The Dental Licensure Objective Structured Clinical Examination (DLOSCE)

Webinar for Dental Students
May 19, 2020
Presenters

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Presentation Overview

• Background Information
• Examination Topic Areas
• Types of Questions
• Explanation of Scoring Rules
• Practice Questions and Exam Preparation
• Eligibility and Examination Fees
• Administration Schedule and Window Testing
• Retesting Policy
• Results Reporting
• Rules of Conduct, Irregularities, and Appeals
• Additional Information
• Q&A Session
Why develop the DLOSCE?

- Gives dental boards the ability to identify those who lack the skills necessary for safe practice, using a professionally developed examination backed by strong validity evidence.
- Eliminates undesirable situations and complications that can arise from the use of patients in the examination process (e.g., patient’s more pressing needs not treated in lieu of pursuing the “perfect lesion”).
- Helps dental boards in their mission to protect the public.
- Allows for more objective measurement of candidate skills.
What is an Objective Structured Clinical Examination (OSCE)?

- A method of measurement
- Candidates rotate through short, standardized stations
- Assesses clinical competence, patient communication skills, knowledge of clinical procedures, prescription writing, etc.
- Widely used in the health sciences
- Success requires critical thinking
- OSCEs are evolving
The Standards for Educational and Psychological Testing

• The Standards were developed by the American Educational Research Association (AERA), American Psychological Association (APA), and the National Council on Measurement in Education (NCME).
• The Standards provide considerations for developing, implementing, and evaluating tests.
• The Standards and industry best practices help guide DTS activities as examinations are designed, constructed, and implemented.
• DTS’ primary focus is on validity, the evidence that supports the interpretation and use of examination results.
What does the DLOSCE cover?

- Focused exclusively on the clinical tasks a dentist performs while providing direct, chair-side treatment to patients.
- A “virtual OSCE” that assesses clinical judgment.
- Use of a “traditional manikin” hand skill assessment is not included.
- The DLOSCE is designed to reliably and accurately reflect the practice of clinical dentistry within the United States.
What does the DLOSCE cover?

• Focal topic areas:
  • Restorative Dentistry (24%)
  • Prosthodontics (19%)
  • Oral Pathology, Pain Management, and TMD (13%)
  • Periodontics (10%)
  • Oral Surgery (9%)
  • Endodontics (8%)
  • Orthodontics (6%)
  • Medical Emergencies and Prescriptions (11%)

• Diagnosis and Treatment Planning—as well as Occlusion—are covered across the topics listed above.

• The DLOSCE includes questions involving patients of various types and backgrounds, including pediatric, geriatric, special needs, and medically complex patients.

• DLOSCE questions are modeled on dental clinical situations.
DLOSCE question presentation

- DLOSCE questions always include a patient.
- Questions are accompanied by information concerning that patient, including reference materials such as the following:

<table>
<thead>
<tr>
<th>Patient Box</th>
<th>Provides patient demographic information (age, biological sex), the chief complaint, patient background and/or history, and the current findings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Photographs</td>
<td>Photographs of patient conditions.</td>
</tr>
<tr>
<td>Radiographs</td>
<td>Radiographic images of patients’ teeth.</td>
</tr>
<tr>
<td>3-D Models</td>
<td>A three-dimensional model of the patient’s teeth, including restorations, lesions, etc.</td>
</tr>
</tbody>
</table>
Evaluation of candidate responses

- DLOSCE scoring contains similarities with Situational Judgment Tests (SJTs).
- Depending on the Question Type, each possible candidate response is evaluated as follows:
  
  - **Correct.** This represents a correct clinical judgment based on the available information. Depending on the question, candidates can receive either full credit (1 point) or partial credit for a given correct response, as long as they avoided choosing any incorrect responses for the question.

  - **Clinical Judgment Error/Incorrect:** This represents a clinical judgment error. Choosing this response causes the candidate to receive no credit (0 points) for this question, even if a Correct response was also selected.

  - **Unscored/Neutral:** This represents an indeterminate situation. These are situations—identified by dental subject matter experts—where given the available information a candidate’s choice of this response is considered neither correct nor incorrect.
DLOSCE Question Types

- The DLOSCE contains three types of questions:
  1. Multiple-Choice, Single-Response Questions
  2. Multiple Choice, Multiple-Response Questions
  3. Prescription writing tasks

- An example of each type of question is provided in the slides that follow
Multiple-Choice, Single-Response Questions

- **Multiple-Choice, Single-Response** questions have only one correct answer and will only allow candidates to choose one response.
- To complete questions of this type, candidates should read the question and available responses, and choose the response that is the best answer.
- Responses other than the Correct response are considered Clinical Judgment Errors.
- Choosing the correct response gives candidates full credit (i.e., one point) for Multiple-Choice, Single-Response questions.
- The instructions provided for these questions are as follows:

  Select the **ONE** correct answer.
Orthodontic treatment for this 8-year-old patient should begin

A. as soon as possible.
B. after reassessment in 6 to 9 months.
C. during late mixed dentition prior to the pubertal growth spurt.
D. immediately following eruption of permanent second molars.
E. after the patient stops growing.

Correct: A (full credit, 1 point)
Clinical Judgment Error/Incorrect: Selecting any response other than the Correct response causes the candidate to receive no credit (0 points) for this question
Content Classification: Orthodontics
**Multiple-Choice, Multiple-Response** questions can have one or more correct answers. For these questions, candidates may choose more than one response. To complete Multiple-Choice, Multiple-Response questions, candidates should read the question and available responses, and choose the response option(s) they believe to be correct.

Each question is worth up to one point. Each chosen response option can:

- give full credit for the question (i.e., 1 point)
- give partial credit for the question (e.g., 0.5 points)
- take away all possible credit for the question (i.e., a **Clinical Judgment Error**; no credit is given for the question, even if the candidate selected other options that were correct).
- neither give credit nor take away credit (a “neutral option”)

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Multiple-Choice, Multiple-Response (continued)

For questions involving responses that provide partial credit, candidates must identify all of the response options that provide partial credit in order to receive full credit (i.e., one point) for the question.

The instructions for Multiple-Choice, Multiple-Response questions are provided as follows:

Select ONE OR MORE correct answers. Any INCORRECT selections will result in your earning NO CREDIT for this question.

IMPORTANT NOTE: Candidates should think carefully when responding, so they identify the correct answer(s) while steering clear of any incorrect selection(s) that could result in the loss of all available credit for a question.
Example Scoring for Multiple Choice, Multiple Response with Partial Credit

In the hypothetical example shown below, there are two correct responses indicated in bold text: **Malignant tumor** and **Cyst or benign tumor**. There is one neutral response option indicated in italicized text: **Developmental condition**. The remaining responses are incorrect, and considered Clinical Judgment Errors. To earn full credit (i.e., 1 point), a candidate must select both of the correct responses and avoid selecting any of the incorrect responses. A candidate can earn partial credit—in this example a half point—by selecting only one of the correct responses (e.g., Malignant tumor) as long as they also avoid selecting any of the incorrect responses. A candidate who selects any incorrect response will automatically earn no credit for the question, even if they also select one or both of the correct responses. Candidates neither gain credit, nor lose credit for selecting the neutral response.

Select **ONE OR MORE** correct answers. Any **INCORRECT** selections will result in your earning **NO CREDIT** for this question.

What should be included in a differential diagnosis?

<table>
<thead>
<tr>
<th>Option</th>
<th>Credit awarded if option chosen</th>
<th>Penalty: All credit lost for this question</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Normal anatomical variant</td>
<td>X</td>
</tr>
<tr>
<td>b.</td>
<td><strong>Developmental condition</strong></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>Allergic or immune-mediated condition</td>
<td>X</td>
</tr>
<tr>
<td>d.</td>
<td>Localized viral infection</td>
<td>X</td>
</tr>
<tr>
<td>e.</td>
<td>Localized fungal infection</td>
<td>X</td>
</tr>
<tr>
<td>f.</td>
<td>Localized bacterial infection</td>
<td>X</td>
</tr>
<tr>
<td>g.</td>
<td>Traumatic lesion</td>
<td>X</td>
</tr>
<tr>
<td>h.</td>
<td><strong>Cyst or benign tumor</strong></td>
<td>+ 0.5 pt</td>
</tr>
<tr>
<td>i.</td>
<td><strong>Malignant tumor</strong></td>
<td>+ 0.5 pt</td>
</tr>
</tbody>
</table>

**Total Possible Credit** 1 point
Select ONE OR MORE correct answers. Any INCORRECT selections will result in your earning NO CREDIT for this question.

Which tooth surfaces have carious lesions or defective restorations?

A. 8 mesial  
B. 9 mesial  
C. 9 distal  
D. 10 mesial

Correct: A (partial credit, 0.5 points) and D (partial credit, 0.5 points)  
Unscored/Neutral: None  
Clinical Judgment Error/Incorrect: Selecting any response other than a “Correct” or “Unscored/Neutral” response causes the candidate to receive no credit (0 points) for this question, even if a Correct response was also selected.  
Content Classification: Restorative Dentistry
Sample 3. Multiple-Choice, Multiple-Response

Patient
Female, 56 years old

Chief Complaint
“I have a bump on my gums”

Background and/or Patient History

Current Findings
Swelling in the lower right premolar area

See next slide.
Select ONE OR MORE correct answers. Any INCORRECT selections will result in your earning NO CREDIT for this question.

Which should be included in a differential diagnosis?

A. Normal anatomical variant  
B. Radiographic artifact  
C. Cyst or benign tumor  
D. Malignant tumor  
E. Odontogenic inflammatory condition  
F. Non-odontogenic inflammatory condition  
G. Reactive lesion (simple bone cyst, giant cell lesions)  
H. Fibro-osseous lesion  
I. Traumatic lesion/fracture  
J. Developmental condition  
K. Manifestation of systemic disease  

Correct: C (partial credit, 0.5 points) and E (partial credit, 0.5 points)  
Unscored/Neutral: G, H, and K  
Clinical Judgment Error/Incorrect: Selecting any response other than a “Correct” or “Unscored/Neutral” response causes the candidate to receive no credit (0 points) for this question, even if a Correct response was also selected.  
Content Classification: Oral Pathology, Pain Management, and Temporomandibular Dysfunction
3-Dimensional Models

- Some DLOSCE items involve lifelike, three-dimensional (3-D) models that can be manipulated, zoomed in and out, moved, and rotated.
Select ONE OR MORE correct answers. Any INCORRECT selections will result in your earning NO CREDIT for this question.

Which describes the MO composite restoration on tooth 19?

- Acceptable
- Unacceptable interproximal contact
- Over-contoured proximal surface
- Under-contoured proximal surface
- Overhang present
- Cavosurface void present
- Hyperocclusion
- Exposed dentin present

3-D Model

The candidate would be presented with a 3-D model showing an MO composite restoration on tooth 19.

The candidate could manipulate the model (e.g., rotate, zoom) in order to view the restoration from multiple angles.
Prescription Tasks

• Each administered DLOSCE form contains two, multi-part prescription tasks: One pertaining to antibiotics and one pertaining to analgesics.

• For each task, patient information is presented in a Patient Box. Based on the information provided, candidates will be asked to choose an appropriate medication and its strength, and to provide any other accompanying instructions.

• Responses are evaluated against a detailed scoring key established by subject matter experts. Each prescription task is worth up to four points. Based on the combination of responses selected by the candidate, it is possible to receive no credit, partial credit or full credit for each prescription task.
1. Select an appropriate medication to manage the infection.

A. No medication
B. acyclovir
C. amoxicillin
D. azithromycin
E. cephalexin
F. clarithromycin
G. clindamycin
H. cloxacillin
I. doxycycline
J. erythromycin
K. fluconazole
L. ketoconazole
M. metronidazole
N. nystatin
O. penicillin VK
P. valacyclovir
# Sample 4. Prescription Task

<table>
<thead>
<tr>
<th>Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male, 45 years old</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint</th>
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<td>“I feel terrible and my face has been swollen for a few days.”</td>
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<table>
<thead>
<tr>
<th>Background and/or Patient History</th>
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<tbody>
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</tr>
<tr>
<td>Allergic to cloxacillin</td>
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<tr>
<th>Current Findings</th>
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<tbody>
<tr>
<td>Temperature of 101 degrees F</td>
</tr>
<tr>
<td>Red, warm, diffuse swelling in the right cheek</td>
</tr>
<tr>
<td>Signs and symptoms consistent with a canine space infection</td>
</tr>
</tbody>
</table>

2. Type in the strength of the tablet/capsule.

______________ mg

3. Type in the total number of tablets/capsules that should be obtained/dispensed.

______________

4a. Select the number of tablets/capsules that should be taken per administration.
A. 1  
B. 2  
C. 3  
D. 4 

4b. Should the patient take a loading dose?
A. yes  
B. no 

See next slide.
### Sample 4. Prescription Task

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5. Select the frequency of administration

- A. once a day until finished
- B. once a day as needed
- C. twice a day until finished
- D. twice a day as needed
- E. three times a day until finished
- F. three time a day as needed
- G. four times a day until finished
- H. four times a day as needed

**Scoring:** Prescription task responses are evaluated against a scoring key established by subject matter experts. Based on the combination of responses selected by the candidate, it is possible to receive no credit, partial credit, or full credit (4 points)

**Content Classification:** Prescriptions
Exam Preparation and Resources

• The JCNDE recommends that candidates use clinical experience, textbooks, and lecture notes as primary sources for study.
  – The JCNDE does not endorse or recommend any specific texts or other teaching aids (e.g., review courses) that are identified as DLOSCE preparation materials.

Coming Soon

• Practice Questions. The JCNDE will provide practice questions to assist candidates in their preparations to challenge the DLOSCE.

• 3D Model Tutorial. The DLOSCE contains questions involving lifelike three-dimensional (3D) models that can be manipulated, zoomed in and out, moved, and rotated. The JCNDE will make an online tutorial available, so that candidates can practice interacting with this 3D model before they arrive at the test center.

• DLOSCE Guide. The DLOSCE guide will be made available at ADA.org/DLOSCE
Who is eligible to take the DLOSCE?

- Eligibility requirements and application procedures mirror those in place for the NBDE.
  
  - **Current Student – CODA Accredited Program**
    - A current student in a CODA accredited program is eligible for examination when the dean (or designee) provides confirmation that the student is prepared in all applicable disciplines.
  
  - **Former Student – CODA Accredited Program**
    - A former student who has completed courses in preparation for this examination, but is no longer enrolled in the same program is eligible for examination only if admitted or conditionally admitted to another CODA-accredited program in the applicable area of study. Conditionally admitted is defined as admission contingent upon successful completion of this examination. Verification must be in the form of a letter from the dean of the CODA-accredited program.
  
  - **Dentist – Graduate of CODA Accredited Program**
    - A dentist who is an active, life, or retired member of the American Dental Association at the time of application is eligible for examination without further documentation.
    - An affiliate member or nonmember must submit a copy of their diploma or provide other appropriate verification of their degree.
Who is eligible to take the DLOSCE?

Candidates trained in programs NOT accredited by CODA

– General Provisions
  • ALL candidates from **non-accredited dental programs** must have their educational degree confirmed through Educational Credential Evaluators Inc. (ECE). ECE prepares reports providing confirmation of candidate educational degrees earned in other countries.

– Current Student – Non-CODA-Accredited Program
  • A current student attending a non-CODA-accredited program must adhere to the General Provisions indicated above. Additionally, these students must have their status confirmed by their educational program, through the completion of the Certification of Eligibility form. Completed certification forms must be sent by the educational program and must include both the seal of the university and the signature of the dean or registrar.

– Dentist – Graduate of a Non-CODA-Accredited Program
  • Candidates in this category must adhere to the General Provisions indicated above.
In light of COVID-19, the JCNDE is offering the DLOSCE for a lower fee in 2020, to help students caught in a challenging circumstance.

- 2020 Fee: $800
- 2021 Fee: $1,650

### DLOSCE Fees

<table>
<thead>
<tr>
<th>FEE TYPE</th>
<th>DESCRIPTION</th>
<th>FEE AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLOSCE Fee</td>
<td>This fee includes official results reporting to the candidates and the dean of an accredited dental school. Reports are delivered electronically to dental schools through the DTS Hub.</td>
<td>$800*</td>
</tr>
<tr>
<td></td>
<td>* due to COVID-19, fee applies to 2020 applications only. The standard DLOSCE fee is $1,650.</td>
<td></td>
</tr>
<tr>
<td>Processing Fee for International Candidates</td>
<td>This processing fee applies to candidates who are students or graduates of a dental school not in the United States or Canada.</td>
<td>$210</td>
</tr>
<tr>
<td>Results Report Fee (optional)</td>
<td>This fee covers a single results report for a recipient NOT selected at the time of application.</td>
<td>$45 per report</td>
</tr>
<tr>
<td>Results Audit Fee (optional)</td>
<td>DTS is willing to audit a candidate's results if the request is received within 30 days of the reporting date on the official results report.</td>
<td>$65</td>
</tr>
</tbody>
</table>
DLOSCE Administration

- The DLOSCE is a computer-based test that is administered at select Prometric Test Centers throughout the US.
  - Test centers are currently limited, with preference given to states that have accepted the DLOSCE. Many students will need to travel.
  - DTS will post and update the list of available sites. Please review this list before applying.
  - Please be patient as DTS continues to work with Prometric to improve site availability.
- The DLOSCE contains 150 questions and is administered in 6 hours and 45 minutes.

<table>
<thead>
<tr>
<th>Examination Schedule</th>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial (optional)</td>
<td>25</td>
</tr>
<tr>
<td>Section 1 (37 Questions)</td>
<td>75</td>
</tr>
<tr>
<td>Break (optional)</td>
<td>10</td>
</tr>
<tr>
<td>Section 2 (37 Questions)</td>
<td>75</td>
</tr>
<tr>
<td>Section 3 (2 Prescription Questions)</td>
<td>10</td>
</tr>
<tr>
<td>Break (optional)</td>
<td>30</td>
</tr>
<tr>
<td>Section 4 (37 Questions)</td>
<td>75</td>
</tr>
<tr>
<td>Break (optional)</td>
<td>10</td>
</tr>
<tr>
<td>Section 5 (37 Questions)</td>
<td>75</td>
</tr>
<tr>
<td>Survey</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total Time</strong></td>
<td>6 hrs, 45 min</td>
</tr>
</tbody>
</table>
DLOSCE Administration Dates and Retesting Policy

• The DLOSCE is administered in testing windows, with availability for 2020 as follows:
  – June 15 – July 17, 2020
  – November 9 – 27, 2020

• The DLOSCE retest policy is as follows:
  – Candidates will be permitted to test once per testing window.
  – Candidates who have not passed the examination within five attempts or five years from their first attempt are limited to one examination attempt per 12-month period.
  – Candidates who have passed the DLOSCE may not retake the examination unless required by a dental board or relevant regulatory agency.
Results Reporting

- The DLOSCE is a criterion-referenced examination, with the minimum passing score determined by subject matter experts through rigorous standard-setting activities.

- DLOSCE results are reported as either “pass” or “fail.” The status of “pass” is reported for candidates who achieve a scale score of 75 or higher. The status of “fail” is reported for candidates who achieve a scale score below 75. Scale scores are only reported to candidates who fail.

- DLOSCE results will be reported approximately four to five weeks after the close of the administration window. Results can be viewed online by logging into the My Account Summary page on ADA.org/JCNDE.
• The Joint Commissions’ examinations inform dental board decisions that are intended to protect the public health.

• Rules of conduct govern DLOSCE administrations to ensure results accurately reflect candidates’ skills. These rules mirror those in place for other examinations of the JCNDE.

• Test content (in whole or in part) is prohibited from being disclosed before, during, or after the test to anyone, including but not limited to family, friends, classmates, colleagues or test preparation organizations. This applies to any content disclosed through discussions, emails, in writing, online (e.g., blogs, social media, websites), or otherwise.

• **Behavior that results in misconduct or irregularity in the examination process is a very serious matter.** Violation of the rules of conduct or examination regulations may result in civil liability, voiding of examination results, or other appropriate penalties.
Additional Information

- DLOSCE webinars:
  - Dental Boards – April 22, 2020
  - Dental Students – May 19, 2020 4:00pm (Central)
  - Dental Educators – May 21, 2020 4:00pm (Central)
  - Dental Societies – TBD

- General DLOSCE questions (e.g., DLOSCE candidates)
  - dlosce@ada.org

- Updates on the DLOSCE are made available on the DLOSCE website:
  - ADA.org/DLOSCE

- The JCNDE and its DLOSCE Steering Committee will continue to provide updates to communities of interest.
Q & A

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Thank you!