The Science of the New CODA Standards: Collaboration Workshop

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Chair, Commission on Dental Accreditation 2013-14
Chair, CODA Predoctoral Review Committee 2010-14
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Mission Statement of the Commission on Dental Accreditation

The Commission on Dental Accreditation serves the public by establishing, maintaining and applying standards that ensure the quality and continuous improvement of dental and dental-related education and reflect the evolving practice of dentistry. The scope of the Commission on Dental Accreditation encompasses dental, advanced dental and allied dental education programs.

Commission on Dental Accreditation
Revised: October 2012
Standards 1 through 6 constitute *The Accreditation Standards for Dental Education* by which the Commission on Dental Accreditation and its consultants evaluate Dental Education Programs for accreditation purposes. This entire document also serves as a program development guide for institutions that wish to establish new programs or improve existing programs. Many of the goals related to the educational environment and the corresponding standards were influenced by the work of the American Dental Education Association Commission on Change and Innovation and by best practices in accreditation from other health professions.

The standards identify those aspects of program structure and operation that the Commission regards as essential to program quality and achievement of program goals. They specify the minimum acceptable requirements for programs and provide guidance regarding alternative and preferred methods of meeting standards.
Dental Education Environment
(CODA Pre-doctoral Standards)

Core Principles of ADEA CCI & CODA DDS Educational Programs:

- Critical Thinking
- Lifelong and Self-Directed Learning
- Humanistic Environment
- Scientific Discovery and the Integration of Knowledge
- Evidence-Based Oral Health Care
- Assessment
- Application of Technology
- Faculty Development
- Health Care Team Collaboration (IPE)
- Diversity
The foundation of these Standards is a competency-based model of education through which students acquire the level of competence needed to begin the unsupervised practice of general dentistry. Competency is a complex set of capacities including knowledge, experience, critical thinking, problem-solving, professionalism, personal integrity and procedural skills that are necessary to begin the independent and unsupervised practice of general dentistry. These components of competency become an integrated whole during the delivery of patient care. Professional competence is the habitual and judicious use of communication, knowledge, critical appraisal, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individuals and communities served. Accordingly, learning experiences help students blend the various dimensions of competency into an integrated performance for the benefit of the patient, while the assessment process focuses on measuring the student’s overall capacity to function as an entry-level, beginning general dentist rather than measuring individual skills in isolation.
Competency and the Novice-Expert Continuum

Performance: Task completion to standard (observed)
Learning: Growth in capacity to perform in context-appropriate ways (inferred)
Continuous Changes in Performance with Increased Competency

<table>
<thead>
<tr>
<th>Novice</th>
<th>Beginner</th>
<th>Competent</th>
<th>Proficient</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigid, broken</td>
<td>Smooth, flexible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow, interrupted</td>
<td>Efficient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Errors, false starts</td>
<td>As expected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On request</td>
<td>Responsive to context</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrinsically rewarded</td>
<td>Intrinsically rewarded</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation as separate activity</td>
<td>Continuous monitoring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher responsibility</td>
<td>Performer responsibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discrete performance segments</td>
<td>Integrated performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One task at a time</td>
<td>Multitasking (background)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control by surface features</td>
<td>Responsive to deep structure</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Single, dominant method</td>
<td>Alternative paths to end</td>
<td></td>
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</tbody>
</table>
Three-Stage Changes in Performance with Increased Competency

<table>
<thead>
<tr>
<th>Novice</th>
<th>Beginner</th>
<th>Competent</th>
<th>Proficient</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules</td>
<td>Schema</td>
<td>Both</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor content verbalization</td>
<td>Great verbalization</td>
<td>Reduced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semiconscious performance</td>
<td>Conscious</td>
<td>Semiconscious</td>
<td>Morality</td>
<td></td>
</tr>
<tr>
<td>Detached ethics</td>
<td>Ethical choice</td>
<td>Independent</td>
<td>Interdependent</td>
<td></td>
</tr>
<tr>
<td>Dependent</td>
<td></td>
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</tr>
</tbody>
</table>

# Vary the Method to Fit the Learner

<table>
<thead>
<tr>
<th>Level</th>
<th>Instruction</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novice</td>
<td>Faculty control</td>
<td>Standardized testing</td>
</tr>
<tr>
<td></td>
<td>Structured</td>
<td>Discrete elements</td>
</tr>
<tr>
<td>Beginner</td>
<td>Simulations</td>
<td>Problem sets</td>
</tr>
<tr>
<td></td>
<td>Maximum interaction</td>
<td>Demand reasoning</td>
</tr>
<tr>
<td>Competent</td>
<td>Student control</td>
<td>Authentic evaluation</td>
</tr>
<tr>
<td></td>
<td>Realistic settings</td>
<td>Portfolios</td>
</tr>
</tbody>
</table>
The Issue of Competency Learning

In these *Standards* the competencies for general dentistry are described broadly. The Commission expects each school to develop specific competency definitions and assessment methods in the context of the broad scope of general dental practice. These competencies must be reflective of an *evidence-based definition of general dentistry*. To assist dental schools in defining and implementing their competencies, the Commission strongly encourages the development of a formal liaison mechanism between the dental school and the practicing dental community.

The objectives of the Commission are based on the premise that an institution providing a dental educational program will strive continually to enhance the standards and quality of both scholarship and teaching. The Commission expects an educational institution offering such a program to conduct that program at a level consistent with the purposes and methods of higher education and to have academic excellence as its primary goal.
The Commission considered the American Dental Association House of Delegates Resolutions and subsequently directed that the Commission Chair appoint an ad hoc committee to conduct a self-assessment of the Commission (Resolution 1H-2013). The Commission also directed that the Predoctoral Dental Education Review Committee study Resolution 57H-2013, urging the Commission to revise the Accreditation Standards for Predoctoral Dental Education Programs related to practice management to include instruction on personal debt management and financial planning, with a report for the Summer 2014 Commission meeting.
Dental Education at the Crossroads 1995
Where to Probe:
The Science of the New CODA Standards

- Critical Thinking
- Lifelong and Self-Directed Learning
- Humanistic Environment
- Scientific Discovery and the Integration of Knowledge
- Evidence-Based Oral Health Care
- Assessment
- Application of Technology
- Faculty Development
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• CODA Frequency of citing's
Frequency of Citing’s
Jan 2007 to Oct 2012  (N=59 DDS/DMD programs)

http://www.ada.org/sections/educationAndCareers/pdfs/pde_citings.pdf

- Standard 1: 2
- Standard 2.1-2.24: 19
- Standard 2.25 a-n: 19*
- Standard 2.26 & 27: 4
- Standard 3: 4
- Standard 4: 1
- Standard 5: 9 (8 from 5.1 a to d)
- Standard 6: none
My Challenge to You

• Look at the CODA Standards
• Explore the science
• Analyze the data
• Produce the “best evidence”
• Submit findings for CODA evaluation
• Help improve the accreditation process
THANK YOU!

We are glad you are here

Have a great 2014 ADEA Annual Session!!