ADEA CCI SPOTLIGHT:
FRESH APPROACHES TO ASSESSMENT FOR DENTAL EDUCATORS
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#assessment
Leading Conversations
Webinar Series

Dr. Eugene Anderson
Chief Policy Officer and Managing Vice President
American Dental Education Association
Presenters

Catherine A. Demko, Ph.D.
Associate Professor in Community Dentistry
Case Western Reserve University School of Dental Medicine

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University of Pittsburgh School of Dental Medicine
Webinar Objectives

1. Describe the global assessment program developed and implemented at the University of Pittsburgh School of Dental Medicine.
2. Identify key factors for successfully implementing change in a predoctoral dental program such as a global assessment program.
3. Describe two assessment strategies for evidence-based decision skills in didactic and clinical courses developed and implemented at the Case Western Reserve University School of Dental Medicine.
4. List three activities in faculty development for teaching and assessing evidence-based skills.
5. Identify lessons learned when implementing change and innovation not the dental curriculum.
EXPERIENCES AND CHALLENGES
ASSESSING EVIDENCE-BASED DECISION MAKING

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CODA Standard 2-21

“Access, critically appraise, apply and communicate scientific and lay literature as it relates to providing evidence-based patient care.”
Challenges of EB Practice Education

Teaching, Modeling
- Learner Background
- Learner Attitude
- Content
- Educational format
- Engagement
- Time
- Faculty/Preceptors

Assessment
- Knowledge
- Attitude
- Skills
- Clinical Application
Organization: Sequenced, Progressive Curriculum Thread

D1: Foundational knowledge for critical appraisal

D2: Building skills; link to preclinical courses; searching emphasized; hybrid online/in-class

D3: 1) TX Planning, emphasis on SR; 2) Preceptor groups; identify Best Available Evidence

D4: Continue preceptor group activity; EBD Clinical Competency
## Lecture and PBL Formats

### D1 Core Topics Taught and Assessed

<table>
<thead>
<tr>
<th>Study Design</th>
<th>Validity</th>
<th>Statistical Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Characterize</td>
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</tr>
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<td>• Recognize the threats</td>
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<td>• Describe how to minimize threats</td>
<td>• Treatment effects</td>
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### D1 Assessment

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**Lecture and PBL Formats**

**D1 Core Topics Taught and Assessed**

- **Study Design**
  - Characterize
  - Recognize
  - Know strengths and weaknesses

- **Validity**
  - Define; distinguish
  - Recognize the threats
  - Describe how to minimize threats

- **Statistical Literacy**
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  - Treatment effects

**D1 Assessment**

- **Formative**
  - Homework
  - Quizzes
  - Introduce CAHSL

- **Summative**
  - CAHSL for grade
  - Final Exam MCQ and OE
D3: EB in Treatment Planning Course

**Emphasize Systematic Reviews (SR)**
- AMSTAR (Shea, et al, BMC Medical Research Methodology, 2007)
- Students receive 2 SR
- Apply AMSTAR

**Evidence-based Course Materials**
- Course information is evidence-based, with ref
- Emphasis on knowledge gathered from literature

**Assessment**
- Formative with AMSTAR feedback
- Summative with graded AMSTAR tool; must justify answers
D3-D4 Clinical Groups: Formative

Ask clinical questions based on given scenario

Acquire: Individual Search

Appraise: Decide on 3; Critically review papers; Group discussion

Apply: Answer clinical question? Patient explanation

Formative Assessment: Feedback in the group and on 8 week preceptor form

Next steps: Formalize assessment of acquire and patient explanation
D4 Clinic-based Competency

1. Chooses competency exam to include EB component
2. Completes and submits EB packet to examiner
3. Queried by examiner
4. Assessment of packet and oral responses
Faculty Development to Build Capacity

- Faculty training, role-play, detailed manual/guides; completed CAHSLs
- Observe expert facilitator; Facilitate group with “expert”
- Facilitate/precept EB topics alone; Clinical faculty EB examiners trained and calibrated
- Critical mass who can “solo” on EB practice
Moving From Didactic to Clinical EB
Practice and Assessment

- Communicate early and often: Didactic ↔ Clinical

- Faculty development: Support your preceptors
  - Critical appraisal is stumbling block
  - Continue to pair with faculty EB champion

- Link to assessment of critical thinking

- Searching requires repeated practice/assessment

- “Thread” course
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Sorin Teich, D.M.D., M.B.A.
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Today’s Host

Eugene Anderson, Ph.D.
American Dental Education Association
GLOBALLY ASSESSING ETHICAL AND PROFESSIONAL BEHAVIORS IN DENTAL STUDENTS

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Marnie Oakley, D.M.D.
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Audience Poll

How many cases of unprofessional or unethical behavior did your school respond to last year?

a. None
b. 1–2
c. 3–4
d. 5 or more
e. Don’t know
Timing/Opportunities

Why Global Assessment?

- Grading practices
- Communication
- Inadequate policies
- Legal challenge
Goals of Global Assessment

- All students would succeed as professional, ethical graduates of the program
- Early identification and intervention for struggling students
- Legally defendable
CODA Standard 2-23

Intent Statement...

“Programs should assess overall competency, not simply individual competencies, in order to measure the graduate’s readiness to enter the practice of general dentistry.”
GA Program Specifics

Qualities of a General Dentist course:

• Series of courses (one each term)
• Database to house input from faculty
• HIGH STAKES
Qualities of a General Dentist

QGD courses criteria

- Clinical
- Non-clinical

Two levels of behavior

- Needs Improvement (NI)
- Unsatisfactory (U)
QGD in Action

Behavior needs improvement →
Behavior needs improvement →
Behavior needs improvement →
Behavior needs improvement →
**Learning Plan...academic warning**

Behavior needs improvement →
**Performance Improvement Plan...academic probation**

Behavior needs improvement/No improvement →
**Course failure**
Important considerations...

**Academic vs. Disciplinary**

- Freedom of speech
- Social media
References


4. ADEA statement on professionalism in dental education. Retrieved from adea.org/documents/Section3/(3.2.5)-ADEA-Statement-on-Professionalism-in-Dental-Education.pdf
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CHANGE AND INNOVATION: LESSONS LEARNED

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Jean O’Donnell, D.M.D., M.S.N.
Marnie Oakley, D.M.D.
Innovation Process: Lessons Learned

- Timing/opportunities
- Strength in numbers
- Broad-based support
- Follow up
- Sustainability/evaluation
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Thank you!

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QUESTIONS?