Expanded Function Dental Auxiliary (EFDA) Curriculum Guideline

This document is intended to be used as a guide in creating an EFDA education program which will need to be approved by the Washington State Dental Quality Assurance Commission.

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February 11-14 2008

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EFDA Philosophy Statement

Expanded Function Dental Auxiliary (EFDA) education and practical application learning is based upon Commission on Dental Accreditation (CODA) standards to sustain itself as a learned profession. We encourage all parties offering EFDA training to follow this format to ensure quality education through standardized comprehensive curriculum.

Programs should be visionary in providing for oral health needs of all components of society. Creative non-traditional delivery in rural settings may be necessary and can be adapted from this curriculum.

Consideration When Developing an EFDA Course

The Commission on Dental Accreditation (CODA) has set standards to which accredited dental assisting, dental hygiene and dental programs have designed their curriculum for accountability in the level instruction in the formal educational setting.

It is with these standards in mind that the following curriculum has been designed as a guide for ensuring that quality dental health care services are being provided by dental assistants and dental hygienists who serve our communities. Special consideration should be given to the final clinical practice activities and outcomes. Final skills performed by the EFDA students should be thorough and adapted to the same standards.

It is recommended EFDA instructors request the Dental Assisting Accreditation Standards from CODA and perform a comprehensive review of the materials.

The intent of this curriculum is to prepare the EFDA student to pass two licensure examinations approved by the commission: For example: DANB Washington State EFDA examination and the WREB clinical restorations examination.

EFDA Definitions: ***[Taken From the American Dental Association, Commission on Dental Accreditation (CODA) of Dental Assisting Accreditation Standards]***

Types of Instruction

> **Didactic Instruction:** Refers to lectures, demonstrations or other instruction without active participation by students.
>
> **Laboratory or Preclinical Instruction:** Indicates instruction in which students receive supervised experience while performing functions using study models, manikins and typodonts or other simulation methods; students' performance is evaluated by faculty according to predetermined criteria.

Clinical Instruction: Indicates instruction in which students receive supervised experience in performing functions in the clinical setting on patients and clinical performance of the functions is evaluated by faculty according to predetermined criteria.

Levels of Skill

Exposure: The level of skill attained by observation of/or participation in a particular activity.

Laboratory or Preclinical Competence: The achievement of a predetermined level of special skill derived from laboratory/preclinical instruction.

Clinic Competence: The achievement of a predetermined level of special skills derived from education and experience in the clinical setting.

The following are being acknowledged for their involvement and encouragement during the development of the EFDA Career Pathway, curriculum, and commitment to meet the needs of access to care:

State Representative Eileen Cody
Washington State Dental Assistants Association Representatives
Washington State Dental Association
Dental Quality Assurance Commission
Dental Assisting National Board, Inc.

EFDA 101 REVIEW OF PRE-REQUISITE KNOWLEDGE

Course Description:
This course is designed to provide the Certified Dental Assistant (CDA) review for the Expanded Function Dental Auxiliary (EFDA) course content. The course includes the evaluation of the student's ability to perform skills under the dentist's general supervision to include: patient oral health instruction; coronal polishing; fluoride treatments; sealants; expose, process and mount dental radiographs.

Objectives:
The successful student will meet the following objectives and demonstrate an understanding of the facts, principles and techniques in this course.

Didactic:

- Describe the ethics and professional knowledge of the law as it pertains to EFDA WAC., DQAC, Uniform Discipline Act (UDA).
- Identify the dental arches and quadrants using the correct terminology.
- List the primary and permanent teeth by name and location.
- Identify the different divisions of the tooth, including clinical and anatomical divisions.
- Identify the surfaces of teeth and their locations.
- Describe each permanent tooth according to anatomical features, morphology, function, and other identifying factors.
- Describe each deciduous (primary) tooth according to anatomical features, morphology, function, and identifying other factors.
- Identify Black's classification of cavity preparation.
- Plan and prioritize the sequence for oral hygiene instruction while meeting the patient's needs.
- Identify terms related to drugs, pharmacology, and medicine.
- Discuss drugs used in dentistry and their application.
- Describe several emergency situations that may take place in the dental office and explain how dental assistants can be prepared for these possibilities.
- Identify risk management as related to dental charting and health history alerts.
- Explain the indications and contra-indications for coronal polish.
- Describe fluoride and its uses in dentistry.
- Explain the purpose of enamel sealants.
- List the indications and contraindications for placing sealants.
- Identify the means of producing quality radiographs on various patients.
- Explain technique errors and corrections.
- Demonstrate knowledge necessary to contour prefabricated temporary crowns and to fabricate and fit custom temporary restorations.
- Describe the ergonomics of the operator at chairside.

Laboratory/Clinical:

- Demonstrate correct ergonomic positioning.
- Demonstrate proficiency in the following skills on typodonts and/or simulated patients as appropriate:
    - Oral hygiene instructions
    - Coronal polish
    - Fluoride application
    - Sealant application
    - Full-mouth radiographic series

Students may be assessed as to existing knowledge and performance. Instruction may be modified to address individual levels of proficiency.

Course Content (Topical Outline):

1. Dental Arches
2. Dental Quadrants
3. Types of teeth and their Functions
    a. Primary teeth
    b. Permanent Teeth
4. Divisions of the Tooth
5. Surfaces of the Teeth
    a. Surfaces of the Anterior Teeth
    b. Surfaces of the Posterior Teeth
    c. Contact
    d. Embrasure
6. Anatomical Structures
7. Permanent Teeth
    a. Maxillary Central Incisor
    b. Maxillary Lateral Incisor
    c. Maxillary Canine
    d. Maxillary First Premolar
    e. Maxillary Second Premolar
    f. Maxillary First Molar
    g. Maxillary Second Molar
    h. Maxillary Third Molar
    i. Mandibular Central Incisor
    j. Mandibular Lateral Incisor
    k. Mandibular Canine
    l. Mandibular First Premolar
    m. Mandibular Second Premolar
    n. Mandibular First Molar
    o. Mandibular Second Molar
    p. Mandibular Third Molar
8. Deciduous (Primary) Teeth
    a. Maxillary Deciduous Central Incisor
    b. Maxillary Deciduous Lateral Incisor

c. Maxillary Deciduous Canine
d. Maxillary Deciduous First Molar
e. Maxillary Deciduous Second Molar
f. Mandibular Deciduous Central Incisor
g. Mandibular Deciduous Lateral Incisor
h. Mandibular Deciduous Canine
i. Mandibular Deciduous First Molar

9. Cavity Classifications
    a. Class I
    b. Class II
    c. Class III
    d. Class IV
    e. Class V
    f. Class VI
10. Preventive Dentistry
    a. Plaque Formation
    b. Patient Motivation
    c. Age Characteristics
    d. Home Care
11. Oral Hygiene Aids
    a. Disclosing Agents
    b. Dentifrice
    c. Mouth Rinses
    d. Chewing Gum
    e. Interdental Aids
12. Toothbrushes and Techniques
    a. Manual Toothbrushes
    b. Mechanical Toothbrushes
    c. Brushing Techniques for the Manual Toothbrush
    d. Tongue Brushing
13. Dental Flossing
    a. Types of Floss
    b. Hygienic Care of Prosthetic Devices
14. Pharmacology
15. Emergencies
16. Risk management as related to dental charting
17. Health history alerts
18. Temporization
19. Oral Hygiene for Patients with Special Needs
    a. Pregnant Patient
    b. Patients with Cancer
    c. Patients with Heart Disease
    d. Older Patients
    e. Additional Preventive Procedures Performed in the Dental Office
20. Coronal Polish
    a. Rationale for Performing Coronal Polish

b. Contraindications
c. Modifications

21. Dental Deposits
    a. Soft Deposits
    b. Calculus
    c. Stains
22. Abrasives and Polishing Agents
    a. Abrasives
    b. Types of Abrasive
23. Equipment and Supplies
    a. Use of Dental Handpiece for Coronal Polish
    b. Use of the Rubber Prophy Cup
    c. Systematic Procedure
    d. Prophy Brush
    e. Dental Tape and Dental Floss
24. Maintaining Operating Field
    a. Patient Management and safety during restorative procedures
    b. Dental Light Position
    c. Maintain the Operating field
        i. HVE
        ii. 3-way syringe
        iii. Retraction
25. Auxiliary Polishing Aids
    a. Bridge Threaders
    b. Abrasive Polishing Strips
    c. Softwood Points
    d. Interproximal Brushes
26. Fluoride
    a. Fluoridation
    b. Effects of Fluoride
    c. Fluoride in Dental Plaque
    d. Fluoride Toxicity
    e. Forms of Fluoride
    f. Fluoride Rinses
27. Enamel Sealants
    a. Indications and Contraindications
    b. Materials
    c. Placement
23. Radiographs
    a. Preparation
    b. Film Exposure
    c. Patient Exposure
    d. Handling of Exposed Films
    e. Types of Film Exposures
    f. Paralleling Technique
    g. Full Mouth Radiographic Survey

1. Positioning for Maxillary Arch
2. Positioning for Mandibular Arch
3. Mounting full mouth radiographs
4. Technique errors and correction

EFDA 102 AMALGAM RESTORATIONS

Prerequisite:
Successful completion of EFDA 101.

Course Description:
The following objectives and content focuses on the didactic, laboratory and clinical components of the amalgam curriculum to include: armamentarium including various matrices, classification of restorations; components of the prepared tooth; materials, composition of amalgam, advantages and disadvantages, indications and contraindications; placement, condensing and carving; evaluation of restoration; occlusal adjustment.

Objectives:
The successful student will meet the following objectives and demonstrate an understanding of the facts, principles and techniques in this course.

Didactic:
- Identify armamentarium used to place and finish amalgam restoration.
- Explain the function of the various matrices, retainers and wedges.
- Describe how tissues surrounding the tooth may be impacted during the placement of matrix/wedge and an improperly contoured restoration.
- Describe cavity classifications and all aspects of a cavity preparation.
- Describe various systems for bonding, bases, and liners.
- Explain the physical properties and manipulation techniques of amalgam.
- Explain the rationale for placing, condensing, and carving amalgam restorations.
- Identify: appropriate use; advantages/disadvantages; indications/contraindications for amalgam restorations.
- Explain moisture control and the prevention of contamination of the cavity preparation before placement of restorative materials.
- Describe the principals and procedural steps for placing amalgam restorations.
- Describe correct occlusal relations and the process for checking occlusion.
- Evaluate the restorative outcomes according to established criteria for the task.

Laboratory:
- Prepare the amalgam procedure armamentarium.
- Follow amalgam safety protocol.
- Demonstrate efficient and effective placement of matrix and wedge.
- Prepare and place dental materials.
- Demonstrate trituration of amalgam.
- Place, condense and carve restorations.
- Evaluate the restoration according to the established criteria including: a well adapted, functionally correct, esthetically pleasing and harmonious anatomy.

Clinical:

- Prepare the correct armamentarium.
- Follow amalgam safety protocol.
- Ensure moisture control and non-contamination of the cavity preparation during the procedure.
- Demonstrate effective placement of matrix and wedge.
- Prepare and place assigned dental materials.
- Place, condense and carve restorations.
- Evaluate the restoration according to the established criteria which includes: a well adapted, functionally correct, and harmonious anatomy.
- Provide post-operative instructions.

Students maybe assessed as to existing knowledge and performance. Instruction may be modified to address individual level of proficiency.

Course Content (Topical Outline):

1. Armamentarium
2. Matrices, retainers and wedges
3. Tissue management
4. Cavity Classifications
    a. Class I
    b. Class II
    c. Class III
    d. Class IV
    e. Class V
    f. Class VI
5. Cavity preparation terminology
6. Bonding, bases and liners
7. Physical properties of amalgam
    a. Safety protocol
    b. MSDS protocol
8. Patient management
9. Moisture control and contamination prevention of the cavity preparation.
10. Place, condense and carve amalgam restoration
    a. advantages/disadvantages
    b. indications/contraindications
11. Occlusal relations
    a. Check
    b. Adjust
12. Evaluate restoration.
13. Post-operative instructions.

EFDA 103 COMPOSITE RESTORATIONS

Prerequisite:
Successful completion of EFDA 101.

Course Description:
The following objectives and content focuses on the didactic, laboratory and clinical components of the composite curriculum to include: armamentarium including various matrices, classification of restorations; components of the prepared tooth; materials, composition of composites, advantages and disadvantages, indications and contraindications; placement and finishing; evaluation of restoration and occlusal adjustment.

Objectives:
The successful student will meet the following objectives and demonstrate an understanding of the facts, principles and techniques in this course.

Didactic:

- Identify armamentarium used to place and finish composite restoration.
- Explain the function of the various matrices, retainers and wedges.
- Describe how tissues surrounding the tooth may be impacted during the placement of matrix/wedge and an improperly contoured restoration.
- Describe cavity classifications and all aspects of a cavity preparation.
- Describe various systems for acid etching, bonding, bases, liners, and sealers.
- Explain the rationale for placing composite restorations.
- Identify the classifications of composite resins.
- Differentiate between composite materials, appropriate uses, advantages/disadvantages, and indications/contraindications.
- Describe uses and procedures for the placement of glass ionomers and compomers.
- Explain the physical properties of composites to include shrinkage, thermal expansion, and wear resistance.
- Describe the principals that effect shade selection.
- Explain moisture control and preventing contamination of the cavity preparation before placement of restorative materials.
- Describe the principals and procedural steps for placing composite restorations.
- Describe correct occlusal relations and the process for checking occlusion.
- Evaluate the restorative outcomes according to established criteria for the task.

Laboratory:

- Prepare composite armamentarium.
- Demonstrate efficient and effective placement of matrix and wedge.
- Prepare and place assigned dental materials.
- Place and finish composite restorations.
- Place and finish glass ionomer/compomer restorations.

- Evaluate the restoration according to established criteria to include: adaptability, functionally correct, esthetically pleasing and harmonious anatomy.

Clinical:

- Prepare composite armamentarium.
- Ensure moisture control and non-contamination of the cavity preparation during the procedure.
- Demonstrate proper placement of matrix and wedge.
- Prepare and place assigned dental materials.
- Place and finish composite restorations.
- Place and finish glass ionomer/compomer restorations.
- Evaluate restorations according to established criteria including: well adapted, functionally correct, esthetically pleasing, and harmonious anatomy.
- Provide post-operative instructions.

Students maybe assessed as to existing knowledge and performance. Instructions may be modified to address individual level of proficiency.

Course Content (Topical Outline):

1. Armamentarium
2. Matrices, retainers and wedges.
3. Tissues management
4. Cavity classifications
    a. Class I
    b. Class II
    c. Class III
    d. Class IV
    e. Class V
    f. Class VI
5. Cavity preparation terminology.
6. Bonding, bases, liners, and sealers.
7. Rationale for placing composite restorations.
8. Classifications of composite resin materials.
    a. Uses
    b. Advantages/disadvantages
    c. Indications/contraindications.
9. Glass ionomers and compomers.
    a. Placing
    b. Finishing
10. Physical properties of composites/glass inomers/compomers
    a. Shrinkage
    b. Thermal expansion
    c. Wear resistance.
11. Shade selection.
12. Moisture control and contamination prevention.
13. Steps for placing and finishing composite restoration

14. Occlusal relations
    a. Check
    b. Adjust
15. Evaluate restoration.
16. Post operative instructions

EFDA 104 FINAL IMPRESSIONS

Prerequisite:
Successful completion of EFDA 101.

Course Description:
The following objectives and content focuses on the didactic and laboratory components of taking preliminary and final impressions and bite registrations to include computer assisted design and computer assisted manufacture applications.

Objectives:
The successful student will meet the following objectives and demonstrate an understanding of the facts, principles and techniques in this course.

Didactic:

- Indicate common anomalies to examine before taking an impression.
- List anatomical structures that should be included in final impressions.
- Describe and define oral fixed and removable prosthesis.
- Describe and demonstrate knowledge, uses, and manipulation of impression materials for final impressions including, polyether, polysulfide, polyvinyl siloxane, and reversible hydrocolloid.
- Understand the importance of work and setting times in situations where two impression materials are used simultaneously.
- Indicate how the setting time of impression material can be altered.
- Indicate the guidelines to follow when selecting the proper tray size for the mandibular and maxillary arch.
- Describe techniques for moisture control and isolation.
- Describe the different systems for gingival deflection and retraction including homeostasis.
- Explain the steps for placing and removing gingival retraction cord.
- Indicate guidelines to follow when working with a patient who has a tendency to gag.
- Indicate instructions given to the patient while taking a mandibular impression.
- Describe the criteria for preparing and properly seating an impression tray.
- Describe the proper way to remove the impression.
- Evaluate the final impression for accuracy according to established criteria for the task.
- Explain proper handling of final impression after removal from the oral cavity.
- Review the components necessary for completion of a laboratory prescription.
- Describe the steps in computer assisted design and computer assisted manufacture application.

Laboratory:

- Demonstrate techniques for moisture control and isolation.
- Demonstrate the steps for placing and removing gingival retraction cord.

- Demonstrate the operator's position while taking both mandibular and maxillary impressions.
- Seat, align, and remove the impression tray to create accurate impressions.
- Select probable results when the tray is seated too far anteriorly or posteriorly.
- Demonstrate the technique for taking preliminary impressions.
- Demonstrate the technique for taking bite registrations.

Students maybe assessed as to existing knowledge and performance. Instruction may be modified to address individual level of proficiency.

Course Content (Topical Outline):

1. Common anomalies to examine before taking an impression
2. Anatomical structures
3. Oral fixed and removable prosthesis
4. Impression material
    a. Preliminary
    b. Polyether
    c. Polysulfide
    d. Polyvinyl siloxane
    e. Reversible hydrocolloid
5. Management of material when using more than one material simultaneously.
6. Altering setting time.
7. Selecting appropriate tray.
8. Moisture control and isolation.
9. Gingival deflection and retraction including homeostasis.
10. Patient management.
    a. Instructing patient during impression procedure.
    b. Gag reflex control.
    c. Saliva control.
11. Insertion and removal of impression tray.
    a. Patient position
    b. Operator position
12. Evaluation of the final impression.
13. Management of final impression.
14. Laboratory prescription.
15. Computer assisted design and manufacture application.
16. Bite registration.

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