

Subject Area Committee Name: Dental Laboratory Technology

Focal Outcome Being Assessed: “Ceramic Pressables Process.” *Aligned with program Outcome:* Apply general laboratory techniques to prepare and evaluate impressions and casts, use articulators, develop functional occlusion on articulated casts and fabricate custom impression trays. (PCC Core Outcomes CT&PS, PC and SR).

Contact Person:

<i>Name</i>	<i>e-mail</i>
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This form is for the initial assessment of a focal outcome.

- Refer to the help document for guidance in filling out this report. If this document does not address your question/concern, contact [Nora Stevens](#) 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_2018 (Example: NRS_ARF_2018)
- 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 27th, 2017**
- **Completed LAC Assessment or Reassessment Reports: June 16th, 2018**

Please Verify This Before Beginning this Report:

This project is not the second stage of the assess/reassess process (if this is a follow-up, re-assessment project, use the LAC Re-assessment Report Form CTE. Available [here](#)).

1. Outcome Chosen for Focal Analysis

1A. How does your field interpret the outcome you are assessing?

Candidates for careers in Dental Laboratory Technology usually possess good eye-hand coordination and color perception, dexterity in using small instruments, the patience to attend to detail and an interest in learning the underlying material science. Each restoration the technician makes will be different and each must simulate the function of the natural teeth. But, beyond that, the technician's great challenge is to capture and recreate both the perfection and the imperfection of natural teeth. Critical thinking and trouble shooting ability skills are major components in helping the technicians to test appliances for conformance to specifications and accuracy of occlusion, and function. As part of 2017/2018 LAC Focal Outcome, the Fixed Restorative Instructor has decided to assess the students Critical Thinking and Troubleshooting on "Pressed Ceramic Restoration" where the students must be able to identify deficiencies of a pre-fabricated Pressed ceramic crown and take steps to make the necessary corrections.

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

- Degree/Certificate Outcome – if yes, include here: Apply general laboratory techniques to prepare and evaluate impressions and casts, use articulators, develop functional occlusion on articulated casts and fabricate custom impression trays*
- PCC Core Outcome – if yes, which one: CT&PS, PC and SR*
- Course Outcome – if yes, which one: 1. Demonstrate knowledge and handskills in the build-up and processing of porcelain and resin in the reproduction of lifelike inlays, onlays, crowns and fixed bridgework on specialty practical cases and typodont models according to specified criteria within a predetermined time. 2. Demonstrate adaptation and problem solving techniques to solve problems in occlusion, tooth shape, tooth alignment and periodontal conditions. 3. Perform all dental technology procedures at entry level competency or better while demonstrating professionalism, good ethical judgment and good biohazard and hazardous chemical safety practices in all work situations.*
- 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): DT 205, Dental Technology Lab V
Type of assessment (e.g., essay, exam, speech, project, etc.): Lab: Ceramic Pressables Project
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): Please refer to information in Section 1B.
- 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 publicly 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
 Qualitative

Direct Assessment
 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. Note that the **use of a numerical rubric is considered quantitative analysis**, even if the artifacts under consideration are not based on quantitative calculations (e.g. an essay scored by a rubric counts as quantitative in the context of assessment).

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
- 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:)

2E. In which quarter will student artifacts (samples 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. 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 Within the Course.

2G. 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**
- 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 sampling method:

2H. 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:

2I. Briefly describe the procedure you will use to select your sample (**including a description of the procedures used to ensure student and instructor anonymity.**)

All students samples will be assessed

2J. 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).

Start with the number of students you estimate will be enrolled in the course(s) from which you will draw the sample – that is your “population.” Enter the other numbers as indicated in the screenshot. The sample size calculator will tell you how many artifacts you need to collect. Enter that number below:

All students samples will be assessed

Raosoft Sample size calculator

What margin of error can you accept?
5% is a common choice

What confidence level do you need?
Typical choices are 90%, 95%, or 99%

What is the population size?
If you don't know, use 20000

What is the response distribution?
Leave this as 50%

Your recommended sample size is

10 %

90 %

105

50 %

42

The margin of error is the amount of error that you can tolerate. If 90% of respondents answer yes, while 10% answer no, you may be able to tolerate a larger amount of error than if the respondents are split 50-50 or 45-55. Lower margin of error requires a larger sample size. **Use 10% and 90% in these boxes.**

The confidence level is the amount of uncertainty you can tolerate. Suppose that you have 20 yes-no questions in your survey. With a confidence level of 95%, you would expect that for one of the questions (1 in 20), the percentage of people who answer yes would be more than the margin of error away from the true answer. The true answer is the percentage you would get if you exhaustively interviewed everyone. Higher confidence level requires a larger sample size. **Enter the total number of students currently enrolled in all sections of the courses you are assessing here.**

For each question, what do you expect the results will be? If the sample is skewed highly one way or the other, the population probably is, too. If you don't know, use 50%, which gives the largest sample size. See below under **More information** if this is confusing. **Measure this many students.**

This is the minimum recommended size of your survey. If you create a sample of this many people and get responses from everyone, you're more likely to get a correct answer than you would from a large sample where only a small percentage of the sample responds to your survey.

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:

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; ideally, that will be 75% agreement or greater.

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

A discussion time between raters will occur by reviewing the rubric to be used and information would be provided about the reason for norming, how the information will be used and shared, how this session contributes to program assessment, how long the session should take, and what the expectations are for each process of the procedures.

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. Briefly describe your plan:

Notes: the agreement method is the most frequently used for assessment, but the **calculation of inter-rater reliability is also among the more challenging issues** within assessment as a whole. If your SAC is unfamiliar with norming procedures, contact your assessment coach, or if you don’t know who your coach is, contact LAC Vice Chair [Chris Brooks](#) to arrange for coaching help for your SAC’s norming session.

The consistency method is not generally recommended; see the help guide for details.

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

No

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

This would be a two-step process.

First, the student’s assessment will be based on accuracy of their findings. They will be reassessed until they accurately identify the problem.

Second, the student's work will be evaluated and scored based on their skills to correct the deficiencies of the restoration to minimum standards.

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 student-identifying information (and, when possible remove instructor-identifying information). **Please share your process for ensuring that all identifying information has been removed.**

All students will be given a number which will be placed on their rubric. Data reporting will only include student numbers.

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 explain why:

Who will be assessing student work for this project? 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, summarize those changes below:

No Changes were made.

5. *Narrative*

Broadly, what did your SAC learn from the assessment of the focal outcome under consideration this year?

The SAC recognized the importance of having calibration exercises between the raters prior to evaluating the students work. In the case of this year's project, the raters were able to utilize the same models for calibration that each student would use to complete their assignment on. Even though both raters are present during all demonstrations that students receive during the term, when it came time to calibrate they noticed that they evaluated "Axial Contours" slightly differently. Following the calibration exercise, the two instructors discussed and reviewed proper evaluation and procedure/criteria for corrections in the Axial Contours aspect of the models. Agreement was reached at the end of the calibration session and at the conclusion of grading of student's work, the instructors found they were in 100% agreement.

6. Results of the Analysis of Assessment Project Data

6A. Quantitative Summary of Sample/Population

How many students were enrolled in all sections of the course(s) you assessed this year? **6**

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 assess in this project? **6**

Did you use a recommended sample size (see the Sample Size Calculator linked to in section 2J)? **Yes**

No

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

All students enrolled were evaluated

6B. 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:

During Calibration Exercises Instructors either agreed or disagreed with the findings on each model assigned. Review occurred when agreement was not reached, until both raters were in full agreement on assessment criterion.

6C. **Brief Summary of Your Results** In summary, the faculty found the calibration part of the project to be very valuable by allowing them to recognize where differences in perception/understanding of the need for corrections in the six criterion existed. By first evaluating each model separately, and then reviewing

the areas where differences existed, the instructors learned of each other's different scoring perspective. When it came time for the evaluators to assess the student's own evaluation of the models, the instructors had a common set of features that they were both looking for and as such, were in 100% agreement of the student's final work. It was also important for the instructors to learn that students were much better at recognizing when a correction was needed and when it was not needed. The more difficult skill for the student was in actually making the appropriate correction on the model that was needed. This information will be used for improvement of the next course offering and assignment. More time will be used to address how to correctly adjust the occlusal contacts, which is the one area students struggled to correct adequately.

- 1. If you used frequencies of benchmark achievement, report those here. For example, "46 students attained or exceeded the benchmark level in written communication and 15 did not." If necessary, provide detailed results in an appendix.*

Students were expected to receive 70% on the finished assignment. Four students attained 100% accuracy and two students attained 92% accuracy on this assignment. All students exceeded the expectations for this assignment and demonstrate the basic competence needed in working with ceramic pressable fabrications.

- 2. If you used percentages of the total to identify the degree of benchmark attainment in this project, report those here. For example, "75% of 61 students attained or exceeded the benchmark level."*

100% of the 6 students exceeded the benchmark.

6D. 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

6E. 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.

While results revealed that all of the students were able to perform above the benchmark level, it is important that more emphasis be placed on instructing students on repair/correction of occlusal contacts for pressable restorations. Without strong skill performance in this area, the technician could fabricate a restoration that would not be functionally suitable for a patient and might possibly lead to pulpal, periodontal or other adverse responses.

If you are planning changes, when will these changes be fully implemented?

Winter 2019 Course Offering

6F. *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**

7. SAC Response to the Assessment Project Results

7A. 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 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).

Rubrics should include more descriptive indicators for the evaluator's use. Even though each of the evaluator's has each had 20+ years of experience in the field and in particular, performing this procedure, they each evaluated "Axial Contours" slightly differently during the calibration exercises. Utilizing a rubric with descriptors would help the evaluators to be more consistent.

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):

The norming session went very well and allowed evaluators time to discuss and review where differences existed.

8. Follow-Up Plan

8A. How will the changes detailed in this report be shared with all FT/PT faculty in your SAC? *(select all that apply)*

- | | | |
|----------------------------------------------|-----------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> email | <input type="checkbox"/> phone call | <input type="checkbox"/> workshop |
| <input type="checkbox"/> campus mail | <input type="checkbox"/> face-to-face meeting | <input checked="" type="checkbox"/> other |
| <input type="checkbox"/> no changes to share | | |

If 'other,' please describe briefly below.

Presented at SAC Meeting

8B. Is further collaboration/training required to properly implement the identified changes? Yes No

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

N/A

8C. 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?

- | | |
|-------------------------------------------------------------------------|------------------------------------------------------------------|
| <input type="checkbox"/> follow-up project in next year's annual report | <input checked="" type="checkbox"/> on-going informal assessment |
| <input type="checkbox"/> in a future assessment project | <input type="checkbox"/> other |

If 'other,' please describe briefly below.

8D. 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.

Creating Calibration exercises and allowing time within the faculty workday to perform these exercises has been extremely helpful in the evaluation of student's work by the two different instructors.

Appendix 1 – Instructor Calibration Exercise

2018 Dental Laboratory Technology Learning Assessment Council Project														
DLT Project: Pre-Fabricated Pressed Ceramic Restoartion Evaluation														
Instructor Calibration Chart														
Model #	Crown Fit		Marginal Adaptation		Proximal Contacts		Occlusal Contacts		Axial Contour		Glaze/Shade		Percent	Action Taken
317	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Agreement	if not 100% Agreement
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	83%	Instructors reviewed criteria and came to agreement
Instr. Eval.	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
101	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Agreement	if not 100% Agreement
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	100%	No Action Needed
Instr. Eval.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes		
104	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Agreement	if not 100% Agreement
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	67%	Instructors reviewed criteria and came to agreement
Instr. Eval.	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes		
105	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Agreement	if not 100% Agreement
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	100%	No Action Needed
Instr. Eval.	No	No	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes		
102	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Agreement	if not 100% Agreement
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	100%	No Action Needed
Instr. Eval.	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes		
103	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Agreement	if not 100% Agreement
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	100%	No Action Needed
Instr. Eval.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes		

Appendix - 2 DT 205 Dental Lab V – Pre-Fabricated Pressed Ceramic Restoration Evaluation Project

Student Name: _____ Case Number _____ Station # _____

Instructions: Student must follow below guidelines to evaluate the quality and accuracy of the pressed porcelain crown and explain and correct if necessary any deficiencies or inaccuracies. Points awarded = 2.5 for accurately evaluating whether a correction is needed and 2.5 points for describing why a correction is not needed, or if a correction is needed, making the appropriate correction.

- | | | |
|------------------------------------|------------|---------------------|
| 1. Fit of the crown
Explain: | Acceptable | Correction Required |
| 2. Marginal Adaptation
Explain: | Acceptable | Correction Required |
| 3. Proximal Contacts:
Explain: | Acceptable | Correction Required |
| 4. Occlusal Contacts
Explain: | Acceptable | Correction Required |
| 5. Axial Contours:
Explain: | Acceptable | Correction Required |

6. Glaze and Shade Quality: Acceptable Correction Required
Explain:

Total Maximum Points Possible = 30

Appendix 3 – Student Evaluation (Grading by Each Instructor) Key = Correct (5pts awarded), Incorrect Student Evaluation = - 2.5 pts for incorrect student evaluation and/or -2.5 pts for not making satisfactory correction.

Student Evaluation Grading (Each category is worth 5 points: (2.5 pts for recognizing if correction needed and 2.5 pts for making the appropriate correction)														
Student #	Crown Fit		Marginal Adaptation		Proximal Contacts		Occlusal Contacts		Axial Contour		Glaze/Shade		Score/ Percent	Notes:
102	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed			Instructors Agree = 100%
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2		Student recognized need for correction
Grade	correct	correct	correct	correct	correct	correct	incorrect	incorrect	correct	correct	correct	correct	27.5 points/92%	but did not make accurate correction.
103	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed			Instructors Agree = 100%
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2		Student Evaluated need for corrections
Evaluation/Grade	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	30 points/100%	and made corrections with no errors
105	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed			Instructors Agree = 100%
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2		Student Evaluated need for corrections
Evaluation/Grade	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	30 points/100%	and made corrections with no errors
104	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed			Instructors Agree = 100%
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2		Student Evaluated need for corrections
Evaluation/Grade	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	30 points/100%	and made corrections with no errors
101	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed			Instructors Agree = 100%
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2		Student Evaluated need for corrections
Evaluation/Grade	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	correct	30 points/100%	and made corrections with no errors
317	Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed		Correction Needed			Instructors Agree = 100%
	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2	Instr #1	Instr #2		Student recognized need for correction
Evaluation/Grade	correct	correct	correct	correct	correct	correct	incorrect	incorrect	correct	correct	correct	correct	27.5 points/92%	but did not make accurate correction.