14.65%	23	3.70%	157	20.18%	621	81.64%
5c: Practice ethical behavior by demonstrating honesty, trustworthiness, and integrity of work	530	46.49%	348	30.53%	196	17.19%	66	5.79%	301	20.89%	1140	77.02%
5d: Exhibit appropriate conduct and behavior in accordance with disciplinary and/or professional expectations	1184	42.41%	875	31.34%	475	17.01%	258	9.24%	363	11.51%	2792	73.75%

## **APPENDICES**

ISLO	4 (#)	4 (%)	3 (#)	3 (%)	2 (#)	2 (%)	1 (#)	1 (%)	N/A* (#)	N/A (%)	Total	TA%
ISLO6: Social Consciousness	788	37.20%	675	31.87%	473	22.33%	182	8.59%	242	10.25%	2118	69.07%
6a: Demonstrate respectful, fair, and equal treatment of all people, and contribute positively to collaboration and teamwork by offering ideas, assistance, and encouragement.	391	42.13%	274	29.53%	147	15.84%	116	12.50%	32	3.33%	928	71.66%
6b: Examine and acknowledge different views and express appreciation for diversity, explore the relationships between the ideas, values, and practices of different groups of people across cultures and throughout history.	192	33.80%	192	33.80%	157	27.64%	27	4.75%	122	17.68%	568	67.61%
6c: Engage with local and extended communities to promote civic action and social improvement.	55	25.23%	75	34.40%	74	33.94%	14	6.42%	18	7.63%	218	59.63%
6d: Recognize the interconnectivity of important issues and broaden disciplinary and personal knowledge to include overarching social, ecological, and political issues.	150	37.13%	134	33.17%	95	23.51%	25	6.19%	70	14.77%	404	70.30%
PCC Flex Self-Assessment	158	29.70%	260	48.87%	52	9.77%	62	11.65%	658	55.29%	532	78.57%
Flex 1. Content Mastery (1a)	24	31.58%	39	51.32%	4	5.26%	9	11.84%	94	55.29%	76	82.89%
Flex 2. Problem Solving (1d)	18	23.68%	45	59.21%	4	5.26%	9	11.84%	94	55.29%	76	82.89%
Flex 3. Effective Communication (2c)	23	30.26%	37	48.68%	7	9.21%	9	11.84%	94	55.29%	76	78.95%
Flex 4. Finding Resources (4b)	23	30.26%	30	39.47%	15	19.74%	8	10.53%	94	55.29%	76	69.74%
Flex 5. Time Management (5a-1)	22	28.95%	39	51.32%	6	7.89%	9	11.84%	94	55.29%	76	80.26%
Flex 6. Participation (5a-2)	24	31.58%	32	42.11%	11	14.47%	9	11.84%	94	55.29%	76	73.68%
Flex 7. Integrity of Work (5a-3)	24	31.58%	38	50.00%	5	6.58%	9	11.84%	94	55.29%	76	81.58%
All ISLOs	13089	39.62%	10679	32.32%	6403	19.38%	2868	8.68%	8055	19.60%	33039	71.94%

## Appendix C: Division Overview Reports

#### C1: Arts & Sciences Division Overview

## 1. Overview of A&S Division Assessment Activities

	Pa	articipatio	n		Sample Size	•	Assessments	
Department	Total	FT	PT	Courses	Sections	Students	Planned	Completed
Arts & Sciences Division	61/156	22/37	39/119	75	207	2551	448	216
Biological & Physical Sciences	10/23	8/11	2/12	14	38	498	51	42
Early Childhood Education	2/9	0/2	2/7	3	4	83	15	4
English & Communication	16/49	6/11	10/38	12	58	652	135	58
Fine Arts & Humanities	9/15	1/1	8/14	11	21	266	27	21
Mathematics	10/18	3/5	7/13	11	37	312	145	37
Media Communications	2/8	2/3	0/5	11	17	228	21	21
Social Sciences	12/34	2/4	10/30	13	32	512	54	33

# 2. Overview of A&S Division Assessment Results

		SP22			SU22			FA22			CY22	
ISLO Category	TA%*	Sample	N/A's									
All ISLOs	73.15%	6615	2671	67.94%	708	229	66.45%	6810	2273	69.66%	14133	5173
1: Critical Thinking	78.22%	1267	312	48.84%	43	18	73.70%	1730	294	75.23%	3040	624
2: Communication	70.27%	1564	499	70.57%	265	120	73.57%	1290	404	71.66%	3119	1023
3: Quantitative Reasoning	77.70%	1054	1041	87.50%	80	10	62.42%	1530	956	69.22%	2664	2007
4: Textual Literacy	78.09%	1018	267	54.55%	66	21	65.28%	769	226	71.94%	1853	514
5: Professionalism	65.40%	1341	403	69.01%	213	41	53.62%	884	222	61.44%	2438	666
6: Social Consciousness	65.85%	287	79	48.78%	41	19	60.79%	579	108	61.85%	907	206
PCC Flex Self-Assessment	82.14%	84	70	-	0	0	64.29%	28	63	77.68%	112	133

## C2: Business & Advanced Technology Division Overview

## 1. Overview of BAT Division Assessment Activities

	P	articipatio	n		Sample Size	•	Assessments		
Department	Total	FT	PT	Courses	Sections	Students	Planned	Completed	
<b>Business &amp; Technology Division</b>	48/79	20/27	28/52	96	185	2666	300	192	
Automotive Technology	4/6	3/4	1/2	29	51	594	52	51	
Business & Accounting	14/19	4/4	10/15	14	31	330	42	33	
Computer Information Systems	10/21	3/7	7/14	21	42	1188	49	46	
Machining & Industrial Tech. Maint.	5/11	2/3	3/8	12	14	111	88	15	
Welding Technology	15/22	8/9	7/13	20	47	443	69	47	

## 2. Overview of BAT Division Assessment Results

		SP22			SU22			FA22			CY22	
ISLO Category	TA%*	Sample	N/A's	TA%*	Sample	N/A's	TA%*	Sample	N/A's	TA%*	Sample	N/A's
All ISLOs	77.30%	4991	856	90.00%	170	76	64.77%	5163	821	71.24%	10324	1753
1: Critical Thinking	75.49%	971	94	93.33%	15	3	64.72%	1403	166	69.28%	2389	263
2: Communication	71.32%	652	71	100.00%	55	29	51.50%	600	108	63.43%	1307	208
3: Quantitative Reasoning	72.98%	496	70	-	0	0	65.79%	798	54	68.55%	1294	124
4: Textual Literacy	78.16%	1502	214	77.14%	70	38	59.48%	1345	219	69.52%	2917	471
5: Professionalism	81.78%	1065	175	100.00%	30	6	80.00%	905	120	81.25%	2000	301
6: Social Consciousness	90.63%	32	1	-	0	0	-	0	0	90.63%	32	1
PCC Flex Self-Assessment	82.05%	273	231	_	0	0	69.64%	112	154	78.44%	385	385

## C3: Health & Public Safety Division Overview

#### 1. Overview of HPS Division Assessment Activities

	Р	articipatio	n		Sample Size	•	Asses	ssments
Department	Total	FT	PT	Courses	Sections	Students	Planned	Completed
Health & Public Safety Division	35/71	23/33	12/38	55	76	1018	118	81
Cosmetology	4/4	3/3	1/1	7	9	140	9	9
Dental Hygiene	7/7	6/6	1/1	15	20	310	21	20
Emergency Medical Services	5/16	5/5	0/11	6	9	102	35	9
Fire Science Technology	1/5	0/2	1/3	1	1	17	2	1
Health Professional	1/8	0/0	1/8	1	2	33	3	2
Law Enforcement Academy	1/3	1/3	0/0	1	1	13	1	1
Occupational Therapy Assistant	5/6	2/2	3/4	7	9	121	14	14
Pharmacy & Phlebotomy	0/0	0/0	0/0	0	0	0	0	0
Physical Therapist Assistant	2/5	1/3	1/2	2	2	22	2	2
Respiratory Care	2/8	2/6	0/2	6	10	108	12	10
Radiologic Technology	7/9	3/3	4/6	9	13	152	19	13

## 2. Overview of HPS Division Assessment Results

		SP22			SU22			FA22			CY22	
ISLO Category	TA%*	Sample	N/A's									
All ISLOs	87.38%	1418	109	72.97%	37	1	68.60%	1140	102	78.92%	2595	212
1: Critical Thinking	78.43%	394	12	57.14%	21	1	60.47%	549	14	67.74%	964	27
2: Communication	96.81%	188	17	-	0	0	62.07%	203	20	78.77%	391	37
3: Quantitative Reasoning	77.78%	72	6	-	0	0	-	0	0	77.78%	72	6
4: Textual Literacy	84.87%	119	55	-	0	0	90.91%	66	47	87.03%	185	102
5: Professionalism	95.06%	344	4	93.75%	16	0	88.00%	225	21	92.31%	585	25
6: Social Consciousness	87.71%	301	15	-	0	0	68.04%	97	0	82.91%	398	15
PCC Flex Self-Assessment	-	0	0	-	0	0	-	0	0	-	0	0

#### C4: Medical & Behavioral Health Division Overview

## 1. Overview of MBH Division Assessment Activities

	Participation ET DT				Sample Size	е	Assessments		
Department	Total	FT	PT	Courses	Sections	Students	Planned	Completed	
Medical & Behavioral Health Division	28/38	19/20	9/18	48	89	1404	176	112	
Counseling	1/3	0/0	1/3	2	2	56	2	2	
Medical Assisting Professional	2/2	1/1	1/1	11	15	151	15	15	
Nursing Aide	4/8	2/2	2/6	2	11	64	38	19	
Nursing	16/20	13/14	3/6	23	46	925	101	61	
Psychiatric Technician	0/0	0/0	0/0	0	0	0	0	0	
Surgical Technology	5/5	3/3	2/2	10	15	208	20	15	

## 2. Overview of MBH Division Assessment Results

		SP22			SU22			FA22			CY22	
ISLO Category	TA%*	Sample	N/A's									
All ISLOs	80.67%	2737	535	46.15%	65	71	71.65%	3185	311	75.50%	5987	917
1: Critical Thinking	83.66%	459	123	36.36%	11	33	75.77%	743	154	78.40%	1213	310
2: Communication	81.33%	525	47	56.25%	32	36	72.14%	585	65	75.92%	1142	148
3: Quantitative Reasoning	96.86%	223	47	-	0	0	97.44%	312	24	97.20%	535	71
4: Textual Literacy	69.00%	442	66	-	0	0	58.96%	519	28	63.58%	961	94
5: Professionalism	83.62%	751	110	36.36%	22	2	66.36%	547	22	75.68%	1320	134
6: Social Consciousness	72.52%	302	2	-	0	0	67.64%	479	18	69.53%	781	20
PCC Flex Self-Assessment	82.86%	35	140	-	0	0	-	0	0	82.86%	35	140

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