Subject Area Committee Name: Ophthalmic Medical Technology Program

Contact Person

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Only one assessment report is required this year. Document your plan for this year's assessment report(s) in the first sections of this form. This plan can be consistent with the Multi-Year Plan you have submitted to the LAC, though, this year, because PCC is engaging in a year-long exploration of our core outcomes and general education program, SACs are encouraged to explore/assess other potential outcomes. Complete each section of each form. In some cases, all of the information needed to complete the section may not be available at the time the report is being written. In those cases, include the missing information when submitting the completed report at the end of the year.

- Refer to the help document for guidance in filling-out this report. If this document does not address your question/concern, contact Chris Brooks to arrange for coaching assistance.
- Please attach all rubrics/assignments/etc. to your report submissions.
- **Subject Line of Email:** Assessment Report Form (or ARF) for <your SAC name> (Example: ARF for NRS)
- **File name:** SACInitials_ARF_2016 (Example: NRS_ARF_2016)
- SACs are encouraged to share this report with their LAC coach for feedback before submitting.
- Make all submissions to learningassessment@pcc.edu.

Due Dates:
- **Planning Sections of LAC Assessment or Reassessment Reports: November 16th, 2015**
- **Completed LAC Assessment or Reassessment Reports: June 17th, 2016**

Please Verify This Before Beginning this Report:

☒ *This project is not the second stage of the assess/re-assess process (if this is a follow-up, re-assessment project, use the LAC Re-assessment Report Form CTE. Available at:*
http://www.pcc.edu/resources/academic/learning-assessment/LDC-2013-2014-Info-Templates.html

1. Outcome Chosen for Focal Analysis

1A. Briefly describe what and why this focal outcome is being investigated: (e.g., "First term students do not seem to be able to transfer the knowledge from their math class to our program class. We wish to investigate student understanding of the needed math concepts upon entry into our course. If students do have the theoretical understanding, we will investigate ways we can help students apply their knowledge in a concrete application." A second example is: "Anecdotally, it seems that our first year students are not retaining critical information between Winter and Spring Quarters." We will measure student benchmark attainment in Winter Quarter.

The Ophthalmic Scribe Cert. exam is a new certification and will be a pilot this year. We will have all the first year students take this examination with the current course curriculum. Through the individual exam results it will provide us with information whether or not the student is ready for practicum.

1B. If the assessment project relates to any of the following, check all that apply:

☒ *Degree/Certificate Outcome – if yes, include here: Critial thinking and problem solving: Apply critical thinking skills to provide safe, effective patient care.*
☒ *PCC Core Outcome – if yes, which one: Critical thinking and problem solving: Identify and investigate problems, evaluate information and its sources, and use appropriate methods of reasoning to develop creative and practical solutions to personal, professional and community issues.*
☐ *Course Outcome – if yes, which one:*
☐ *Exploratory Outcome – if yes, briefly describe*:

2. Project Description

2A. Assessment Context

Check all the applicable items:

☒ **Course based assessment.**

Course names and number(s): OMT 104
Expected number of sections offered in the term when the assessment project will be conducted: 1
Number of these sections taught by full-time instructors: 0
Number of these sections taught by part-time instructors: 1
Number of distance learning/hybrid sections:
Type of assessment (e.g., essay, exam, speech, project, etc.): National certification exam

Are there course outcomes that align with this aspect of the outcome being investigated? ☒ Yes ☐ No
    If yes, include the course outcome(s) from the relevant CCOG(s):
    OMT104:
    Outcome: 1. Effectively take a complete patient history.

☐ **Common/embedded assignment in all relevant course sections.** An embedded assignment is one that is already included as an element in the course as usually taught. Please attach the activity in an appendix. If the activity cannot be shared, indicate the type of assignment (e.g., essay, exam, speech, project, etc.):

☐ **Common – but not embedded - assignment used in all relevant course sections.** Please attach the activity in an appendix. If the activity cannot be shared, indicate the type of assignment (e.g., essay, exam, speech, project, etc.):

☐ **Practicum/Clinical work.** Please attach the activity/checklist/etc. in an appendix. If this cannot be shared, indicate the type of assessment (e.g., supervisor checklist, interview, essay, exam, speech, project, etc.):

☒ **External certification exam.** Please attach sample questions for the relevant portions of the exam in an appendix (provided that publically revealing this information will not compromise test security). Also, briefly describe how the results of this exam are broken down in a way that leads to nuanced information about the aspect of the core outcome that is being investigated.

☐ **SAC-created, non-course assessment.** Please attach the assessment in an appendix. If the assessment cannot be shared, indicate the type of assignment (e.g., essay, exam, speech, project, etc.):

☐ **Portfolio.** Please attach sample instructions/activities/etc. for the relevant portions of the portfolio submission in an appendix. Briefly describe how the results of this assessment are broken down in a way that leads to nuanced information about the aspect of the core outcome that is being investigated:

☐ **TSA.** Please attach the relevant portions of the assessment in an appendix. If the assessment cannot be shared, indicate the type of assignment (e.g., essay, exam, speech, project, etc.):

☐ **Survey**

☐ **Interview**

☐ **Other.** Please attach the activity/assessment in an appendix. If the activity cannot be shared, please briefly describe it:

In the event publically sharing your assessment documents will compromise future assessments or uses of the assignment, do not attach the actual assignment/document. Instead, please give as much detail about the activity as possible in an appendix.

2B. How will you score/measure/quantify student performance?

☐ **Rubric** (used when student performance is on a continuum - if available, attach as an appendix – if in development - attach to the completed report that is submitted in June)

☒ **Checklist** (used when presence/absence rather than quality is being evaluated - if available, attach as an appendix – if in development - attach to the completed report that is submitted in June)

☒ **Trend Analysis** (often used to understand the ways in which students are, and are not, meeting expectations; trend analysis can complement rubrics and checklist)

☐ **Objective Scoring** (e.g., Scantron scored examinations)

☐ **Other** – briefly describe:

2C. Type of assessment (select one per column)

☒ **Quantitative**   ☒ **Direct Assessment**
☐ **Qualitative**   ☐ **Indirect Assessment**

If you selected 'Indirect Assessment', please share your rationale:

Qualitative Measures: projects that analyze in-depth, non-numerical data via observer impression rather than via quantitative analysis. Generally, qualitative measures are used in exploratory, pilot projects rather than in true assessments of student attainment. Indirect assessments (e.g., surveys, focus groups, etc.) do not use measures of direct student work output. These types of assessments are also not able to truly document student attainment.

2D. Check any of the following that were used by your SAC to create or select the assessment/scoring criteria/instruments used in this project:

☐ Committee or subcommittee of the SAC collaborated in its creation

4

☐ Standardized assessment
☐ Collaboration with external stakeholders (e.g., advisory board, transfer institution/program)
☐ Theoretical Model (e.g., Bloom's Taxonomy)
☐ Aligned the assessment with standards from a professional body (for example, The American Psychological Association Undergraduate Guidelines, etc.)
☐ Aligned the benchmark with the Associate's Degree level expectations of the Degree Qualifications Profile
☐ Aligned the benchmark to within-discipline post-requisite course(s)
☐ Aligned the benchmark to out-of-discipline post-requisite course(s)
☒ Other (briefly explain: none because the exam is administered by a third party)

2E. In which quarter will student artifacts (examples of student work) be collected? If student artifacts will be collected in more than one term, check all that apply.

☐ **Fall**　　☒ **Winter**　　☐ **Spring**　　☐ **Other** (e.g., if work is collected between terms)

2F. When during the term will it be collected?　If student artifacts will be collected more than once in a term, check all that apply.

☐ **Early**　　☐ **Mid-term**　　☒ **Late**　　☐ **n/a**

2G. What student group do you want to generalize the results of your assessment to?　For example, if you are assessing performance in a course, the student group you want to generalize to is 'all students taking this course.'

All students taking this course.

2H. There is no single, recommended assessment strategy.　Each SAC is tasked with choosing appropriate methods for their purposes.　Which best describes the purpose of this project?

☐ **To measure established outcomes and/or drive programmatic change (proceed to section H below)**
☐ **To participate in the Multi-State Collaborative for Learning Outcomes Assessment**
☒ **Preliminary/Exploratory investigation**

If you selected 'Preliminary/Exploratory' (most often a 'pilot study'), briefly describe why you opted to do a pilot study, along with your rationale for selecting your sample of interest (skip section H below).　For example: "The SAC intends to add a Cultural Awareness related outcome to this course in the upcoming year.　It is not currently taught in most sections of this course.　2 full-time faculty and 1 part-time faculty member will field-test 3 different activities/assessments intended to measure student attainment of this proposed course outcome.　The 3 will be compared to see which work best."

This will be the first time the exam is conducted since it is a new certification exam that released this year. The results will inform the SAC of needed changes in the curriculum.

2I. Which will you measure?

☒ **the population** (all relevant students – e.g., all students enrolled in all currently offered sections of the course)
☐ **a sample** (a subset of students)

If you are using a sample, select all of the following that describe your sample/sampling strategy (refer to the Help Guide for assistance):

☐ **Random Sample** (student work selected completely randomly from all relevant students)
☐ **Systematic Sample** (student work selected through an arbitrary pattern, e.g., 'start at student 7 on the roster and then select every 5th student following'; repeating this in all relevant course sections)
☐ **Stratified Sample** (more complex, consult with an LAC coach if you need assistance)
☐ **Cluster Sample** (students are selected randomly from meaningful, naturally occurring groupings (e.g., SES, placement exam scores, etc.)
☐ **Voluntary Response Sample** (students submit their work/responses through voluntary submission, e.g., via a survey)
☐ **Opportunity/Convenience Sample** (only a few instructors are participating in a project taught via multiple sections, so, only those instructors' students are included)

The last three options in bolded red have a high risk of introducing bias. If your SAC is using one or more of these sample/sampling strategies, please share your rationale:

2J. Briefly describe the procedure you will use to select your sample (including a description of the procedures used to ensure student and instructor anonymity. For example:

"We chose to use a random sample. We asked our administrative assistant to assist us in this process and she was willing. All instructors teaching course XXX will turn-in all student work to her by the 9th week of Winter Quarter. She will check that instructor and student identifying information has been removed. Our SAC decided we wanted to see our students' over-all performance with the rubric criteria. Our administrative assistant will code the work for each section so that the scored work can be returned to the instructors (but only she will know which sections belong to which instructor). Once all this is done, I will number the submitted work (e.g., 1-300) and use a random

number generator to select 56 samples (which is the sample size given by the Raosoft sample size calculator for 300 pieces of student work). After the work is scored, the administrative assistant will return the student work to individual faculty members. After this, we will set up a face-to-face meeting for all of the SAC to discuss the aggregated results."

*2K. Follow this link to determine how many artifacts (samples of student work) you should include in your assessment: http://www.raosoft.com/samplesize.html (see screen shot below). **Estimate the size of the group you will be measuring (either your sample or your population size [when you are measuring all relevant students]). Often, this can be based on recent enrollment information (last year, this term, etc.):***

3. Project Mechanics

3A. Does your project utilize a rubric for scoring? ☐ **Yes** ☒ **No**

If 'No', proceed to section B. If 'Yes', complete the following.

Whenever possible, multiple raters should always be used in SAC assessment projects that utilize rubrics or checklists. SACs have several options for ensuring that ratings are similar across each rater. The most time consuming option is for all raters to collectively rate and discuss each artifact until they reach 100% agreement on each score (this is called **consensus**). In most cases, SACs should consider a more efficient strategy that divides the work (a norming or calibrating session). During a norming session, all raters participate in a training where the raters individually score pre-selected student work and then discuss their reasons for giving the scores they chose. Disagreements are resolved and the process is repeated. When the participants feel they are all rating student work consistently, they then independently score additional examples of student work in the norming session (often 4-6 artifacts). The ratings for these additional artifacts are checked to see what percentage of the scores are in agreement (the standard is 70% agreement or higher). When this standard is reached in the norming session, the raters can then divide-up the student work and rate it independently. If your SAC is unfamiliar with norming procedures, contact Chris Brooks to arrange for coaching help for your SAC's norming session.

Which method of ensuring consistent scoring (inter-rater reliability) will your SAC use for this project?

☐ **Agreement** – the percentage of raters giving each artifact the same/similar score in a norming session

If you are using agreement, describe your plan for plan for conducting the "norming" or "calibrating" session:

☐ **Consensus** - all raters score all artifacts and reach agreement on each score

Though rarely used at PCC, some SACs might occasionally use the consistency measure for determining the similarity of their ratings. Consistency is generally only recommended when measuring student improvement – not for showing outcome attainment (which explains its rarity). See the Help Guide for more information. Check here if you will be using consistency calculations in this assessment.

☐ **Consistency*** – raters' scores are correlated: this captures relative standing of the performance ratings - but not precise agreement – and then briefly describe your plan:

3B. Have performance benchmarks been specified?

The fundamental measure in educational assessment is the number of students who complete the work at the expected/required level. We are calling this SAC-determined performance expectation the 'benchmark.'

☐ **Yes** (determined by faculty consensus – all instructors who currently teach the course)
☐ Yes (determined by only some of the instructors who currently teach the course)
☒ **Yes** (determined by alignment with an external standard: e.g., standards published by the discipline's professional organization)
☐ **Yes** (determined by post-requisite course expectations within PCC)
☐ **Yes** (determined by post-requisite course expectations for transfer institution)
☐ **Yes** (other). Describe briefly:
☐ **No**

If yes, briefly describe your performance benchmarks, being as specific as possible (if needed, attach as an appendix):

As per national standard, they identified a threshold for passing to earn the certification.

If no, what is the purpose of this assessment (for example, this assessment will provide information that will lead to developing benchmarks in the future; or, this assessment will lead to areas for more detailed study; etc.)?

3C. The purpose of this assessment is to have SAC-wide evaluation of student work, not to evaluate a particular instructor or student. Before evaluation, remove identifying student information (and, when possible remove instructor identifying information). If the SAC wishes to return instructor-specific results, see the Help Guide for suggestions on how to code and collate. Please share your process for ensuring that all identifying information has been removed.

The course is taught by one instructor, the instructor specific information is readily identifiable but is not the focus of the study. Student identifying information is removed before presenting to the SAC. But material being tested on is comprehensive and is based on multiiple classes and multiple instructors.

3D. Will you be coding your data/artifacts in order to compare student sub-groups?   ☐ **Yes**   ☒ **No**

If yes, select one of the boxes below:

☐ **student's total earned hours**   ☐ **previous coursework completed**   ☐ **ethnicity**   ☐ **other**

Briefly describe your coding plan and rationale (and if you selected 'other', identify the sub-groups you will be coding for:

*3E. Ideally, student work is **evaluated** by both full-time and adjunct faculty, even if students being assessed are taught by only full-time and/or adjunct faculty. Further, more than one rater is needed to ensure inter-rater reliability. If you feel only one rater is feasible for your SAC, please consult with an LAC coach prior to submitting your plan/conducting your assessment.*

Other groups may be appropriate depending on the assessment. Check all that apply.

☒ PCC Adjunct Faculty within the program/discipline
☒ PCC FT Faculty within the program/discipline
☐ PCC Faculty outside the program/discipline
☐ Program Advisory Board Members
☐ Non-PCC Faculty
☐ External Supervisors
☐ Other:

End of Planning Section – Complete the remainder of this report after your assessment project is complete.

Beginning of End of Year Reporting Section – complete the following sections after your assessment project is complete.

4. *Changes to the Assessment Plan*

Have there been changes to your project since you submitted the planning section of this report? ☐ **Yes** ☒ **No**

If so, note the changes in the planning section above.

5. *Results of the Analysis of Assessment Project Data*

5A. *Quantitative Summary of Sample/Population*
How many students were enrolled in all sections of the course(s) you assessed this year? 20
If you did not assess in a course, report the number of students that are in the group you intend to generalize your results to.

How many students did you actually assessed in this project? 20
Did you use a recommended sample size (see the Sample Size Calculator linked to above)? ☐ **Yes** ☒ **No**

If you did not use a recommended sample size in your assessment, briefly explain why:

I used all students enrolled in the course.

5B. Did your project utilize a rubric for scoring? ☐ **Yes** ☒ **No**
If 'No', proceed to section C. If 'Yes', complete the following.

How was inter-rater reliability assured? (Contact your LAC Coach if you would like help calculating this.)

☐ **Agreement** – the percentage of raters giving each artifact the same/similar score in a norming session
☐ **Consensus** - all raters score all artifacts and reach agreement on each score
☐ **Consistency** – raters' scores are correlated: this captures relative standing of the performance ratings - but not precise agreement
☐ **Inter-rater reliability was not assured.**

If you utilized agreement or consistency measures of inter-rater reliability, report the level here:

5C. Brief Summary of Your Results

In most cases, report the numbers of students who attain your benchmark level and the numbers who do not. ***Do not average these numbers or combine dissimilar categories (e.g., do not combine ratings for communication and critical thinking together).*** *If your project measures how many students attain the overall benchmark level of performance, report the summary numbers below (choose one):*

1. *If you used frequencies (the actual number who attained the desired level(s) and the actual number who did not), report those here for each of your criteria for this learning outcome. For example, "46 students attained the benchmark level over-all in written communication and 15 did not. Our SAC used 5 criteria within this rubric: 46 student achieved the benchmark level in idea expression (15 did not); 54 achieved the benchmark level for use of standard English (10 did not); etc."*

All 20 students attained this benchmark of passing the Ophthalmic Scribe Certification.

2. If your project used percentages of the total to identify the degree of benchmark attainment in this project, report those here for each of your criteria for this learning outcome. For example, "75% of 61 students attained the benchmark level over-all in written communication. Our SAC used 5 criteria within this rubric: 75% of students achieved the benchmark level in idea expression; 89% achieved the benchmark level for use of standard English; etc."
5D. Attach a more detailed description or analysis of your results (e.g., rubric scores, trend analyses, etc.) as an appendix to this document. Appendix attached? ☐ **Yes** ☒ **No**
5E. What did the SAC learn about your students' attainment of your important benchmarks from this assessment? For example, "We are pleased that most of our students are using standard English in their writing, but want to improve our students' ability to express ideas clearly...."   We are pleased that all of our students passed the Ophthalmic Scribe Certification.
5F. Do the results of this project suggest that academic changes might be beneficial to your students (changes in curriculum, content, materials, instruction, pedagogy etc.)? ☐ Yes ☒ No   *If you answered 'Yes,' briefly describe the changes to improve student learning below. If you answered 'No', detail why no changes are called for.*   No, because this was a pilot to see if there were any changes needed to improve the student learning in order to pass the Ophthalmic Scribe Certification (OSC). This was the first time the OSC was taken by students in the OMT program.   *If you are planning changes, when will these changes be fully implemented?*
5G. Has all identifying information been removed from your documents? (Information includes student/instructor/supervisor names/identification numbers, names of external placement sites, etc.) ☐ **Yes** ☒ **No**

6. SAC Response to the Assessment Project Results

6A. Assessment Tools & Processes: Indicate how well each of the following worked for your assessment:

Tools (rubrics, test items, questionnaires, etc.):

☒ *very well*   ☐ *some small problems/limitations to fix*   ☐ *notable problems/limitations to fix*   ☐ *tools completely inadequate/failure*

Please comment briefly on any changes to assessment tools that would lead to more meaningful results if this assessment were to be repeated (or adapted to another outcome).

No changes would need to be made as all the students passed.

Processes (faculty involvement, sampling, norming, inter-rater reliability, etc.):

☒ *very well*   ☐ *some small problems/limitations to fix*   ☐ *notable problems/limitations to fix*   ☐ *tools completely inadequate/failure*

Please comment briefly on any changes to assessment process that would lead to more meaningful results if this assessment were to be repeated (or adapted to another outcome).

No changes to the assessment process would need to be made that could lead to more meaningful results as all the students passed.

7. Follow-Up Plan

7A. How will the changes detailed in this report be shared with all FT/PT faculty in your SAC? *(select all that apply)*

☒ email   ☐ phone call   ☐ workshop
☐ campus mail   ☒ face-to-face meeting   ☐ other
☐ no changes to share

If 'other,' please describe briefly below.

7B. Is further collaboration/training required to properly implement the identified changes? ☐ *Yes* ☒ *No*

If 'Yes,' briefly detail your plan/schedule below.

7C. Re-assessment is a critical part of the overall assessment process. This is especially important if academic changes have been implemented. How will you assess the effectiveness of the changes you plan to make?

☐ *follow-up project in next year's annual report* ☐ *on-going informal assessment*

☒ *in a future assessment project* ☐ *other*

If 'other,' please describe briefly below.

7D. SACs are learning how to create and manage meaningful assessments in their courses. This development may require SAC discussion to support the assessment process (e.g., awareness, buy-in, communication, etc.). Please briefly describe any successful developments within your SAC that support the quality assessment of student learning. If challenges remain, these can also be shared.

As a SAC we discussed all the subcontent areas that were in the OSC exam and went over the CCOG to ensure that all the information was taught in order for the students to successfully complete and pass the OSC exam. Any subcontent areas of the test that were touched on briefly in the course, we implemented those pieces into the curriculum more thouroughly. Through the results of the test proved that the students were well prepared for the exam and they all passed!