

REPORT

New thinking for the new century: Preparing for the next 100 years

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1 | INTRODUCTION

In July 2021, the American Dental Education Association (ADEA) launched the New Thinking for the New Century (NTNC) initiative with the convening of a diverse, eight-member Steering Committee under the leadership of then Chair-elect of the ADEA Board of Directors, Dr. Nader Nadershahi. The main goal of the project was to identify new solutions to some of the chronic and emerging challenges facing dental education while supporting the development of the next generation of dental education leaders. In order to build a sense of community and broadly engage the ADEA community, ADEA members, as well as leaders from other oral health organizations, were surveyed regarding the challenges they thought were the highest priority. Subsequently, during virtual ADEA meetings held in fall 2021 where more direct discussion

could be used, members were not only asked to consider which challenges were most important, but also which of the challenges ADEA would have the best opportunity to provide significant impact in terms of creating and implementing solutions to those challenges.

Ultimately, challenges in three domains were identified for exploration over the following year, which were thought to be not only critical to the future of dental education but also challenges that ADEA would be able to impact in a positive manner. The domains of these challenges are as follows:

1. Faculty and staff recruitment for dental, allied dental, and advanced dental education.
2. Leadership development and succession planning.
3. Preparing students for the future of collaborative practice.

During the 2022 ADEA Annual Session & Exhibition, ADEA's seven councils were asked to engage in further dialog around the specific aspects of the challenges and to identify nominees for subcommittees established to work on each of these issues during the year leading up to the 2023 ADEA Annual Session & Exhibition. The work of the subcommittees was to study the challenges to ensure a comprehensive understanding of all facets of the inherent issues and develop recommendations and plans for creative, realistic, and impactful solutions to each challenge. Each subcommittee was co-chaired by members of the Steering Committee. The subcommittees were intentionally composed of a diverse and inclusive cadre of experts and leaders, including those in our next generation of dental education leaders. The subcommittees were charged with creating a problem statement and developing a set of strategies for addressing these key issues and challenges in the three domains. As part of their charge, they were asked to consider these issues through a lens of diversity, equity, inclusion, and belonging (DEIB) and from the perspectives of dental, allied dental, and advanced dental education.

In fall 2022, the subcommittees concluded the preparation of their problem statements and preferred solutions to the challenges reports, which were submitted to the Steering Committee for initial review. The reports were shared with a reactor panel composed of ADEA members who had previously volunteered to serve on the NTNC subcommittees but, due to the overwhelming number of members who volunteered, were not selected to serve on the subcommittees.

The reports were shared in the context of a survey where the reactor panel members were asked to read the problem statements and preferred solutions reports and then complete a short survey of both quantitative and qualitative questions. Among those questions, feedback was solicited regarding suggestions to further strengthen, operationalize, or implement the proposed solutions and to identify critical issues missing from the reports and reasons that ADEA or member institutions would be prevented from implementing the proposed solutions.

During the 2022 ADEA Diversity, Equity, Inclusion, and Belonging Workshop, 2022 ADEA Fall Meetings, and 2022 ADEA Deans' Conference, the ADEA attendees of those groups provided a brief presentation of the work completed up to that time and were subsequently invited to review the reports and complete the same survey sent previously to the reactor panel. Those councils that did not meet during ADEA Fall Meetings were contacted directly and invited to complete the survey through their ADEA Connect online communities. All responses were compiled and presented in a comprehensive report to the Steering Committee in early December 2022. After reviewing the feedback, the subcommittees finalized their reports in early 2023. The

findings and recommendations of the subcommittees were presented during a Chair of the Board Symposium at the 2023 ADEA Annual Session & Exhibition. The full final reports and a video recording of the symposium can be viewed on the ADEA website at adea.org/New-Thinking.

2 | FACULTY AND STAFF RECRUITMENT FOR DENTAL, ALLIED DENTAL, AND ADVANCED DENTAL EDUCATION

2.1 | Problem statement

One of the many long-term impacts of the recent pandemic includes a significant decline in the workforce. Academic dentistry has not been immune to these changes and therefore has been significantly impacted by the lack of qualified faculty and staff. The resulting impact has often resulted in current employees taking on or being appointed additional roles with minimal or no pay increase, less time off, less work-life balance, and more workplace stress. All of these factors have led to a change in our current workforce model that is not only smaller, but also one that has a very different view on job and employer expectations. The impact of the twin pandemics—COVID-19 and the racial equity movement—combined with a paradigm shift in faculty and staff need for adequate compensation, recognition, and incentives, along with a need for work-life balance, has contributed to a shortage of dental faculty and staff in educational institutions.¹

The mission of dental institutions is to educate future oral health professionals and thereby provide qualified oral health professionals to serve all areas including our underserved communities. This requires that dental institutions have enough qualified faculty and staff so that students, residents, and fellows receive a quality education.² This will require that dental education is responsive, innovative, and creative in addressing the new needs of dental faculty and staff to include the following:

- Faculty burnout
- Belonging
- Prestige
- Generational differences
- Diversity, equity, and inclusion
- Mentorship
- Compensation

Dental institutions need to elevate opportunities to market the benefits of being a dental and/or allied dental educator; for example, using social media venues to recruit faculty and staff to academic and academic support roles.

This can be for both internal and external recruitment by capitalizing on the energy and enthusiasm of those currently in academia as well as those new to academia to convey the benefits of teaching in dental education, which include³:

- Work–life balance
- Faculty loan repayment options
- Compensation
- Awards and recognition
- The ability to have a positive impact on future dental and allied dental professionals

2.2 | Proposed solutions

The following outlines practical ways dental institutions can implement changes that not only meet the needs of current faculty and staff, but also attract new faculty and staff to dental education.

1. *Development of a clear and dedicated pathway within ADEA for new faculty*: Development and implementation of an integrated ADEA initiative with a focus to recruit and support the development of pathways for new faculty and staff.
2. *Availability of courses and certifications in pedagogy*: The availability of short-term, low-cost certifications in pedagogy. The courses can be completed at the institutional level or through ADEA. These certifications can be used for promotion and tenure. Faculty should receive recognition from their institution and ADEA for earning certifications and receive financial incentives for these achievements.
3. *Institutions must offer competitive compensation and more balanced workloads*: Faculty should receive financial compensation that is commensurate with their educational level and experience. Compensation should be equal to or greater than that offered in private practice. Offer loan repayment options for those who enter academia. Balanced workloads to allow time for professional development and personal time.
4. *Implementation of new faculty mentoring*: Formation of student faculty development groups and organizations using the structure of ADEA Dental and Allied Dental Student Chapters that provide mentorship and best practices for becoming an academician. Mentoring can occur at both the institutional level and within ADEA. Use the newly developed *Pearls of Wisdom Faculty Handbook*.
5. *Provide a student pathway to academic careers*: Grow the ADEA Academic Dental Careers Fellowship Programs (ADCFP) opportunities within dental schools and allied

dental education programs and seek assistance from ADEA with identifying and applying for grants to help support ADCFP programs. This strategy should include how to support student debt relief if they pursue an academic career in dental and dental allied education.⁴

6. *Faculty recognition*: Development of podcasts, videos, and informational presentations to recognize and celebrate faculty achievements. These can be used on social media and other venues to recognize faculty achievements. Dental schools and allied dental programs can submit to ADEA names of faculty who receive outstanding faculty awards and other recognitions.

These faculty and schools can be recognized at the ADEA Annual Session & Exhibition each year. Podcasts, videos, and other information presentations can also be used to inform those not in academia to consider education as a career pathway. Seek engagement of the ADEA Corporate Council to recognize faculty on their social media platforms.

7. *Recruitment of private practice dentists, dental hygienists, dental therapists, and dental assistants*:
 - a. Encourage the use of the ADEA Faculty Diversity Toolkit⁵ and engage dental organizations such as the American Dental Association (ADA), American Dental Hygienists' Association (ADHA), American Association of Dental Assistants (ADAA), Hispanic Dental Association (HDA), National Dental Association (NDA), National Dental Hygiene Association (NDHA), Society of American Indian Dentists (SAID), American Association of Women Dentists (AAWD), Lesbian, gay, bisexual, transgender, queer/questioning, intersex, asexual, and agender (LGBTQ + IA), American Network of Oral Health Coalitions (ANOHC), and dental specialty organizations.⁶
 - b. Capitalize on recruiting opportunities available through participation in large continuing education events.

3 | LEADERSHIP DEVELOPMENT AND SUCCESSION PLANNING

3.1 | Problem statements

3.1.1 | Leadership development

To plan for the future, dental and allied education programs must address the shortage of faculty prepared to assume leadership positions, including encouragement and preparation of underrepresented individuals. Leadership development should be incorporated into an institution's culture, integrated within the roles and

responsibilities of faculty, and emphasize inclusiveness.⁷⁻⁹ ADEA and other organizations offer leadership development programs. However, participation is often limited by an institution's inability to cover training costs or permitting the faculty time to attend. Additionally, existing programs may not be coordinated and may lack critical content, including DEIB.

Due to the challenges enumerated above, dental education must establish a core portfolio of leadership programs that take into consideration formal leadership development programs currently offered, identify gaps/opportunities for additional programs, and provide a customized roadmap of leadership training to align with a faculty's current role and their individual career aspirations.

To ensure a healthy pool of future leaders, efforts must also be made to provide leadership training for students in our educational programs.

3.1.2 | Succession planning

Succession planning is the process of identifying critical leadership positions within an organization, recognizing individuals for their unique talents, and creating leadership development plans for them to assume those positions.^{10,11} The recent increase in leadership turnover, coupled with a tendency toward reactive succession planning, has created a challenging environment to maintain the continuity of an institution's mission.

Succession plans should include the identification of internal talent and a strategy for external talent acquisition, paying particular attention to diversity and a holistic approach. To be successful and non-threatening, succession planning must become part of the organization's culture.

Dental education can benefit from succession plans for critical positions within their institution. Each institution needs to determine its critical positions, key skills required for each position, and potential individuals who can assume these positions. Appropriate training, experience, and a supportive environment are crucial for success.

3.2 | Proposed solutions

To promote a culture of proactive leadership development and succession planning, ADEA would assist in creating programs for dental institutions and allied dental programs. The programs would focus on three aspects of leadership development and succession planning:

1. *Critical role assessment and identification*: This program will guide institutions/programs on factors to be considered in defining critical positions within the organization. It will provide a guide for programs to use as a self-assessment in identifying critical roles and determining responsibilities. This guide will also serve as a reference for potential candidates interested in leadership opportunities to have a better understanding of the leadership role and its responsibilities.
2. *Talent identification*: This program will assist institutions/programs in developing a guide to help identify internal talent that may benefit from further leadership development and potential inclusion in the organization's succession plan. The guide must ensure that this is a measurable process, identify milestones that a candidate needs to accomplish to be considered for a given administrative role, and delineate fair and equitable processes that consider DEIB. The talent guide could also be used to identify those skills needed by an external candidate to assume the position.
3. *Talent development opportunities*: These programs will focus on assisting institutions/programs in leadership development for internal candidates and integrating succession planning in the hiring strategy for the organization. We propose that ADEA develop the following programs:
 - a. *Match Program*: This program, to be modeled after the Association of American Medical Colleges (AAMC) Council of Deans (COD) Fellowship Program (aamc.org/career-development/affinity-groups/cod/fellowship-program), provides a fellow with the opportunity to shadow dean mentors at other institutions. This opportunity is accompanied by other programming and mentoring for those selected for the program.
 - (1) *External*—ADEA formal program: This could be incorporated into the ADEA Leadership Institute or be offered as a standalone program. *Note*: During the New Thinking for the New Century Planning, ADEA initiated the COD Fellowship with the inaugural class to start in 2023.
 - (2) *Internal*—Institutional formal program: Institutions would implement a match program as described above at the institutional level.
 - b. *ADEA Mentor Program*: Develop a formal mentorship program with an organized curriculum. ADEA to solicit volunteers interested in serving as mentors. Simultaneously, ADEA would put out a call for applications for potential mentees. ADEA would assist in pairing up one to two mentees per mentor and the cohorts would follow a prescribed curriculum with ADEA staff oversight.

- c. *Skills Workshops*: Seminars and workshops would be conducted online through ADEA eLearn and/or at ADEA meetings. The participants would receive certification and recognition for completing the workshops, which could be incorporated into the ADEA Micro-credentialing Program.
- d. *Strengthen/Modify Existing ADEA Leadership Programs*:
 - *Refine ADEA ADCFP*: ADEA Staff will work closely with ADEA COSRF and faculty involved with the program to reimagine and revise the ADCFP with future oversight for the program coming from ADEA. Infiltration of new ideas will make the program more sustainable, better incorporate DEIB and have a broader reach. The current program is highly variable from school to school. A redesigned program could invigorate renewed interest and participation by dental, allied, and advanced education students exploring careers in academia.
 - *ADEA Sections (Business and Financial Administration, Clinic Administration, Dental School Admissions Officers, Student Affairs and Financial Aid, etc.) could create leadership tracks within their areas*. Use mid-year meetings to offer leadership development and succession planning sessions to the various ADEA Sections.
- e. *ADEA Website*: Create a one-stop location for leadership development containing a list of leadership resources and programs, for example:
 - Leadership programs at the national, regional, state, and local levels geared to dental educators offered by ADEA and other organizations
 - Leadership programs (outside of dental education) such as Academic Impressions, Center for Creative Leadership, etc.
 - Industry programs
 - List of books, podcasts, blogs, etc., on leadership
 - Book clubs

4 | PREPARING STUDENTS FOR THE FUTURE OF COLLABORATIVE PRACTICE

4.1 | Problem statement

Collaborative practice is an approach that enables health care providers to deliver high-quality, safe person-centered services to achieve the best possible individual health outcomes for a diverse population. It happens when multiple health workers from different professional backgrounds work together with patients, families, care (givers), and communities to deliver the highest quality of care across

settings. This pattern of practice requires communication, sharing, and problem solving between all pertinent health care professionals and implies a shared responsibility and accountability for patient care.¹²

Currently, despite the well-established necessity to teach collaboration, the majority of dental education does not include intraprofessional training.¹³ In addition, the Commission on Dental Accreditation's and the Commission on Dental Accreditation of Canada's accreditation standards/requirements comprise the teaching of collaborative practice. Also, cooperation between dental disciplines and programs is not adequate. Mutual respect is needed to fully share and take accountability for differing roles, responsibility, communication, and teamwork.

As dental education of all professionals involved in oral health care reflects on future practice and the requirements in order to prepare future generations, several trends are to be anticipated to educate and train the diverse dentist residents, allied, and expanded oral health care workforce to work in collaborative care environments (interprofessional practice [IPP]).

4.1.1 | What trends could impact collaborative practice?

Changing demographics: larger number of young dentists in the workforce and a large number of retirement-age dentists. The gender distribution is more likely to be 50:50 by 2040 with more non-white professionals. However, the "face" of practitioners still does not represent the population, requiring that DEIB principles continue to be highlighted and applied.

Changing models of care and practice environments with fewer dentists owing their practices. Solo practice is disappearing, and the integration of services and practice is likely in some settings. Reimbursement models will change (e.g., diagnostic codes, national/state model reimbursement), but access to care for many populations remains a challenge.

Changes in chair-side delivery of care, with technology continuing to advance in the biological, pharmacological, and technical areas. Also, artificial intelligence and data sciences will probably drive efficiencies.

4.1.2 | How will dental education adapt to these trends?

To meet these challenges, dental education will have to develop guidelines, competencies, and practice environments that the oral health care providers of the future

will need in several different domains, such as knowledge, skills, and attitudes.

Educational programs will be required to review current processes and adapt/adopt new methods of admissions. Curriculum design will need to consider decompression, include new science, and embed interprofessional education (IPE)/IPP models.

It is essential that the clinical environments in dental schools be adapted to facilitate patient-centered interprofessional collaborative care, including the clinics' design and their systems. These changes should also extend to the externships and community health models with which students will be involved.

But, how to extend an already overly compacted curriculum? Most likely, it will be in the form of incorporating first postgraduate year (PGY-1) general dentistry programs into the education model. Implementing a mandatory PGY-1 still demands much lobbying, and its importance has to be emphasized already at the pre-doctoral level.

4.2 | Proposed solutions

Based on the above principles and recommendations, the subcommittee identified the following areas for ADEA to act on:

1. ADEA will hold yearly workshops as designated at ADEA meetings for IPP and IPE around the following topics:
 - Curriculum development
 - Competencies
 - Assessment
 - Faculty development
 - Best practices/working models

Note: These topics should include both *inter-* and *intra-*professional education/collaboration/practice.

2. ADEA will identify and fund “super-users” (at least 10, with representatives for allied and DEIB) that are ADEA ambassadors for IPE/IPP who can attend other health professional events/meetings. For example, that have the responsibility of collating and developing tools that can disseminate information to dental/allied leaders through ADEA platforms and at ADEA meetings. These ambassadors should share how oral health needs to be integrated into the other health professions and share models/host workshops at other health professions meetings (e.g., AAMC, American Association of Colleges of Nursing, American Association of Colleges of Pharmacy, Association of Schools & Programs of Public Health).
3. ADEA will identify one IPE/IPP director/responsible person per school who can be taught the requisite skills,

resources, and tools needed to implement curriculum and assessments (e.g., ADEA Commission on Change and Innovation in Dental Education representative model). Diversity should be considered (Core Competencies for Interprofessional Collaborative Practice: 2016 Update).

4. ADEA will host and showcase partners that can facilitate IPE/IPP in dental and medical clinics (e.g., integrated health record companies, telehealth companies etc.).
5. ADEA will lead the effort with other organizations (e.g., ADA and ADHA) to lobby on behalf of schools and professions for changes in licensure/scope of practice/accreditation/billing that allow for more IPP in clinics.
6. ADEA must be the organization that facilitates the incorporation of PGY-1 general dental programs into the education model.
 - a. Different than periodontics (American Academy of Periodontology), endodontics (American Association of Endodontists), oral surgery and maxillofacial surgery (American Association of Oral and Maxillofacial Surgeons), and other specialties, there is no “parent” organization for general dentistry education. ADEA must take a leadership role in being that “parent” organization for general dentistry educational programs.
7. ADEA will need to ensure that the themes of DEIB are included in all aspects. There must be recognition that many issues concerning DEIB are institutional—a key emphasis has to be on dealing with the barriers and how to list them (i.e., cultural barriers as one example).

5 | CONCLUSION

The ADEA NTNC initiative successfully identified three major emerging and current challenges that dental education faces. Through a very inclusive and iterative process, the NTNC subcommittees and Steering Committee diligently studied the important aspects of these challenges and developed problem statements that described the elements of the challenges. Finally, reports were created that proposed a set of actionable solutions ADEA could undertake in the near future that would positively impact these issues as they affect predoctoral, allied, and advanced dental education, being always mindful of DEIB considerations (for full text of the subcommittee reports, see Appendices 1–3). As the ADEA Board of Directors develops the next ADEA Strategic Framework, the work and reports of the NTNC initiative will provide important direction as one source of information to inform the strategic direction of ADEA into its next century.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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