Guest Editorial

Renewing Our Commitment to the Future of Dental Education: ADEA CCI 2.0

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In 2005, the Board of Directors of the American Dental Education Association (ADEA) made a significant commitment to a long-term initiative to address challenges of curriculum reform in a contemporary dental school through the authorization of the ADEA Commission on Change and Innovation in Dental Education, commonly referred to as the ADEA CCI. The reasons for this action were numerous; the need to act was imperative. An extensive multiyear study undertaken by the Institute of Medicine (IOM) had reported in 1995 on a variety of challenges in dental education that had plagued the profession for generations, including a focus on past dental practice rather than emerging practice and knowledge; a continued priority on siloed specialty-based clinical education as opposed to comprehensive care; and inadequate integration of dentistry with other health professions.[1] The authors of an article published in the *Journal of Dental Education* in 2005 found these challenges to still be generally pervasive in U.S. dental schools a decade later.[2] In 2004, Kassebaum et al. published a report on a survey of dental schools that delved more deeply into the issues to identify the obstacles that deans and other academic leaders were facing.[3] Some of those obstacles included too few qualified faculty members to teach in comprehensive courses and clinics or to act as facilitators with active learners, as well as the perceived barriers placed by accreditation standards and national board examinations.

The ADEA CCI began in earnest in 2006 with an Oversight Committee that included broad representation from various communities in dental education, the American Dental Association (ADA), the Joint Commission on National Dental Examinations (JCNDE), the Commission on Dental Accreditation (CODA), higher education, allied dental professions, and others. A portfolio of initiatives was undertaken to address the challenges and obstacles to curricular reform that had been identified:

- Between 2005 and 2009, 21 "white papers" were commissioned and published to highlight the areas in which change and innovation might occur.[2,4-23] These papers were consolidated into a volume published by ADEA entitled *Beyond the Crossroads: Change and Innovation in Dental Education*.
- Each dental school was invited to identify up to four ADEA CCI Liaisons to participate in ongoing networking and in-person meetings. An ADEA CCI Liaisons meeting has been held each summer since 2007, and the quarterly *ADEA CCI Liaison Ledger* newsletter has been published regularly since 2008 with spotlights on campuses, students, educators, and resources.
- Abundant courseware is now available on the ADEA website, including access to MedEdPORTAL, a collaboration between the Association of American Medical Colleges (AAMC) and ADEA that promotes educational scholarship and collaboration by facilitating the open exchange of peer-reviewed health education teaching and assessment resources.
- In 2010, Haden et al. published a report of a survey they conducted asking dental schools about changes made to their curricula between 2003 and 2009.[24] Of the 55 U.S. and Canadian schools that responded, 65% indicated that their most recent comprehensive curriculum reform review was then under way or had occurred in the previous two years. Other results reported clearly showed schools looking to increase interdisciplinary courses, blending basic and clinical sciences, developing new methods to assess competence, and increasing interprofessional collaborations with other schools of the health professions.
- Strategic alliances were pursued to advance the work of the ADEA CCI through faculty engagement to gain the skills of a master educator, including the ADEA/AAL Institute for Teaching and Learning (ITL) with over 650 alumni and the ADEA/

Colgate/AAL Institute for Allied Health Educators (IAHE) with over 1,500 alumni. Several dental specialty organizations provide scholarships for the ITL.

There are dramatic changes occurring outside of ADEA as well, some of which we have helped to promote. Several new CODA standards have been developed, and other long-standing ones have been revised since 2005 to bring them into greater alignment with contemporary needs.[25] The JCNDE changed the grading of Parts I and II of the dental boards from numerical to pass/fail. The JCDNE is now considering implementation of a single integrated national board examination, eliminating the dichotomy of the current two parts that focus on basic sciences in the first two years and clinical sciences in the second two years, with a consequential impact on curricular design. The last decade has also seen changes in licensure testing and portability among the states after generations of steadfast opposition to any change in the licensure process involving human patients. Diagnostic codes have been approved as a national standard, and their eventual implementation will provide opportunities for research on their impact on competency assessment.

Of particular note is that ten new U.S. dental schools have opened since 2005, providing laboratories for developing innovations in curricular design not bound by traditions that might exist in a school in existence for many years. A term that hardly existed in 2005, "dental support organization," now is part of our lexicon, and the role these new delivery models will play in our future is certain to impact dental curricula. The demographics of the dental faculty influence change and innovation as well. In 2015, 64% of the faculty nationwide were over 50 years of age, and one-quarter of those were women, while one half of the remaining 36% under 50 years of age were women.[26]

Many other changes are occurring in the world of health care, health professions, and higher education that are certain to impact us as well. No matter what happens with the political process related to the future of the Affordable Care Act, the financing of health care will change due to market forces; and dental care is not exempt from those forces. The movement toward interprofessional education and practice in the health professions is a game changer and will motivate dental schools to promote implementation in their curricula of the competencies of learning and working with students in other health professions. The technological changes we have seen in the past decade in education and practice portend an incredible future of further and probably even more rapid changes, creating even more urgency for those working on curricular design and implementation.

The ADEA Board of Directors reviewed the progress of the ADEA CCI in 2016, determining there had been immense success as a result of the Commission's work since 2005 and that it was the appropriate time to renew the Association's commitment to change and innovation in dental education. The Board recognized that the changes occurring in environments internal and external to ADEA and its member institutions require that we continue to support the ADEA CCI but provide a new charge and structure to ensure its success over the next decade.

The charge to the current manifestation of the ADEA CCI—ADEA CCI 2.0—is as follows:

- Facilitate sharing and engagement with ADEA Institutional Members and stakeholders by providing opportunities for connecting with colleagues using both traditional and innovative technologies.
- Produce compelling resources that reflect and support emerging trends and practices that will likely impact dental and other health education stakeholders.
- Strengthen and further enhance dental education's critical role in establishing oral health as an integral part of overall health and dental professionals as essential members of the entire health care team.
- Produce and disseminate practical tools that will help ADEA members build capacity for change and innovation.

The 2005 article that introduced the concept of the ADEA CCI to the dental education community stated, "What is lacking in most proposals for innovation is a single Archimedean leverage point by which to switch the entire system."[2] That Archimedean point is a hypothetical vantage point on a fulcrum from which massive movement could occur. Perhaps we have not yet found the Archimedean point, but we believe that the first 12 years of the ADEA CCI has been a significant lever of innovation throughout dental education. In an environment in which change is constant, we need to keep our focus keenly on the future, to develop curricula and resources that meet the needs of contemporary learners, to monitor trends in health care and education to realize their impact on dental education, and to ensure that we keep our highest priority on serving those who are entrusted to our care, our patients.

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