

PROVISIONAL PROSTHODONTIC CLINICAL

COURSE STUDY GUIDE

2nd Edition

Provisional Prosthodontic Clinical

Course Study Guide

2nd Edition

Contributors Fern Hubbard (Course writer, 1997) Margaret Dennett (Course writer/Consultant, 1997) Catherine Baranow (Course writer, 2013)

First edition published by Open College for the Province of British Columbia Ministry of Education, Skills and Training and the Centre for Curriculum, Transfer and Technology, 1997. Second edition revisions by Catherine Baranow, Okanagan College, 2013.

Copyright ©2018, Province of British Columbia



This material is owned by the Government of British Columbia and is licensed under a <u>Creative Commons Attribution---Share Alike 4.0 International license</u>.

Contents

Introduction1
Clinical Course Objectives
Role of the Learner
Role of the Instructor
Evaluation6
Phase 1: Clinical Course Schedule and Outline7
Suggested Course Schedule9
Demonstrations9
Day 1, morning session10
Day 1, afternoon session11
Day 2, morning session13
Day 2, afternoon session14
Day 3, morning session14
Day 3, afternoon session16
Day 4, all-day session
Phase 2: Dental Office Practicum and Assignments 17
Phase 3: Clinical Summary Session
Appendices
Appendix 1: Procedural Guidelines
Direct Fabrication of a Single-Unit Provisional Crown Using an Impression Matrix 20
Direct Fabrication of a Single-Unit Provisional Crown Using a Preformed Shell 24
Indirect Direct Fabrication of a Three-Unit Provisional FPD
Removal of Provisional Cement
Removal of a Provisional Restoration35
Appendix 2: Clinical Assignments
Checklist and Sign-Off
Appendix 3: Dental Office
Assignments Checklist and Sign-Off
Appendix 4: Evaluation Forms for Clinical Assignments
Provisional Prosthodontic Clinical Evaluation #140
Provisional Prosthodontic Clinical Evaluation#242
Provisional Prosthodontic Clinical Evaluation #344
Provisional Prosthodontic Clinical Evaluation #446

F	Provisional Prosthodontic Clinical Evaluation #54	8
F	Provisional Prosthodontic Clinical Evaluation #64	9
F	Provisional Prosthodontic Clinical Evaluation #75	51
F	Provisional Prosthodontic Clinical Evaluation #85	52
F	Provisional Prosthodontic Clinical Evaluation #95	53
F	Provisional Prosthodontic Clinical Evaluation #105	54
F	Provisional Prosthodontic Clinical Evaluation #115	5
F	Provisional Prosthodontic Clinical Evaluation #125	57
F	Provisional Prosthodontic Clinical Evaluation #135	58
F	Provisional Prosthodontic Clinical Evaluation #146	60
F	Provisional Prosthodontic Clinical Evaluation #156	52
Appe	ndix 5: Evaluation Forms for Dental Office Assignments6	63
F	Provisional Prosthodontic Dental Office Evaluation #1	5
F	Provisional Prosthodontic Dental Office Evaluation #2	8
F	Provisional Prosthodontic Dental Office Evaluation #3	0
F	Provisional Prosthodontic Dental Office Evaluation #47	'1
F	Provisional Prosthodontic Dental Office Evaluation #5	'4
F	Provisional Prosthodontic Dental Office Evaluation #6	'6
F	Provisional Prosthodontic Dental Office Evaluation #77	7
F	Provisional Prosthodontic Dental Office Evaluation #87	'9
F	Provisional Prosthodontic Dental Office Evaluation #9	31
F	Provisional Prosthodontic Dental Office Evaluation #10	32

Introduction

Welcome to the *Provisional Prosthodontic Clinical* course. The fact that you are enrolled in this course means that you have successfully completed *Provisional Prosthodontic Theory.* In preparation for this clinical course, you should have observed and assisted for at least four prosthodontic procedures in your sponsoring dental office, performing as many legal tasks as possible.

Provisional Prosthodontic Clinical has three phases: Phase 1 is the clinical sessions and assignments, Phase 2 is the dental office practicum and assignments, and Phase 3 is a post-course summary session.

This clinical course builds on the knowledge developed in the theory course; the clinical skills and techniques presented and practiced here are modeled after those studied in the theory course. You may need to review the information in your theory learning package and textbook prior to the clinical sessions. The clinical instructors will assume that you are an informed participant and that your knowledge of provisional restorations from the theory course is current.

This Course Study Guide directs you through the clinical course. You should be thoroughly familiar with its contents *before* attending the course sessions so that you can take full advantage of the clinical instruction. Course objectives are included in this guide, in addition to information on your role as a learner and how you will be evaluated. The guide also outlines the content of the clinical sessions, the dental office practicum, and the summary session. Completing the guide are appendices containing procedural guidelines and evaluation forms.

The clinical Course Study Guide will be used in all provisional prosthodontic clinical courses offered throughout British Columbia. Individual course providers will supply any additional information specific to their institution.

The textbook for the clinical course is the same one used for the theory course: Rosenstiel, Land, and Fujimoto's *Contemporary Fixed Prosthodontics*, fourth edition, Mosby, 2006.

Certified dental assistants who successfully complete both *Provisional Prosthodontic Theory* and *Provisional Prosthodontic Clinical* will be recommended to the College of Dental Surgeons of BC to receive the Prosthodontic module designation on their certificate.

Clinical Course Objectives

At the successful completion of this clinical course you will be able to perform the following prosthodontic competencies:

- Fabricating and trying-in provisional restorations intra-orally, including intra-coronal direct provisionals, and adjusting occlusion extra-orally, followed by assessment by a dentist before cementation.
- Temporary cementation of provisional restorations and removal of temporary cement followed by assessment by a dentist.
- Performing non-surgical gingival retraction techniques excluding the use of epinephrine.
- Removing temporary and permanent cements using an appropriate hand instrument and excluding the use of dental handpieces.
- Removing provisional restorations

Each competency is introduced and demonstrated by an instructor and guidance and feedback is provided while you practice. The instructor then evaluates your performance of all the procedural steps that make up the competency.

Role of the Learner

As an informed learner, you are expected to be prepared for each clinical session and, as already mentioned, have current knowledge of the theory covered in the prerequisite course, *Provisional Prosthodontic Theory*. It is advantageous for you to understand the steps of each procedure so that you can concentrate on performing the skill, rather than thinking about the theory supporting the skill or what step comes next. The clinical course covers all procedures and requires a focused, concentrated effort from participants.

As an active learner, you strive to relate the clinical skills demonstrated by an instructor to your own knowledge and experiences of prosthodontic procedures. You will likely want to take notes during the demonstrations. Your instructors are prepared to answer questions to help you relate previously studied theory to clinical practice.

You are required to attend *all* sessions during the clinical course. If for some reason you miss a session, you must notify the course provider and make up the missed assignments. Incomplete assignments will result in an unsatisfactory evaluation for the clinical course. It is important for you to maintain an open line of communication with your instructors regarding all aspects of your clinical course work and evaluation. If you are having a problem or are unsure of something, talk it over with your instructor.

You are expected to conduct yourself in a professional manner during the clinical course and to practice safely at all times. Since you are attending a professional clinic course, you should dress in suitable clinical attire; for example, you should wear neat, clean uniforms, clinic shoes and have a hairstyle that meets safety and infection control guidelines. Check with the institution offering the course for specific information on clinical attire.

When working in the clinic on classmate "patients," a clean uniform is required. Safety glasses are mandatory at all times. Please bring gloves and masks with you; they are required for all sessions when you are working intra-orally with a fellow learner. Check with the institution offering the course for specific information on types of gloves and masks; for example some institutions prefer non-latex. You will be supplied with a name tag on your fist day, and you should wear it for all sessions.

Clinical responsibilities include contributing as a team member to the cleanup of the clinic after each session and to routine clinical support procedures.

Part of your responsibility in the clinical prosthodontic course is to participate in clinic activities as an operator and as a patient. Just as it is important to be a good operator, it is

equally important to be a good patient by being co-operative and positive. Note that you are required to complete a health history prior to partner clinic sessions. Any concerns you have about being a patient should be discussed with an instructor prior to the course.

In summary, besides an active, informed learning approach and safe, professional working habits, bring the following items with you to the clinical sessions:

- Provisional Prosthodontic Theory, Course Study Guide
- Provisional Prosthodontic Clinical, Course Study Guide
- The textbook, Contemporary Fixed Prosthodontics
- Gloves
- Masks
- Safety glasses
- Clean uniform

Role of the Instructor

In addition to course planning and arrangement of facilities, materials, and equipment, instructors have the following responsibilities toward learners:

- Present information through seminars, demonstrations, and discussion.
- Provide feedback and guidance to learners during clinical practice.
- Provide assistance and direction during demanding parts of procedures.
- Encourage problem-solving approaches to difficulties.
- Promote the sharing of ideas and feelings during the clinical course.
- Evaluate the learner's performance and progress.

Evaluation

There are several types of evaluation in the course. Self-evaluation or self-assessment is an integral part of all clinical procedures. Peer evaluation is also encouraged. Your clinical instructors will provide both informal feedback and formal evaluation. Your sponsoring dentist will evaluate your dental office assignments.

Formal evaluation is based on the criteria outlined in the sample evaluation forms in Appendix 4. An "S" evaluation is "satisfactory" and equates with safe, professional performance to the stated criteria of competence; a "U" evaluation designates "unsatisfactory" performance and indicates that further practice is needed to achieve a competent, safe, and professional level of skill. You must receive an "S" rating for *all* procedures. Note that numerical percentages are not associated with an "S" or a "U"; rather, these ratings indicate competence or non-competence in performing a procedure.

You must satisfactorily complete all course assignments by the end of the scheduled time, as given in the clinical course schedule and summarized Appendix 2: Clinical Assignments Checklist and Sign-Off.

You are also required to pass, at a satisfactory level, the dental office assignments performed on patients and summarized in Appendix 3: Dental Office Assignments Checklist and Sign-Off. The dental office assignments are explained in the following section on Phase 2.

Evaluation by your instructor occurs in clinic or laboratory settings on manikins, models, or in simulations with clinic partners. Evaluation is based on documents found in the appendices as follows:

Appendix 1:Procedural Guidelines: A sequential, detailed guide for performing
the provisional prosthodontic procedures.

Appendix 2:	Clinical Assignments Checklist and Sign-Off: A list of the clinical
	assignments, serving as a checklist for learners to mark their
	progress through the course.
Appendix 3:	Dental Office Assignments Checklist and Sign-Off: A checklist of
	dental office assignments for learners to record their progress.
Appendix 4:	Evaluation Forms for Clinical Assignments: The evaluation criteria
	instructors use to evaluate the learner's clinical assignments.
Appendix 5:	Evaluation Forms for Dental Office Assignments: The evaluation
	criteria dentists use to evaluate the learner's dental office
	assignments.

Phase 1: Clinical Course Schedule and Outline

You practice prosthodontic skills in simulated clinic or laboratory settings that are as realistic as possible. The intent is to provide relevant experiences that prepare you for the clinical assignments and help you transfer your newly acquired clinical skills to dental office practice.

Each clinical session generally begins with a seminar. Instructors discuss clinical objectives, the material to be covered in the session, and the learning plan. You then have a chance to ask any questions and share clinical experiences and knowledge.

Instructors demonstrate clinical skills using manikins and/or models. The instructor-learner ratio will be low enough to allow clear observation of the demonstration and provide ample opportunity for you to ask questions and obtain needed direction. Demonstrations are divided into steps (see Appendix 1: Procedural Guidelines) so that you can understand each part of the skill and the related theory.

Clinical sessions are a mix of guided and independent practice. During independent practice, you are encouraged to self-assess your results. Learning to critically evaluate your performance will help you master the clinical objectives and prepare you for your professional and ethical obligations. If pausing to assess your work is not already an integral part of your practice, it is a habit well worth developing. Your goal is to identify and correct errors in order to increase competence and safety.

Clinical sessions usually end with a wrap-up discussion, giving you a chance to share problem-solving experiences and learn from others. Problem solving is important because it will help you trouble shoot difficulties that may arise when you are performing the new skills in your dental office. The instructors conclude each session with recommendations for preparing for the next session.

Because clinical skills are best learned through practice, the majority of clinical time will be taken up with hands-on experience. The emphasis is on working at your own pace through the procedural steps of all the competencies.

You will practice assembling the armamentarium, manipulating the materials, performing procedural steps, and self-evaluating your work. Instructors also assess your performance, and by the end of the course you will be evaluated on all clinical skills and should feel well-prepared for the dental office assignments.

The clinical course is scheduled to be completed in approximately 32 hours. The hours may be divided in a variety of ways - full days, part days, evenings during weekdays, or weekends. Course providers will plan a schedule around the availability of a clinic facility and instructors and the locations and work commitments of participants.

The following is a sample schedule for a 32-hour course that takes place over four days. The course begins with a welcome and introduction and includes an orientation to the course and what is expected of learners. There are eight sessions made up of seminars, demonstrations, and clinic blocks. The same schedule could also be used for other combinations of full and part days or evenings. Please note that all times given are approximate. When you attend the clinical course, you will learn and participate in these activities, but the actual schedule and organization may vary. This sample schedule provides you with an idea of what you can expect.

Suggested Course Schedule

The clinical course schedule will vary from institution to institution, depending on the preferred arrangements of demonstrations and presentation principles. The following is a list of expected demonstrations and a sample schedule. The schedule allows for a flow of procedures suitable to all skill levels. Students who are competent can continue on to the next activity, while those who need the practice have additional practice time during the last session. Allowing some element of self-pacing reduces frustration for those who want to progress at their own speed and improves the student-instructor ratio as students exit early.

Demonstrations

- Single-unit acrylic form made using an alginate or elastomeric impression
- Non-surgical gingival retraction (excluding the use of epinephrine)
- Single-unit preform crown selection and acrylic/bis-acryl reline
- Three-unit pressform matrix with acrylic/bis-acryl reline
- Intra-coronal form made using an alginate or elastomeric impression
- Trim and fit single-unit form
- Trim and fit single-unit preform
- Trim and fit three-unit provisional
- Trim and fit intra-coronal provisional
- Provisional cementing and cement removal procedures on models
- Provisional cementing and cement removal on student partners
- Removal of cemented provisional

Day 1, morning session - 4 hours

Welcome and introduction, paperwork and housekeeping (1/2 hour)

Seminar #1 (1 hour)

- Discuss office experience to date
- Review temporary cements
- Discuss gingival retraction systems (choices, limitations and uses)

Demonstration (15 min.)

- Apply and remove cement on student partner
- Place and remove gingival retraction cord on a student partner

Clinic #1 (30 min.)

- Apply and remove cement on student partner
- Checklist sign-off (point 8)
- Place and remove gingival retraction cord on a student partner
- Checklist sign-off (point 9)

Break (15 min.)

Seminar #2 (30 min.)

- Discuss in general matrix fabrication
- Shade selection

Demonstration #2 (30 min.)

- Take quadrant impression for single-unit matrix
- Using a quadrant impression matrix, fabricate a single-unit form of either tooth #2.2 and/or tooth #4.6
- Discuss removal of forms: safety and technique

Clinic #2 (1 hour)

Obtain quadrant impressions and forms, three for tooth #2.2 and three for tooth #4.6. All of the forms should meet the criteria. One of each will be identified as the best. Have this activity signed off on checklist shown in Appendix 2 (point 1)

Day 1, afternoon session - 4 hours

Seminar #3 (15 min.)

Preformed shells
 Review types of materials
 Uses of preformed shells
 Advantages and disadvantages
 Selection criteria

Demonstration #3 (30 min.)

- Preformed shell selection for anterior and posterior
- Anterior shell adaptation for fit
- Posterior shell adaptation for fit
- Contacts
- Reline anterior
- Reline posterior

Clinic #3 (1 hour)

- Select and fit two posterior shells and two anterior shells
- Reline two posterior shells and two anterior shells
- Checklist sign-off in Appendix 2 (point 2)

Break (15 min.)

Demonstration #4 and #5 (45 min.)

Demonstration #4: Review margin design

- Discuss types of margin design for inlays, onlays, metal and PFM and porcelain

- Mark margins on acrylic and bis-acryl forms

Demonstration #5: Trim single-unit crowns

- Armamentarium
- Safety and technique

Clinic #4 (45 min.)

- Mark margins and contacts
- Start to trim acrylic/bis-acryl single units

Clean-up and summary ($\frac{1}{2}$ hour)

Day 2, morning session - 4 1/2 hours

Clinic #4, continued (30 min.)

- Continue to trim single units, acrylic, bis-acryl and preformed shells

Seminar #4 (30 min.)

- Discuss trimming tips and problem solving, including review of bead-brush technique and use of micro-filled composite
- Discuss occlusal anatomy and occlusion for single units

Demonstration #6 (45 min.)

- Review occlusal adjustment, polishing, and finishing of acrylic form and preformed shell
- Bead-brush technique and adding micro-filled composite
- Staining with use of stain kit

Break (15 min.)

Clinic #5, continued (1 hour)

- Trim margins, adjust occlusion, and polish single-unit provisionals
- Checklist sign-off in Appendix 2 (point 3)

Demonstration #7 (30 min.)

- Fabricate and trim pressform matrices for three-unit provisionals
- Fabricate anterior and posterior three-unit acrylic and bis-acryl forms
- Anterior shade variation using bead-brush technique

Clinic #6 (1 hour)

- Fabricate two pressform matrices to make three forms for #1.1 to #1.3 and two pressform matrices for #3.4 to #3.6. Fabricate acrylic forms using shade variation for anteriors and two other forms in your choice of provisional material.

Day 2, afternoon session - 3 1/2 hours

Clinic #6, continued (1 hour)

- Continue to fabricate two pressform matrices for #1.1 to #1.3 and two pressform matrices for #3.4 to #3.6. Fabricate acrylic forms using shade variation for anteriors and two other forms in your choice of provisional material
- Checklist sign-off (point 4)

Seminar #5 (15 min.)

- Discuss intra-coronal provisional

Demonstration #8 (30 min.)

- Fabricate trim adjust and polish a MODL onlay

Clinic #7 (1 hour 15 min.)

- Fabricate two MODL onlays for #2.6
- Checklist sign-off (point 5)
- Trim, adjust and polish onlays
- Checklist sign-off (point 13)

Summary, clean-up, and plan for next day. (30 min.)

Day 3, morning session - 4 hours

Seminar #6 (30 min.)

- Discuss provisional cement, cementing procedures, and removing cement

Demonstration #9 (15 min.)

- Cement single unit provisionals and remove cement

Clinic #8 (30 min. for set-up, procedure, and clean-up)

- Cement a single-unit crown and remove excess cement
- Checklist sign-off (point 5)
- Cement a MOD onlay and remove excess cement
- Checklist sign-off (point 14)

Break (15 min.)

Demonstration #10 (15 min.)

- Remove provisionally cemented single-unit crown and onlay
- Safety, precautions.

Clinic #9 (30 min.)

- Remove provisionally cemented single-unit crown
- Checklist sign-off (point 6)
- Remove provisionally cemented onlay
- Checklist sign-off (point 15)

Seminar #7 (15 min.)

- Review, discuss, and answer trimming questions
- Review pontic design

Demonstration #11 (30 min.)

- Mark, trim, adjust occlusion, and polish three-unit provisional for #1.1 to #1.3 and #3.4 to #3.6

Clinic #10 (1 hour)

- Mark, trim, adjust occlusion, and polish three-unit provisionals

Day 3, afternoon session - 4 hours

Demonstrations #12 and #13 (30 min.)

Demonstrations #12

- Cement anterior three-unit provisional FPD and remove provisionally cemented anterior three-unit FPD

Demonstrations #13

- Cement posterior three-unit provisional FPD and remove provisionally cemented posterior three-unit FPD

Clinic #11, continued (3 ½ hours)

- Continue trimming three-unit provisional; when complete, cement and remove
- Checklist sign-off (points 7, 8, and 10)

Day 4, all-day session

Seminar #8

- Discuss the application of clinical skills to practice, including patient safety, procedures, and other necessary information
- Clinical course evaluation
- Discuss dental office practicum and assignments
- Discuss legalities of practice

The remaining clinical time will be for completion of assignments.

Phase 2: Dental Office Practicum and Assignments

As part of the requirements for this clinical course, you must, in co-operation with your sponsoring dentist, schedule a minimum of three patients for specific prosthodontic procedures. One patient should require a single-unit provisional crown, the second patient a three-unit provisional FPD, and the final patient an intra-coronal restoration. Try to schedule the appointments soon after you have completed Phase 1 of the clinical course.

In addition to assisting for the prosthodontic procedure, you will perform your newly acquired skills with provisional restorations under the close supervision of the sponsoring dentist. In the Sponsoring Dentist/Participant Agreement, your dentist has agreed to work with you to help refine and reinforce the provisional restoration skills you are learning. The dentist will also evaluate your performance to a basic level of competence, according to the criteria in Appendix 5: Evaluation Forms for Dental Office Assignments. These forms are similar to the ones used in the clinical sessions. Once you have successfully completed the prosthodontic procedures, and all your satisfactory evaluations made by the dentist have been submitted to your course instructor, you will be recommended to the College of Dental Surgeons for the prosthodontic module designation on your CDA certificate.

If you do not meet basic competency levels, you and your sponsoring dentist will consult the course instructor, and additional patient assignments may be required. It is important to note that the transfer and integration of theoretical knowledge into clinical practice is the goal of this course, and working in partnership with your dentist is essential and beneficial to this goal.

You have three months to finish the Phase 2 assignments. If completion takes longer than three months, you may be required to retake the clinical course.

Phase 3: Clinical Summary Session

The purpose of the summary session is to provide a discussion forum for you and other participants of the clinical course to share dental office assignment experiences, obtain feedback from the instructor, and problem solve any outstanding questions or difficulties.

Within two weeks of the completion of Phase 2, the course provider will facilitate a minimum one-hour seminar with all course participants and at least one instructor. Depending on the location of the participants and instructor, the summary session may be a teleconference, webinar or a classroom seminar.

The summary session is not mandatory, but you are encouraged to participate and learn from the experiences of your peers. It is hoped that the session will foster networking and continued learning, perhaps through on-going contact in a study club.

Appendices

- Appendix 1: Procedural Guidelines
- Appendix 2: Clinical Assignments Checklist and Sign-Off
- Appendix 3: Dental Office Assignments Checklist and Sign-Off
- Appendix 4: Evaluation Forms for Clinical Assignments
- **Appendix 5:** Evaluation Forms for Dental Office Assignments

Appendix 1: Procedural Guidelines

Direct Fabrication of a Single-Unit Provisional Crown Using an Impression Matrix

Armamentarium

Quadrant impression

- o Quadrant impression tray
- Elastomeric impression material or
- o Alginate powder
- Alginate powder measure
- o Water measure and water
- Mixing bowl and spatula

Acrylic: monomer and polymer

Mixing containers and spatula

Bis-acryl cartridge of base and catalyst

Extruder gun

Disposable tips

Lubricant/separating medium

Variety of trimming sandpaper disks and round acrylic burs

Handpiece and mandrels

Hemostat pliers

Articulating paper

Pencil

Cotton rolls and pellets, cotton pliers, and scissors

Spoon excavator, discoid cleoid

Explorer, mouth mirror

Floss

Lathe, rag wheel, and flour of pumice

Bowl or water bath

Shade guide

Note: when practicing in a lab situation with models, the models should be soaked in water prior to taking impressions.

Procedural Steps

- 1. Take the impression. Rinse and gently dry the impression.
- Trim excess impression material to assist with the reseating of the impression when the restoration is fabricated. Making a notch on the facial of the prepared tooth can be helpful in evaluating the excess material during setting.
- Set out the acrylic ready for use. Select the shade and put out the polymer and monomer with the appropriate measures and manufacturers' directions. If using bis-acryl, set out cartridge extruder gun and disposable tips
- 4. Isolate the prepared tooth in the impression by placing a piece of moistened cotton roll on either side of the prepared tooth depression.

The dentist has prepared the tooth for a full gold crown, and the prosthodontic assistant now fabricates the provisional crown.

- 5. Isolate the prepared tooth with cotton rolls and thoroughly dry the area.
- 6. Lubricate the prepared tooth and teeth adjacent to the preparation. Use a cotton pellet to ensure that the proximal areas are covered.
- 7. Explain to the patient what you are about to do, and if applicable, mention the taste and odor that she or he might notice.
- 8. Mix the acrylic according to the manufacturer's directions and pour it into the matrix, filling the depression of the prepared tooth. If using the extruder gun, fill

the matrix, remembering to keep the syringe tip engaged to eliminate possible air bubbles. Remove the pieces of cotton roll.

- 9. Seat the filled impression in the patient's mouth.
- Time the set according to the manufacturer's directions. When the set is in the rubbery stage, gently work the impression up and down to loosen the acrylic form. If using bis-acryl, use a hand instrument to test the excess material.
- Prior to the provisional reaching complete set, remove the impression. The provisional may stay on the preparation or it may come out with the impression. Using a spoon excavator or hemostat pliers, gently remove the provisional from the tooth or the impression.
- 12. Place the provisional in a bowl of warm water to continue the set.
- 13. Thoroughly rinse the patient's mouth. The patient may wish to rinse with mouthwash to clear the strong taste. Place the patient in an upright position and allow him or her to take a break.
- 14. Once the provisional has totally set, remove the provisional from the water and dry it thoroughly.
- 15. Using a pencil, mark the contact points and the margin on the provisional.
- 16. Starting with a coarse disk, trim the bulk of the material away from the margin.
- 17. Switch to finer disks as the trimming gets closer to the marginal area. Avoid trimming the contact points.

- 18. When trimming of the margins is complete, slightly relieve the tissue surface side with a large round acrylic bur.
- 19. Tip the patient back again and dry and isolate the preparation.
- 20. Try the trimmed provisional in the mouth.
- 21. Check the marginal fit using the explorer and then adjust the provisional as necessary.
- 22. Check the contacts by passing floss through them, and adjust as necessary.
- 23. Using articulating ribbon, check the occlusal contacts and adjust as necessary.

Note: any adjustments to the marginal fit or the occlusion contact must be done outside the mouth.

- 24. Once satisfied with the fit, shape and function of the provisional, have the dentist evaluate it. Then remove it for polishing.
- 25. Using a rag wheel and pumice, polish the provisional. Avoid the margins and the contact areas.
- 26. Disinfect the provisional if required.

The provisional crown is now ready for cementation.

Direct Fabrication of a Single-Unit Provisional Crown Using a Preformed Shell

Armamentarium

Selection of ESF performed shells

- o Anterior: polycarbonate
- Posterior: aluminum or stainless steel

Dividers or manufacturer-provided measuring device

Crown and collar scissors

Contouring pliers

Green stone or crimping pliers

Slow-speed handpiece

Bur for establishing contacts

Assorted disks and mandrel

Pencil

Material: Acrylic: monomer and polymer and/or bis-acryl cartridges

Spatula

Dappen dishes or mixing container and/or extruder gun and disposable tips

Hemostat pliers

Cotton rolls and pellets, cotton pliers and scissors

Mouth mirror, explorer, spoon excavator, discoid cleoid, half Hollenback

Floss

Rubber wheel for polishing

Bowl or heated water bath

Shade guide

Procedural Steps

The dentist has prepared the tooth for a full gold crown, and the prosthodontic assistant now fabricates the provisional crown.

- Select the appropriate size preformed ESF shell by observing the tooth preparation. If necessary, use dividers to measure the mesiodistal width of the crown space.
- 2. Check the occlusal-cervical height, and using crown and collar scissors, trim any excess. After trimming with scissors, use the crimping pliers and discs to smooth off any sharp edges.
- 3. Try in the shell again and have the patient gently close. This will help adjust the occlusion. Check for tissue blanching after the patient has closed. More trimming may be required if blanching occurs. With the patient in occlusion, ask the patient if the bite feels normal. Are the teeth on the other side touching?
- 4. Remove the shell and use a bur to puncture holes in the shell to establish mesial and distal contacts are necessary.
- 5. Dry and roughen the interior of the shell with a bur.
- 6. Isolate and lubricate the teeth.
- 7. Mix the acrylic in a dappen dish. Allow the material to lose its shine and then place it in the shell.
- 8. Allow the material to set approximately one minute more before placing it on the preparation.
- 9. Firmly place the shell on the preparation and ask the patient to slowly close into occlusion.
- 10. Use an instrument such as a half Hollenback to remove excess material from proximal undercuts.

- 11. Allow the material to reach the rubbery stage and ease the form slightly on and off the tooth, taking care not to distort the marginal area. Continue this motion until the material has almost reached its set.
- 12. Remove and place the crown form in warm water.
- 13. Rinse the preparation and sit up the patient for a break.
- 14. Dry the crown form.
- 15. Using a pencil, mark the marginal and contact areas.
- 16. Starting with a fine garnet disc, trim to just before the margins. Switch to a finer disk as you get close to the line.
- 17. Reposition the patient and try in the crown. Check the margins with an explorer. If any area is short, repair using the bead-brush technique or micro-filled composite.
- 18. Using articulating ribbon, check the occlusion and adjust as necessary.

Note: any adjustments must be made outside the patient's mouth.

 Once satisfied with the fit, shape and function of the provisional, have the dentist check it. Use the rubber wheel to polish it.

The provisional is ready for cementation.

Indirect Direct Fabrication of a Three-Unit Provisional FPD

Armamentarium

Duplicate of model with wax-up (pontic area restored)

Vacuum former

Vacuum former coping material

Scissors

Scalpel

Acrylic: monomer and polymer in selected shades and/or bis-acryl cartridges

Mixing container and spatula and/or extruder gun and disposable tips

Sable brush for bead-brush technique

Separating medium

Variety of trimming sandpaper disks, assorted carbide burs, and double-sided diamond disks. Following are suggestions:

• Course garnet 7	78-060
-------------------	--------

EF
É

- o Brasseler 911HF H295EF
- o Double-sided 365-220 7404

Hemostat pliers

Articulating ribbon and holder

Pencil

Cotton rolls, cotton pellets, cotton pliers

Spoon excavator, discoid cleoid, half Hollenback

Explorer, mouth mirror

Floss and floss threader

Lathe, rag wheel, flour of pumice

Robinson brush for lathe or handpiece

Acrylic resin polishing medium

Bowl or heated water bath

Procedural Steps

Prior to the patient's preparation appointment, the pressform matrix must be fabricated.

- 1. Turn on the heater unit of the vacuum former and allow it to warm for five to ten minutes.
- 2. Position the coping material in the vacuum former and secure it centred in the frame.
- 3. Position the stone model in the centre of the vacuum stage.
- 4. Swing the arm of the frame so the heating element is directly above.
- 5. Allow the heating element to soften the coping material so that it slumps 1 to 1 $\frac{1}{2}$ inches below the frame.
- Quickly and firmly lower the frame with the coping material onto the model vacuum stage. Turn on the vacuum and keep it on until the plastic coping material has formed to the tooth model (approximately 30 seconds).
- 7. Turn off the heater unit and the vacuum.
- 8. Remove the model from the stage and allow it to cool for a few minutes.
- 9. Using small curved scissors or a scalpel, remove the plastic form from the model.
- 10. Trim the resulting plastic matrix so that it includes the tooth on either side of the prepared teeth and is approximately 4 5 mm below the prepared teeth. Trim the interproximal area so that acrylic will not flow and lock interproximally.

The pressform is now complete and ready to be used to fabricate the provisional.

The dentist has completed preparation of the teeth, and the prosthodontic assistant now fabricates the tissue surface form (TSF) of the provisional FPD.

- 1. Position the patient in the chair.
- 2. Check for removal of the retraction cord.
- 3. Try in the plastic matrix. If any areas are impinging on the tissues, these should be trimmed.
- 4. Place pieces of moistened cotton roll in the tooth depressions of the pressform matrix beside the abutment teeth.
- 5. Isolate and lubricate the prepared teeth.
- Layer the appropriate acrylic shades into the matrix. For anterior FPDs, characterization of shade can be done using the bead-brush technique. If using bis-acryl, squeeze the material into the matrix.
- 7. Fill the matrix with the provisional material to the margins.
- 8. Seat the filled matrix on the prepared abutment teeth. When seating the matrix, apply pressure over the abutment area rather than the pontic area.
- 9. Following the manufacturer's directions, time the set and if using acrylic, ease the form slightly on and off until it reaches the rubbery stage. Flush with water to control the exothermic reaction.
- 10. Just prior to setting, remove the form from the patient's mouth.
- 11. Place the form in a bowl of warm water to complete the set.

- 12. Thoroughly rinse the patient's mouth. The patient may wish to rinse with a mouthwash to clear the strong taste. Sit up the patient and allow the patient to take a break.
- 13. Using a pencil, mark the contact points, margins and the pontic area that contacts the tissue.
- 14. Starting with a coarse disk, trim the bulk away so that the coping material can be removed. Trim to the marked margins using finer disks as you get closer to the marked line.
- 15. Use the diamond disks to open up the interproximal areas and create the pontic.
- 16. Reposition the patient and try in the trimmed provisional.
- 17. Check the marginal fit using an explorer and adjust as necessary.
- 18. Check the contacts with floss and adjust as necessary.
- 19. Using articulating ribbon, check the occlusal contacts and adjust as necessary.

Note: any adjustments must be done outside of the mouth.

- 20. Once satisfied with the fit, shape and function of the provisional, have the dentist check it.
- 21. Using a rag wheel and pumice, polish the provisional. Avoid the margins and the contact areas. For a high lustre, use a rag wheel with an acrylic resin polishing medium such as Hi-Shine.
- 22. Disinfect if required.

The provisional FPD is now ready for cementation.

Cementation of a Provisional Restoration

Armamentarium

Completed provisional Petroleum jelly Provisional cement, mixing surface, and spatula Desensitizing agent or disinfectant agent Cement application instrument Cotton rolls and pellets, cotton pliers Half Hollenback or other appropriate hand instrument Explorer, mouth mirror Dental floss

Procedural Steps

- 1. Using petroleum jelly, lubricate the external surface form of the provisional restoration.
- 2. Prepare the provisional cement according to the manufacturer's directions.
- 3. Isolate the prepared tooth or teeth using cotton rolls.
- 4. Check for removal of the retraction cord.
- 5. If directed by the dentist, place a desensitizing agent or disinfectant agent on the tooth.
- 6. Gently dry the preparation and the tissue surface form of the provisional. Ask the patient to stay open.
- 7. Mix the provisional cement and apply it to the marginal one-third of the provisional.

- 8. Place the provisional on the preparation.
- 9. Firmly seat the provisional with your fingers and then have the patient bite on a cotton roll.
- 10. Check the marginal fit with an explorer.
- 11. Instruct the patient to remain closed on the cotton roll until the cement is set.

Removal of Provisional Cement

Armamentarium

Mouth mirror Explorer Half Hollenback Floss Air-water syringe

Procedural Steps

- 1. Ensure that the cement has set by testing it with the half Hollenback.
- 2. Keeping finger pressure on the provisional, gently flick the set cement off the acrylic. Be sure to work away from the gingiva and always use a fulcrum.
- 3. Remove the bulk of the provisional cement with the half Hollenback.
- 4. Using the explorer, very gently remove the remaining cement. Always keep finger pressure on the provisional and maintain a fulcrum.
- 5. Use gentle puffs of air directed into the sulcus to determine if there is any cement remaining.
- 6. Floss the proximal contacts. Once you have passed the floss through the contact, do not attempt to pull it back up. Instead, pull the floss through the proximal space toward the lingual or labial. A knot in the floss can assist with removal of excess cement.
- 7. Have the dentist perform a final check.

Discuss the transfer of this skill to removal of *permanent* cement, a service that can be delegated to CDAs with the prosthodontic designation. Follow the same procedural steps as in removal of provisional cement.

Note: If using a dual curing technique, the dentist will perform the procedure due to the multipart steps.

Removal of a Provisional Restoration

Armamentarium

Mouth mirror Explorer Half Hollenback, spoon excavator, discoid cleoid Floss Cotton pellets Cotton forceps Hemostat pliers or other type of forceps Prophy angle and prophy cup Pumice

Procedural Steps

The patient may or may not be anesthetized, so it is important that extra care be taken with this procedure.

- 1. Position the patient for safety.
- 2. Have cotton pliers ready in case the provisional should slip off unexpectedly.
- 3. Gently grasp the provisional lingual, facial with the hemostat pliers.
- 4. With a gentle rocking motion, loosen the provisional.
- 5. Ease off the provisional in the direction of the draw of the preparation. For multi-unit provisionals, following the draw of the preparations, ease off the retainers a little at a time, going back and forth from one to the other.

For intra-coronal provisional, a hemostat or other forcep is incorrect. A sharp instrument is needed to gently tease a corner upwards.

- 6. Inspect the preparation for residual provisional cement.
- 7. If the patient can tolerate it, rinse the preparation with warm water.
- 8. If necessary, use the half Hollenback or a rounded toothpick/perio-aid to gently remove any small particles of provisional cement.
- 9. If the patient is anesthetized, use the prophy cup and fine pumice to thoroughly clean the preparation.
- 10. If directed by the dentist, place a desensitizing agent or disinfectant agent on the tooth.

Appendix 2: Clinical Assignments

Checklist and Sign-Off

Instructions: Date and sign-off each assignment as it is completed and satisfactorily evaluated.

Date ✓

#2.2	1. Fabricate acrylic forms for single-unit provisionals, using alginate/elastomeric quadrant matrices. Minimum three of #2.2 (two		
#4.6	for practice and best one to be evaluated) and three of #4.6 (two for practice and best one to be evaluated).		
Posterior	2. Select, fit, and reline preformed shells: two posterior (one for practice		
Anterior	and one for evaluation).		
#2.2	3. Trim, adjust, and polish single-unit provisionals #2.2 and #4.6.		
#4.6			
#1.1-#1.3	4. Fabricate acrylic forms for three-unit provisionals, using pressform matrices. Minimum three of #1.1 to #1.3 (two for practice and best one		
#3.4-#3.6	to be evaluated) and three of #3.4 to #3.6 (two for practice and best one to be evaluated).		
#2.6	5. Fabricate two MOD direct intra-coronal provisionals using a quadrant matrix (one for practice and best one to be evaluated).		
	6. Cement single-unit provisional #2.2 or #4.6, removing excess cement.		
	 Remove provisionally cemented single-unit provisional crown and residual cement. 		
	8. Remove excess provisional cement applied to a partner's teeth in quadrant 3.		
	9. Place and remove retraction cord in a partner's oral cavity.		
#1.1-#1.3	10. Trim, adjust, and polish three-unit provisionals #1.1 to #1.3 and #3.4		
#3.4-#3.6	to #3.6.		
	11. Cement three-unit anterior provisional restoration #1.1 to #1.3, removing excess cement.		
	12. Remove provisionally cemented anterior three-unit provisional FPD and residual cement.		

#2.6	13. Trim adjust, and polish intra-coronal provisionals #2.6.
#2.6	14. Cement intra-coronal provisional #2.6, removing excess cement.
#2.6	15. Remove provisionally cemented intra-coronal provisional and residual cement.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Appendix 3: Dental Office

Assignments Checklist and Sign-Off

Instructions: Date and sign-off each assignment as it is completed and satisfactorily evaluated.

Date ✓

 Using the direct method, fabricate, try-in, adjust, and polish a single-unit provisional crown.
2. Cement a single-unit provisional crown, and remove excess cement.
3. Remove a provisionally cemented single-unit provisional crown and remove residual cement from the preparation.
4. Using the indirect-direct method, fabricate, try-in, adjust, and polish a three-unit provisional FPD.
5. Cement a three-unit provisional FPD, and remove excess cement.
6. Remove a provisionally cemented three-unit provisional FPD, and remove residual cement from the preparation.
7. Remove residual permanent cement from the prosthesis.
8. Using the direct method, fabricate, try-in, adjust, and polish an intra-coronal direct provisional.
9. Cement an intra-coronal provisional, and remove excess cement.
10. Remove a provisionally cemented intra-coronal provisional, and remove residual cement from the preparation.

Participant's name (print)	Signature	Date
Sponsoring Dentist's name	Signature	Date
(print)		

Appendix 4: Evaluation Forms for Clinical Assignments

Provisional Prosthodontic Clinical Evaluation #1

Fabricate acrylic forms for single-unit provisional crowns, using impression quadrant matrices. Minimum three of #2.2 (two for practice and a best one to be evaluated) and three of #4.6 (two for practice and a best one to be evaluated).

#4	.6	#2	2.2
S	U	S	U

- 1. Assemble and prepare the armamentarium (select shade).
- 2. Follow principles of asepsis; use correct ergonomics, observe area, practice professionally and safely.
- 3. Obtain an alginate impression of the unprepared quadrant.
- 4. Isolate and lubricate the prepared tooth and adjacent teeth.
- 5. Mix the acrylic or prepare cartridge.
- 6. Seat the material-filled impression, and time the set.
- 7. Ease the ESF on/off, remove it from the preparation or matrix, and place it in a bowl of water to complete the set.
- 8. Care for the patient.
- 9. Self-assess performance and obtain 3 acceptable forms.
- 10. Complete the procedure within acceptable time.

- 1. Provisional material set monitored.
- 2. Forms removed from matrix without distortion.
- 3. Marginal area is complete and clear.
- 4. Procedure is completed within acceptable time.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Select, fit, and reline preformed shells: two posterior (one for practice and a best one for evaluation) and two anterior (one for practice and a best one for evaluation).

Post	terior		Ante	erior	
S	U		S U		
					1. Assemble and prepare the armamentarium.
					 Follow principles of asepsis; use correct ergonomics, observe area, practice professionally and safely.
					3. Select a form of appropriate size.
					4. Trim the form to fit.
					5. Establish contacts.
					6. Isolate and lubricate the prepared tooth and adjacent teeth.
					7. Mix the acrylic or prepare cartridges.
					8. Seat the material-filled impression, and monitor the set.
					9. Ease the form on/off, remove it from the preparation, and place it in a bowl of warm water to complete the set.
					10. Care for the patient.
					11. Self-assess performance and the preforms.
					12. Complete the procedure within acceptable time.

- 1. Provisional material set monitored.
- 2. Preforms removed without distortion.
- 3. Marginal area complete and clear.
- 4. Procedure is completed within acceptable time.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Trim, adjust, and polish single-unit provisionals #2.2 and #4.6

#4.6 #2.2		2.2		
S	U	S	U	
				1. Assemble and prepare the armamentarium.
				2. Follow principles of asepsis; use correct ergonomics, obs
				area, practice professionally and safely.
-				3. Prepare the rough ESF for trimming.
				4. Trim the excess bulk.
				5. Trim the marginal areas.
				6. Relieve the TSF of the provisional.
				7. Try-in the trimmed provisional.
				8. Check margins, contacts, and occlusion.
				9. Adjust the fit outside the mouth.
				10. Recheck the fit and readjust as needed.
				11. Polish the provisional.
				12. Self-assess performance and the provisionals.
				13. Complete the procedure within acceptable time.

- 1. Margins
 - Distinct, well-adapted, not rounded.
 - Neither under nor over extension.
 - Follows the normal anatomic line of the tooth.
- 2. Contact
 - Firm contact with adjacent teeth.
 - Floss snaps through the contact with slight resistance.

- Contact is in the upper third of the proximal surface.
- Contact is an area rather than a point.
- 3. Contour
 - Neither over contoured nor flat.
 - Buccal and lingual surfaces resemble the adjacent teeth and blend harmoniously.
 - Embrasures accessible for cleansing.
 - Adequate thickness.
- 4. Anterior Occlusion
 - In centric, there is one or two points of contact.
 - Adjacent teeth are in contact.
 - There is the same lingual contact as adjacent teeth in protrusive motion, including incisal edge.
- 5. Posterior Occlusion
 - Opposing tooth contacts only the fossa, marginal ridge, and working cusp tip.
 - Adjacent teeth are in contact.
 - No incline plane contact.
 - No contact in lateral excursion.
- 6. Finish
 - Smooth finish free of disk marks.
 - No bubbles or voids.
 - High lustre.
 - Margins polished without reduction.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

#1 1_#1 3 #3 /_#3 6

Provisional Prosthodontic Clinical Evaluation #4

Fabricate acrylic and bis-acryl forms for three-unit provisionals using pressform matrices. Minimum three of #1.1 to #1.3 (two for practice and a best one to be evaluated) and three of #3.4 to #3.6 (two for practice and a best one to be evaluated).

#1.1	#1.1-#1.3 #3.4-#3.6		-#3.6	
S	U	S	U	
				1. Assemble and prepare the armamentarium.
				2. Select shade(s).
				3. Follow principles of asepsis; use correct ergonomics, observe
				area, practice professionally and safely.
				4. Prepare the model: a wax-up or duplicate of waxed-up model.
				5. Fabricate a pressform matrix and trim.
				6. Lubricate the prepared model.
				7. Mix the provisional material and layer it into the matrix.
				8. Seat and secure the material-filled pressform over prepared
				teeth.
				9. Monitor the set.
				10. Loosen and ease off the matrix from the model during the set;
				separate, and place form in a bowl of warm water.
				11. Care for patient.
				12. Self-assess performance and the forms.
				13. Complete the procedure within acceptable time.

- 1. Form is not distorted upon removal.
- 2. Marginal area is complete and clear
- 3. Material is bubble free.
- 4. Procedure is completed within acceptable time.

Participant's name (print)	Signature	Date
	<u> </u>	
Instructor's name (print)	Signature	Date

Fabricate two MOD direct intra-coronal provisionals using a quadrant matrix (one for practice and a best one for evaluation).

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Obtain an impression of the unprepared quadrant.
		4. Isolate and lubricate the prepared tooth and adjacent teeth.
		5. Mix the acrylic or prepare the cartridge.
		6. Seat the filled impression, and time the set.
		7. Ease the ESF on/off, remove it from the preparation or matrix and place it
		in a bowl of water to complete the set.
		8. Care for the patient.
		9. Self-assess performance and forms.
		10. Complete the procedure within acceptable time.

- 1. Provisional material set monitored.
- 2. Forms removed from matrix without distortion.
- 3. Marginal area complete and clear.
- 4. Procedure is completed within acceptable time.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Cement single-unit provisional #2.2 or #4.6, removing excess cement.

S	U		
		1. Assemble and prepare the armamentarium.	
		2. Follow principles of asepsis; use correct ergonomics, observe area,	
		practice professionally and safely.	
		3. Lubricate the ESF of the provisional.	
		4. Isolate and dry the preparation and TSF of the provisional.	
		5. Mix provisional cement; apply.	
		6. Seat the provisional, and check the marginal fit.	
		7. Remove cement, using appropriate instruments and safe technique.	
		8. Remove bulk excess cement.	
		9. Remove the remaining cement.	
		10. Floss the contacts.	
		11. Check for remaining cement with air.	
		12. Check occlusion.	
		13. Self-assess performance and the cemented provisional.	
		14. Complete the procedure within acceptable time.	

- 1. Crown is fully seated.
- 2. Cement has set and provisional is secure.
- 3. Occlusion is in harmony with the rest of the dentition.
- 4. All cement is removed from the provisional, sulcus, adjacent teeth, opposing teeth, tongue, cheek, and face.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Remove provisionally cemented single-unit provisional crown and residual cement.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Grasp the provisional, using an appropriate instrument.
		4. Loosen the provisional gently.
		5. Ease off the provisional in the direction of draw.
		6. Inspect and rinse the preparation.
		7. Gently remove residual cement from the preparation and/or clean it.
		8. Self-assess performance.
		9. Complete the procedure within acceptable time.

- 1. Crown is removed.
- 2. No visible damage to tooth preparation.
- 3. No soft tissue damage due to removal technique.
- 4. All temporary cement is removed.
- 5. Provisional crown is undamaged.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Remove excess cement applied to a partner's teeth in quadrant 3.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Dry the teeth in quadrant 3.
		4. Mix provisional cement; apply.
		5. Remove cement, using appropriate instruments and safe technique.
		6. Remove bulk excess cement.
		7. Remove the remaining cement.
		8. Floss the contacts.
		9. Check for remaining cement with air.
		10. Self-assess performance.
		11. Complete the procedure within acceptable time.
L		

- 1. All cement is removed.
- 2. Tissue is not traumatized.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Place and remove retraction cord in a partner's oral cavity.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Prepare cord – cut to correct length, soak in a water solution.
		4. Remove and place on 2X2 gauze to squeeze out excess water.
		5. Isolate the tooth; place LVE if necessary.
		6. Loop the cord around the tooth and gently push it into the sulcus with a
		suitable hand instrument, beginning with interproximal areas and ending
		at facial surface.
		7. Check that cord is apical to margin, but avoid overpacking as it could
		result in tearing of gingival attachment, which may lead to gingival
		recession.
		8. Self-assess performance.
		9. Complete the procedure within acceptable time.

- 1. The cord is packed vertically to horizontally retract the gingiva and potentially expose the margin.
- 2. Tissue is not traumatized.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Trim, adjust, and polish three-unit provisionals #1.1 to #1.3 and #3.4 to #3.6.

#3.4-	#3.6	#1.1·	-#1.3	
S	U	S	U	
				1. Assemble and prepare the armamentarium.
				2. Follow principles of asepsis; use correct ergonomics, observe
				area, practice professionally and safely.
				3. Prepare the ESF for trimming (mark your contacts, margins and
				pontic).
				4. Trim the excess bulk.
				5. Open up the interproximal areas and create the pontic.
				6. Relieve the TSF of the provisional.
				7. Try-in the trimmed provisional; check margins, contacts, and
				occlusion.
				8. Adjust the fit outside the mouth.
				9. Recheck the fit and readjust as needed.
				10. Polish the provisional.
				11. Self-assess performance and the provisionals.
				12. Complete the procedure within acceptable time.

Evaluation Criteria

Criteria are the same as a single-unit provisional (#3), with two additions:

- 1. Embrasures are wide enough to pass floss threader/proxabrush as per instructions.
- 2. Pontic design made to instructor`s/dentist`s directions.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Cement three-unit anterior provisional restoration #1.1 to #1.3, removing excess cement.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Lubricate the ESFs of the provisional FPD.
		4. Isolate and dry the preparations and the TSFs of the provisional.
		5. Check for removal of all retraction cords.
		6. Mix provisional cement; apply.
		7. Seat the provisional, and check the marginal fit.
		8. Remove cement, using appropriate instruments and safe technique.
		9. Remove bulk excess cement.
		10. Remove the remaining cement.
		11. Floss the contacts and the pontic area.
		12. Check for remaining cement with air
		13. Self-assess performance and the cemented provisional.
		14. Complete the procedure within acceptable time.
	I	1

- 1. Provisional FPD fully seated, not loose.
- 2. Cement set.
- 3. Occlusion not high.
- 4. All excess cement removed.
- 5. No tissue trauma.
- 6. Contacts and pontic flossed.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Remove provisionally cemented anterior three-unit provisional FPD and residual cement.

S	U		
		Assemble and prepare the armamentarium.	
		Follow principles of asepsis; use correct ergonomics, observe area,	
		practice professionally and safely.	
		. Grasp the provisional, using an appropriate instrument.	
		. Loosen the provisional retainers gently.	
		Ease off the provisional in the direction of draw.	
		Inspect and rinse the preparations.	
		. Gently remove residual cement from the preparations and/or clean the	nem.
		Self-assess performance.	
		Complete the procedure within acceptable time.	

- 1. Provisional FPD is removed.
- 2. No visible damage to tooth preparation.
- 3. No soft tissue damage due to removal technique.
- 4. All temporary cement is removed.
- 5. Provisional FPD is undamaged.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Trim, adjust and polish intra-coronal provisional for tooth #2.6.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Prepare the rough ESF for trimming.
		4. Trim the excess bulk.
		5. Trim the marginal areas.
		6. Check the TSF of the provisional.
		7. Try-in the trimmed provisional.
		8. Check margins, contacts, and occlusion.
		9. Adjust the fit outside the mouth.
		10. Recheck the fit and readjust as needed.
		11. Polish the provisional.
		12. Self-assess performance and the provisionals.
		13. Complete the procedure within acceptable time.

- 1. Margins
 - o Distinct, well-adapted, not rounded.
 - o Neither under nor over extension.
 - Follow the normal anatomic line of the tooth.
- 2. Contact
 - Firm contact with adjacent teeth.
 - Floss snaps through the contact with slight resistance.
 - o Contact is in the upper third of the proximal surface.
 - Contact is an area rather than a point.

- 3. Posterior Occlusion
 - Opposing tooth contacts only the fossa, marginal ridge, and working cusp tip.
 - o Adjacent teeth are in contact.
 - No incline plane contact.
 - No contact in lateral excursion.
- 4. Finish
 - Smooth finish free of disk marks.
 - No bubbles or voids.
 - o High lustre.
 - Margins polished without reduction.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Cement intra-coronal provisional restoration #2.6, removing excess cement.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Lubricate the ESFs of the provisional FPD.
		4. Isolate and dry the preparations and the TSFs of the provisional.
		5. Check for removal of all retraction cords.
		6. Mix provisional cement; apply.
		7. Seat the provisional, and check the marginal fit.
		8. Remove cement, using appropriate instruments and safe technique.
		9. Remove bulk excess cement.
		10. Remove the remaining cement.
		11. Floss the contacts and the pontic area.
		12. Check for remaining cement with air.
		13. Self-assess performance and the cemented provisional.
		14. Complete the procedure within acceptable time.

- 1. Provisional fully seated, not loose.
- 2. Cement set.
- 3. Occlusion not high.
- 4. All excess cement removed.
- 5. No tissue trauma.
- 6. Contacts flossed.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Remove provisionally cemented intra-coronal provisional and residual cement.

S	U	
		. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Use an appropriate instrument.
		 Loosen the provisional gently by breaking the seal.
		5. Ease off the provisional in the direction of draw.
		Inspect and rinse the preparations.
		7. Gently remove residual cement from the preparation and/or clean it.
		 Self-assess performance.
		Complete the procedure within acceptable time.

- 1. Provisional is removed.
- 2. No visible damage to tooth preparation.
- 3. No soft tissue damage due to removal technique.
- 4. All temporary cement is removed.
- 5. Provisional is undamaged.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Appendix 5: Evaluation Forms for Dental Office Assignments

Note to the Dentist

Following are ten evaluation forms for you to evaluate the provisional prosthodontic skills performed by the dental assistant taking the provisional prosthodontic clinical course. The skills you will be evaluating are procedures performed on patients.

Please evaluate the dental assistant's performance to a basic level of competence, according to the criteria in the evaluation forms. These forms are similar to the evaluation checklists used by instructors for the clinical sessions and include the same criteria.

Learners are evaluated for each procedural step with an "S" or a "U". An "S" evaluation is "satisfactory" and equates with safe, professional performance to the stated criteria of competence; a "U" evaluation designates "unsatisfactory" performance and indicates that further practice is needed to achieve a competent, safe, and professional level of skill. Learners must receive an "S" rating for *all* procedures. Note that numerical percentages are not associated with an "S" or a "U"; rather, these ratings indicate competence or non-competence in performing a procedure. Transferring the skills from the model used in the clinical to patients may take several attempts. The dental assistant will need your expert guidance to build each skill to a competent level.

Transferring the skills from the model used in the clinical session to patient may take several attempts and will need your expert guidance to build the skill to a competent level. The dental office assignments and evaluations must be completed within three months of the learner completing the clinical sessions.

Once the learner has successfully completed the prosthodontic procedures in the dental office, and all the satisfactory evaluations made by the dentist have been submitted to the course instructor, he or she will be recommended to the College of Dental Surgeons for the prosthodontic module designation on their CDA certificate.

If a learner does not meet basic competency levels, the learner and sponsoring dentist will consult the course instructor, and additional patient assignments may be required.

Provisional Prosthodontic Dental Office Evaluation #1

Using the direct method, fabricate, try-in, adjust, and polish a single-unit provisional crown.

U	
	1. Assemble and prepare the armamentarium (select shade).
	2. Follow principles of asepsis; use correct ergonomics, observe area,
	practice professionally and safely.
	3. Obtain an impression of the unprepared quadrant.
	4. Isolate and lubricate the prepared teeth.
	5. Mix the acrylic or prepare the bis-acryl cartridges.
	6. Seat the provisional material-filled impression, and time the set.
	7. Ease the form on/off, remove it from the preparation, and place it in a bowl
	of water to complete the set.
	8. Care for the patient.
	9. Prepare the rough external surface form (ESF) for trimming.
	10. Trim excess bulk.
	11. Trim the marginal areas.
	12. Relieve the tissue surface form (TSF) of the provisional.
	13. Try-in the trimmed provisional.
	14. Check the margins, contacts, and occlusion.
	15. Adjust the fit outside the mouth.
	16. Recheck the fit and readjust as needed.
	17. Polish the provisional.
	18. Self-assess performance and the provisional.
	19. Complete the procedure within acceptable time.

- 1. Margins
 - Distinct, well-adapted, not rounded.
 - Neither under nor over extension.
 - Follows the normal anatomic line of the tooth.
- 2. Contact
 - Firm contact with adjacent teeth.
 - Floss snaps through the contact with slight resistance.
 - Contact is in the upper third of the proximal surface.
 - Contact is an area rather than a point.
- 3. Contour
 - Neither over contoured nor flat.
 - Buccal and lingual surfaces resemble the adjacent teeth and blend harmoniously.
 - Embrasures accessible for cleansing.
 - Adequate thickness.
- 4. Anterior Occlusion
 - o In centric, there is one or two points of contact.
 - Adjacent teeth are in contact.
 - There is the same lingual contact as adjacent teeth in protrusive motion, including incisal edge.
- 5. Posterior Occlusion
 - Opposing tooth contacts only the fossa, marginal ridge, and working cusp tip.
 - o Adjacent teeth are in contact.
 - No incline plane contact.
 - No contact in lateral excursion.
- 6. Finish
 - Smooth finish free of disk marks.
 - No bubbles or voids.
 - o High lustre.
 - Margins polished without reduction.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Cement a single-unit provisional crown, and remove excess cement.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Lubricate the ESF of the provisional.
		4. Isolate and dry the preparation and TSF of the provisional.
		5. Mix provisional cement; apply.
		6. Seat the provisional, and check the marginal fit.
		7. Remove cement, using appropriate instruments and safe technique.
		8. Remove bulk excess cement.
		9. Remove the remaining cement.
		10. Floss the contacts.
		11. Check for remaining cement with air.
		12. Self-assess performance and the cemented provisional.
		13. Complete the procedure within acceptable time.

- 1. Crown is fully seated.
- 2. Cement has set and provisional is secure.
- 3. Occlusion is in harmony with the rest of the dentition.
- 4. All cement is removed from the provisional, sulcus, adjacent teeth, opposing teeth, tongue, cheek, and face.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Remove a provisionally cemented single-unit provisional crown, and remove residual cement from the preparation.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Grasp the provisional, using an appropriate instrument.
		4. Loosen the provisional crown gently.
		5. Remove the provisional in the direction of draw.
		6. Inspect and rinse the preparation.
		7. Gently remove residual cement and/or clean the preparation.
		8. Apply a desensitizing agent if directed.
		9. Self-assess performance.
		10. Complete the procedure within acceptable time.
L	1	1

- 1. Crown is removed.
- 2. No visible damage to tooth preparation.
- 3. No soft tissue damage due to removal technique.
- 4. All temporary cement is removed.
- 5. Provisional crown is undamaged.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Using the indirect-direct method, fabricate, try-in, adjust, and polish a three-unit provisional FPD.

S	U	
		1. Assemble and prepare the armamentarium (select shade).
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Prepare a duplicate model.
		4. Fabricate a pressform matrix on the model of the wax-up.
		5. Prepare the pressform matrix.
		6. Isolate and lubricate the patient's prepared teeth.
		7. Mix the provisional material, fill the matrix, seat, and time set.
		8. Ease the ESF on/off, remove it from the preparations, and place it in a bowl
		of water to complete the set.
		9. Care for the patient
		10. Prepare for trimming; use a pencil to mark the margins, contact points, and
		pontic area that contacts the tissue.
		11. Trim the provisional starting with removing the bulk and switching to finer
		discs as you get closer to the marked lines. Use the diamond disc to open
		up the interproximal areas and create the pontic.
		12. Try-in the trimmed provisional; check the margins, contacts, and occlusion.
		13. Adjust the fit outside the mouth.
		14. Recheck the fit and readjust as needed; have the dentist evaluate it.
		15. Polish the provisional. It is now ready for cementation.
		16. Self-assess performance and the provisional.
		17. Complete the procedure within acceptable time.

- 1. Margins
 - Distinct, well-adapted, not rounded.
 - Neither under nor over extension.
 - Follow the normal anatomic line of the tooth.
- 2. Contact
 - Firm contact with adjacent teeth.
 - Floss snaps through the contact with slight resistance.
 - Contact is in the upper third of the proximal surface.
 - Contact is an area rather than a point.
- 3. Contour
 - Neither over contoured nor flat.
 - Buccal and lingual surfaces resemble the adjacent teeth and blend harmoniously.
 - Embrasures accessible for cleansing.
 - Adequate thickness.
- 4. Anterior Occlusion
 - o In centric, there is one or two points of contact.
 - Adjacent teeth are in contact.
 - There is the same lingual contact as adjacent teeth in protrusive motion, including incisal edge.
- 5. Posterior Occlusion
 - Opposing tooth contacts only the fossa, marginal ridge, and working cusp tip.
 - o Adjacent teeth are in contact.
 - No incline plane contact.
 - No contact in lateral excursion.
- 6. Finish
 - o Smooth finish free of disk marks.
 - No bubbles or voids.
 - o High lustre.
 - Margins polished without reduction.

- 7. Embrasures are wide enough to pass floss threader/proxabrush as per instructions.
- 8. Pontic design made to dentist's directions.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Cement a three-unit provisional FPD and remove excess cement.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
-		3. Lubricate the ESF of the provisional.
		4. Isolate and dry the preparations and TSFs of the provisional.
		5. Mix provisional cement; apply.
		6. Seat the provisional, and check the marginal fit.
		7. Remove cement, using appropriate instruments and safe technique.
		8. Remove bulk excess cement.
		9. Remove the remaining cement.
		10. Floss the contacts.
		11. Check for remaining cement with air.
		12. Self-assess performance and the cemented provisional.
		13. Complete the procedure within acceptable time.

- 1. Provisional fully seated, not loose.
- 2. Cement set.
- 3. Occlusion not high.
- 4. All excess cement removed.
- 5. No tissue trauma.
- 6. Contacts and pontic flossed.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Remove a provisionally cemented three-unit provisional FPD and remove residual cement from the preparation.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Grasp the provisional, using an appropriate instrument.
		4. Loosen the provisional retainers gently.
		5. Remove the provisional in the direction of draw.
		6. Inspect and rinse the preparation.
		7. Gently remove the residual cement and/or clean the preparations.
		8. Apply a desensitizing agent if directed.
		9. Self-assess performance.
		10.Complete the procedure within acceptable time.
	<u> </u>	
-		

- 1. Provisional FPD is removed.
- 2. No visible damage to tooth preparation.
- 3. No soft tissue damage due to removal technique.
- 4. All temporary cement is removed.
- 5. Provisional FPD is undamaged.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Assist with cementation of a permanent prosthesis with CDA removing excess permanent cement using an appropriate hand instrument and excluding the use of dental handpieces.

Note: If using a hybrid dual cure final cement it is recommended the CDA assist only with excess cement removal.

		٦	
S	U		
		1.	Assemble and prepare the armamentarium.
		2.	Follow principles of asepsis; use correct ergonomics, observe area,
			practice professionally and safely.
		3.	Try-in and final check of prosthesis.
		4.	Isolate and dry the preparations.
		5.	Mix permanent cement; apply.
		6.	Dentist seats the prosthesis, and checks the marginal fit.
		7.	CDA can remove excess cement, using appropriate instruments and safe
			technique.
		8.	Remove bulk excess cement.
		9.	Remove the remaining cement.
		10	Floss the contacts.
		11	. Check for remaining cement with air.
		12	. Self-assess performance and the cemented provisional.
		13	. Complete the procedure within acceptable time.

- 1. Prosthesis seated correctly.
- 2. Cement set.
- 3. Occlusion not high.

- 4. All excess cement removed.
- 5. No tissue trauma.
- 6. Contacts flossed.

Participant's name (print)	Signature	Date
Instructor's name (print)	Signature	Date

Using the direct method fabricate, trim, adjust and polish an intra-coronal provisional.

Note: In the case of a small Class 2 inlay the CDA may place a modified microfilled provisional material.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Prepare the rough ESF for trimming.
		4. Trim the excess bulk.
		5. Trim the marginal areas
		6. Check the TSF of the provisional.
		7. Try-in the trimmed provisional.
		8. Check margins, contacts, and occlusion.
		9. Adjust the fit outside the mouth.
		10. Recheck the fit and readjust as needed.
		11. Polish the provisional.
		12. Self-assess performance and the provisionals.
		13. Complete the procedure within acceptable time.

- 1. Margins
 - o Distinct, well-adapted, not rounded.
 - Neither under or over extension.
 - o Follow the normal anatomic line of the tooth.
- 2. Contact
 - Firm contact with adjacent teeth.
 - Floss snaps through the contact with slight resistance.

- Contact is in the upper third of the proximal surface.
- Contact is an area rather than a point.
- 3. Posterior Occlusion
 - Opposing tooth contacts only the fossa, marginal ridge, and working cusp tip.
 - Adjacent teeth are in contact.
 - No incline plane contact.
 - No contact in lateral excursion.
- 4. Finish
 - Smooth finish free of disk marks.
 - No bubbles or voids.
 - o High lustre.
 - Margins polished without reduction.

Participant's name (print)	Signature	Date
Dentist's name (print)	Signature	Date

Cement an intra-coronal provisional restoration and remove excess cement.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area, practice professionally and safely.
		3. Lubricate the ESFs of the provisional.
		4. Isolate and dry the preparations and the TSFs of the provisional.
		5. Check for removal of all retraction cord.
		6. Mix provisional cement; apply.
		7. Seat the provisional, and check the marginal fit.
		8. Remove cement, using appropriate instruments and safe technique.
		9. Remove bulk excess cement.
		10. Remove the remaining cement.
		11. Floss the contacts.
		12. Check for remaining cement with air.
		13. Self-assess performance and the cemented provisional.
		14. Complete the procedure within acceptable time.

- 1. Provisional fully seated, not loose.
- 2. Cement set.
- 3. Occlusion not high.
- 4. All excess cement removed.
- 5. No tissue trauma.
- 6. Contacts flossed.

Participant's name (print)	Signature	Date
Dentist's name (print)	Signature	Date

Remove a provisionally cemented intra-coronal provisional and residual cement.

S	U	
		1. Assemble and prepare the armamentarium.
		2. Follow principles of asepsis; use correct ergonomics, observe area,
		practice professionally and safely.
		3. Use an appropriate instrument.
		4. Loosen the provisional gently by breaking the seal.
		5. Ease off the provisional in the direction of draw.
		6. Inspect and rinse the preparations.
		7. Gently remove residual cement from the preparation and/or clean it.
		8. Self-assess performance.
		9. Complete the procedure within acceptable time.

- 1. Provisional is removed.
- 2. No visible damage to tooth preparation.
- 3. No soft tissue damage due to removal technique.
- 4. All temporary cement is removed.
- 5. Provisional is undamaged.

Participant's name (print)	Signature	Date
Dentist's name (print)	Signature	Date
ų <i>,</i>	-	