ADEA Trends in Dental Education 2024-25

Empower Tomorrow in Oral Health Education

ADEA | THE VOICE OF DENTAL EDUCATION

Access the interactive version with videos, charts and downloadable data at **ADEA.org/ADEATrends**

ADEA Trends in Dental Education 2024-25: Empower Tomorrow in Oral Health Education

Suggested Citation.
Istrate EC, Kimner S, Booker CL, West KP. ADEA Trends in Dental Education 2024-25: A New Beginning for Oral Health Education. Washington, DC: American Dental Education Association (ADEA); 2025.

For more information contact:
Emilia C. Istrate Ph.D., M.A.I.S., CAE
Senior Vice President of Policy and Education Research
Email: ADEAdata@adea.org

Acknowledgments. We are grateful to the members of the 2024-25 ADEA Policy and Research Advisory Committee (PRAC), Marsha Pyle, D.D.S., M.Ed., Senior Chief, Knowledge, Engagement and Development and Tom Quash, CAE, Chief Communication and Marketing Officer for sharing their insights regarding an earlier version of this report. We would also like to thank our colleagues in the Office of Educational Services who helped complete this project.

Photos courtesy of:
Cover: Virginia Commonwealth University School of Dentistry
Page 5: University of Minnesota School of Dentistry
Page 6, 7: University of Louisville School of Dentistry
Page 8: Virginia Commonwealth University School of Dentistry
Page 25: The Ohio State University College of Dentistry
Page 54: iStock, Techa Tungateja

Table of Contents

Table of Contents

Table of Contents

Foreword

I am very pleased to present this report on ADEA Trends in Dental Education 2024-25. I would like to thank the oral health education community for your participation in this valuable research. It is through your solid and generous commitment that we are able to analyze trends, identify influencers of change, and assess opportunities to improve the oral health education landscape.

There are several factors that can play a role in impacting our academic environment, including cultural shifts, economic circumstances, technological breakthroughs and curriculum interests. Through the findings of this report, we can determine how these and other factors have played a role in shaping the outlook of oral health education. As an example, you'll find a healthy boost in the interest of such disciplines as dental hygiene, endodontics, orthodontics and dentofacial orthopedics, expanding the focus of oral health education. There is also a steady trend of the increase in female faculty at U.S. dental schools.

And too, there is the recognition that AI will play a significant role in the oral health learning environment.

Some of the findings also prepare us for the challenges facing our industry. There is data that indicates we can expect fewer high school graduates in the near future. And the rising cost of tuition remains an immediate concern.

While these highlights are just a sampling of the comprehensive materials you will find in this report, I invite you to thoroughly review these findings to generate new thinking and strategy development. Recognized as "The Voice of Dental Education," ADEA is your leader in these ongoing efforts to gain insights, evaluate trends and promote oral health education. Together, we will lead the charge for innovation, advancements and success in oral health education.

Karen P. West

Karen P. West, D.M.D., M.P.H.
ADEA President and CEO

Executive Summary

Key findings of this edition include:

1. **Academic dentistry is expanding.** As of November 2024, there were 1,440 Commission on Dental Accreditation (CODA) accredited dental education programs, present in every U.S. state, the District of Columbia and Puerto Rico (Fig. 1.1). After the closing of seven dental schools between 1978 and 2001, the trend has been upward for predoctoral programs (Fig. 1.2). In the past 23 years, 21 dental schools were CODA accredited in the United States and Puerto Rico, nine between 2020 and fall 2024 (Fig. 1.3).

The number of accredited allied dental education programs was 585 in fall 2024, still lower than the peak of 2011, with some of the dental assisting programs letting their accreditation expire (Fig. 1.4). Accredited advanced dental education programs reached a high of 780 in fall 2024 (Fig. 1.5).

When it comes to school finances, both revenues and expenditures of U.S. dental schools expanded at about 3% annually on average between FY 2013 and FY 2023 (Fig. 1.6). Schools increasingly had to rely on student tuition and fees as all the other revenue sources declined for the past decade (Fig. 1.7). Patient care services revenue is one of the sources of funding that grew slowly. One reason is the larger share of Medicaid and/or CHIP in dental school clinics revenue than the national average(Fig. 1.8). On the expenditures side, expenses associated with patient care services were rising faster than the overall school expenditures(Fig. 1.9).

2. **There are more applicants, more applications and earlier decisions to pursue a career in dentistry than five years earlier.** Personal dental experience is the most influential factor for students to apply to predoctoral or allied dental programs (Fig. 2.1). And the decision to pursue a career as a dentist was occurring earlier, before going to college for more than half of the respondents to the 2024 ADEA U.S. Predoctoral Senior Student Survey (Fig. 2.2).

U.S. dental schools continued their mission to train and educate oral health professionals and provide oral health care through their clinics to local communities.

A lower cost of attendance and proximity to family and friends were the most frequently cited reasons by predoctoral students for choosing the school they were graduating from in 2024, similar with 2019 (Fig. 2.3).

Most types of oral health education programs saw increases in the number of applicants and/or applications. Predoctoral programs attracted 12% more applicants to start dental school in 2024 than five years before (Fig. 2.4). In terms of applications, advanced dental education programs recorded an 18% increase between 2018-19 and 2023-24, with a surge of interest in endodontics and orthodontics and dentofacial orthopedics (Fig. 2.5). Dental hygiene applications also soared over the past five years, a 23% increase, while dental assisting and dental laboratory technology continued their decline (Fig. 2.6).

3. The growth in the number of applicants and/or applications has not translated yet into more enrollees and graduates over the past five years. The rise of the number of applicants is encouraging for the years to come, but is not yet converting into a large enrollment increase across oral health education programs (Fig. 3.1). First-year enrollment and number of graduates actually declined between 2018-19 and 2023-24, with only predoctoral consistently on an upward trend among oral health education programs (Fig. 3.2). The 2024 entering class is the largest predoctoral cohort in 20 years (Fig. 3.3). There is more variety in terms of race and ethnicity among students, first-year or overall, and graduates in academic dentistry than five years before (Fig. 3.4, 3.5 and 3.6). By 2023-24, women represented the majority of students and graduates, at different rates across oral health education programs (Fig. 3.7). When it comes to funding an oral health degree, predoctoral students continue to use loans for two thirds of their cost, while allied students rely more on grants and scholarships and financial support from close ones (Fig. 3.8 and 3.9).

For predoctoral students graduating with debt, education debt remains on the rise, reaching $312.7 thousands by 2024 (Fig. 3.10). With a lower cost of attendance, less than half of allied students graduated with education debt in 2024 (Fig. 3.11). Working in private practice immediately upon graduation increased in popularity among predoctoral students over the past five years and is the top choice for more than two thirds of the graduating allied students in 2024 (Fig. 3.12).

The competition for a place in a U.S.-accredited advanced dental program is robust, with applications numbers growing in double digits between 2018-19 and 2023-24 and first-year enrollment dropping between those two years (Fig. 3.13). General dentistry recorded a significant decline in number of incoming matriculants in 2023-24 versus 20218-19, also reflected in the overall enrollment trends between the two years (Fig. 3.14 and 3.15).

4. **Dental schools recorded higher turnover among faculty and deans and greater numbers of female faculty between 2018-19 and 2023-24.**
Dental schools had more new faculty in 2022-23 than in 2018-19, mainly from other schools for full-time and private practice for part-time (Fig. 4.1). Related, leaving for other academic opportunities was cited more often by departing faculty in 2022-23 than four years before (Fig. 4.2). In terms of demographics, there were more female faculty in allied programs and dental schools and they were more likely to be under age 49 than male faculty (Fig. 4.3–4.6). The race and ethnicity figures for 2022-23 for dental school faculty are difficult to interpret, given that one in four faculty had unknown race and ethnicity and/or undisclosed legal status information (Fig. 4.7). No major changes were recorded in terms of race and ethnicity among allied faculty (Fig. 4.8).

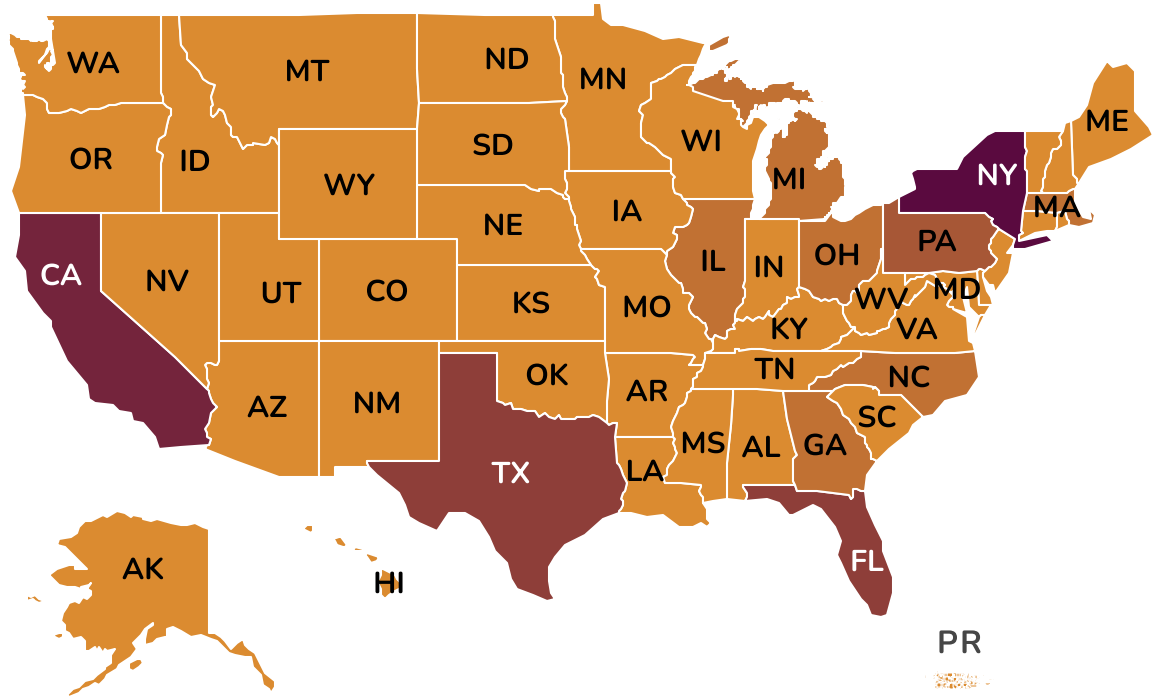
Dental school deans are also seeing changes in the United States and differences with their Canadian counterparts. The percentage of women among the U.S. deans nearly tripled between 2002 and 2024, while Canada has gender parity among deans (Fig. 4.9). With new schools receiving accreditation between 2021 and November 2024, more U.S. deans had a primary discipline in General-Operative-Restorative or General Practice/Advanced Education in General Dentistry/Hospital Dentistry in 2024 than in 2021 (Fig. 4.10). The shortening of the tenure as a dean at U.S. schools points towards the turnover of deans at existing schools; by 2024, a U.S. dean had been in their position 3.3 years, less than 5 years in 2021 and more than the 2.7 years tenure of Canadian deans (Fig. 4.11). U.S. deans are more likely to have a predoctoral dental degree than Canadian deans, but less likely to have a doctoral degree such as Ph.D., M.D., Ed.D., DSc.D. and J.D. or be dean at the school where they completed their dental education (Fig. 4.12).

5. The rapid development and deployment of Artificial Intelligence (A.I.) adds to the economic and policy environment uncertainty facing dental education.
Before the change in administration, the U.S. Congressional Budget Office (CBO) predicted inflation to fall in 2025 and 2026, and subsequently the U.S. Federal Reserve to reduce interest rates through 2026 (Fig. 5.1). Dental schools were already under the strain of insufficient government funding relative to their expenditures, as seen over the past decade (Fig. 5.2). In terms of population, CBO predicted 13 million fewer people aged 24 years and younger between 2025 and 2055 (Fig. 5.3). The demographic challenge will translate into fewer high school graduates between 2026 and 2031, which brings increasing uncertainty to the applicant pool starting in early 2030s (Fig. 5.4). Asked in 2023, higher education and higher education faculty and staff thought that AI would help reduce their workloads and be used for learning analytics by 2026, while contributing to more academic dishonesty (Fig. 5.5).

Section 1. Dental Education Programs

The Past, The Present and The Future

Fig. 1.1 The Landscape of Dental Education, November 2024



1,440 Commission on Dental Education (CODA) accredited dental education programs in the 50 U.S. states, DC and Puerto Rico in fall 2024:

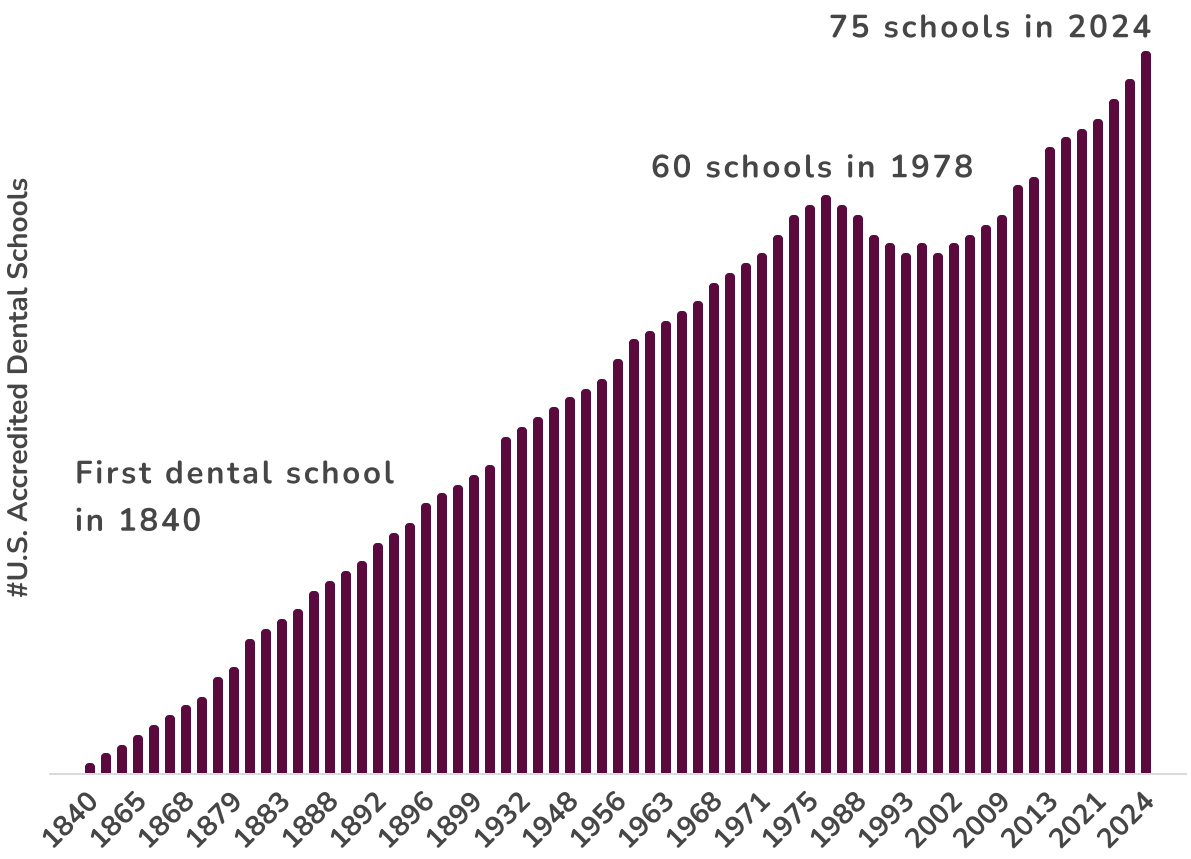
- 75 predoctoral dental programs in 37 states, DC and PR;
- 780 advanced dental education programs in 45 states, DC and PR; and
- 585 allied dental education programs in 50 states, DC and PR.

This includes:

- 342 dental hygiene education programs.
- 227 dental assisting education programs.
- 13 dental laboratory technology programs.
- 3 dental therapy programs.

Sources: ADEA analysis of Commission on Dental Accreditation data, Search for Dental Programs, as of November 2024.

Fig. 1.2 Number of U.S. Predoctoral Dental Education Programs/Dental Schools, 1840-2024



75 accredited dental schools in the U.S. states, DC and Puerto Rico in fall 2024.

Predoctoral Dental Degrees Awarded:
- D.M.D.
- D.D.S.

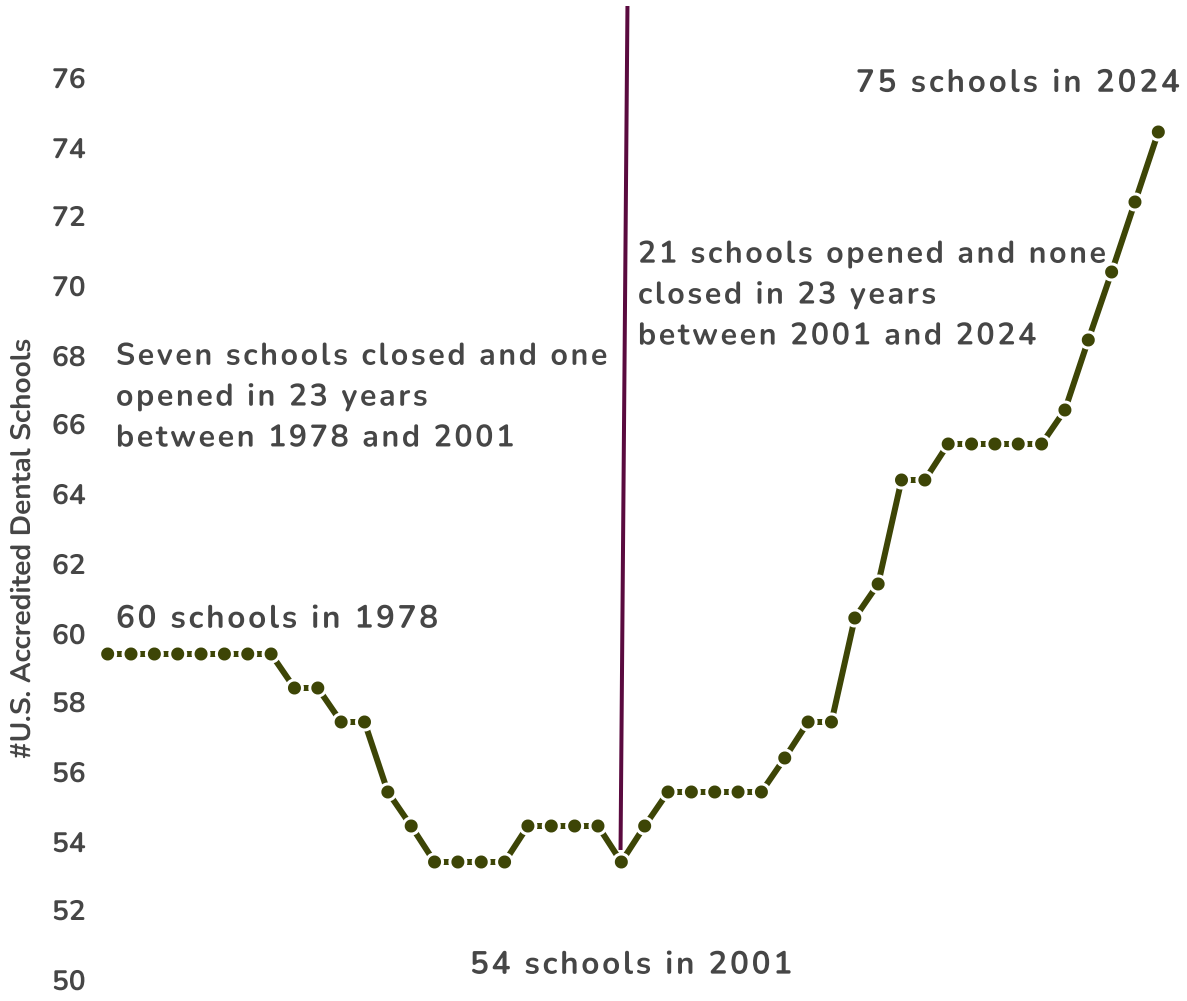
Time to Completion:
- 72 programs with 4 years of education;
- One school with a first class of 3.5 years;
- Two programs with 3 years of education.

The oldest dental school in the world:

The Baltimore College of Dental Surgery, established in 1840, was the first dental school in the United States and the world.

Sources: The analysis shows only the years with a changing number of dental schools. ADEA analysis of founding year, first accreditation year for schools accredited since late 1990s and closing year of U.S. dental schools. Stats based of Commission on Dental Accreditation data, Search for Dental Programs, as of November 2024. ADA, Health Policy Institute, Commission on Dental Accreditation Dental Education Program Enrollment and Graduates Report, 2022-23 and 2023-24; ADA, Health Policy Institute, Commission on Dental Accreditation Survey of Dental Education Series, 2021-22; and school websites for the duration of predoctoral programs for Kansas City University College of Dental Medicine, Lincoln Memorial University College of Dental Medicine, and Ponce Health Sciences University School of Dental Medicine.

Fig. 1.3 Closed and New U.S. Dental Schools, 1978-2024

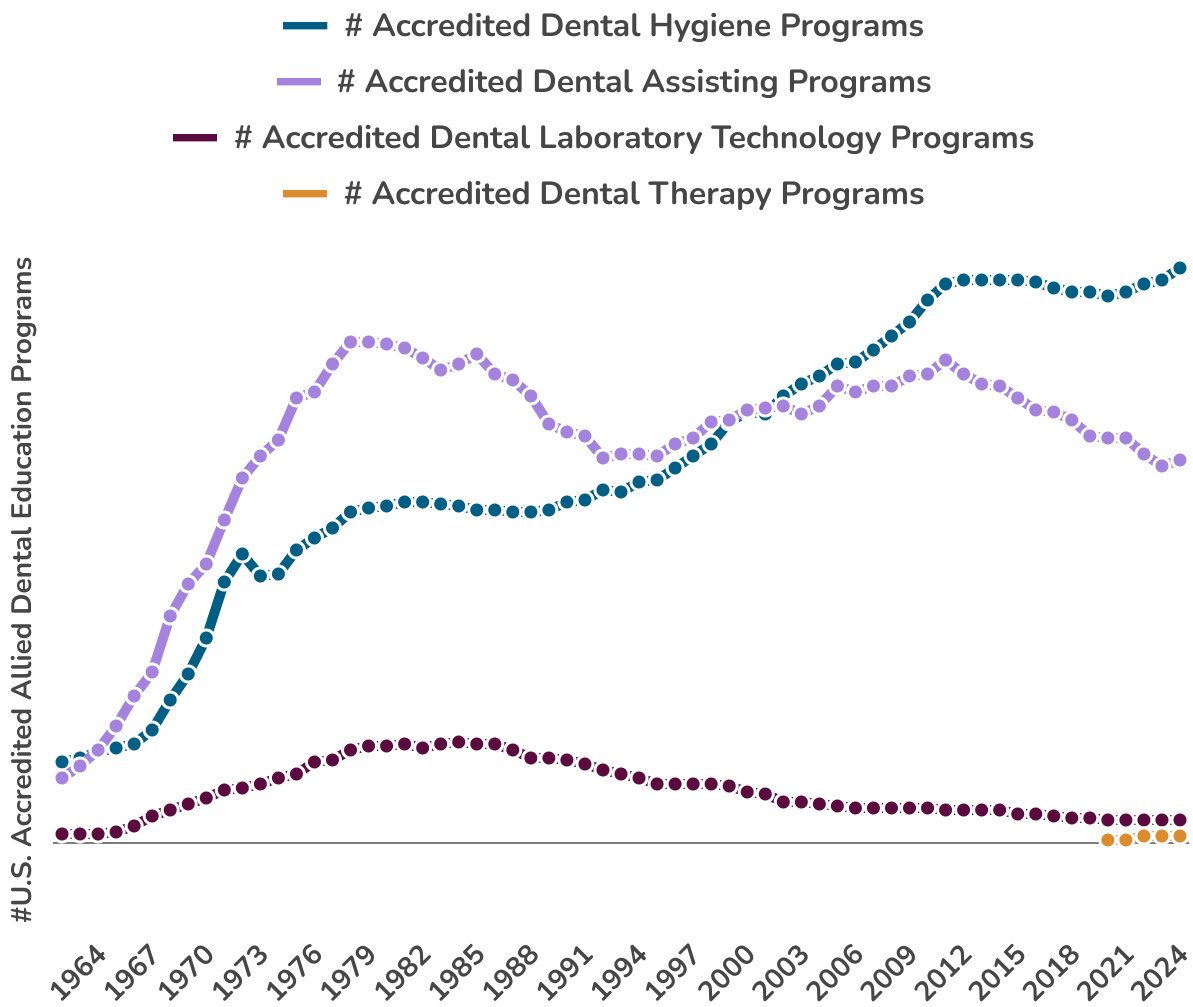


Sources: ADEA analysis of first accreditation year of U.S. dental schools. Based of Commission on Dental Accreditation (CODA) data, Search for Dental Programs, 2001-2024.

Of the 21 schools that opened in the U.S. states, DC and Puerto Rico between 2001 and 2024, nine received initial CODA accreditation between 2020 and fall 2024:

- 2024: Northeast Ohio Medical University Bitonte College of Dentistry
- 2024: Pacific Northwest University of Health Sciences School of Dental Medicine
- 2023: High Point University Workman School of Dental Medicine
- 2023: Universidad Ana G. Méndez - Gurabo, School of Dental Medicine
- 2022: Lincoln Memorial University College of Dental Medicine
- 2022: Ponce Health Sciences University School of Dental Medicine
- 2021: Kansas City University College of Dental Medicine
- 2021: California Northstate University College of Dental Medicine
- 2020: Texas Tech University Health Sciences Center El Paso Woody L. Hunt School of Dental Medicine

Fig. 1.4 Number of U.S. Accredited Allied Dental Education Programs, 1962-2024



585 accredited allied dental programs in the U.S. states, DC and Puerto Rico in fall 2024:

- 342 Dental Hygiene
- 227 Dental Assisting
- 13 Dental Laboratory Technology
- 3 Dental Therapy

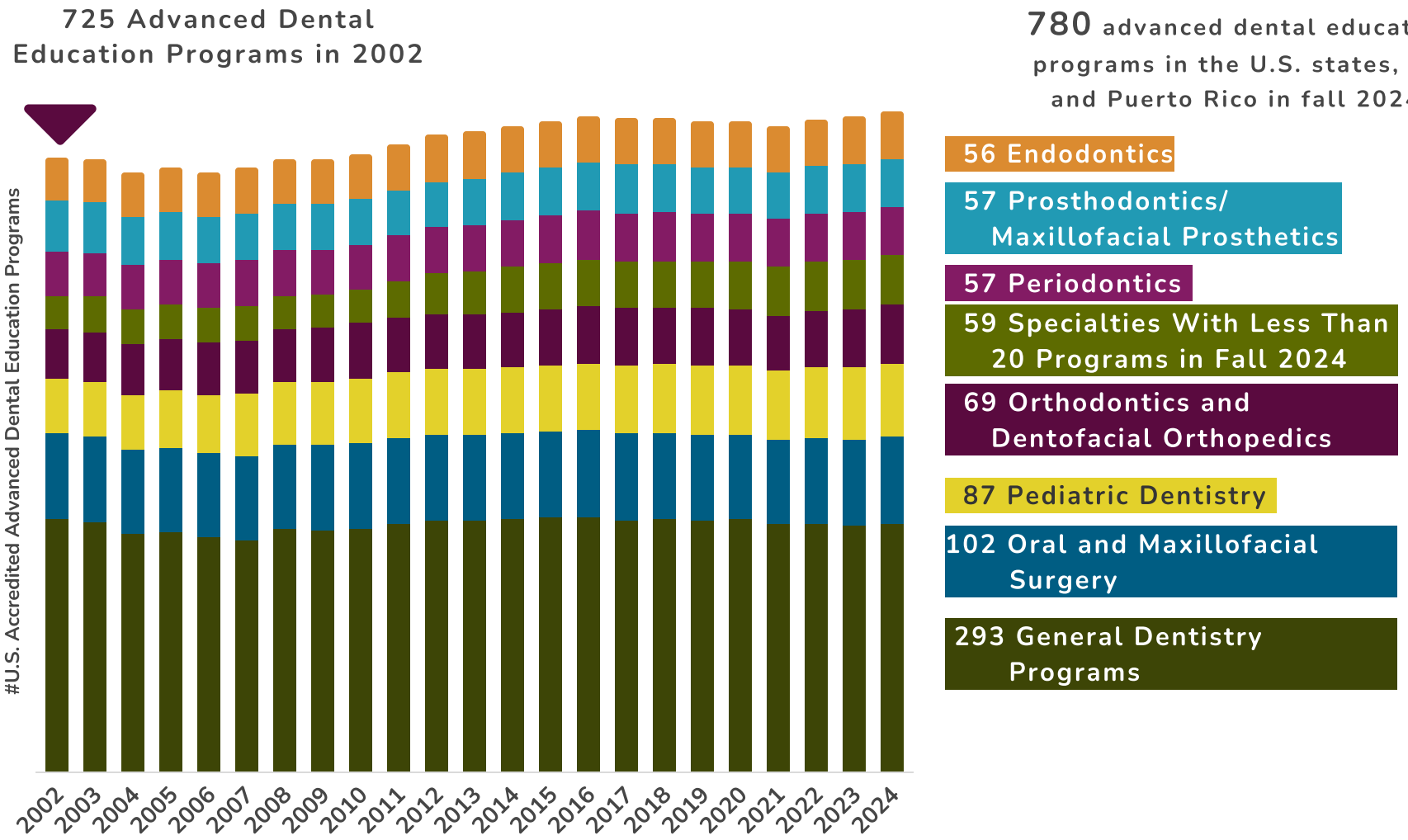
Allied Dental Degrees Awarded:

- Associate Degree
- Diploma
- Certificate
- Baccalaureate degree
- Baccalaureate degree in Dental Hygiene
- Bachelor of Science in Dental Technology

Time to completion:
10 to 180 weeks

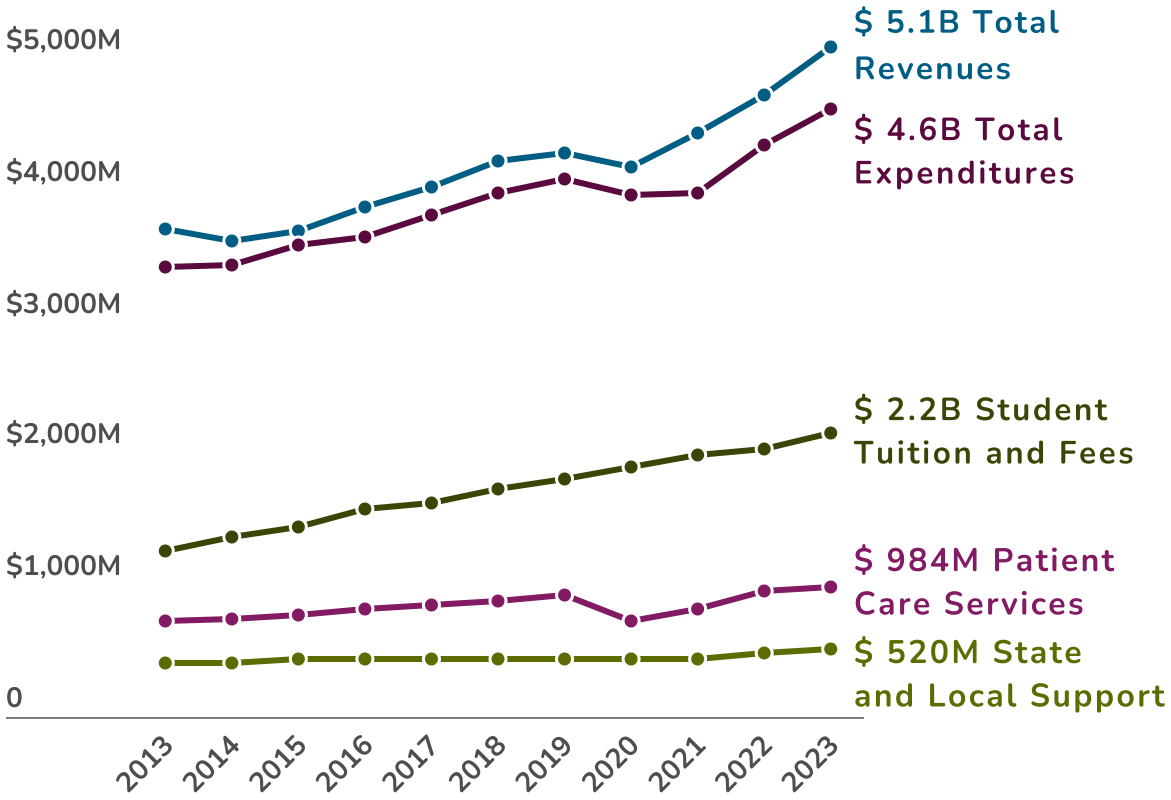
Sources: ADEA analysis ADA, Health Policy Institute, Commission on Dental Accreditation, Survey of Allied Dental Education, 1962-63 to 2010-11; 2011-12 to 2021-22; Dental Education Program Enrollment and Graduates Report, 2022-23. 2024 data are based on Commission on Dental Accreditation (CODA) data, Search for Dental Programs, as of November 2024.

Fig. 1.5 Number of U.S. Accredited Advanced Dental Education Programs, 2002-2024



Notes: General dentistry includes general practice residency, advanced education in general dentistry, dental anesthesiology, oral medicine, and orofacial pain. Specialties with less than 20 programs in November 2024 include dental public health, oral and maxillofacial pathology, oral and maxillofacial radiology, clinical fellowship to oral and maxillofacial surgery, clinical fellowship in orthodontics and orthodontics/periodontics,
Source: 2024 data are based on Commission on Dental Accreditation (CODA) data, Search for Dental Programs, as of November 2024. ADEA analysis of ADA, Health Policy Institute, Commission on Dental Accreditation Survey of Advanced Dental Education, 2011-12 to 2022-23.

Fig. 1.6 Main Revenue Sources and Total Expenditures of U.S. Dental Schools, Current Dollars, FY 2013 to FY 2023

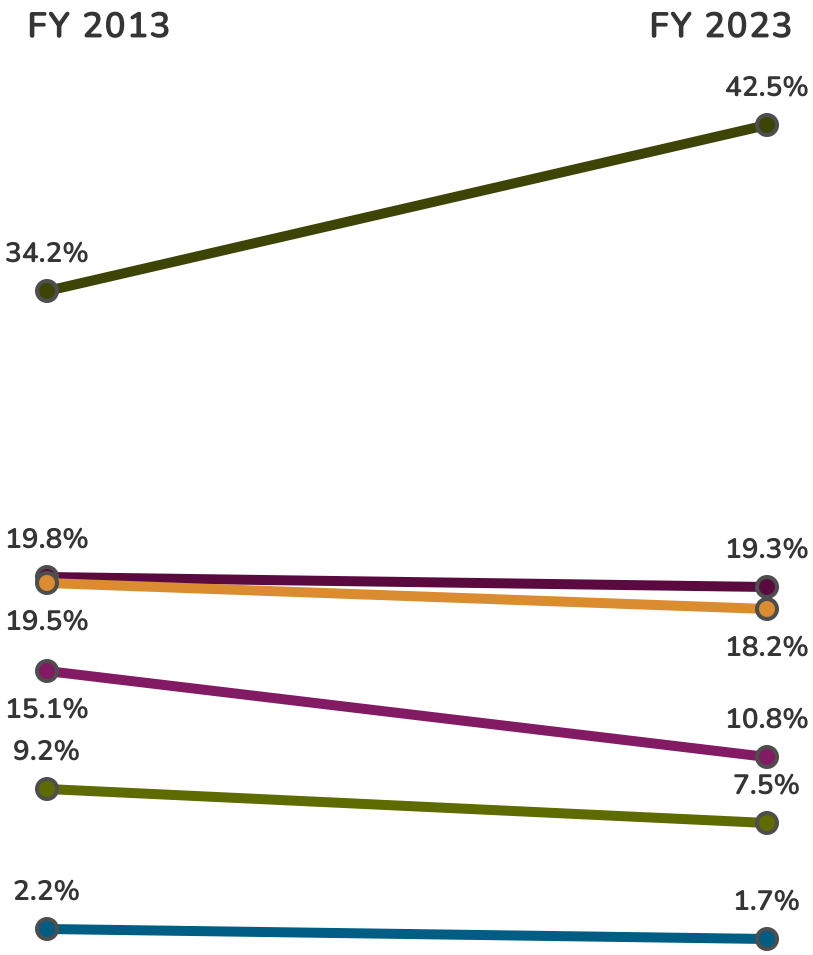


In FY 2023:

- Dental schools were fiscally solvent, with the margin between revenues and expenditures at $468.5 million. These are funds that schools use to build facilities and fund research and/or scholarships and financial aid.
- Tuition and fees revenues passed $2.1 billion, growing at a slower rate than overall dental school revenues.
- After a major drop in 2020, patient care services revenues reached the highest level for the past decade.

Notes: Revenue categories and total expenditures are from the the Group III-Financial Management section of the ADA Survey of Dental Education, as collected by the ADA Health Policy Institute (HPI), on behalf of the Commission on Dental Accreditation (CODA). The audit of colleges and universities prepared by the American Institute of Certified Public Accountants is the basic reference manual for the construction and interpretation of the ADA survey.
Sources: ADEA analysis of American Dental Association, Health Policy Institute, 2023-24 Survey of Dental Education (Group III).

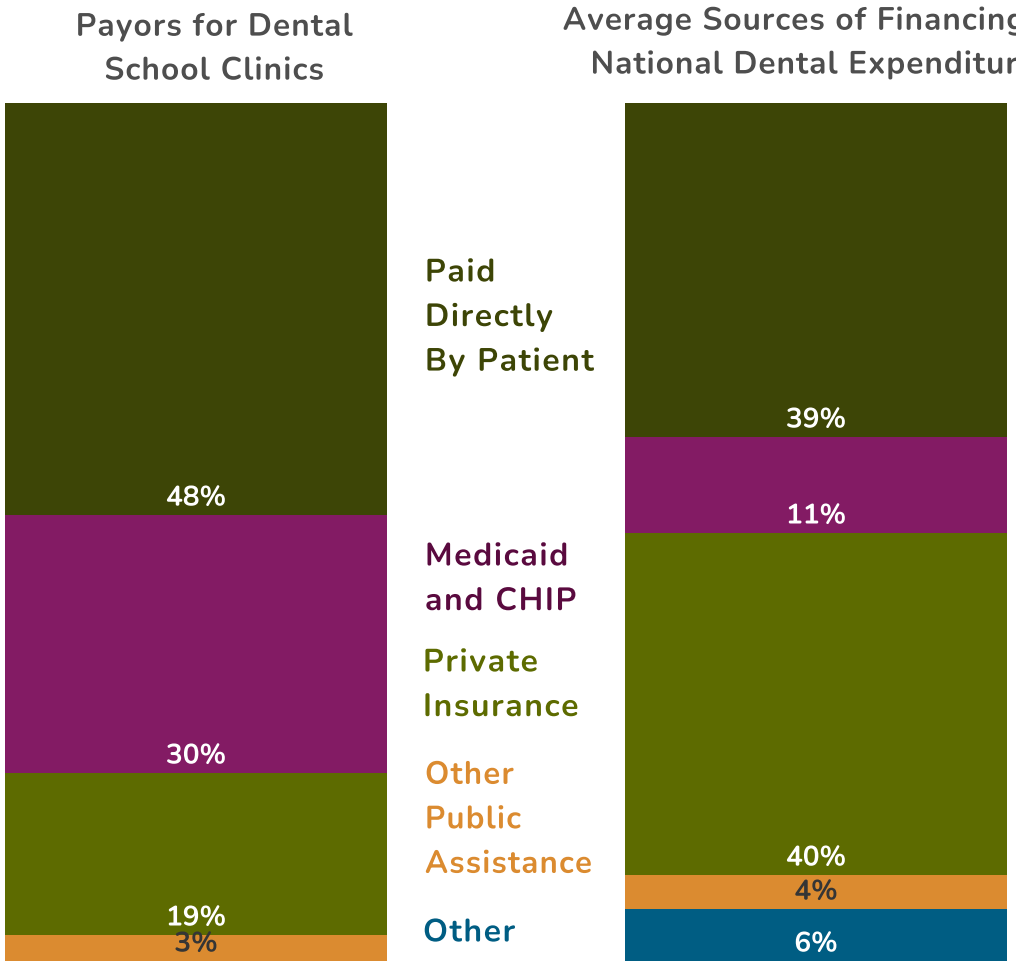
Fig. 1.7 Revenue Sources of U.S. Dental Schools, % of Total Revenue, FY 2013 and FY 2023



- Tuition and fees made a greater share in dental school budgets, compensating for the slower growth of the other sources of revenues.
- Parent university, federal, state and local governments support grew at a slower pace than overall dental school budgets between FY 2013 and FY 2023, resulting in a smaller financial contribution to dental schools' bottom line.
- Patient care services have become a smaller source of revenue for dental schools, but the decline has been limited.

Notes: Percentages might not total to 100% due to rounding. "Government Financial Support" includes revenue from state and local governments and federal, such as support for education, Graduate Medical Education, direct support for research and training and a share of the indirect cost of research and training grants retained by the dental schools proportional with the share of the federal direct support of the entire direct cost of research and training funding. "Other Revenue Sources" include the following revenue sources: continuing education revenue, auxiliary enterprises revenue, gift revenue, endowment earnings, financial aid revenue and miscellaneous. Revenue source categories are ADEA created based on the data from the ADA Survey of Dental Education, as collected by by the ADA Health Policy Institute (HPI), on behalf of the Commission on Dental Accreditation (CODA).
Sources: ADEA analysis of American Dental Association, Health Policy Institute, 2013-14 and 2023-24 Surveys of Dental Education (Group III).

Fig. 1.8 Main Payors for Oral Health Care Patient Care Services: Percentage of Revenue for Dental School Clinics and for U.S. National Dental Expenditures, FY 2021



- The Medicaid program significantly affects the levels of dental schools' patient revenue.

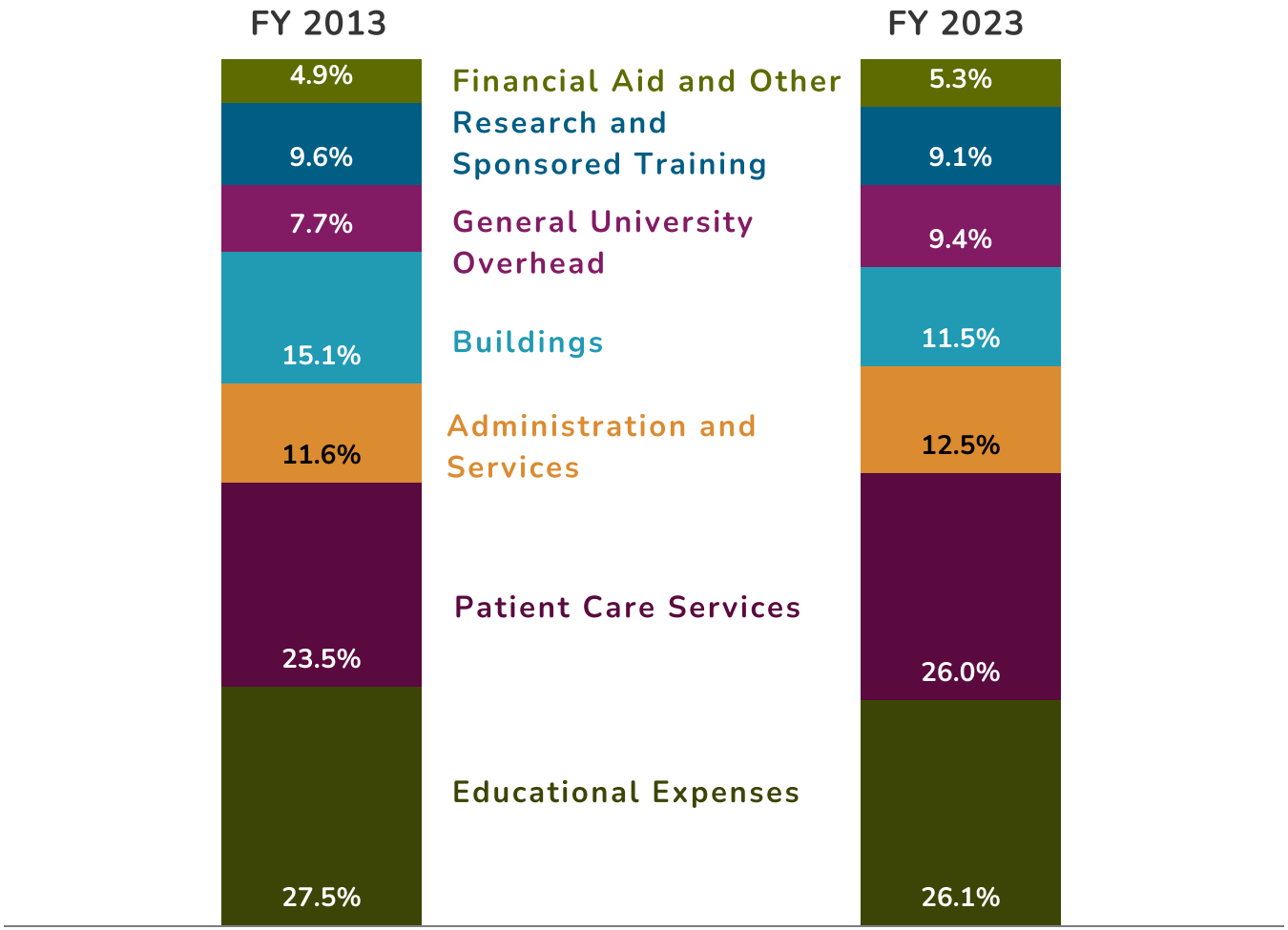
- Medicaid and/or CHIP represented about a third of the revenue at dental school clinics, much higher than their representation in national dental expenditures, according to a 2024 ADEA study.

- The low Medicaid reimbursement rates contributed to declining patient services as a revenue source for dental schools. According to an ADA analysis, the 2024 national rate of Medicaid fee-for-service reimbursement as a percentage of average dentist charges was 39.2% for child dental care services and 29.9% for adult dental care services,

Notes: The "Other" category in the national dental expenditures includes the Paycheck Protection Program (PPP) and the Provider Relief Fund (PRF). The "Other Public Assistance" category for national dental expenditures includes Medicare, U.S. Department of Defense and U.S. Department of Veterans Affairs. For dental schools, the "Other Public Assistance" category refers to the government programs, at any level of government, that provide public dental insurance coverage, besides Medicaid/CHIP.

Sources: Istrate EC, Singh, P, Lawton KB, Gül G, West KP. Dental Schools in the Community: Expanding Access to Oral Health Care Services. American Dental Education Association (ADEA) Policy Research Series, Issue 6. February 2024. For the Medicaid reimbursement rates: American Dental Association, Medicaid Fee-For-Service Reimbursement as a Percentage of Dentist Charges and Private Dental Insurance Reimbursement, 2024, October 2024.

Fig. 1.9 Types of Expenditures of U.S. Dental Schools, % of Total Expenditures, FY 2013 and FY 2023



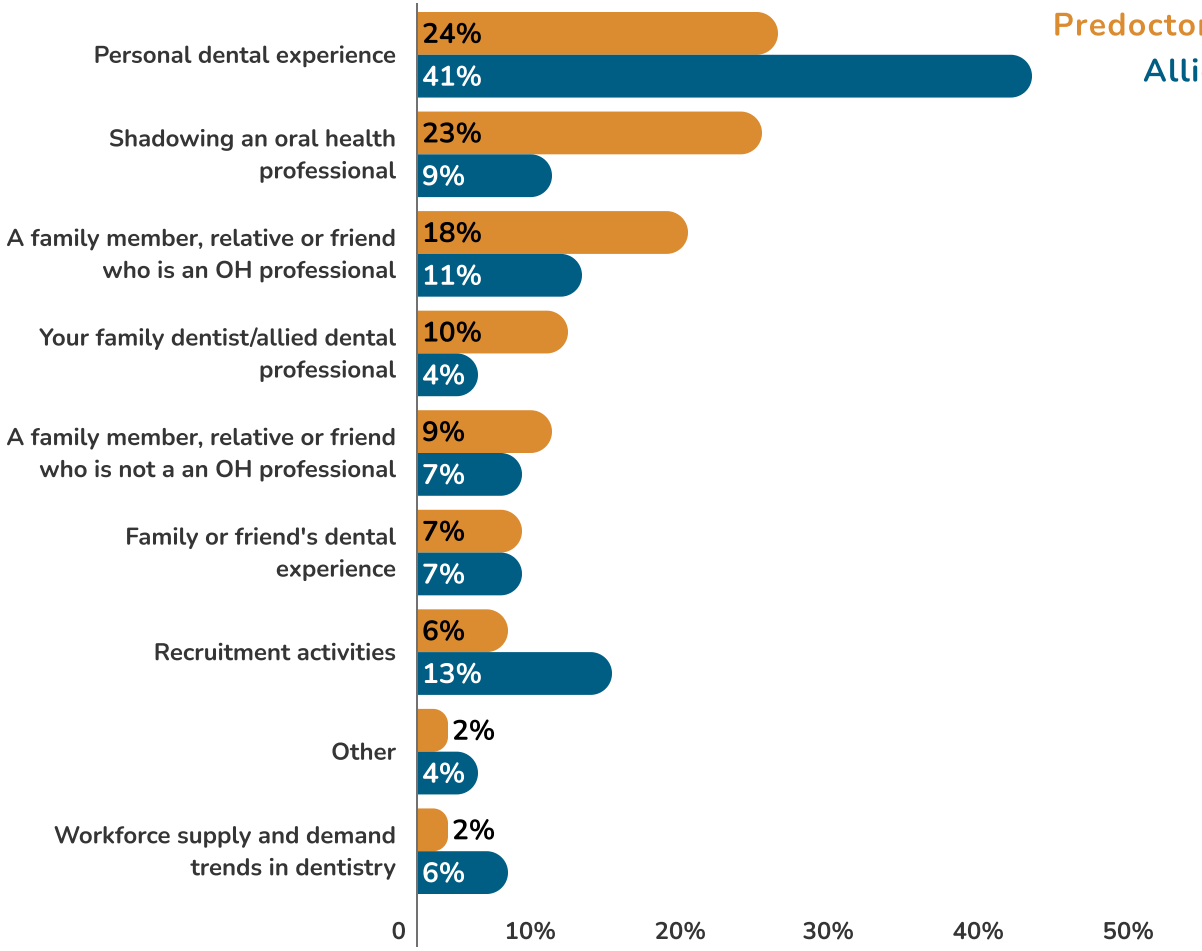
- The largest dental school expenses, those associated with educational services, slowed down relative to overall dental school expenditures between FY 2013 and FY 2023, as shown by their decline in the share of total expenses.
- Expenditures associated with buildings underwent a similar downward trend, but more pronounced.
- Dental schools spent at a higher rate on patient care than overall expenditures, with this category recording the highest increase in their proportion among major expenditures.

Notes: Percentages might not total to 100% due to rounding."Administration and services" include the following functional categories: dental school administration, continuing education, computer services, library and learning resources. "Buildings" represents major capital expenditures and expenses related to building maintenance and renovation (physical plant),
Sources: ADEA analysis of American Dental Association, Health Policy Institute, 2013-14 and 2023-24 Surveys of Dental Education (Group III).

Section 2.
Oral Health Education Applicants

The Pathways Into An Oral Health Profession

Fig. 2.1 Influences in Pursuing a Career as an Oral Health Professional, 2023-24



- Personal dental experience was the most frequently cited top influence on pursuing a career in dentistry or in an allied oral health profession in 2024. It mattered more to graduating allied students than predoctoral students.

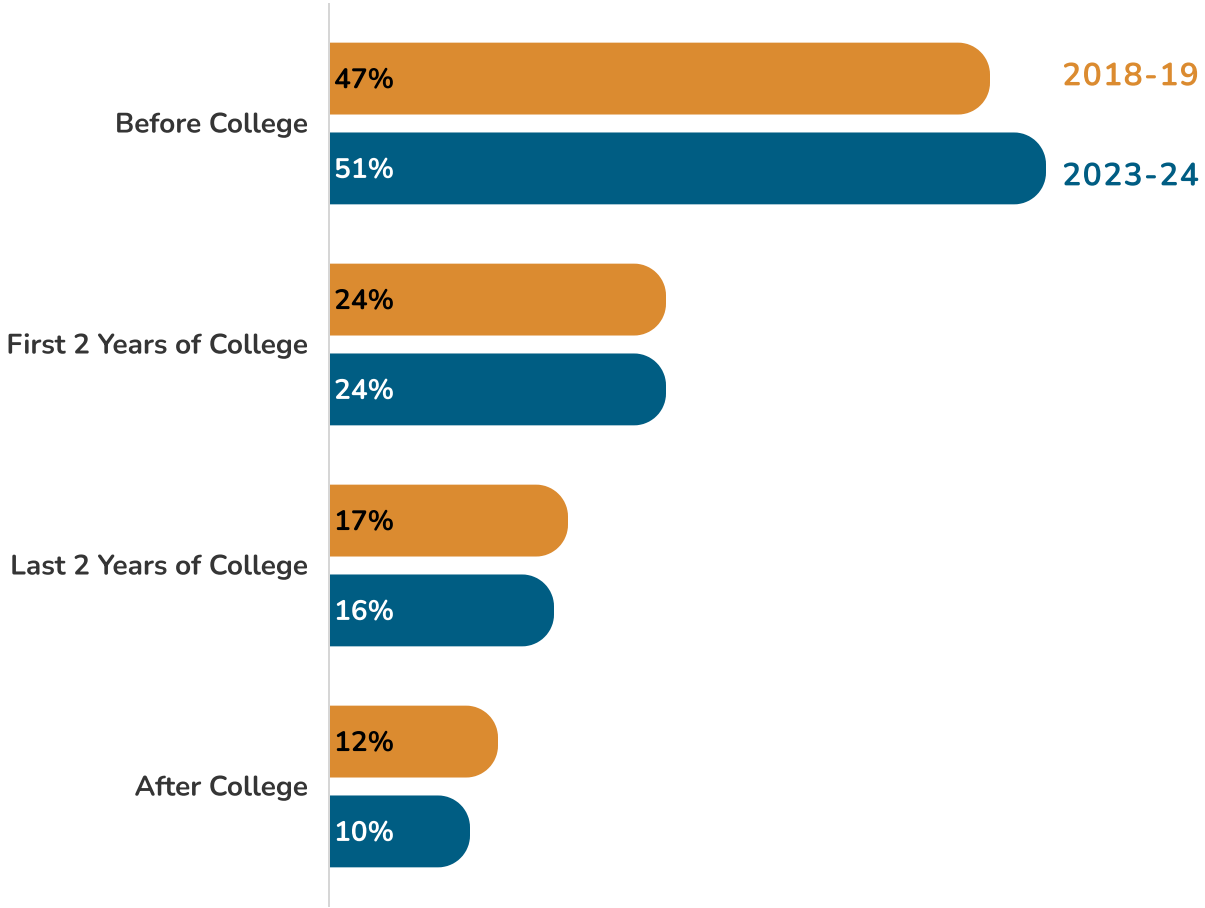
- Shadowing a dentist was the second most reported top reason by predoctoral students, while shadowing an allied oral health professional was only the fourth most important for graduating allied students.

- Recruitment activities were mentioned much more often by allied than predoctoral students as an important factor in the decision to pursue the oral health degree of their choice.

Notes: Percentages might not total to 100% due to rounding. "Oral health professional" refers to the type of oral health profession that the graduating student is pursuing. For example, for predoctoral dental students is a dentist. "Recruitment activities" include "websites on careers in dentistry", "high school or college counselor", "a visit to the type of oral health dental program that the graduating student ultimately pursued", "a career day school visit by an oral health professional whose profession the graduating student followed", "specific recruitment by an oral health dental program that the graduating student ultimately pursued", and "opportunity to participate in a summer enrichment program." The number of respondents to this question for the predoctoral dental students was 3,252 and for allied was 2,663.

Sources: ADEA Analysis of the Results from the ADEA 2024 Survey of U.S. Dental School Seniors, December 2024. Singh P, Stolberg R, Istrate EC, Booker CL, West KP. ADEA U.S. Allied Dental Graduating Student Survey Tables Report, 2024. Washington, DC: American Dental Education Association, January 2025.

Fig. 2.2 Timing of the Decision to Pursue a Career as a Dentist, 2018-19 and 2023-24



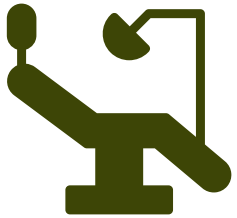
- An earlier decision to pursue a career in dentistry is one of the changes in the 2024 students' experience before dental school relative to their 2019 colleagues, as stated in the ADEA Predoctoral Senior Survey.

- Predoctoral dental students stated an increasingly earlier timing for their decision to pursue a career in dentistry. By 2024, the majority of predoctoral graduating students responding to the ADEA Predoctoral Senior Survey decided to become a dentist before going to college.

- Three quarters of the 2024 graduating predoctoral students stated they determined going into dental school by the end of their sophomore year of college.

Notes: Percentages might not total to 100% due to rounding. The number of respondents to this question was 2,879 total and 3,263 total in 2024.
Sources: Istrate, EC, Samanta, A., Booker, CL, West, KP. Dentists of Tomorrow 2024: An Analysis of the Results from the ADEA 2024 Survey of U.S. Dental School Seniors. American Dental Education Association (ADEA) Education Research Series. Issue 7, December 2024.

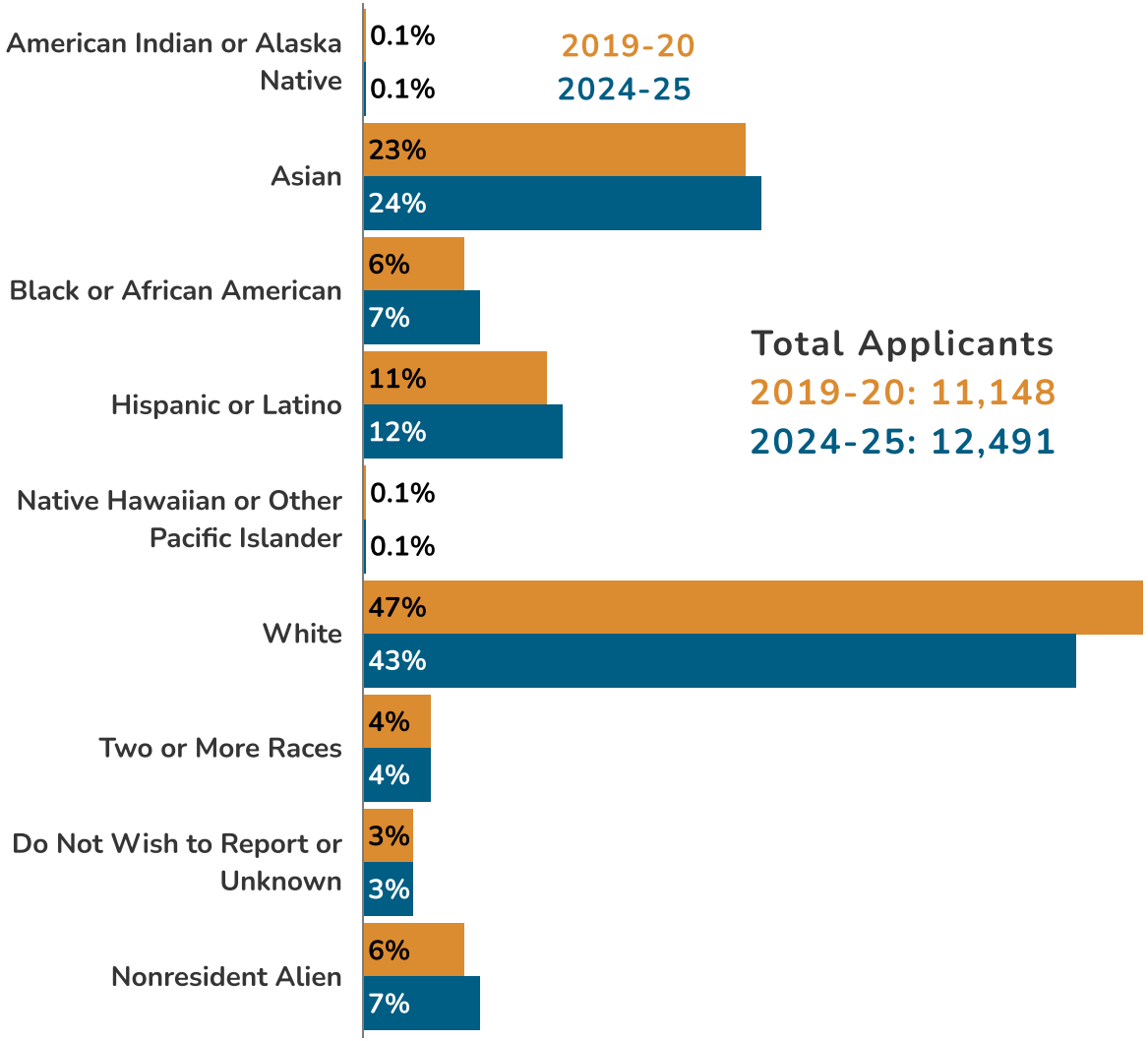
Fig. 2.3. Top Five Reasons for Choosing a Dental School for a Predoctoral Student, 2018-19 and 2023-24

Less expensive than other schools (e.g., due to in-state tuition, financial aid and others)	Proximity to family/friends	The only school that offered me a place	Academic reputation	Specific opportunities (such as clinical procedures performed or the chance to work with specific technologies or faculty)
				
Rank 3, 2019	Rank 1, 2019	Rank 4, 2019	Rank 2, 2019	Rank 6, 2019
Rank 1, 2024	Rank 2, 2024	Rank 3, 2024	Rank 4, 2024	Rank 5, 2024

Notes: The number of respondents to this question was 3,073 in 2019 and 3,338 in 2024.

Sources: Istrate, EC, Samanta, A., Booker, CL, West, KP. Dentists of Tomorrow 2024: An Analysis of the Results from the ADEA 2024 Survey of U.S. Dental School Seniors. American Dental Education Association (ADEA) Education Research Series. Issue 7, December 2024.

Fig. 2.4. Predoctoral Dental Applicants by Race and Ethnicity, 2019-20 to 2024-25

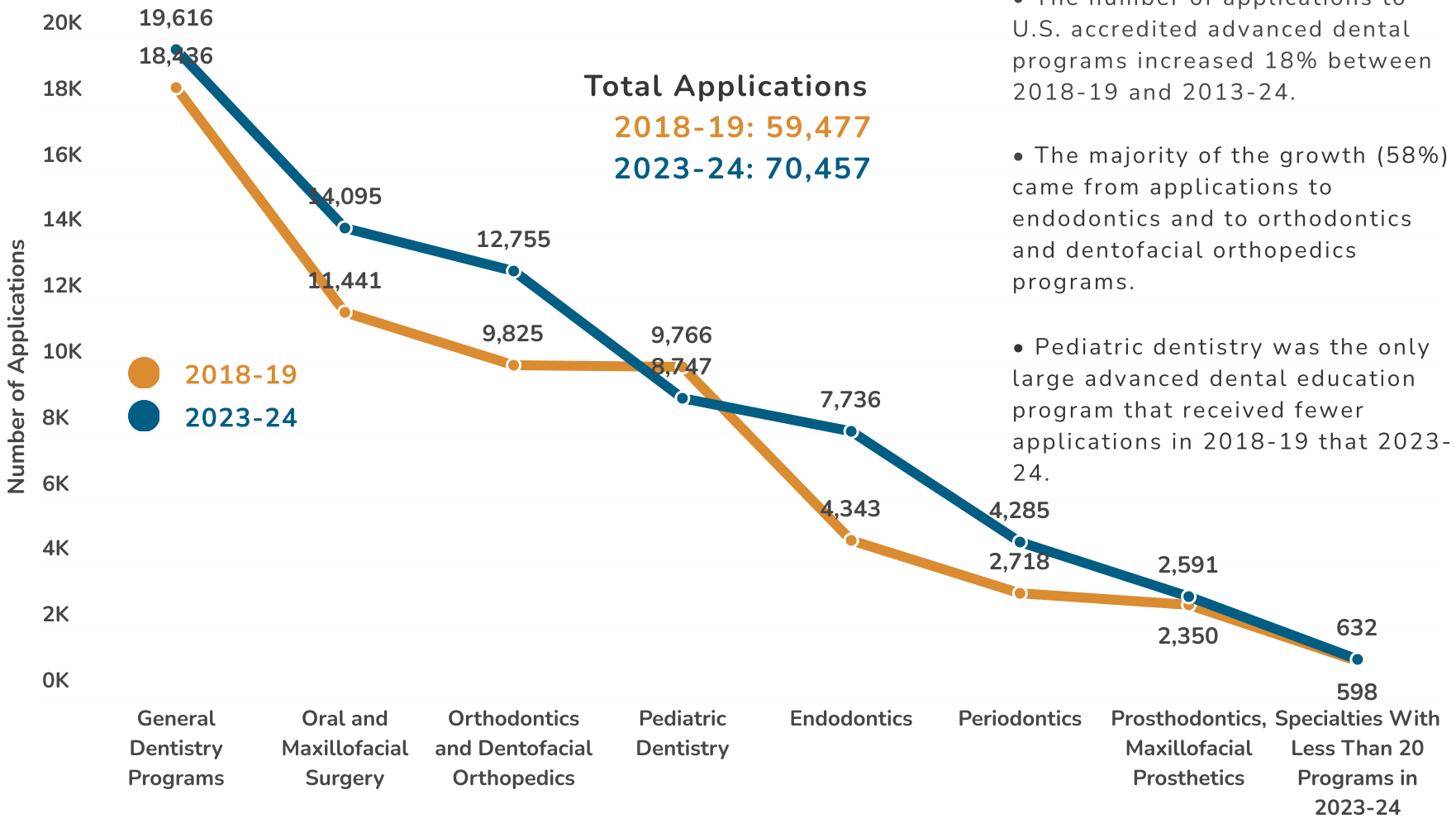


- The growth rate of the number of applicants to U.S. accredited predoctoral programs reached double digits (12%) between 2019 and 2024.
- Asian, Hispanic or Latino, Black and African American and foreign students aplied in larger numbers to the 2024 Entering Class than in 2019.
- While still the largest group of applicants, white students applied to predoctoral dental programs at a lower rate in 2024 than in 2019.

Notes: ADEA adheres to the current U.S. Department of Education guidelines for reporting race and ethnicity data for postsecondary education institutions.

Source: Singh P, Lawton KB, Istrate EC, Booker CL, West KP. U.S. Dental School Applicants and Enrollees, 2024 Entering Class. Washington, DC: American Dental Education Association, February 2025.

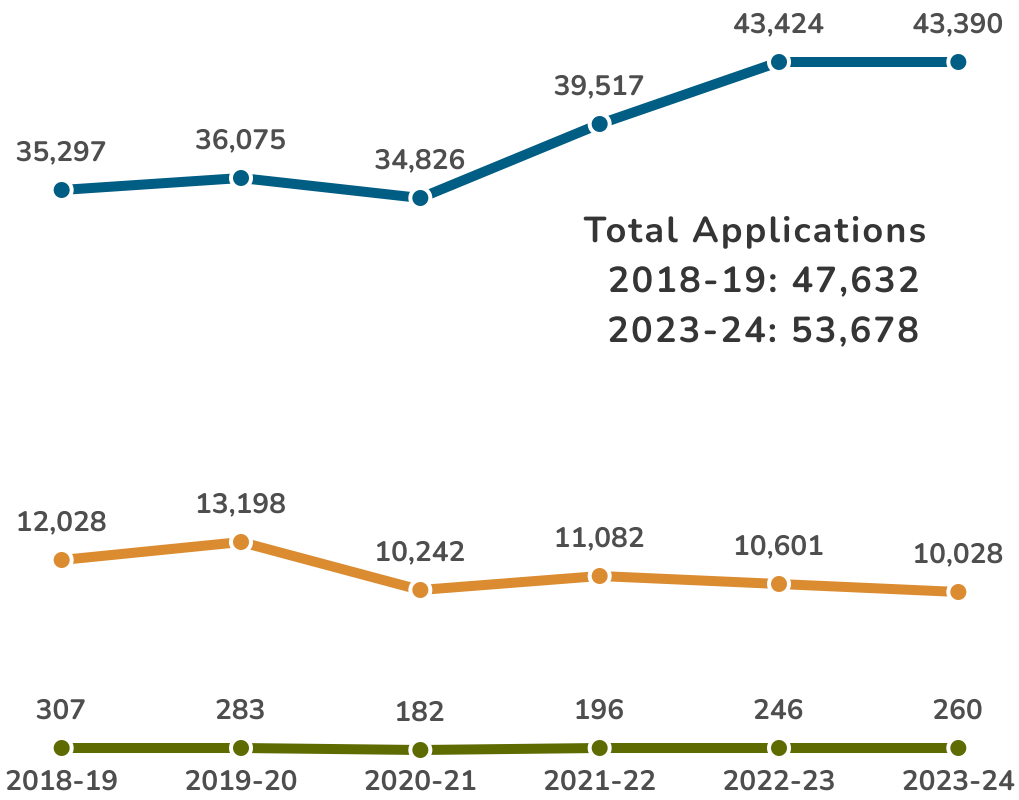
Fig. 2.5. Number of Applications to Accredited Advanced Dental Education Programs, 2018-19 and 2023-24



- The number of applications to U.S. accredited advanced dental programs increased 18% between 2018-19 and 2013-24.
- The majority of the growth (58%) came from applications to endodontics and to orthodontics and dentofacial orthopedics programs.
- Pediatric dentistry was the only large advanced dental education program that received fewer applications in 2018-19 that 2023-24.

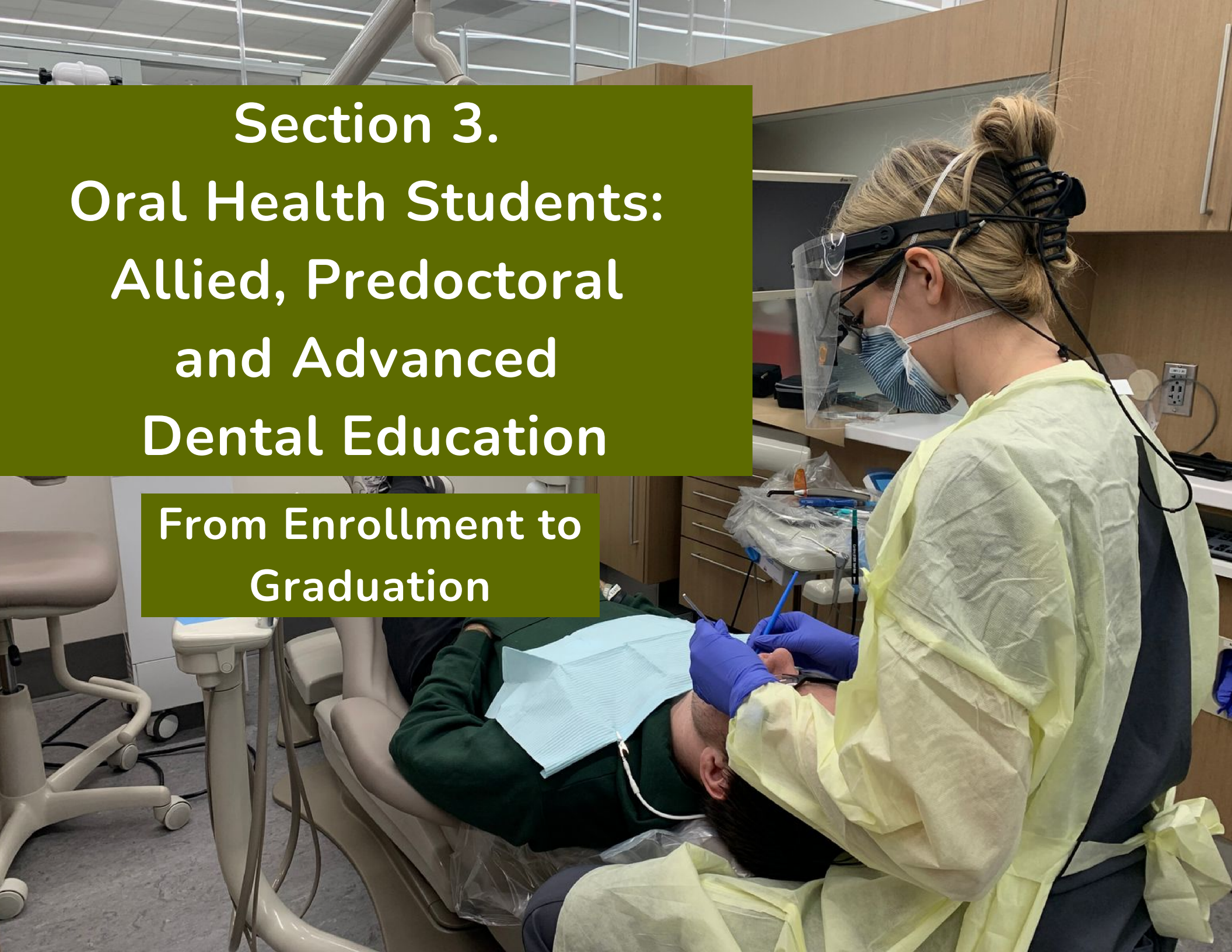
Notes: General dentistry includes general practice residency, advanced education in general dentistry, dental anesthesiology, oral medicine, and orofacial pain. Specialties with less than 20 programs in 2023-24 include dental public health, oral and maxillofacial pathology, oral and maxillofacial radiology, clinical fellowship to oral and maxillofacial surgery, clinical fellowship in orthodontics and orthodontics/periodontics,
Source: ADEA analysis of ADA, Health Policy Institute, Commission on Dental Accreditation Survey of Advanced Dental Education, 2011-12 and 2023-24.

Fig. 2.6. Number of Applications to Accredited Allied Dental Education Programs, 2018-19 and 2023-24



- The number of applications to U.S. accredited allied dental programs increased 13% between 2018-19 and 2013-24.
- The growth was generated from applicants to endodontics and to orthodontics and dentofacial orthopedics programs.
- Dental assisting programs had a volatile trajectory over the past five years, with a pronounced downward trend in the last three.
- Dental laboratory technology continued their downward slide in terms of applicants.

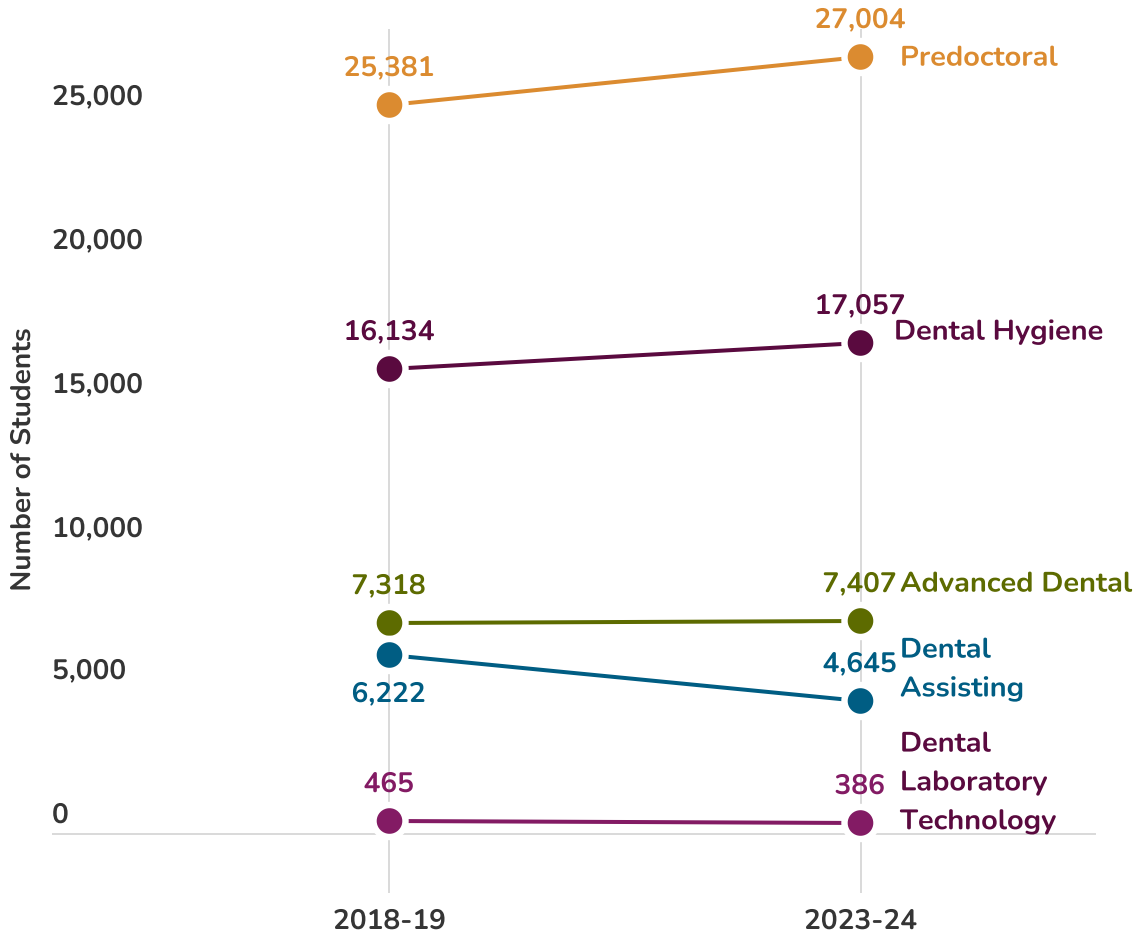
Notes: Percentages may not total 100% because of rounding. These figures reflect only the accredited allied dental program in the specified year. Three dental therapy programs were accredited as of November 2024.
Sources: ADEA Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Education, Survey of Advanced Dental Education, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2018-19 to 2023-24.



Section 3.
Oral Health Students: Allied, Predoctoral and Advanced Dental Education

From Enrollment to Graduation

Fig. 3.1 Total Enrollment in Oral Health Education, 2018-19 and 2023-24

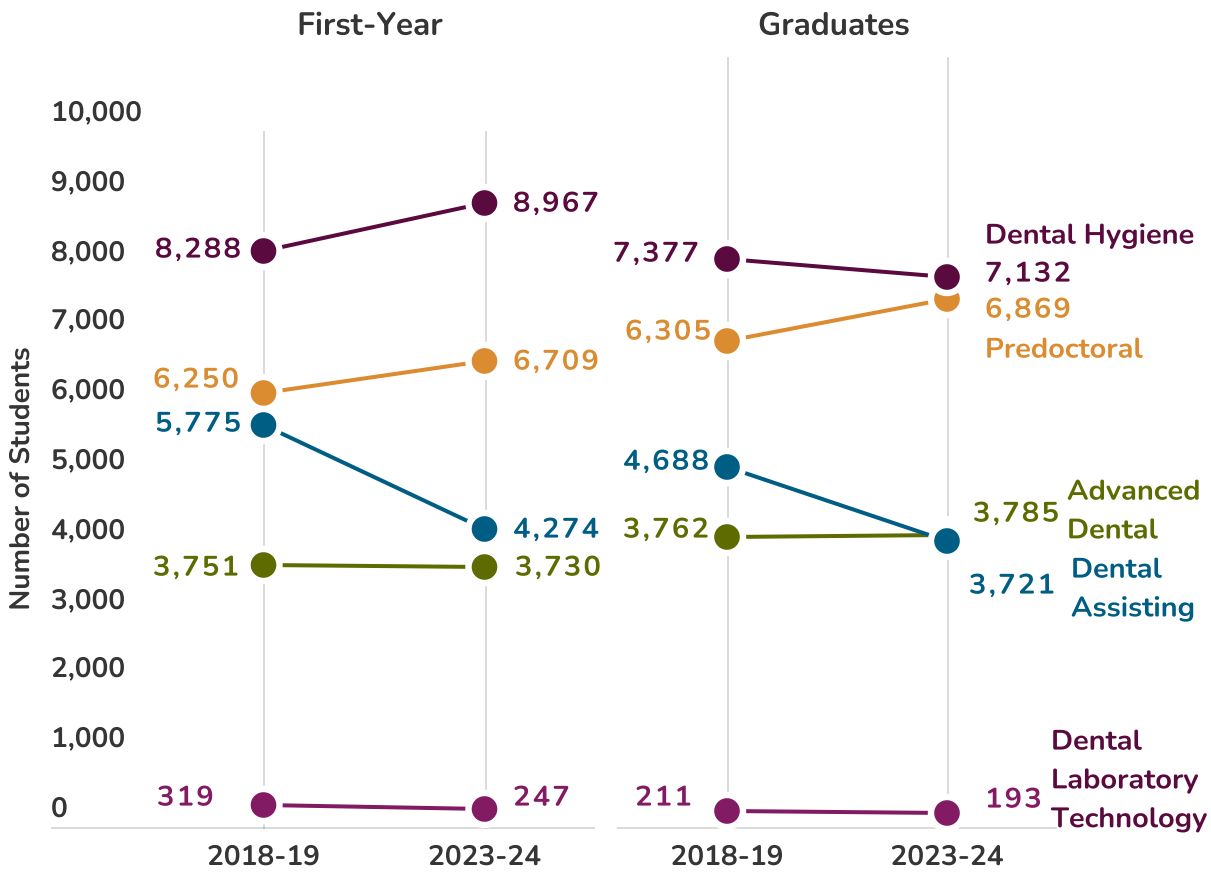


56,470 students were enrolled in accredited dental programs in the United States and Puerto Rico in 2023-24, a 2 percent increase from five years before:

- predoctoral students were almost half of the total, growing rapidly between the two years.
- dental hygiene students represented almost another third, growing at similar rates with predoctoral enrollment.
- advanced dental education enrollment was about 13% of the total, same rate as five years before.
- the number of dental assisting and dental laboratory technology students dropped significantly over the five year period. For dental assisting, it was more of a matter of programs letting their accreditation expire.

Note: Percentages may not total 100% because of rounding.
Sources: ADEA Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Education, Survey of Advanced Dental Education, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2018-19 and 2023-24.

Fig. 3.2 First-Year Matriculants and Graduates in Oral Health Education, 2018-19 and 2023-24



First-year, 2023-24: 23,927

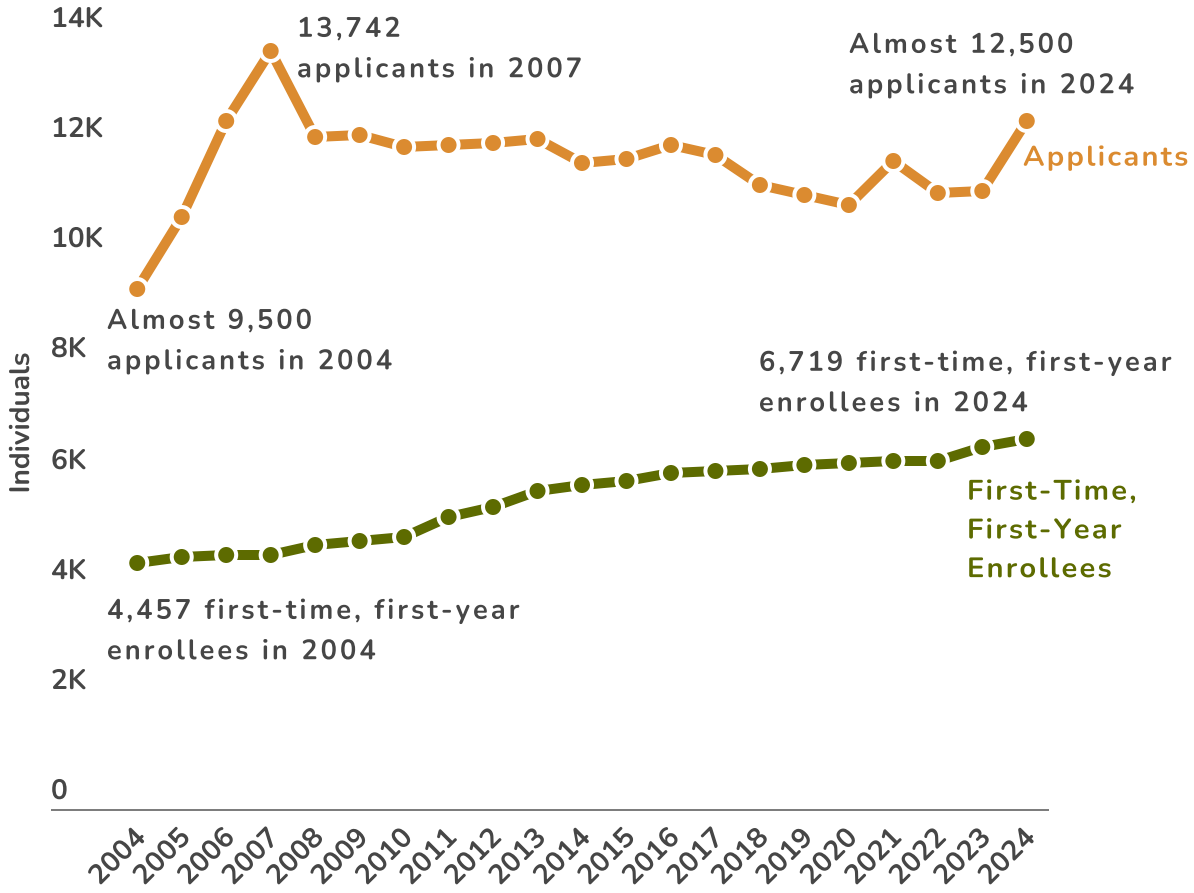
Graduates, 2023-24: 21,700

of accredited dental programs in the U.S. states, DC and Puerto Rico in 2023-24:

- dental hygiene first year enrollment expanded, but graduates numbers did not catch up with the 2018-19 level.
- the number of predoctoral first-time year enrollees and graduates climbed over past five years, with more schools opening and first class sizes increasing.
- dental assisting and dental laboratory technology recorded massive declines in the number of first-year matriculants, and to a smaller degree in terms of graduates.

Note: Percentages may not total 100% because of rounding. The first-year matriculants numbers include repeaters.
Sources: ADEA Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Education, Survey of Advanced Dental Education, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2018-19 and 2023-24.

Fig. 3.3 Predoctoral Dental Applicants and First-Time, First-Year Enrollees in U.S. Dental Schools, 2004-05 to 2024-25

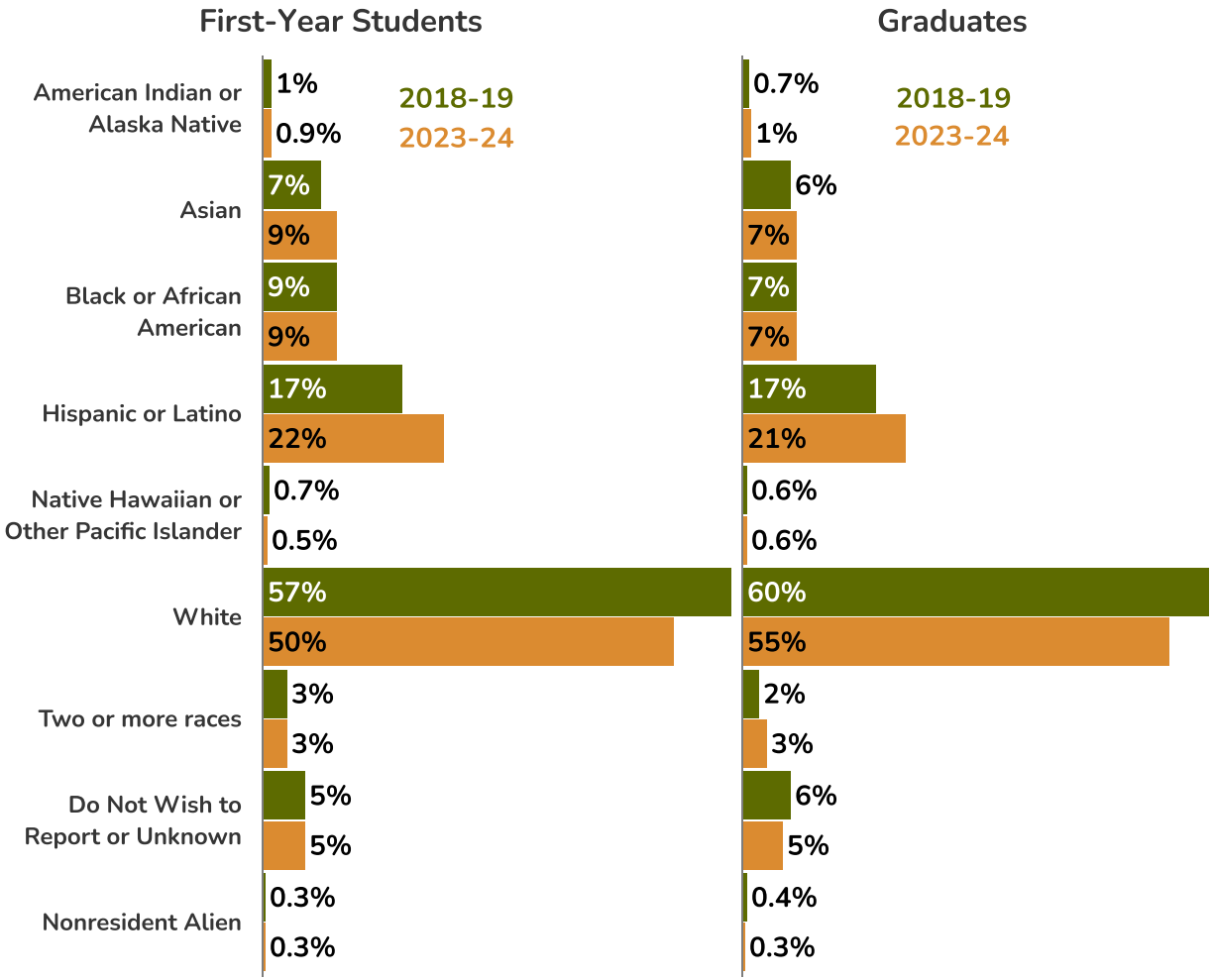


12,491 applicants to accredited predoctoral dental programs in the United States and Puerto Rico in fall 2024, numbers not seen since 2006 and 2007. This was a 12% increase from 2023.

- The number of first-time, first-year enrollees also rose, but at a slower rate than the applicant pool.
- The applicant to first-time, first-year enrollee ratio reached 1.86, a level last recorded last time in 2018.
- More than half of the applicants got enrollment in a dental school (53.8%), a decline from the previous couple of years.

Notes: Applicants are individuals who applied for entry into a predoctoral program at one or more U.S. dental schools in a given year. The first-time, first-year enrollees are matriculated individuals for the first time at a U.S. dental school in a given year. ADEA calculates the "first-time, first-year enrollees" indicators based on an analysis of Texas Medical and Dental Schools Application Service (TMDSAS) and ADEA AADSAS® (ADEA Associated American Dental Schools Application Service) data.
Sources: Singh P, Lawton KB, Istrate EC, Booker CL, West KP. U.S. Dental School Applicants and Enrollees, 2024 Entering Class. Washington, DC: American Dental Education Association, February 2025.

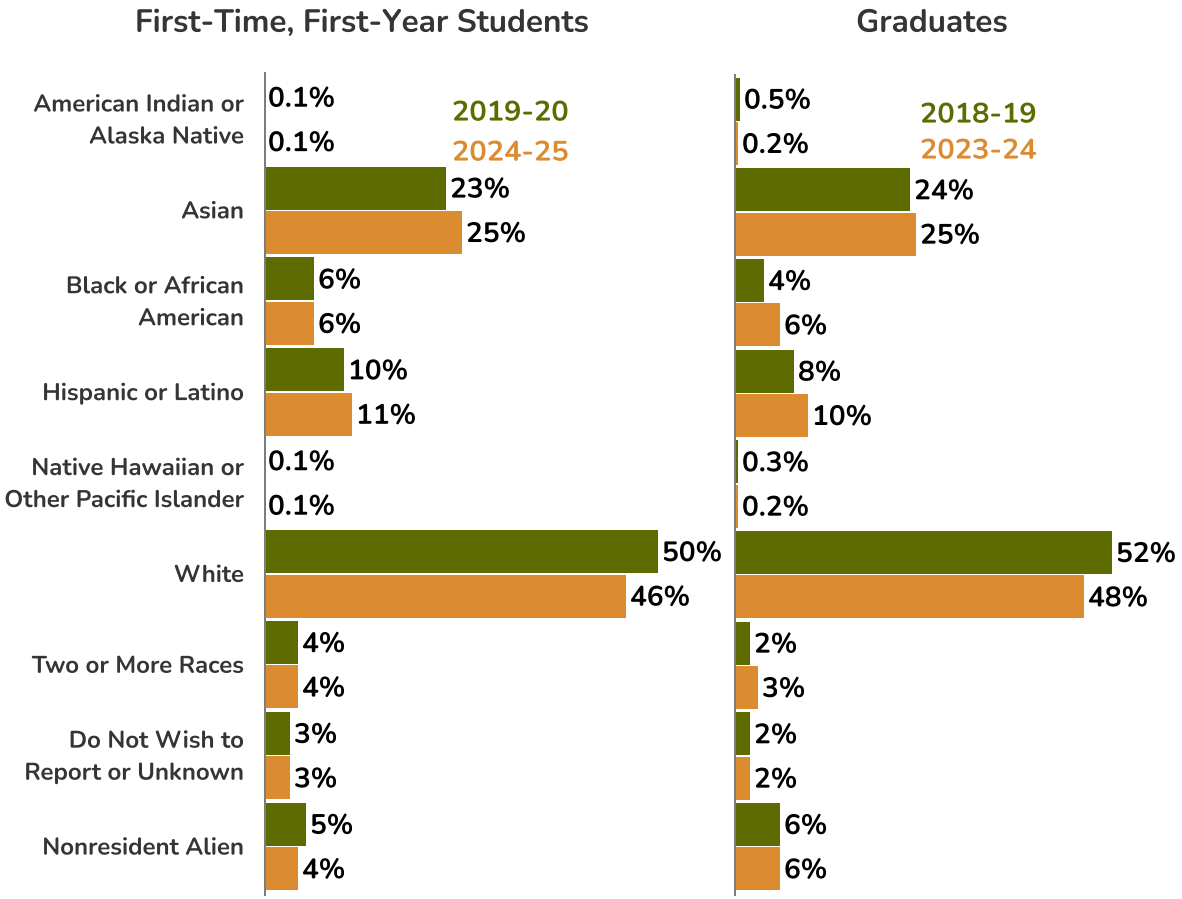
Fig. 3.4 Allied Dental First-Year Enrollees and Graduates by Race and Ethnicity, 2018-19 to 2023-24



- The majority of 2024 allied entering class and graduating class was white, but at a much lower percentage than five years earlier.
- Hispanic or Latino students recorded a quick expansion in both the allied entering and graduating classes between the two years.
- Allied added more Asian first-year allied students in 2023-24 than 2018-19, a relative new trend as the number of Asian allied graduates moved much slower between the two years.

Notes: Percentages may not total 100% because of rounding. These figures reflect only the accredited allied dental program in the specified year. Three dental therapy programs were accredited as of November 2024. ADA adheres to the current U.S. Department of Education guidelines for reporting race and ethnicity data for postsecondary education institutions.
Sources: ADEA Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Education, Survey of Advanced Dental Education, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2018-19 and 2023-24.

Fig. 3.5 First-Time, First-Year Predoctoral Dental Students and Graduates by Race and Ethnicity, 2019-20 and 2024-25

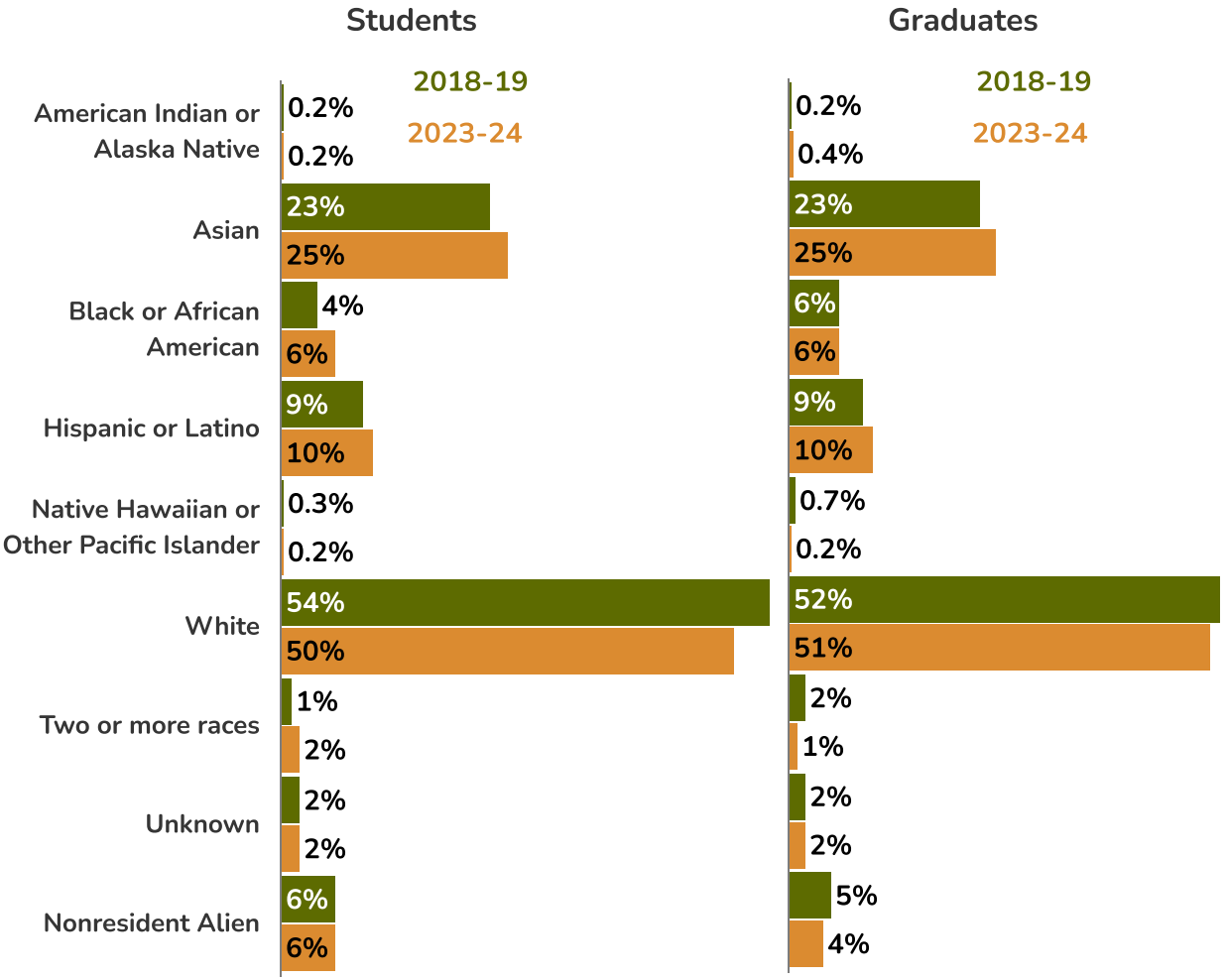


- Both predoctoral 2024 entering and graduating classes were majority non-white, a change from 2019.
- More Asian, Hispanic or Latino and multiracial students entered predoctoral programs in 2024 than five years before. There was no increase in the proportion of Black or African American first-time, first-year matriculants between the two years.
- Among graduates, Hispanic or Latino, Black or African American and multiracial students saw the largest changes.

Note: Percentages may not total 100% because of rounding. ADEA adheres to the current U.S. Department of Education guidelines for reporting race and ethnicity data for postsecondary education institutions.

Sources: Singh P, Lawton KB, Istrate EC, Booker CL, West KP. U.S. Dental School Applicants and Enrollees, 2024 Entering Class. Washington, DC: American Dental Education Association, February 2025. ADEA Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Education, 2018-19 and 2023-24.

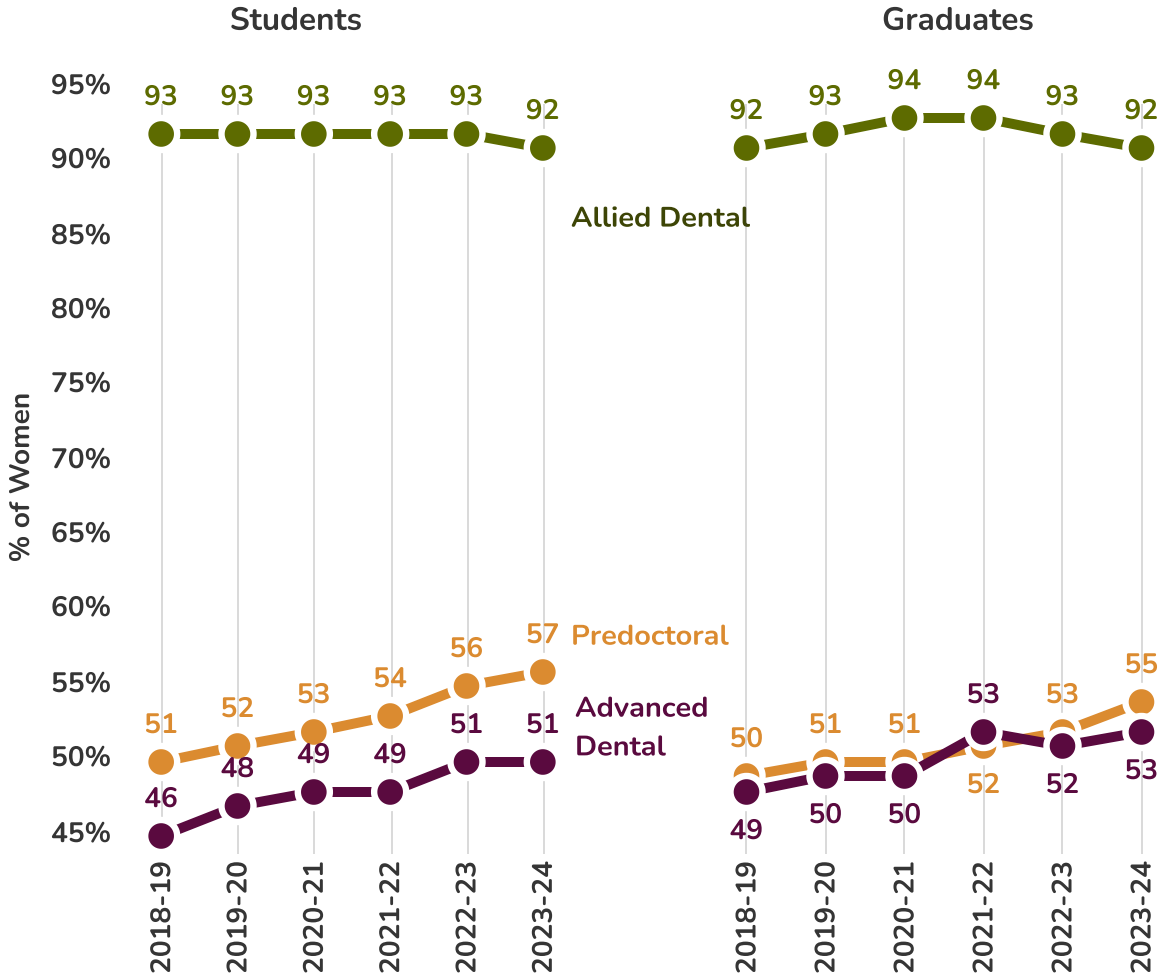
Fig. 3.6 Advanced Dental Students and Graduates by Race and Ethnicity, 2018-19 and 2023-24



- There was more variation in terms of race and ethnicity among the advanced dental enrollees than the graduating classes of 2018-19 and 2023-24.
- A smaller percentage of white students were enrolled overall in advanced education in 2023-24 than five years before, with Asian, Black or African American and Hispanic or Latino increasing their proportion in advanced dental overall enrollment.
- The trend is less pronounced among graduates. Asian students constituted a significantly larger share of the graduates in 2023-24 than 2018-19.

Note: Percentages may not total 100% because of rounding. ADEA adheres to the current U.S. Department of Education guidelines for reporting race and ethnicity data for postsecondary education institutions.
Sources: ADEA Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Education, Survey of Advanced Dental Education, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2018-19 and 2023-24.

Fig. 3.7 Percentage of Women Among Oral Health Students and Graduates, 2018-19 to 2023-24

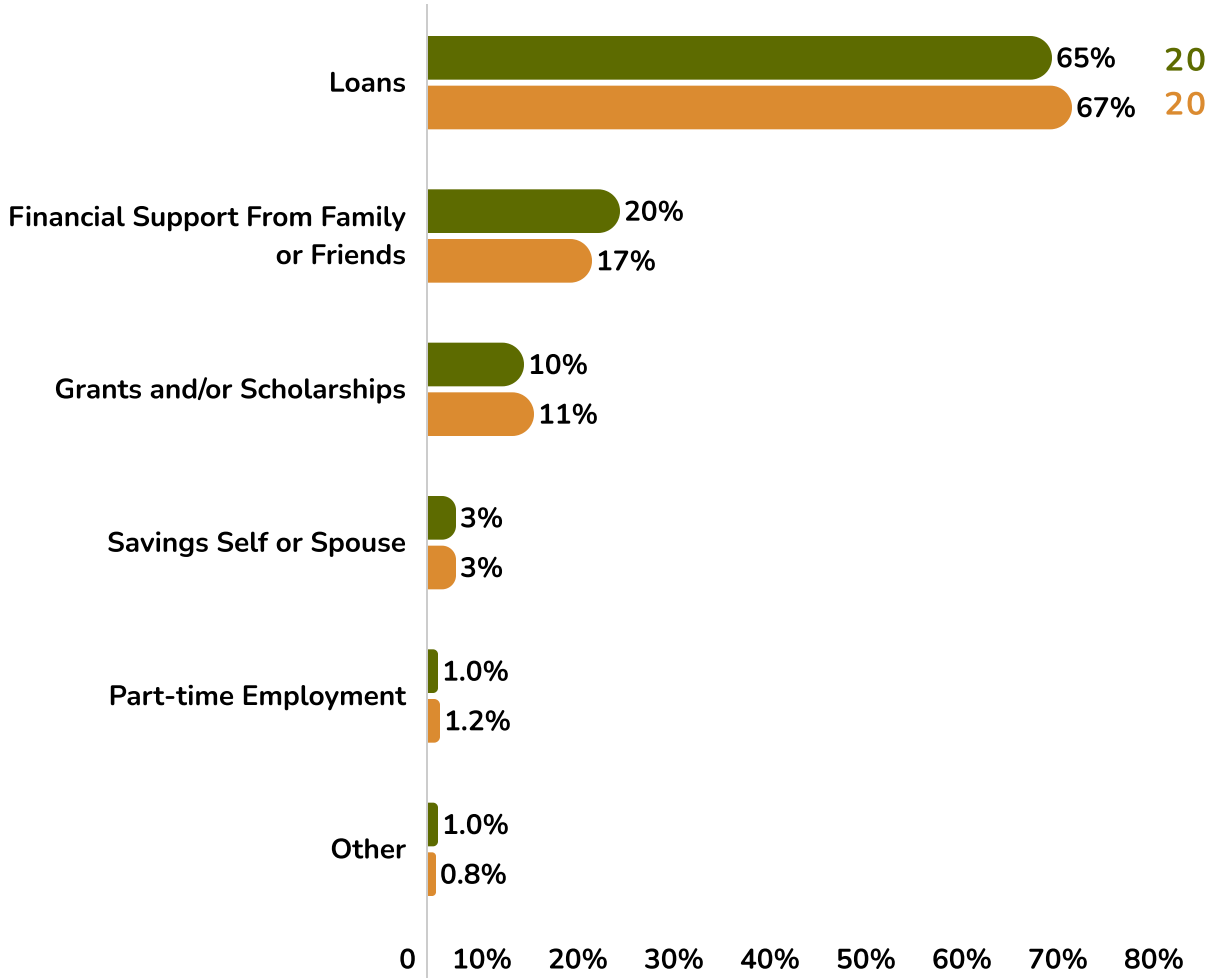


- Women represented the majority of students and graduates across different types of oral health education programs (allied, predoctoral, and advanced) in 2023-24.
- Allied dental enrollment and graduates remain mostly women, with a slight decrease in the past couple of years.
- Predoctoral enrollment is rapidly becoming female, with a much larger percentage of women enrolling and graduating in 2023-24 than five years earlier.
- Advanced dental education enrollment was the latest among dental educaton programs to become majority female in 2022-23.

Note: Percentages may not total 100% because of rounding.

Sources: ADEA Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Education, Survey of Advanced Dental Education, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2018-19 to 2023-24.

Fig. 3.8 Student Sources of Funding for a Predoctoral Dental Degree, 2018-19 and 2023-24

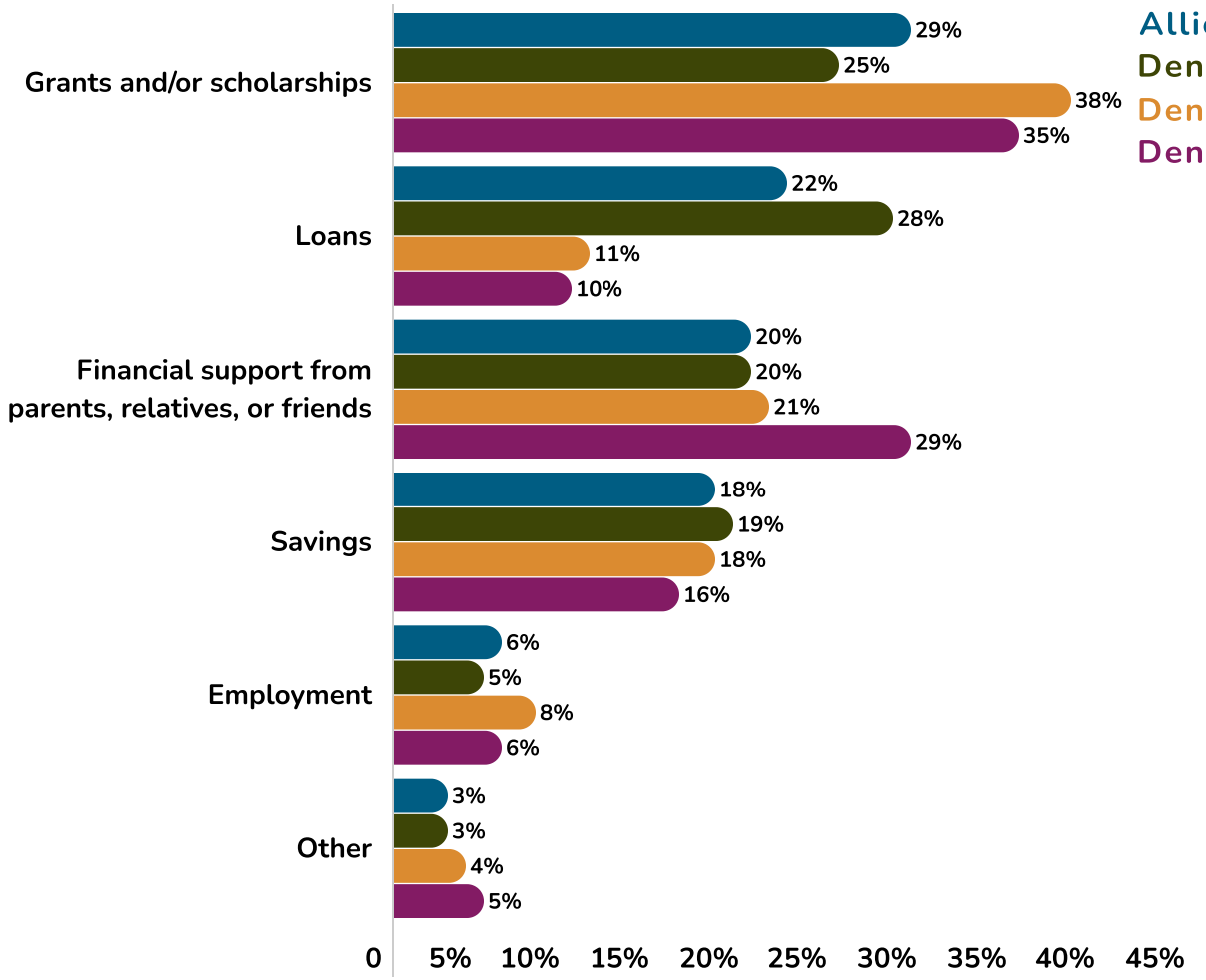


- Loans were the largest source of funding for predoctoral students in both 2018-19 and 2023-24, at two thirds of the overall funding.
- Financial support from family and friends contributed a slightly smaller share of funding in 2023-24, but the difference is not statistically significant.
- Grants and/or scholarships stayed relatively constant over the two years analyzed in terms of their share of funding for a predoctoral dental degree, about 10 cents per dollar of funding.

Note: Percentages may not total 100% because of rounding.

Sources: Istrate EC, Ph.D., M.A.I.S., Asmita Samanta, M.S.; Carolyn L. Booker, PhD.; Karen P. West, D.M.D., M.P.H. Dentists of Tomorrow 2024: An Analysis of the Results from the ADEA 2024 Survey of U.S. Dental School Seniors. American Dental Education Association (ADEA) Education Research Series. Issue 7, December 2024.

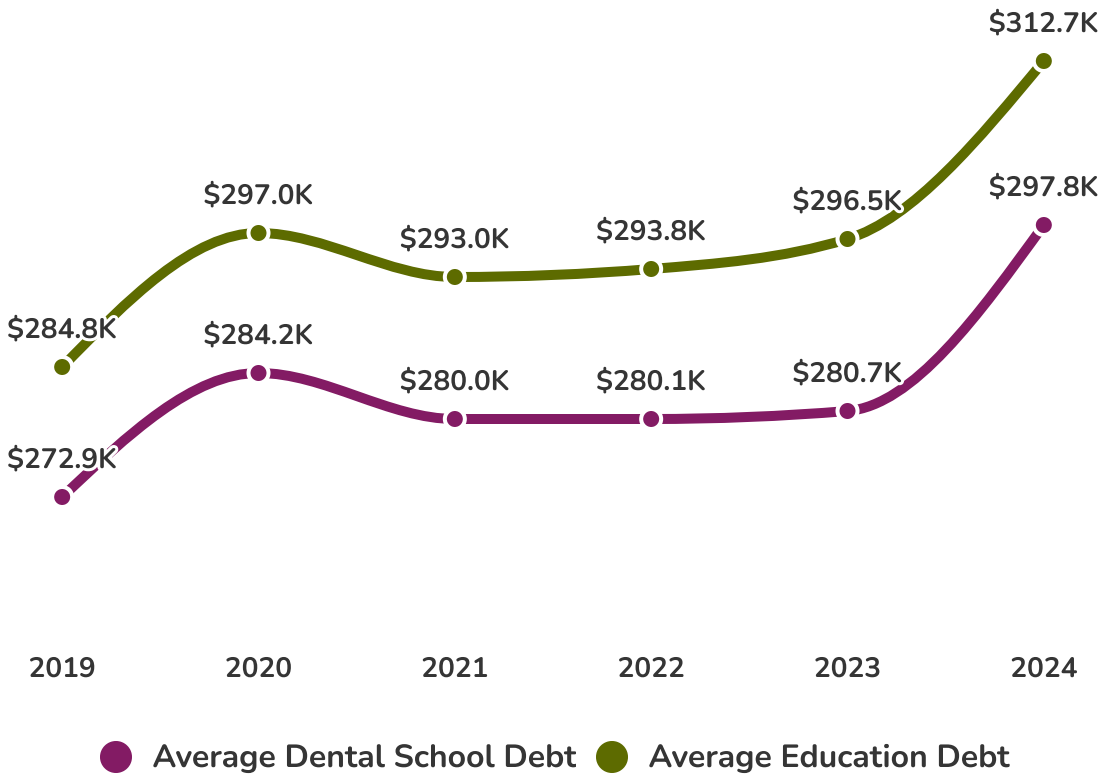
Fig. 3.9 Student Sources of Funding for an Allied Dental Degree, 2023-24



- Grants and/or scholarships were the most significant source of funding for allied dental students.
- Loans were the second source of funding for an allied dental degree overall and the largest for dental hygiene.
- Financial support from family and friends contributed a significant share of funding for allied students, especially for dental laboratory technicians.

Note: Percentages may not total 100% because of rounding.
Sources: Singh P, Stolberg R, Istrate EC, Booker CL, West KP. ADEA U.S. Allied Dental Graduating Student Survey Tables Report, 2024. Washington, DC: American Dental Education Association, January 2025.

Fig. 3.10 Education Debt of Predoctoral Dental Students Graduating With Debt, 2018-19 and 2023-24



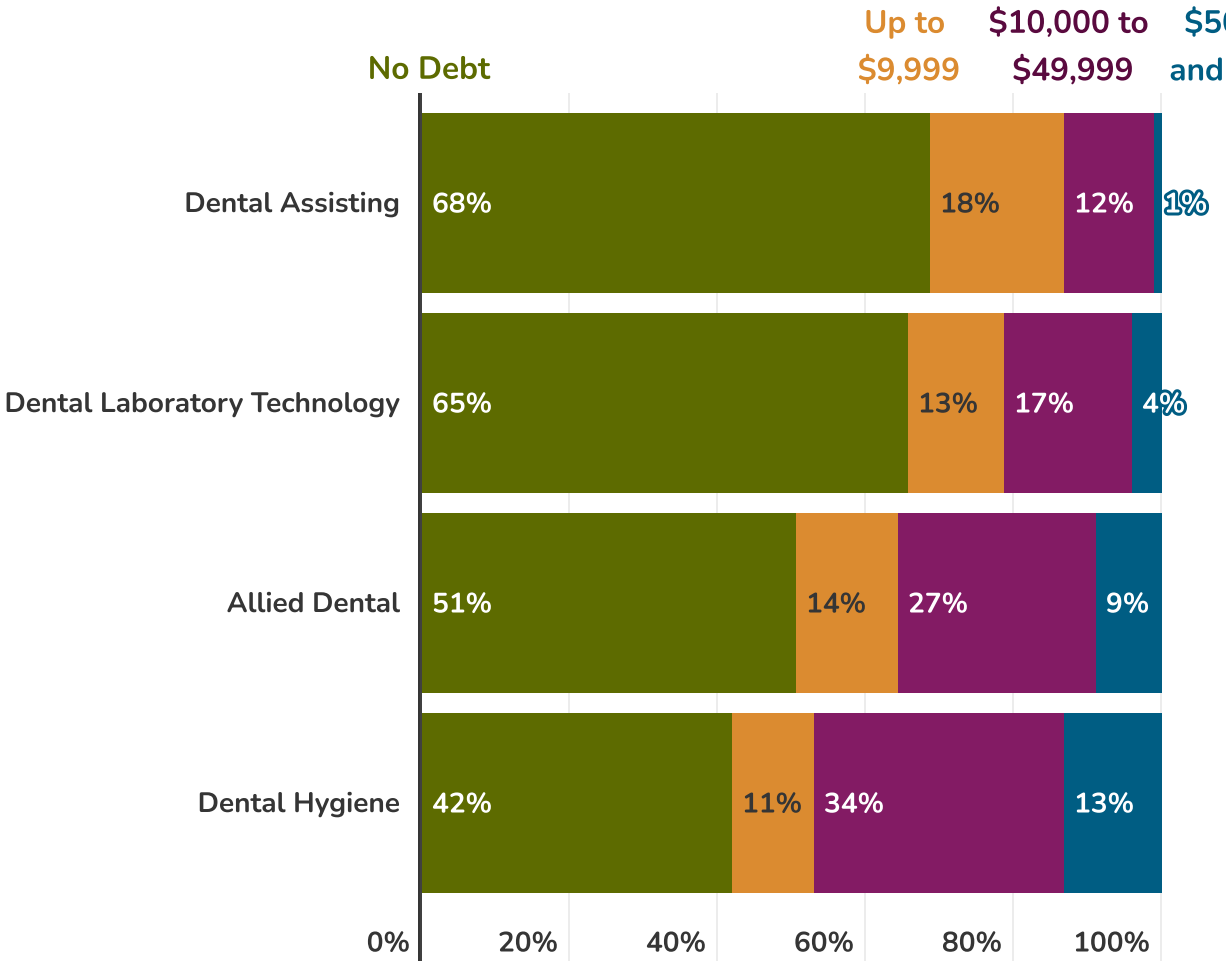
- Average education debt of predoctoral dental students graduating with debt in 2024 was 10% higher than that reported by the 2019 respondents to the ADEA survey, when not adjusting for inflation.

- Education debt is a combination of the dental school debt the senior students graduate with from dental school (the loans contracted to finance partially or all the cost of the predoctoral degree) and their predental education debt, which is the outstanding education debt the senior students had when they entered dental school.

- The percentage of predoctoral students graduating with education debt increased from 77% in 2019 to 80% in 2024.

Notes: Debt values are not adjusted to inflation. The response rates for this survey question vary between 37% in 2020 and 65% in 2019. A response rate reflects the number of respondents for the debt question relative to the senior student population in that academic year.
Sources: Istrate EC, Ph.D., M.A.I.S., Asmita Samanta, M.S.; Carolyn L. Booker, PhD.; Karen P. West, D.M.D., M.P.H. Dentists of Tomorrow 2024: An Analysis of the Results from the ADEA 2024 Survey of U.S. Dental School Seniors. American Dental Education Association (ADEA) Education Research Series. Issue 7, December 2024.

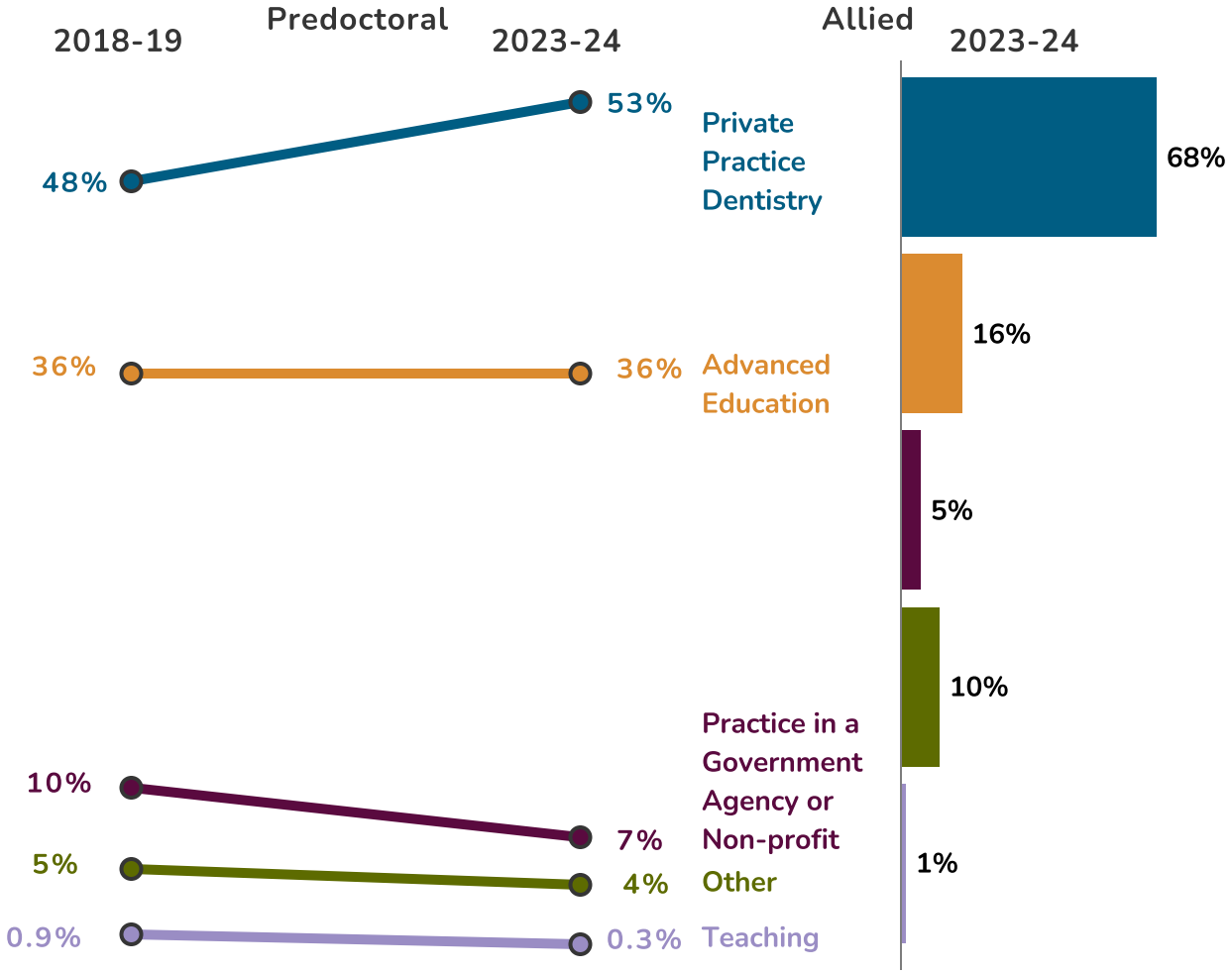
Fig. 3.11 Education Debt of Graduating Allied Dental Students, 2023-24



- Less than half of allied students graduated with education debt in 2024. This varied from 32% for dental assisting to 58% for dental hygiene.
- Dental hygiene graduating students had the largest share of debt above $50,000 among 2024 allied graduates, reflecting the longer and more costly degrees.
- Education debt is a combination of the allied dental debt the students graduated with (the loans contracted to finance partially or all the cost of the allied degree) and their predental education debt, which is the outstanding education debt the students had when they entered allied dental program.

Note: The accredited dental therapy programs were not included in the 2024 ADEA Senior Allied Survey given the small number of graduates.
Sources: Singh P, Stolberg R. L., Istrate E. C., Booker C. L., West K. P. ADEA U.S. Allied Dental Graduating Student Survey Tables Report, 2024. Washington, DC: American Dental Education Association, January 2025.

Fig. 3.12 Predoctoral and Allied Dental Students' Immediate Professional Plans Upon Graduation, 2018-19 and 2023-24

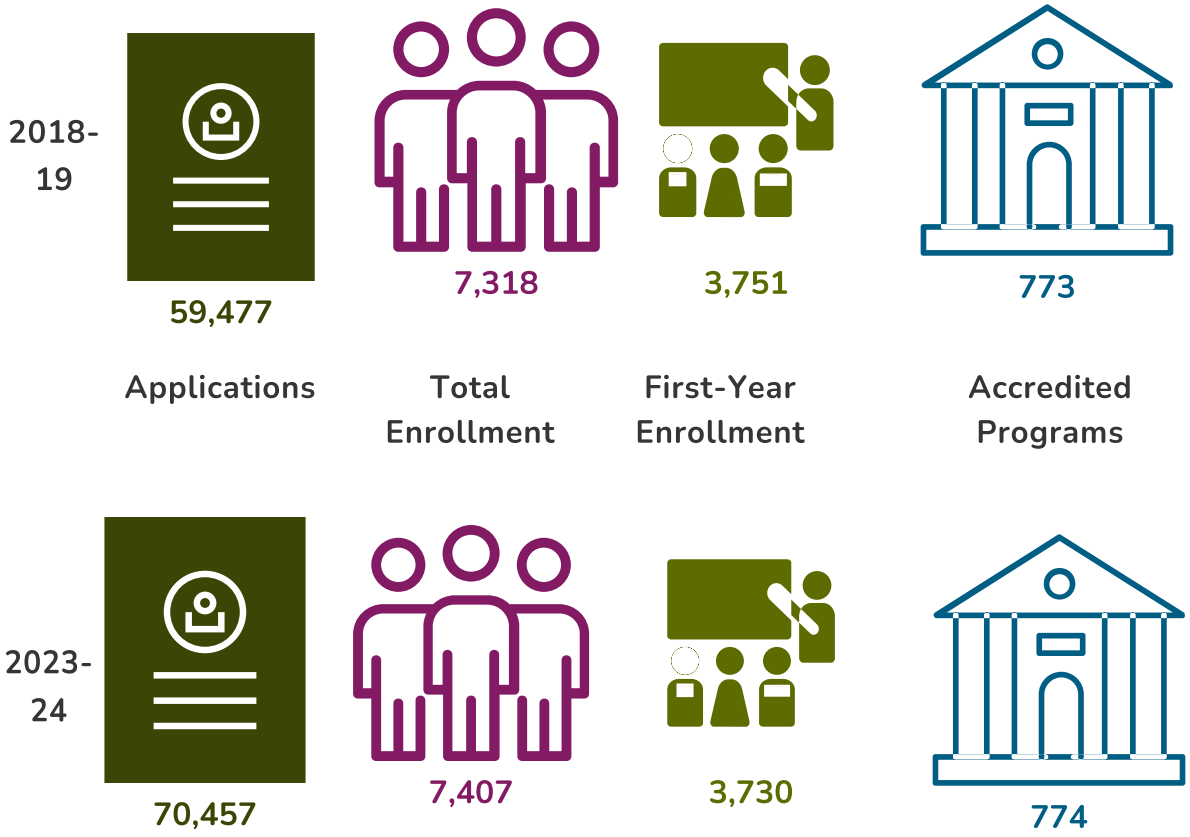


- Working in private practice increased in popularity among the predoctoral students responding to the ADEA Predoctoral Senior Survey between 2019 and 2024.
- In 2023-24, more than two thirds of graduating allied students indicated plans to work in a dental office immediately upon graduation, as stated in the first ADEA Allied Senior Survey,
- Predoctoral students continued to be interested in furthering their dental education in 2023-24 at a similar rate with their counterparts five years before.
- Only one in six of the 2024 graduating allied students were planning to continue theri dental education upon graduating from theri allied degree.

Notes: The "Other" category includes working in another position related to dentistry, but not those mentioned in the chart; working in a position not related to dentistry; and being unsure about professional plans upon graduation. "Teaching" means working as a faculty/staff member in a dental program immediately upon graduation.

Sources: Istrate EC, Ph.D., M.A.I.S., Asmita Samanta, M.S.; Carolyn L. Booker, PhD.; Karen P. West, D.M.D., M.P.H. Dentists of Tomorrow 2024: An Analysis of the Results from the ADEA 2024 Survey of U.S. Dental School Seniors. American Dental Education Association (ADEA) Education Research Series. Issue 7, December 2024. Singh P, Stolberg R, Istrate EC, Booker CL, West KP. ADEA U.S. Allied Dental Graduating Student Survey Tables Report, 2024. Washington, DC: American Dental Education Association, January 2025.

Fig. 3.13 Overview of Applications to and Enrollments in Accredited Advanced Dental Education Programs, 2018-19 and 2023-24



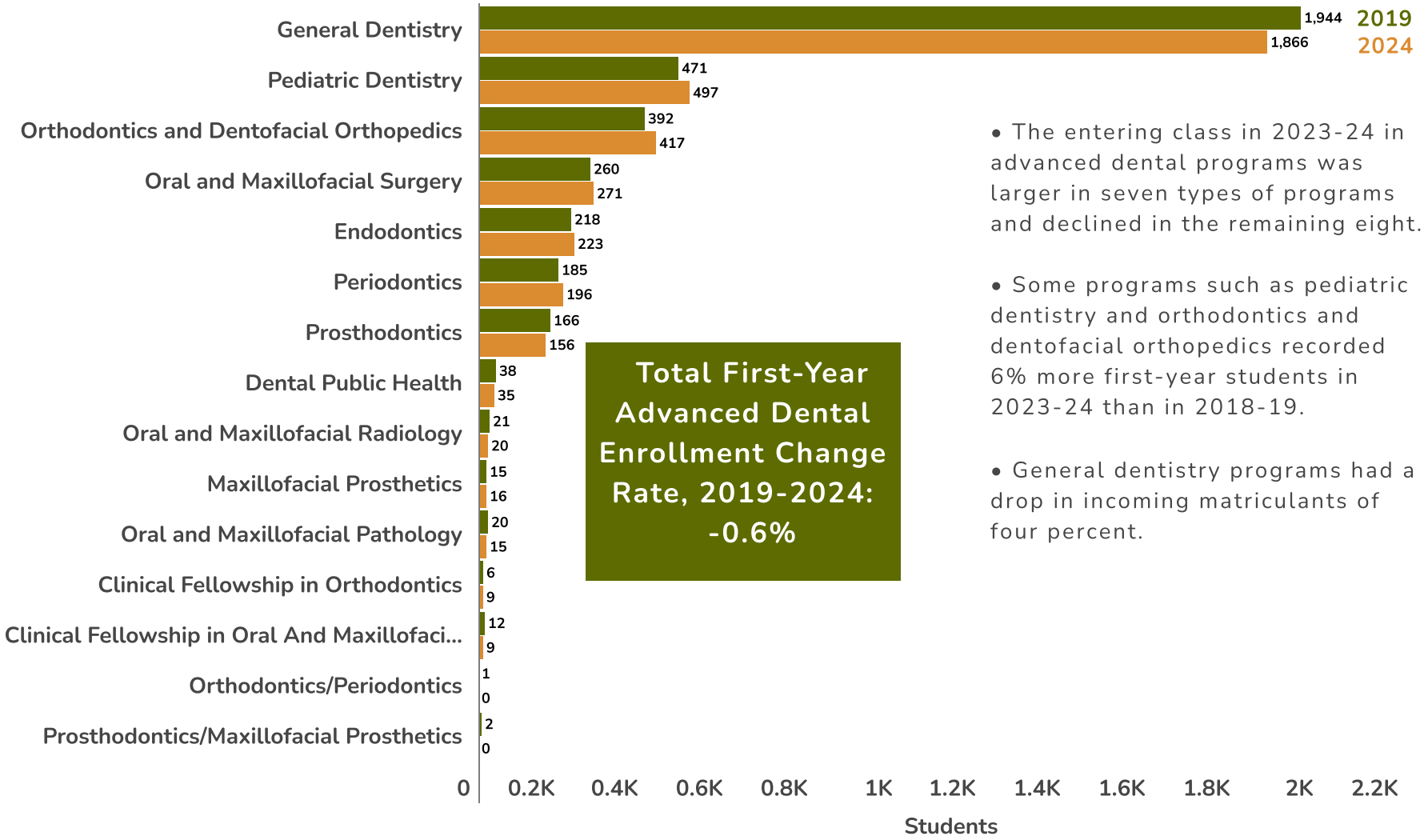
- The number of applications to advanced dental programs rose in double digits between 2018-19 and 2023-24. The competition for a place in an U.S. accredited advanced dental program is robust, as the number of seats in the first-year did not increase over the same period.

- The number of accredited advanced dental programs in 2023-24 was almost the same as in 2018-19, as reported by CODA. By November 2024, the number of accredited advanced dental education programs reached 780, as shown in Figure 1.5.

- Total enrollment in advanced programs expanded somewhat between 2018-19 and 2023-24, at 1.2%.

Notes: Application figures represent the total number of applications examined by all programs, and counts applicants more than once if they applied to multiple programs. The number of programs reflects the number of accredited advanced dental education programs in operation in the specified academic year.
Sources: ADEA analysis of ADA, Health Policy Institute, Commission on Dental Accreditation Survey of Advanced Dental Education, 2011-12 and 2023-24.

Fig. 3.14 First-Year Enrollment in Accredited Advanced Dental Education Programs, 2018-19 and 2023-24

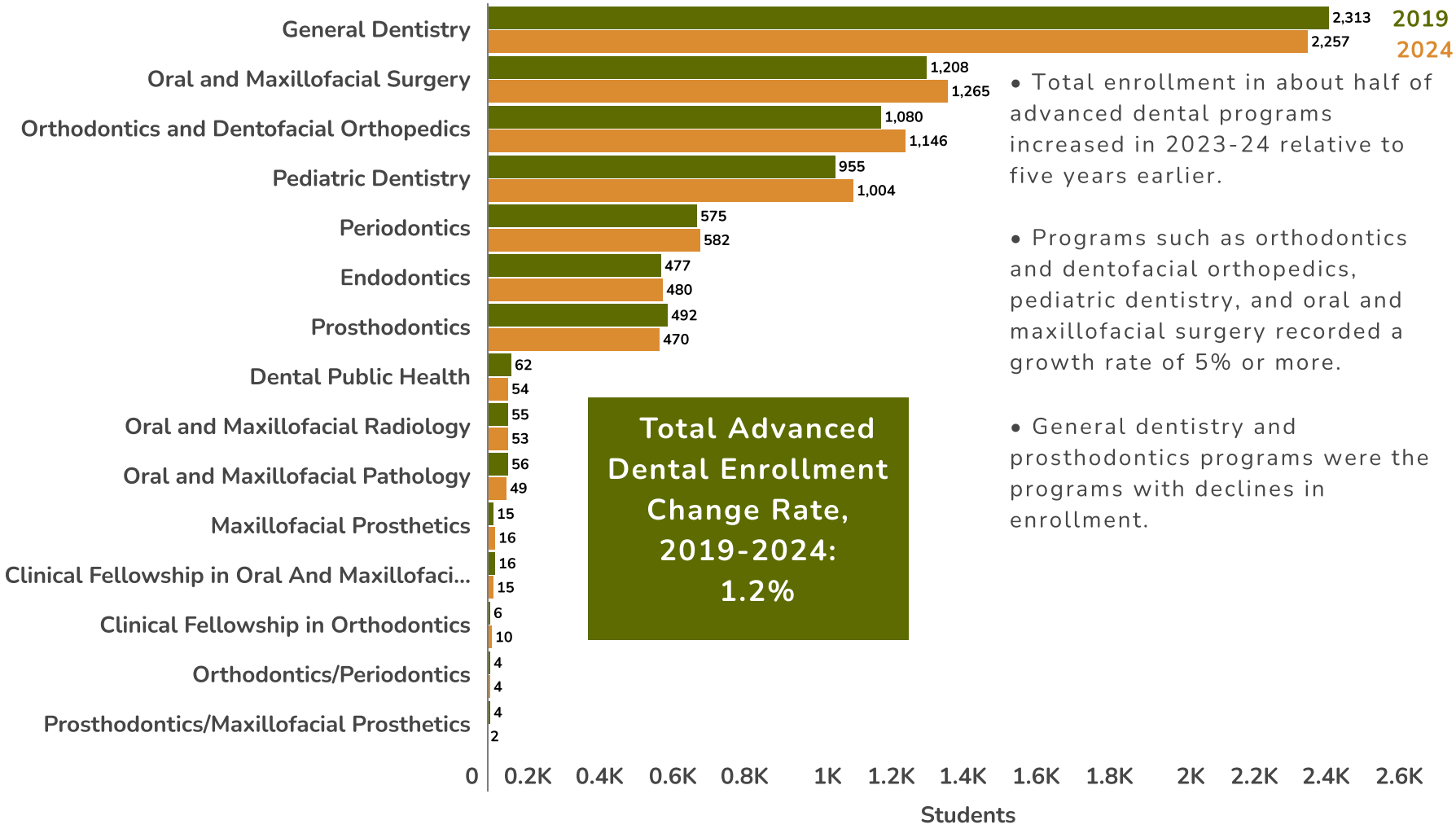


Total First-Year Advanced Dental Enrollment Change Rate, 2019-2024: -0.6%

- The entering class in 2023-24 in advanced dental programs was larger in seven types of programs and declined in the remaining eight.
- Some programs such as pediatric dentistry and orthodontics and dentofacial orthopedics recorded 6% more first-year students in 2023-24 than in 2018-19.
- General dentistry programs had a drop in incoming matriculants of four percent.

Notes: General Dentistry includes General Practice Residency, Advanced Education in General Dentistry, Dental Anesthesiology, Orofacial Pain, and Oral Medicine.
Source: ADEA analysis of ADA, Health Policy Institute, Commission on Dental Accreditation Survey of Advanced Dental Education, 2018-19 and 2023-24.

Fig. 3.15 Total Enrollment In Accredited Advanced Dental Education Programs, 2018-19 and 2023-24



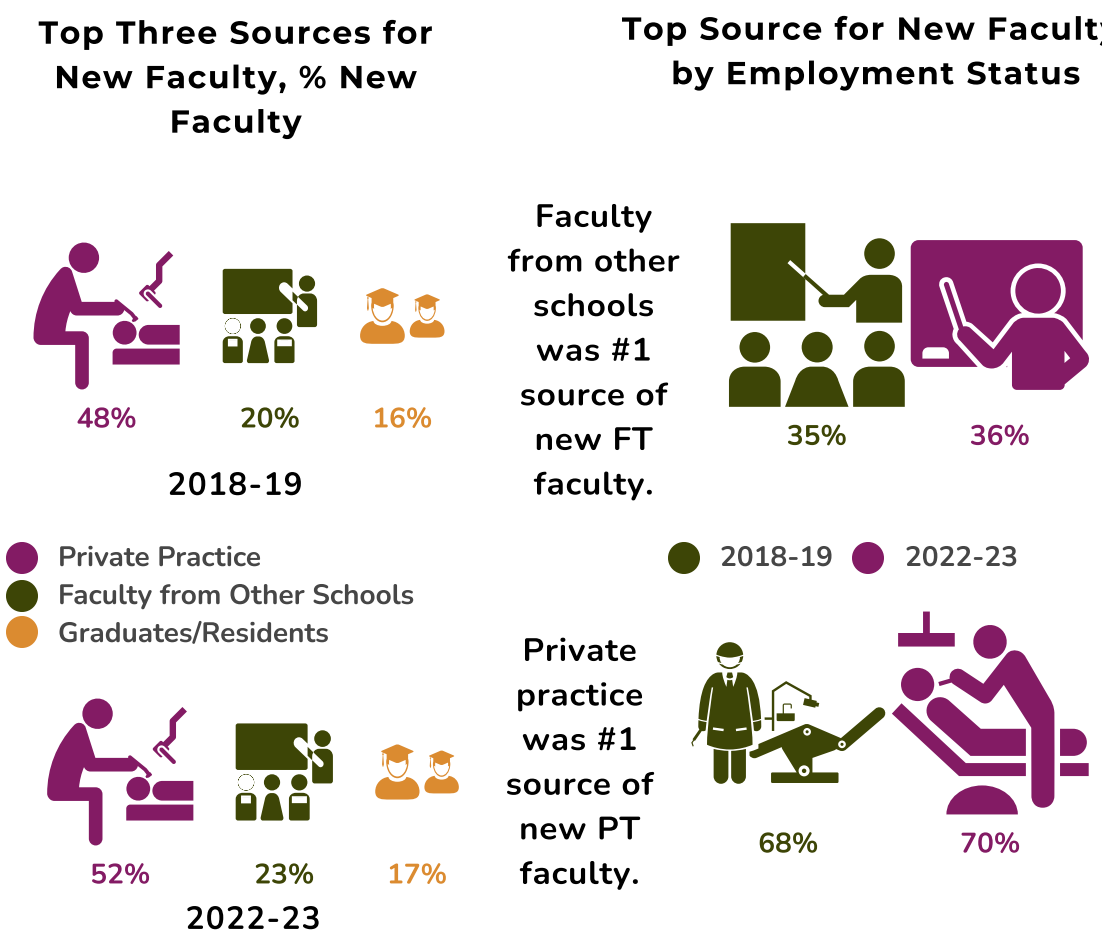
- Total enrollment in about half of advanced dental programs increased in 2023-24 relative to five years earlier.
- Programs such as orthodontics and dentofacial orthopedics, pediatric dentistry, and oral and maxillofacial surgery recorded a growth rate of 5% or more.
- General dentistry and prosthodontics programs were the programs with declines in enrollment.

Notes: General Dentistry includes General Practice Residency, Advanced Education in General Dentistry, Dental Anesthesiology, Orofacial Pain and Oral Medicine.
Source: ADEA analysis of ADA, Health Policy Institute, Commission on Dental Accreditation Survey of Advanced Dental Education, 2011-12 and 2023-24.

Section 4. Oral Health Education Faculty

Changing Demographics, Job Openings and New Opportunities

Fig. 4.1 Sources of New Faculty by Employment Status, U.S. Dental Schools, 2018-19 and 2022-23



- In 2022-23, 11% of faculty were hired in that fiscal year, significantly higher than the 9% rate of 2018-19, according to ADEA Trends in Dental School Faculty: ADEA Dental School Faculty Positions, 2018-19 and 2022-23. The rate was higher both for full-time and part-time faculty.

- Private practice grew as the main source of new faculty. Seven in ten newly hired part-time faculty came from private practice in 2022-23.

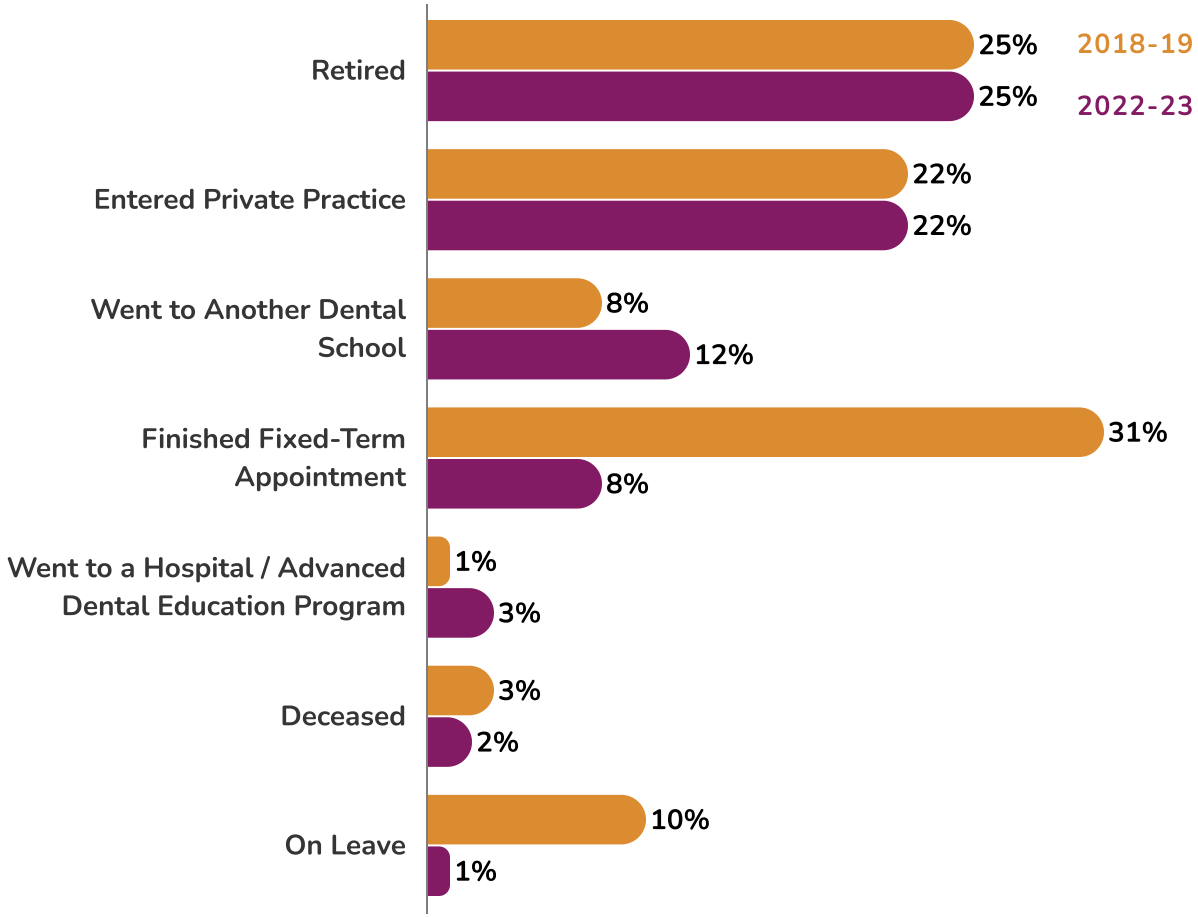
- Recruiting faculty from other schools (dental and non-dental) remained a significant source of new faculty and the top source for newly-hired full-time faculty.

- One in seven new faculty were recent predoctoral and/or advanced dental graduates in 2022-23, similar to the rate in 2018-19.

Notes: Percentages may not total 100% due to rounding. This analysis reflects full-time and part-time new faculty for which the responding dental schools reported the employment status and the source of the new faculty member. "Faculty from other schools" includes dental, non-dental schools and hospitals. For definitions, see Methodological Appendix in the source report.

Source: Istrate EC, Lawton KB, Cooper BL, Booker CL. Trends in Dental School Faculty: ADEA Dental School Faculty Positions Report, 2018-19 and 2022-23. Washington, DC: American Dental Education Association, August 2024.

Fig. 4.2 Separated Full-time and Part-time Faculty by Reason of Leaving, U.S. Dental Schools, 2018-19 and 2022-23



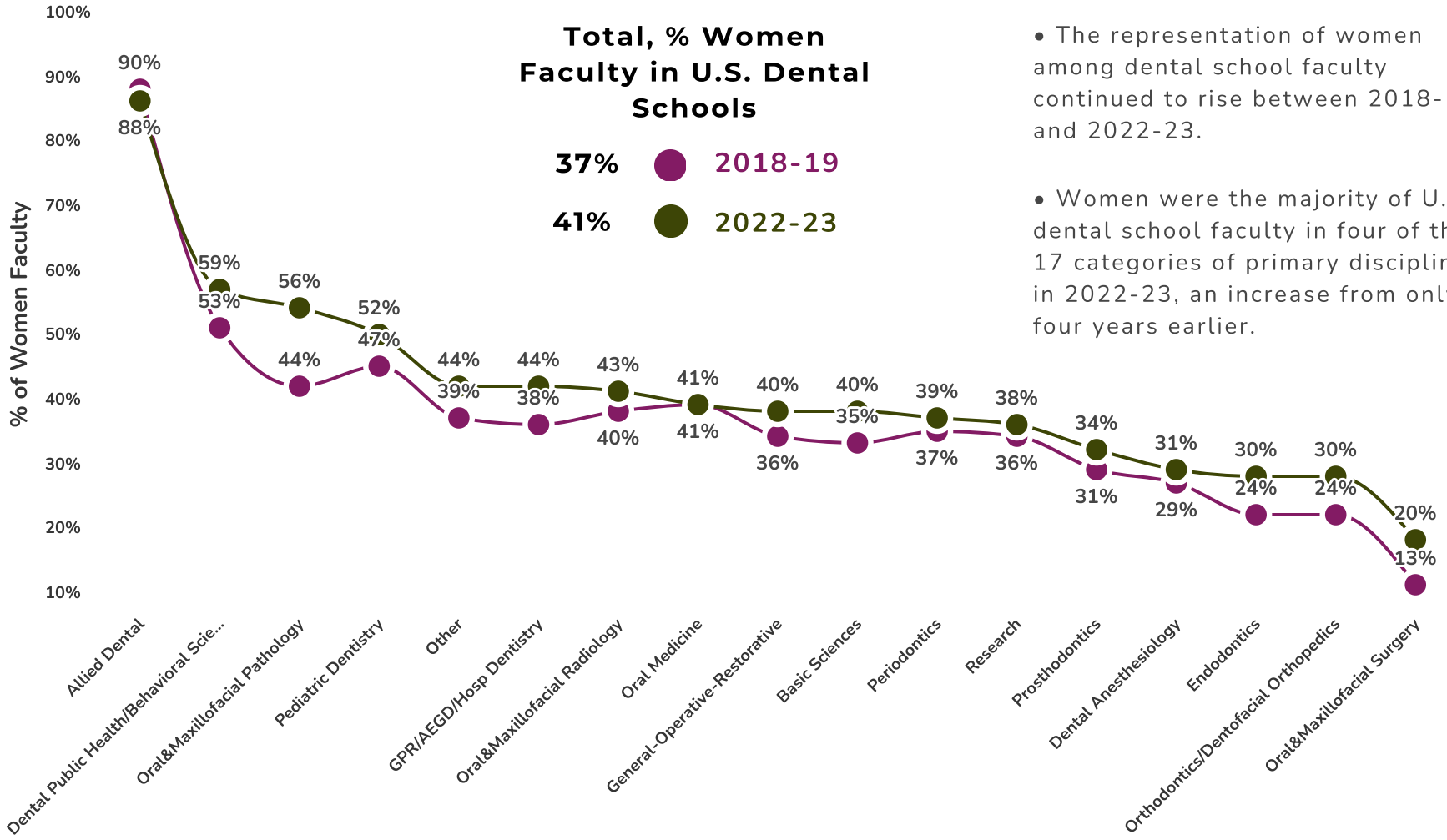
- The faculty separation rate, as percentage of faculty that left their employer during the past fiscal year, went up between 7% and 8%, according to *ADEA Trends in Dental School Faculty: ADEA Dental School Faculty Positions, 2018-19 and 2022-23*. It was driven by a higher percentage of full-time faculty leaving in 2022-23 than four years before.

- Finishing a fixed-term appointment or being on leave are no longer major reasons for faculty separating from a dental school..

- Leaving for other academic opportunities, at another dental school or at a hospital with an advanced dental education program, has been cited more often by departing faculty in 2022-23 than in 2018-19.

Notes: The percentages for 2022-23 do not total 100% because the 2022-23 data have an additional category called "other," which accounts for 27% of separated faculty positions for which dental schools selected a reason of separation. For 2022-23, dental schools reported in "other" mainly voluntary separations for which the faculty did not specify the reason for leaving their employment. The "other" reason for faculty separation was not included in the ADEA 2018-19 Survey of Dental School Faculty. This analysis reflects full-time and part-time faculty for which the responding dental schools reported the employment status and the reason for the faculty separation.
Source: Istrate EC, Lawton KB, Cooper BL, Booker CL. Trends in Dental School Faculty: ADEA Dental School Faculty Positions Report, 2018-19 and 2022-23. Washington, DC: American Dental Education Association, August 2024.

Fig. 4.3 Women Faculty Within Each Primary Discipline, U.S. Dental Schools, 2018-19 and 2022-23

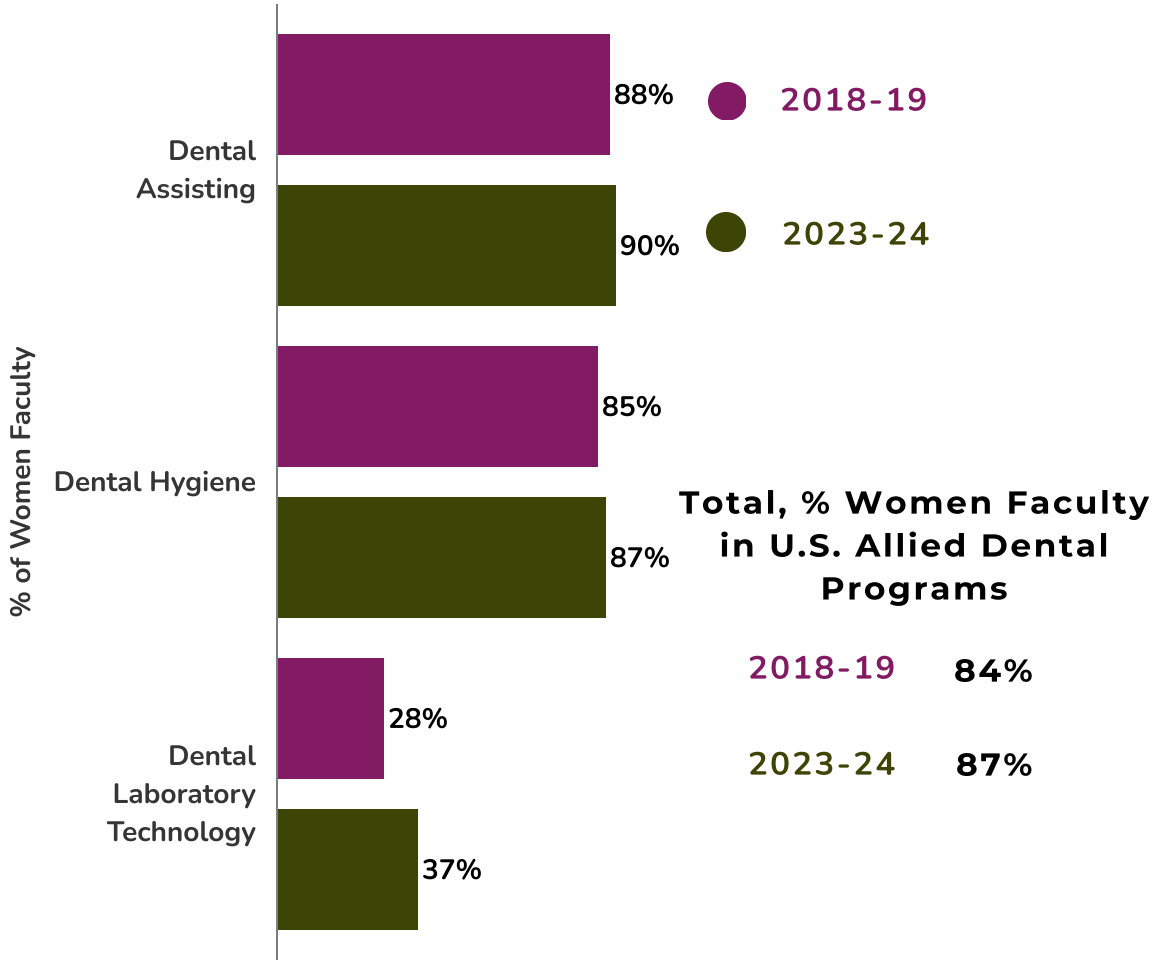


- The representation of women among dental school faculty continued to rise between 2018-19 and 2022-23.
- Women were the majority of U.S. dental school faculty in four of the 17 categories of primary disciplines in 2022-23, an increase from only four years earlier.

Notes: This analysis reflects all the faculty for which the responding schools provided their primary discipline and their gender identity as "women." The faculty with gender identity as "man" and those with not listed gender identity are included in the total faculty for the percentage calculation for women faculty. ADEA collects data on primary disciplines based on a 17 primary disciplines' nomenclature. For full list, see Table A2 in Methodological Appendix in the source report.

Source: Istrate EC, Lawton KB, Cooper BL, Booker CL. Trends in Dental School Faculty: ADEA Dental School Faculty Positions Report, 2018-19 and 2022-23. Washington, DC: American Dental Education Association, August 2024.

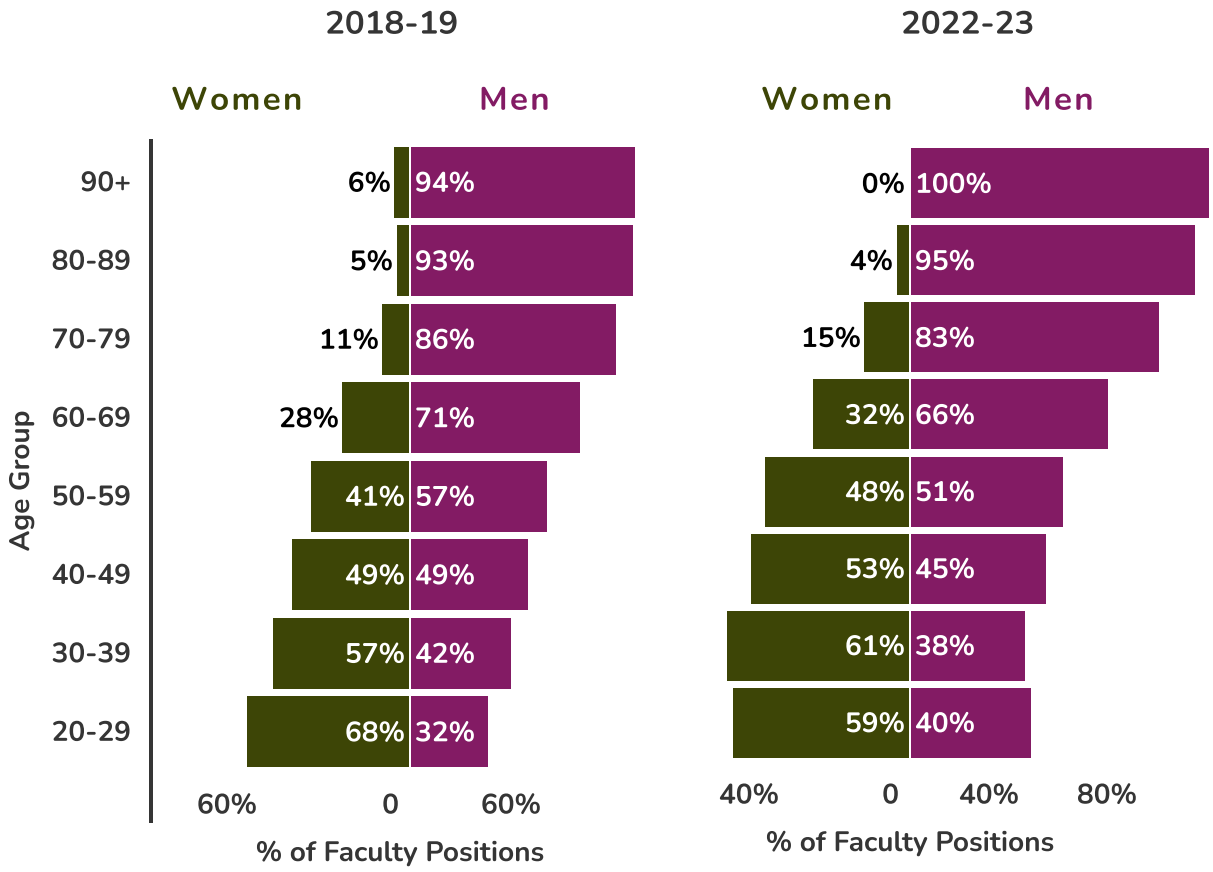
Fig. 4.4 Women Faculty at Accredited U.S. Allied Dental Education Programs, 2018-19 and 2023-24



- Women dominate the composition of dental hygiene and dental assisting faculty.
- There were more women among all dental allied types of programs between 2018-19 and 2023-24.
- Men faculty were the majority in the dental laboratory technology programs in 2018-19 and 2023-24, but at a smaller rate over time.
- This analysis does not include dental therapy programs, because CODA has not started reporting their numbers due to the small number of accredited programs, as of November 2024.

Notes: Percentages may not total 100% because the presence of faculty for which their employer did not report their gender identity and/or reported other gender identities.
Source: Analysis of American Dental Association, Health Policy Institute, Commission on Dental Accreditation 2018-19 and 2023-24 Survey of Allied Dental Education Programs.

Fig. 4.5 U.S. Dental Schools Faculty by Age and Gender, 2018-19 and 2022-23



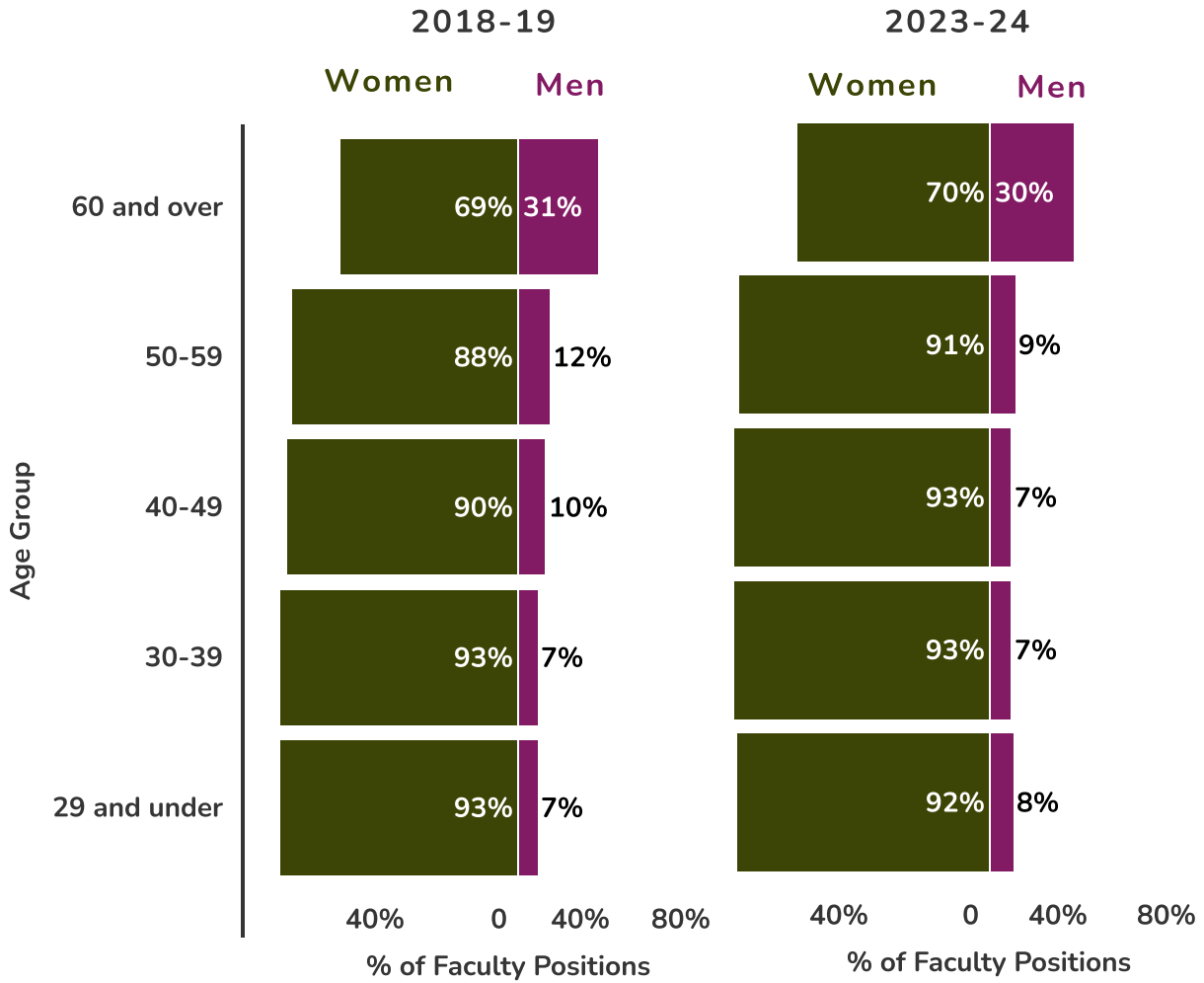
- Between 2018-19 and 2022-23, the median age of dental school faculty declined from 56 to 54 years old, according to *ADEA Trends in Dental School Faculty: ADEA Dental School Faculty Positions, 2018-19 and 2022-23*.

- Women dental school faculty were significantly younger than their men counterparts in both years and the median age dropped for both groups.

- Overall, women accounted for the majority of faculty for every decade of age between 20 and 49 years, with men being more numerous after age 50 both in 2018-19 and 2022-23.

Notes: Percentages may not total 100% because the presence of faculty for which their employer did not report their gender identity and/or reported other gender identities. For definitions, see Methodological Appendix of the source report.
Source: Istrate EC, Lawton KB, Cooper BL, Booker CL. Trends in Dental School Faculty: ADEA Dental School Faculty Positions Report, 2018-19 and 2022-23. Washington, DC: American Dental Education Association, August 2024.

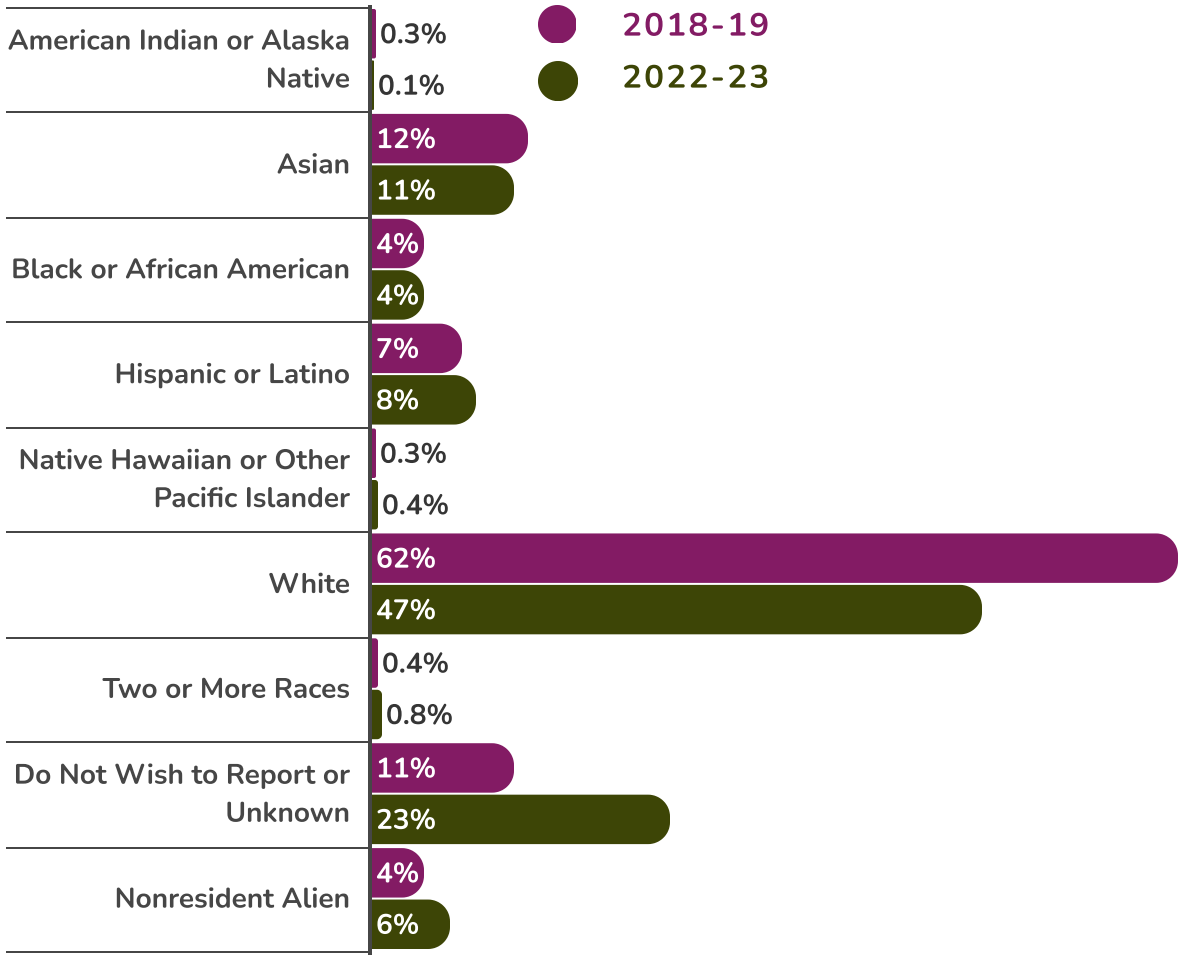
Fig. 4.6 Faculty at Accredited U.S. Allied Dental Programs by Age and Gender, 2018-19 and 2023-24



- Women are the majority in every age group for allied dental faculty.
- Men faculty in allied dental programs tend to be in larger numbers among faculty 60 years and older.
- There was a slight increase of the percentage of men faculty in the youngest age category (29 and under) between 2018-19 and 2023-24.

Notes: Percentages may not total 100% because the presence of faculty for which their employer did not report their gender identity and/or reported other gender identities.This analysis does not include dental therapy programs, because CODA has not started reporting on them due to the small number of accredited programs, as of November 2024.
Source: American Dental Association, Health Policy Institute, Commission on Dental Accreditation 2018-19 znc 2023-24 Survey of Allied Dental Education Programs.

Fig. 4.7 U.S. Dental Schools Faculty by Race and Ethnicity, 2018-19 and 2022-23

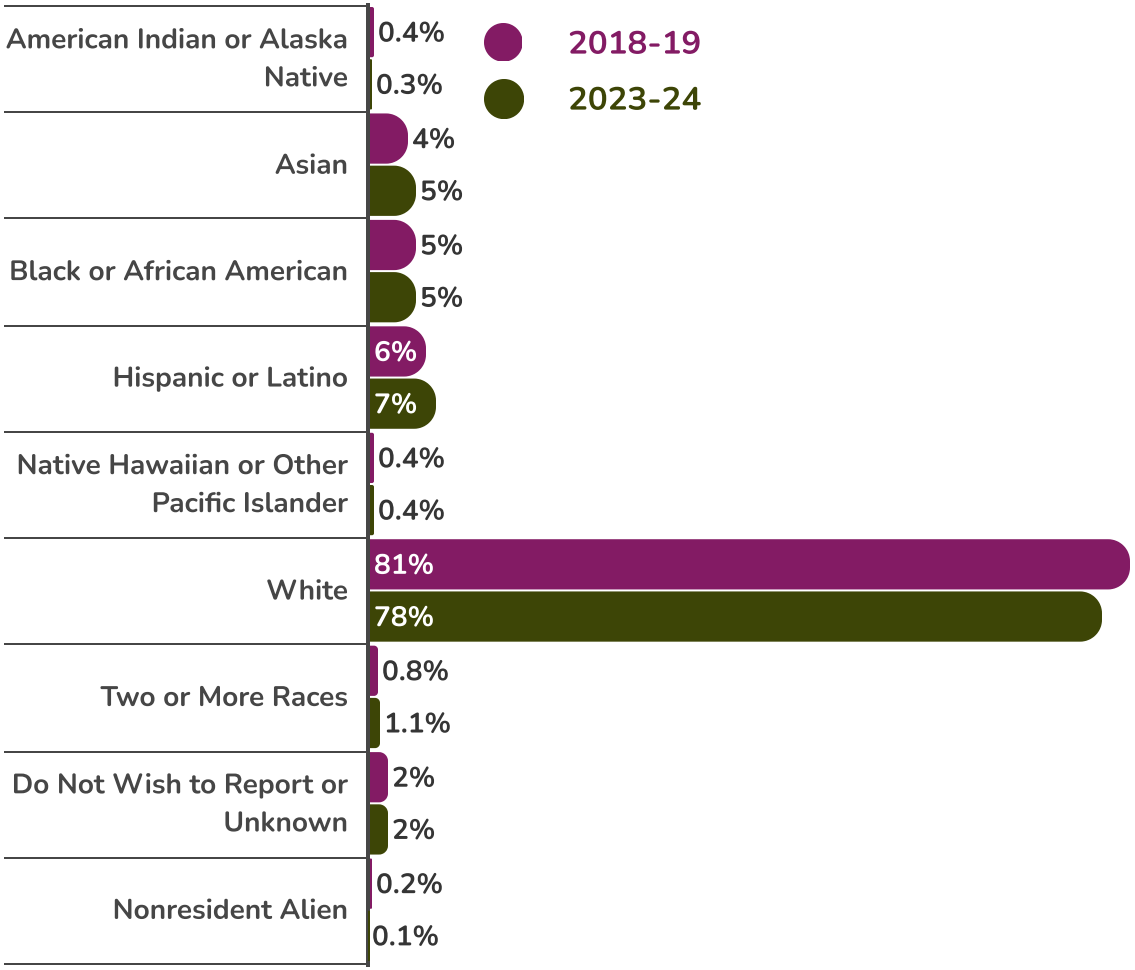


- The percentage of faculty reported with unknown race and ethnicity and/or undisclosed legal status information more than doubled between 2018-19 and 2022-23. Because of this large percentage, race and ethnicity figures should be interpreted with caution.

Notes: With close to one in four faculty members lacking disclosed race, ethnicity, and/or legal status information in the 2022-23 ADEA Faculty Census, these results should be interpreted with caution. This analysis reflects all the faculty for which the responding schools provided their race and ethnicity and legal status. Schools reported race and ethnicity information using pre-existing, faculty self-reported race and ethnicity data and U.S. citizenship status based on the school's administrative records. For more explanations and definitions, see Table A1 in Methodological Appendix of the source report. Percentages may not total 100% because of rounding. ADEA adheres to the current U.S. Department of Education guidelines for reporting race and ethnicity data for postsecondary education institutions.

Source: Istrate EC, Lawton KB, Cooper BL, Booker CL. Trends in Dental School Faculty: ADEA Dental School Faculty Positions Report, 2018-19 and 2022-23. Washington, DC: American Dental Education Association, August 2024.

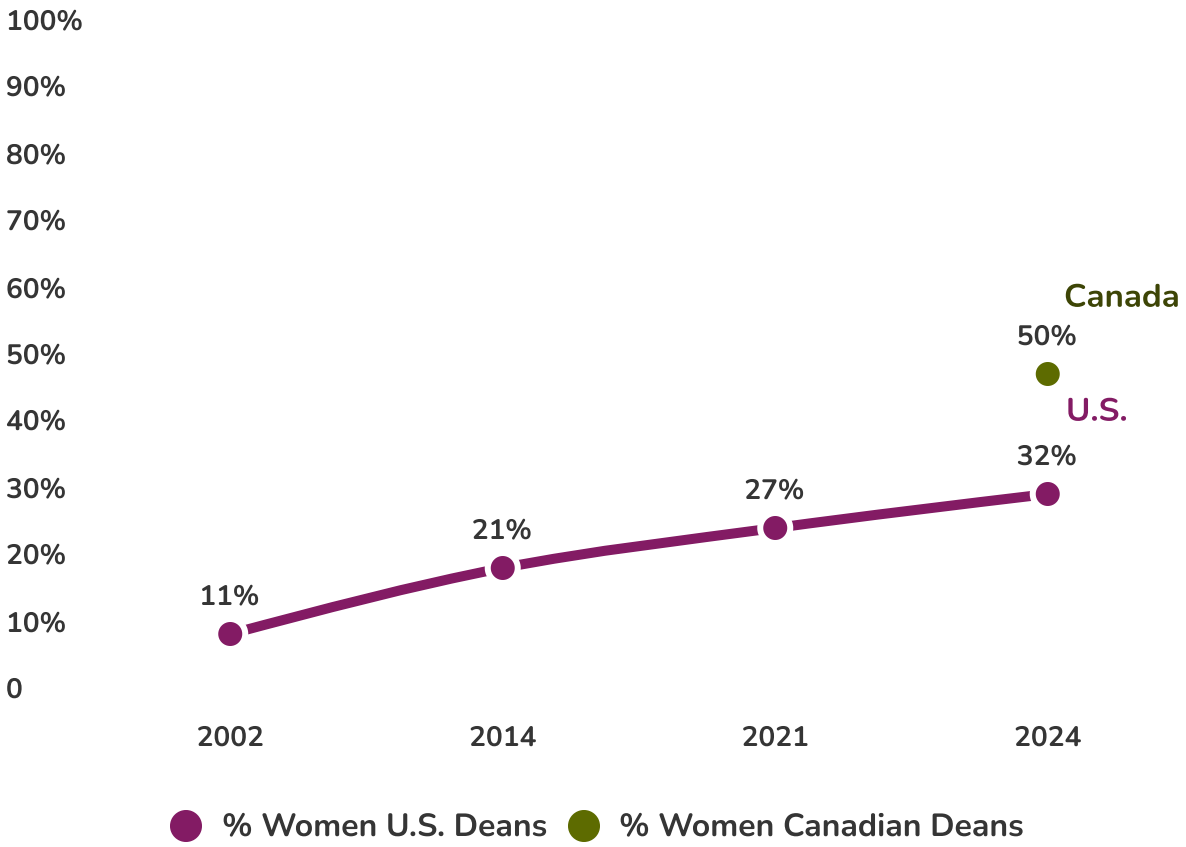
Fig. 4.8 U.S. Allied Dental Education Program Faculty by Race and Ethnicity, 2018-19 and 2023-24



- Most of the allied faculty is white with the share of white allied dental faculty declining slightly between 2018-19 and 2023-24.
- More Asian and Hispanic or Latino allied dental professionals became faculty in accredited U.S. allied programs in 2023-24 than five years before.

Notes: Percentages may not total 100% because of rounding. ADEA adheres to the current U.S. Department of Education guidelines for reporting race and ethnicity data for postsecondary education institutions. This analysis does not include dental therapy programs, because CODA has not started reporting on them due to the small number of accredited programs, as of November 2024.
Source: Analysis of American Dental Association, Health Policy Institute, Commission on Dental Accreditation, Surveys of Allied Dental Education Programs 2018-19 and 2023-24.

Fig. 4.9 Women Deans at Accredited U.S. and Canadian Dental Schools, 2002 to 2024



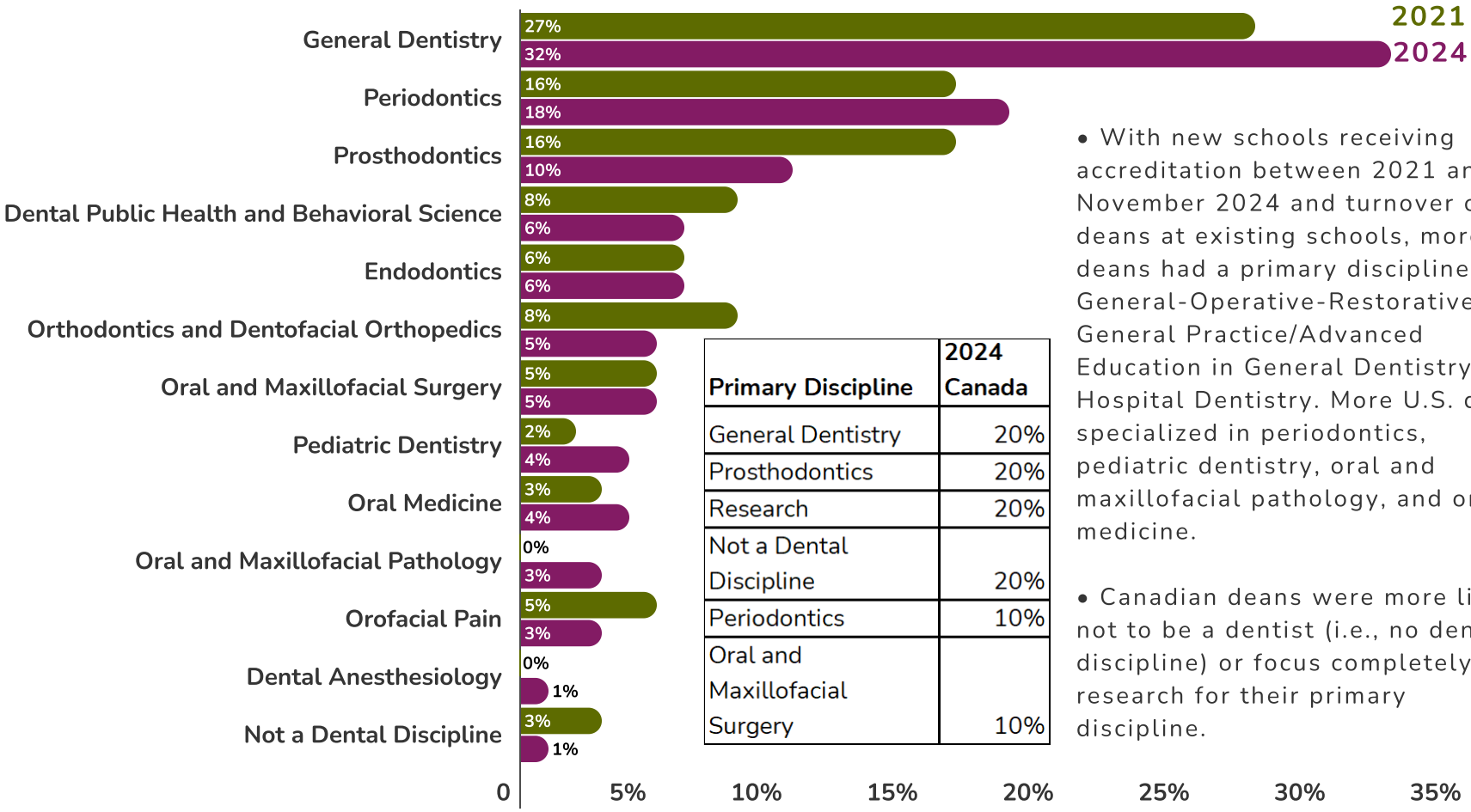
- The percentage of women among the deans at accredited U.S. dental schools nearly tripled between 2002 and 2024, reaching more than 3 in 10 deans.

- Canadian dental schools are getting close to parity in terms of gender distribution of their deans, with 50% of them identified as women in 2024.

- In collaboration with the Academy of Advancing Leadership, ADEA has conducted several surveys of U.S. deans. In November 2024, ADEA conducted an analysis of data collected from public sources on both the U.S. and Canadian deans of accredited dental schools, allowing a glimpse into the characteristics of Canadian deans.

Notes: The data reflects only full dean positions, at 77 accredited dental schools in the U.S. and 10 in Canada, as of November 2024. The 2021 data includes 61 U.S. deans at accredited dental schools and is self-reported. 2024 data is collected from public data.
Sources: For 2024 data, ADEA analyzed public data available on dental school websites, as of November 2024; 2021 data from Weinstein GJ, Haden NK, Stewart DCL, Pyle MA, Albino AW, West KP. A profile of dental school deans, 2021. J Dent Educ 2022;1-13. https://doi.org/10.1002/jdd.12933

Fig. 4.10 Primary Discipline of Deans at U.S. and Canadian Dental Schools, 2021 and 2024



Primary Discipline	2024 Canada
General Dentistry	20%
Prosthodontics	20%
Research	20%
Not a Dental Discipline	20%
Periodontics	10%
Oral and Maxillofacial Surgery	10%

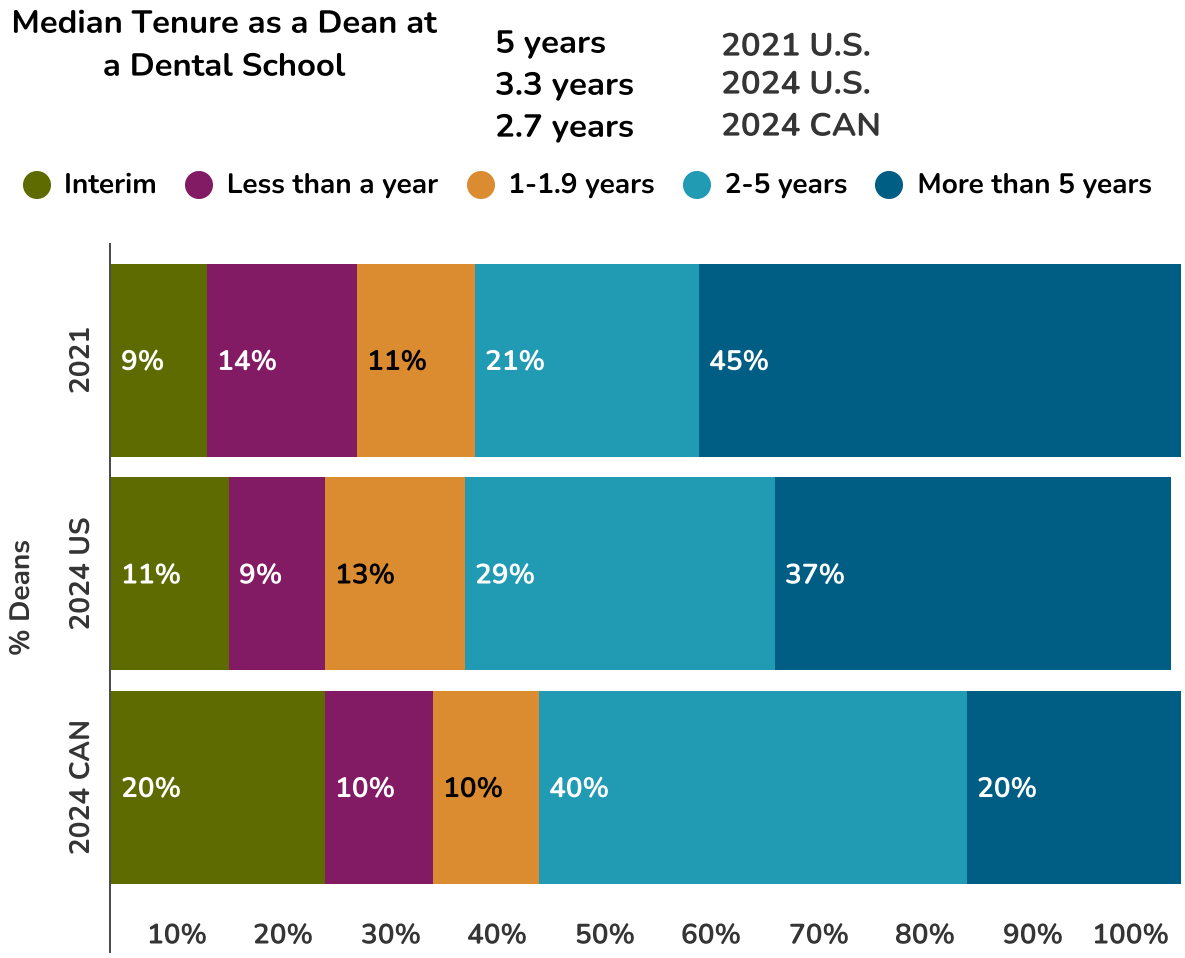
- With new schools receiving accreditation between 2021 and November 2024 and turnover of deans at existing schools, more deans had a primary discipline in General-Operative-Restorative or General Practice/Advanced Education in General Dentistry/ Hospital Dentistry. More U.S. deans specialized in periodontics, pediatric dentistry, oral and maxillofacial pathology, and oral medicine.

- Canadian deans were more likely not to be a dentist (i.e., no dental discipline) or focus completely on research for their primary discipline.

Notes: Percentages may not total 100% because of rounding. This data reflects all dean positions, including interim/acting dean positions at 77 accredited dental schools in the U.S. and 10 in Canada, as of November 2024. The 2021 data includes 61 U.S. deans at accredited dental schools and is self-reported. 2024 data is collected from public data. General dentistry positions include General-Operative-Restorative and General Practice/Advanced Education in General Dentistry/ Hospital Dentistry (GPPR/AEGD/Hospital Dentistry), for year to year comparability for the U.S. data. Prosthodontics includes prosthodontics/maxillofacial prosthetics.

Sources: For 2024 data, ADEA analyzed public data available on dental school websites, Linkedin and other internet resources, as of November 2024; 2021 data are from Weinstein GJ, Haden NK, Stewart DCL, Pyle MA, Albino AW, West KP. A profile of dental school deans, 2021. J Dent Educ 2022;1-13, https://doi.org/10.1002/jdd.12933.

Fig. 4.11 Length of Tenure as a Dean at U.S. and Canadian Dental Schools, 2021 and 2024



- A change among the ranks of deans at both U.S. and Canadian dental schools has been going on. The median tenure of a dean at U.S. schools decreased from 5 years in 2021 to 3.3 years by November 2024. In Canada, it was only 2.7 years in 2024. This reflects only full dean positions.

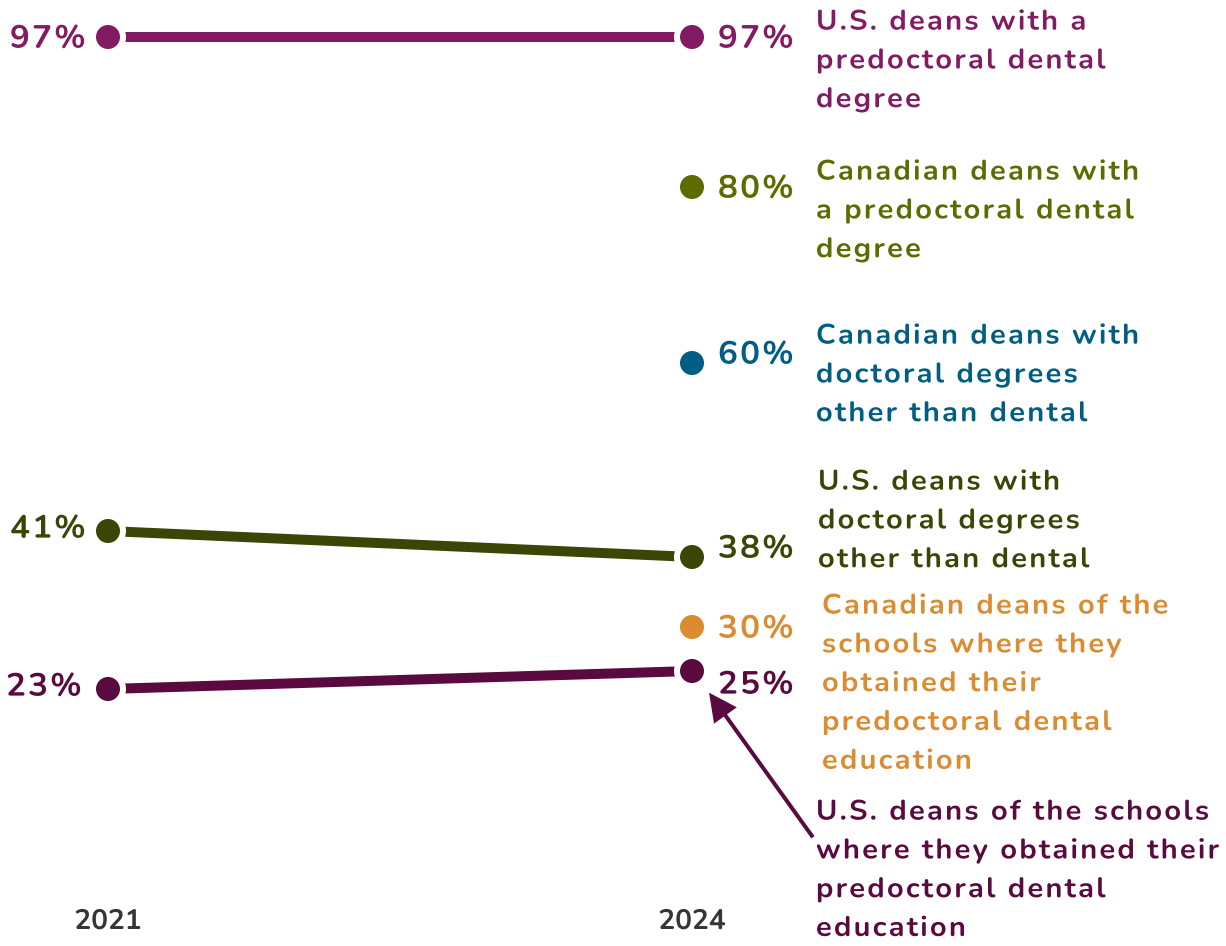
- The proportion of deans with long tenure (more than 5 years) was shrinking in the United States. Some deans with that length of service in 2021 moved on from their dean position or retired, as the percentage of interim deans and those with 1-1.9 years of tenure increased in 2024.

- For the Canadian deans, only 20% had more than 5 years tenure in 2024 and 40% were between 2 and 5 years.

Notes: Percentages may not total 100% because of rounding. The data of median tenure as a dean reflects only full dean positions, at 76 accredited dental schools in the U.S. and 10 in Canada, as of November 2024. The 2021 data includes 61 U.S. deans at accredited dental schools and is self-reported. 2024 data is collected from public data.

Sources: For 2024 data, ADEA analyzed public data available on dental school websites, Linkedin and other internet resources, as of November 2024; 2021 data from Weinstein GJ, Haden NK, Stewart DCL, Pyle MA, Albino AW, West KP. A profile of dental school deans, 2021. J Dent Educ 2022;1-13, https://doi.org/10.1002/jdd.12933.

Fig. 4.12 Deans' Academic Degrees and Percentage of Deans Who Became Dean of Their Predoctoral Dental Schools, U.S. and Canadian Dental Schools, 2021 and 2024



- The overwhelming majority of deans, including interim deans, at U.S. and Canadian dental schools have a predoctoral dental degree.

- About a quarter of U.S. deans and close to a third of Canadian deans are deans of the schools where they obtained their predoctoral dental education. The percentage has increased slightly for U.S. deans over the past three years.

- A higher percentage of Canadian deans completed doctoral degrees other than dental such as Ph.D., M.D., Ed.D., DSc.D., and J.D. than the U.S. deans, as of November 2024. The percentage has been declining for U.S. deans over the past years, but still close to 4 in 10 of U.S. deans have a doctoral degree other than dental. Many U.S. and Canadian deans obtained a Master's level degree.

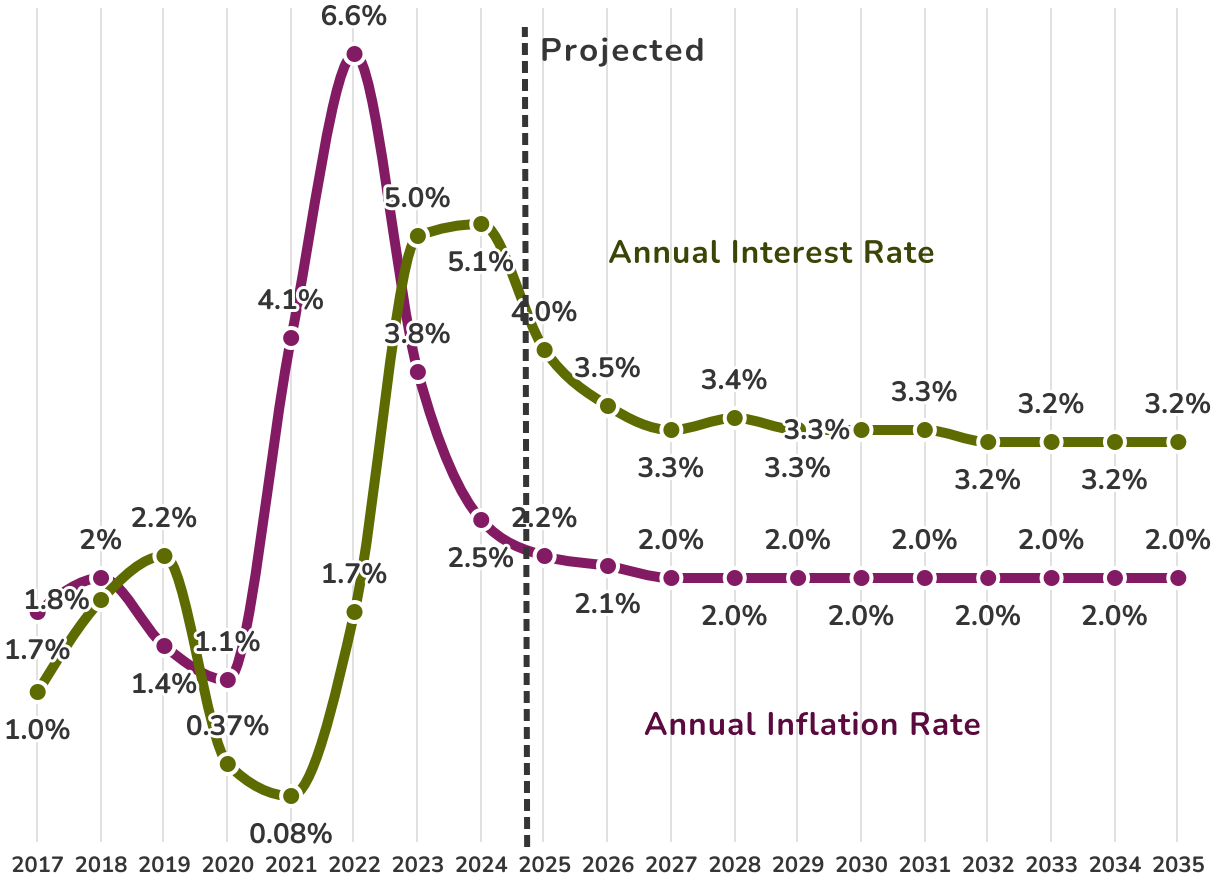
Notes: This data reflects all dean positions, including interim/acting deans. The 2021 data includes 61 U.S. deans at accredited dental schools and it is is self-reported. 2024 data reflects deans from 76 accredited dental schools in the U.S. and 10 in Canada, for which education information was publicly available: in November 2024. Predoctoral dental education includes D.D.S., D.M.D., and B.D.S. degrees. The advanced degrees include Ph.D., M.D., Ed.D., DSc.D., and J.D. degrees.

Sources: For 2024 data, ADEA analyzed public data available on dental school websites, Linkedin and other internet resources, as of November 2024; 2021 data from Weinstein GJ, Haden NK, Stewart DCL, Pyle MA, Albino AW, West KP. A profile of dental school deans, 2021. J Dent Educ 2022;1-13, https://doi.org/10.1002/jdd.12933.

Section 5.
The Macro Environment

Old and New Challenges

Fig. 5.1 U.S. Economic Projections: Annual Inflation Rate and Interest Rate, 2017 to 2035, as of January 2025

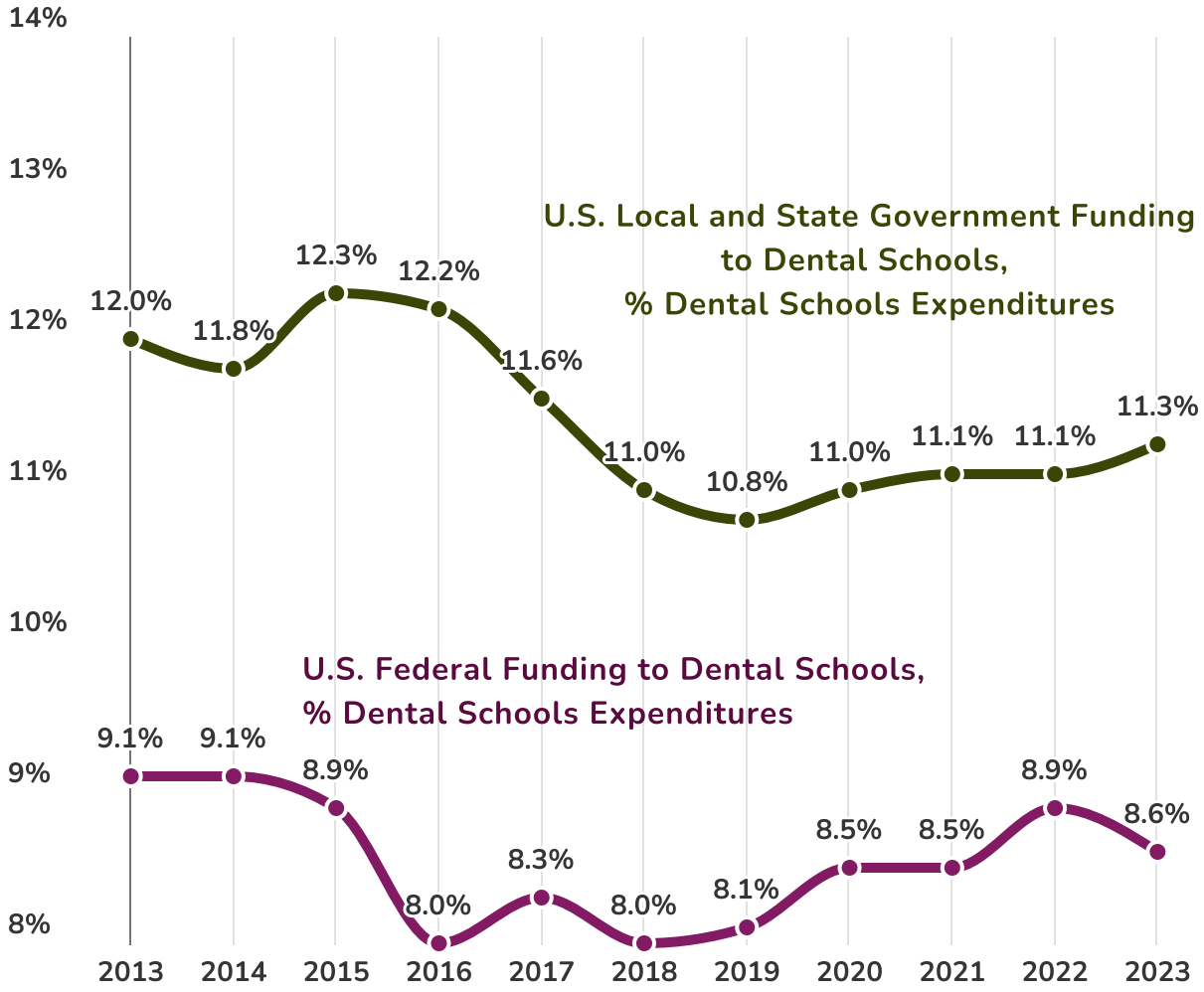


- As of January 2025, the U.S. Congressional Budget Office (CBO) projected that inflation would continue to fall in 2025 and 2026. Based on these projections, CBO forecasted that the U.S. Federal Reserve would continue to reduce interest rates through 2026.
- These projections are based on economic data as of Dec 4, 2024. Potential policy changes by the current Administration, such as rises in tariff levels, may increase the inflation rate.
- A lower inflation rate leads to lower interest rates, including mortgage rates. This facilitates the mobility of faculty and staff and potentially reduces the dental programs' opening (or vacancy) rates.

Notes: Inflation rate is the annual change in the Personal Consumption Expenditures (PCE) Index, which captures the changes in prices that people living in the United States pay for a wide range of goods and services. 2017 PCE level is 100. Interest rate is the federal funds effective rate, which is the rate at which depository institutions trade federal funds (balances held at Federal Reserve Banks) with each other overnight. Figures starting with 2025 are forecasted.

Sources: For historical interest rates: Board of Governors of the Federal Reserve System (US), Federal Funds Effective Rate, retrieved from FRED, Federal Reserve Bank of St. Louis; January 15, 2025. For historical inflation rates: U.S. Bureau of Economic Analysis (BEA), Table 2.3.7. Percent Change From Preceding Period in Prices for Personal Consumption Expenditures by Major Type of Product, as of January 31, 2025. Projections from the Congressional Budget Office (CBO).The Budget and Economic Outlook: 2025 to 2035, January 2025.

Fig. 5.2 U.S. Government Funding to Dental Schools Relative to Dental Schools Expenditures, FY 2013 to FY 2023

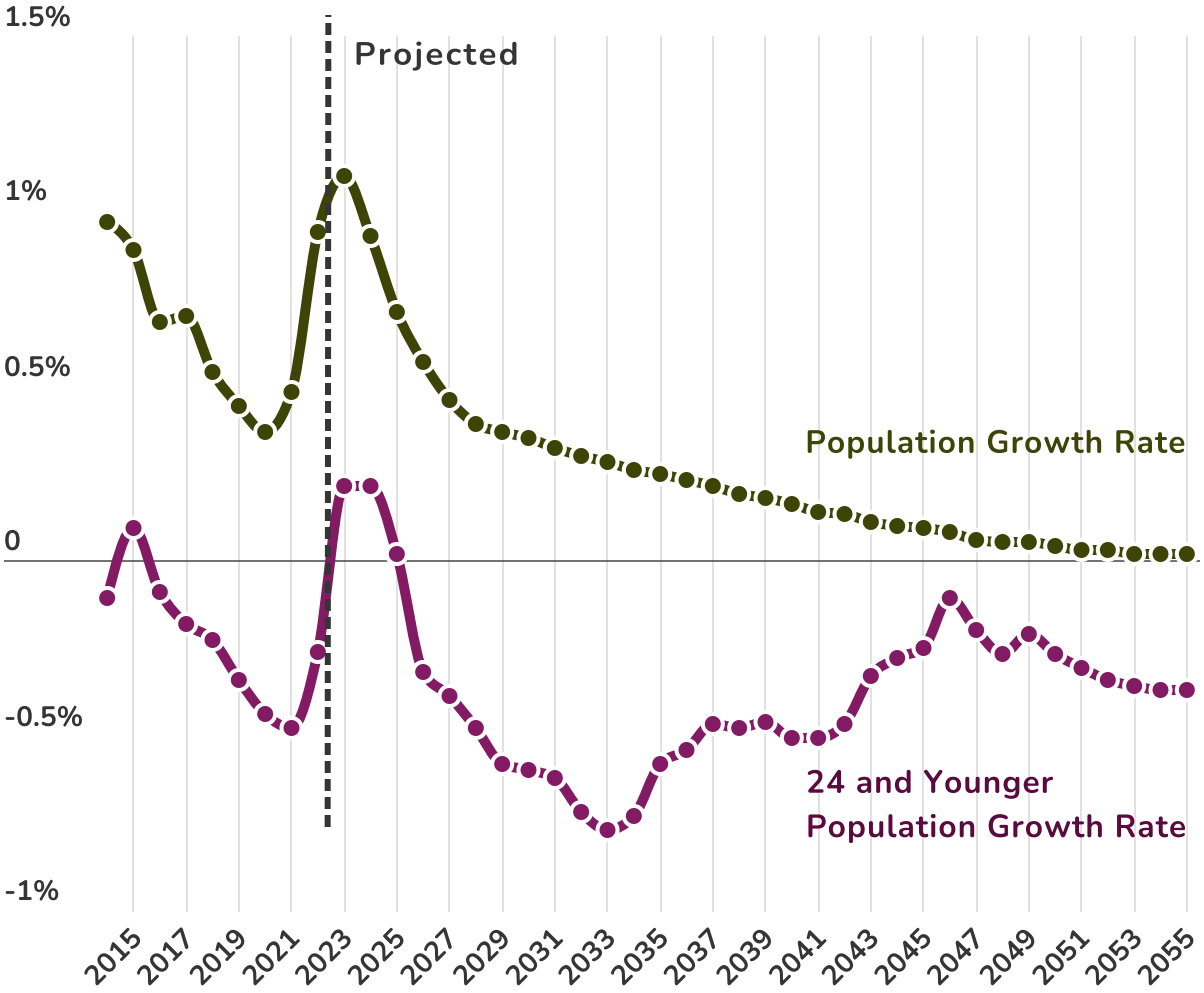


- On average, local and state government funding to U.S. dental schools increased less than overall expenditures of dental schools between FY 2013 and FY 2023. As a result, local and state government funding to dental schools as a percentage of dental schools expenditures declined over the analyzed period.
- Federal government support relative to dental school expenditures recorded a similar trend.
- This points to a downward pattern of government funding relative to dental school expenditures before the change in federal Administration in 2025.

Notes: Federal funding to U.S. dental schools is comprised of federal educational, graduate medical education, and research and training revenue to dental schools. It does not include the federal government programs reimbursement for health care services provided to Medicaid/CHIP/Medicare/Ryan-White Part F patients by dental school clinics.

Sources: ADEA analysis of American Dental Association, Health Policy Institute, 2013-14 to 2023-24 Surveys of Dental Education (Group III).

Fig. 5.3 U.S. Population Projections: Total Population and 24 Years or Younger Population, Annual Growth Rate, 2014 to 2055, as of January 2025



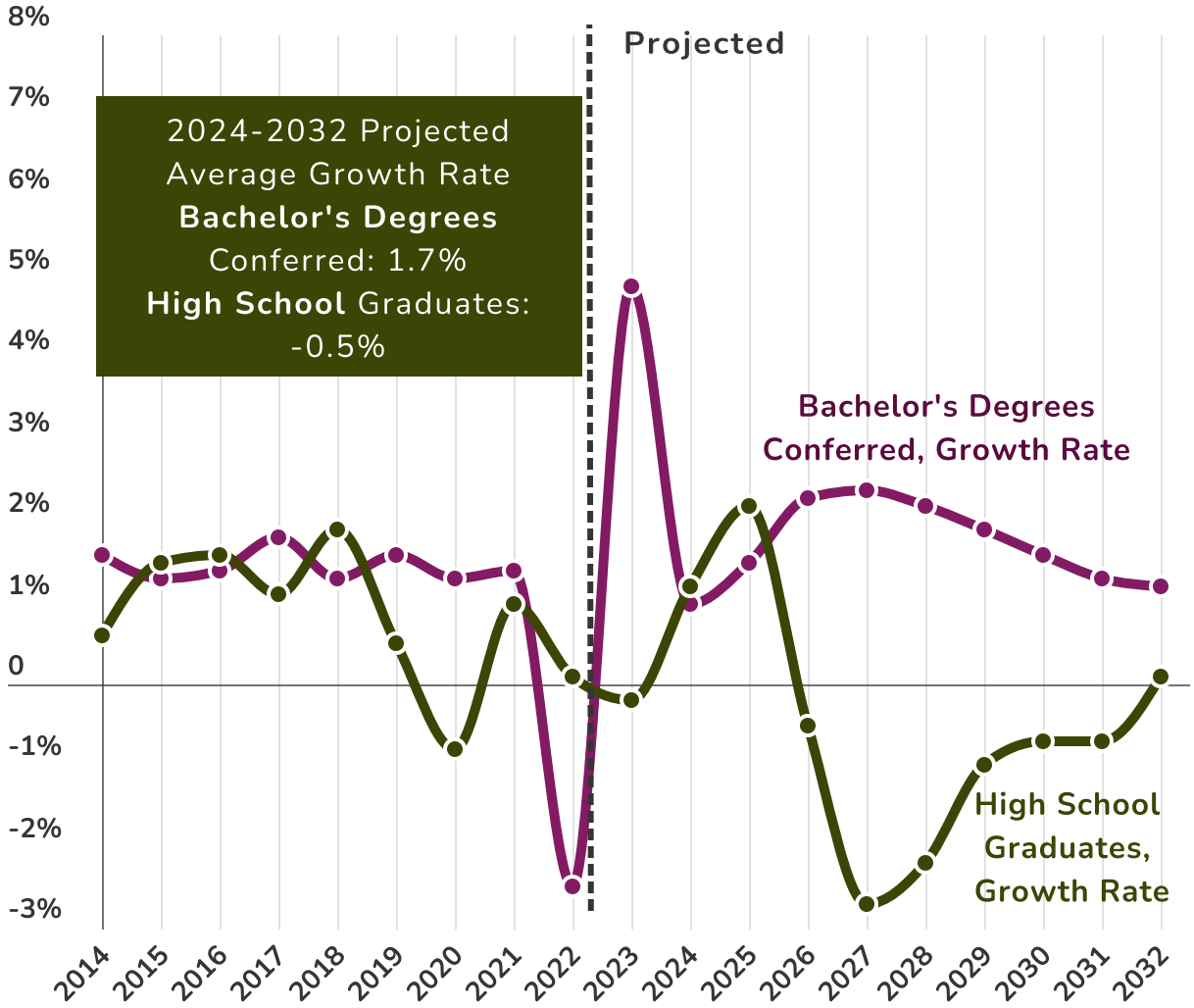
- As of January 2025, CBO projected that the U.S. population would continue to grow, but at an increasingly slower rate than in the past decades. When it comes to those younger than 24 years old, 2025 would be the last year of growth followed by continuous decline.

- These projections reflect laws and policies that were in place as of Nov. 15, 2024. Potential policy changes by the current federal Administration, such as significant immigration restrictions, may lower future population growth rates.

- Fewer individuals 24 years old and younger, without a significantly higher rate of college completion, especially in the preferred majors by dental schools, will mean a smaller dental applicant pool.

Notes: Population is the Social Security area population, which includes residents of U.S. states and territories, as well as U.S. citizens, federal employees, and service members living abroad. Figures starting with 2023 are forecasted.
Sources: U.S. Congressional Budget Office (CBO).The Demographic Outlook: 2025 to 2055, January 2025, available at https://www.cbo.gov/publication/60875

Fig. 5.4 U.S. Graduation Projections: High School and Bachelor's Conferred Degrees, Annual Growth Rate, 2014 to 2032, as of 2023



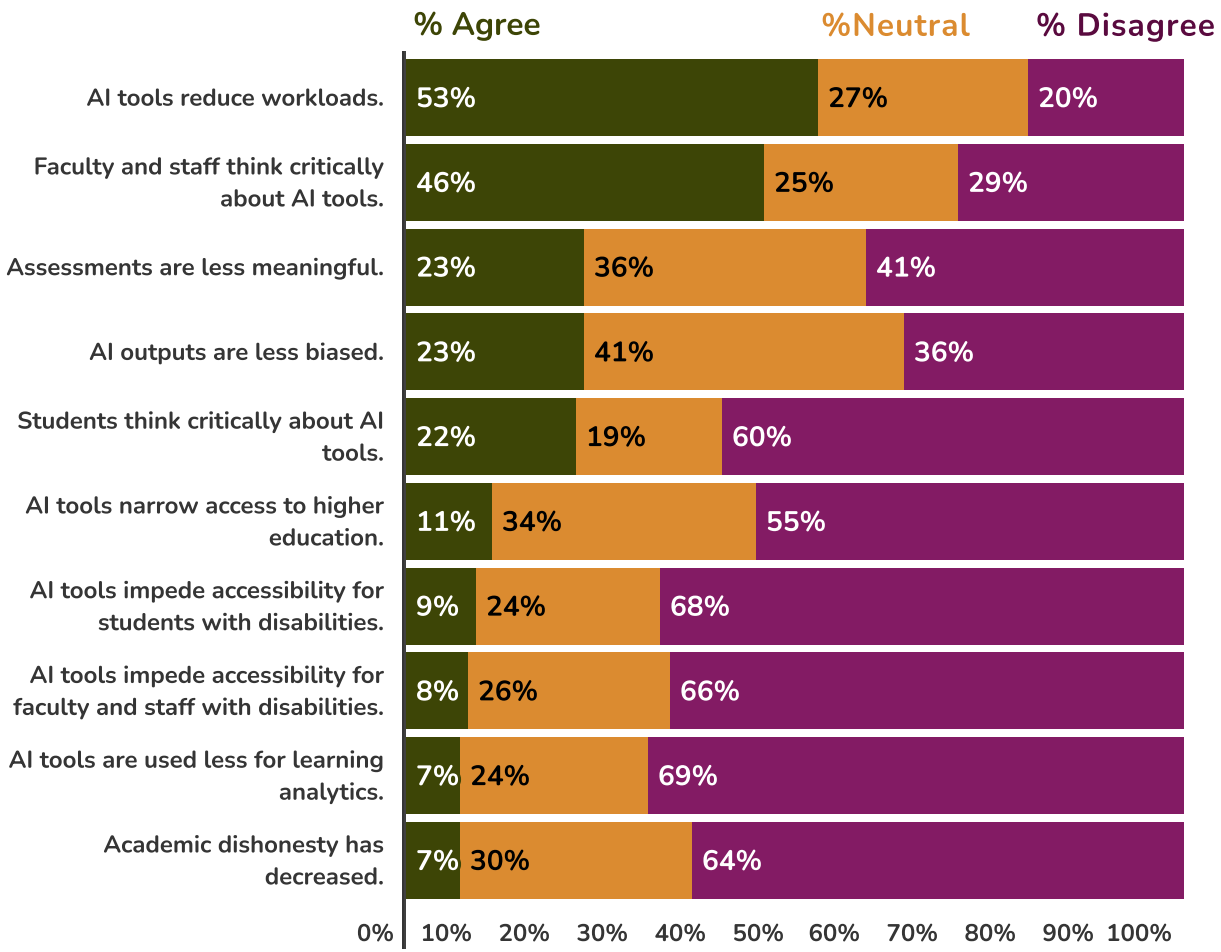
- The National Center for Education Statistics (NCES) projected more bachelor's degree conferred between 2024 and 2032 than between 2014 and 2022, as of 2023. 2023 and 2024 completion rates fit this projection. Based on the National Student Clearinghouse Research Center 2024 data, 2018 had a six-year credential completion rate of 61.1 percent, the highest over the last 12 cohorts tracked by the organization.

- At the same time, NCES predicted the number of high school graduates to shrink between 2026 and 2031.

- This points to a potential robust application pool for predoctoral programs for the immediate future, with increasing uncertainty at the beginning of the 2030s.

Sources: NCES, 2022 Digest of Education Statistics, Table 324.50.Degrees conferred by postsecondary institutions in selected professional fields,1985-86 through 2020-21. NCES, 2023 Digest of Education Statistics, Table 219.10 High school graduates, 1869-70 through 2031-32, as of August 2023. Table 303.70. Total undergraduate fall enrollment in degree-granting postsecondary institutions, 1970 through 2031, as of October 2023. Table 322.10. Bachelor's degrees conferred by postsecondary institutions, by field of study: Selected academic years, 1970-71 through 2021-22. National Student Clearinghouse Research Center, Yearly Progress and Completion Report, December 2024, available at https://nscresearchcenter.org/yearly-progress-and-completion/

Fig. 5.5 EDUCAUSE Estimated Impact of AI on Higher Education by 2026, as of December 2023



- Higher education faculty and staff were carefully considering the possibilities of the use of artificial intelligence (AI) by 2026, according to a 2023 EDUCAUSE survey.

- The majority of the respondents to the EDUCAUSE survey felt that by 2026 AI would help reduce their workloads and would be used for learning analytics. They also conveyed their trust that their colleagues thought critically about AI tools.

- There was widespread concern expressed regarding AI contributing to academic dishonesty and that students did not think critically about AI tools.

Notes: EDUCAUSE used the definition of AI established by the U.S. National Artificial Intelligence Act of 2020: "a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments." The survey was distributed by EDUCAUSE to faculty and staff between November and December 2023. The response sample was 910, and 719 individuals answered the question presented above. For more respondent demographics, check the Methodology and Respondent Demographics sections in the study.
Sources: Jenay Robert. 2024 EDUCAUSE AI Landscape Study. Research report. Boulder, CO: EDUCAUSE, February 2024, avialable at https://www.educause.edu/ecar/research-publications/2024/2024-educause-ai-landscape-study/introduction-and-key-findings. National Artificial Intelligence Initiative Act of 2020, H.R.6216, 2020.

The Road Ahead

The landscape of oral health education is ever changing. This report presented an overview of the latest trends in this arena, ranging from dental education programs; applicants, enrollees and graduates of allied, predoctoral and advanced oral health education programs; to faculty in dental education institutions. The analysis concluded with an examination of long-term challenges and emerging issues that are likely to impact decisions in the dental education and policy-making communities.

ADEA is committed to supporting members across academic dentistry in their preparation of new generations of oral health professionals. With new schools obtaining accreditation in the United States, ADEA remains the community of choice and continues to represent 100% of all the accredited dental schools in the United States and Canada. ADEA's reinforced recruitment efforts and partnerships over the past years contributed to the larger numbers of applications to predoctoral, dental hygiene and advanced programs. Further, ADEA strengthened the flexibility of the centralized application systems that facilitated the influx of applications to these oral health education programs.

ADEA is working closely with oral health students across the country. In June 2024, there were 54 ADEA Chapters for Students, Residents and Fellows registered for the 2023-24 association year. ADEA started a survey of graduating allied students in 2024 to help the allied dental education community better plan for the future. For participating dental schools and allied programs in the student exit surveys, ADEA produces individualized reports with insights into students' experience, funding of the degree and preparedness to practice.

ADEA expanded its continuing education efforts for faculty across the spectrum of allied, predoctoral and advanced dental education programs. The offerings diversified into micro-credentials, workshops for mid-career allied dental faculty, a leadership institute and a leadership development program focused on allied dental faculty. In recognition of the higher turnover trends among deans, ADEA started a Council of Deans Fellowship, now in its third year. The year-long program provides skills, knowledge and experience to fellows who intend to apply to positions as dental school dean or higher-level administration. To support the dental school deans in managing their institution's workforce, ADEA produces annually faculty compensation benchmarking reports for each participating school in the ADEA Faculty Census.

As "The Voice of Dental Education," ADEA is actively monitoring public policy developments at the state and federal levels and advocating on behalf of the community. ADEA leads member efforts to shape American Dental Association (ADA) policy affecting oral health education. For the longer horizon, ADEA created the ADEA Task Force on Envisioning and Transforming the Future of Oral Health & Education (ADEA TF – ETFOHE) in 2024. The Task Force is working on a framework for the future for oral health and then designing the oral health education model(s) that best support that future.

ADEA is oral health education and together we create a stronger future for academic dentistry, oral health professionals and for the health of communities across the United States and Canada.

We need you now more than ever—your commitment, your time and your efforts to engage and partner with each other and with ADEA.

Todd V. Ester, D.D.S., M.A.
2024-25 ADEA Chair–elect of the Board of Directors

ADEA | THE VOICE OF DENTAL EDUCATION

About ADEA: The American Dental Education Association (ADEA) is The Voice of Dental Education. Our mission is to lead and support the health professions community in preparing future-ready oral health professionals. Our members include all 87 U.S. and Canadian dental schools, more than 800 allied and advanced dental education programs, over 50 corporations and approximately 15,000 individuals. Our activities encompass a wide range of research, advocacy, faculty development, meetings, and communications, including the esteemed Journal of Dental Education®, as well as the dental school application services ADEA AADSAS®, ADEA PASS®, ADEA DHCAS® and ADEA CAAPID®. For more information, visit adea.org.

For more information, visit ADEA.org.

655 K Street, NW, Suite 800 Washington, DC 20001
202-289-7201 adeadata@adea.org