

SUMMARY REPORT

ADEA Education Research Series
Issue 2, October 2021

Allied Dental 2020:

An Analysis of the Results of the 2020 ADEA Survey of Allied Dental Program Directors in the United States

T HIS REPORT SUMMARIZES THE KEY FINDINGS of the analysis of the results of the *2020 ADEA Survey of Allied Dental Program Directors* (henceforth called “the *2020 ADEA Allied Survey*”).

It examines various aspects of the activity of accredited allied dental education programs during the 2019-20 academic year, from the type and geographical distribution of accredited allied dental education programs around the country, to information about their program directors, students and faculty.¹ The analysis reflects the characteristics of the 58% of accredited allied dental education programs in the United States who responded to the *2020 ADEA Allied Survey*.

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91% OF
PROGRAM
RESPONDENTS
TO THE 2020
ADEA ALLIED
SURVEY WERE
IN PUBLIC
INSTITUTIONS

1 THE 2020 ADEA ALLIED SURVEY AND THE
ACCREDITED ALLIED DENTAL EDUCATION
PROGRAMS IN THE UNITED STATES

The 2020 ADEA Allied Survey was conducted across 553 programs and the response sample is representative of the overall programs by U.S. Census region and type of program.² The 2020 ADEA Allied Survey sample has slightly more Midwestern and Northeast programs represented than the entire population of accredited dental education programs in the United States (See Table 1). In terms of program type, fewer than half of dental laboratory technology programs responded to the 2020 ADEA Allied Survey. Dental hygiene programs are slightly overrepresented in the 2020 ADEA Dental Survey response sample.

More than three-quarters (78%) of the responding allied dental education programs were in community/technical colleges in the 2019-20 academic year. The percentages vary by type of program, with 95% of respondent dental assisting programs in this institutional setting while only half of dental laboratory technology programs fit this format. Close to one in seven respondent programs are within dental schools and one in twelve are in universities without dental schools.

The overwhelming majority of program respondents to the 2020 ADEA Allied Survey were in public institutions (91%), the rate reaching 96.6% for the responding dental assisting programs. Note, one of the six responding dental laboratory technology programs in 2019-20 academic year is private.

The background image is a composite. On the left, a dental professional is shown from the chest up, wearing a white lab coat, a patterned scrub cap, a white surgical mask, safety glasses, and a clear face shield. They are also wearing blue nitrile gloves and giving a thumbs-up. On the right, a young woman is lying back in a dental chair, smiling at the camera. The overall color palette is dominated by teal and blue tones.

78% OF THE
RESPONDING
ALLIED DENTAL
EDUCATION
PROGRAMS
WERE IN
COMMUNITY/
TECHNICAL
COLLEGES IN
THE 2019-20
ACADEMIC YEAR

TABLE
1**Accredited U.S. Allied Education Programs and 2020 ADEA Allied Survey Response Sample by Type of Program and U.S. Census Region, 2019-20 Academic Year**

	2019-20 TOTAL ACCREDITED U.S. ALLIED EDUCATION PROGRAMS		2020 ADEA ALLIED SURVEY RESPONSE SAMPLE	
TYPE OF PROGRAM	COUNT	%	COUNT	%
DENTAL ASSISTING	214	39%	119	37%
DENTAL HYGIENE	325	59%	196	61%
DENTAL LABORATORY TECHNOLOGY	14	3%	6	2%
U.S. CENSUS REGION	COUNT	%	COUNT	%
MIDWEST	144	26%	93	29%
NORTHEAST	67	12%	41	13%
SOUTH	213	39%	114	36%
WEST	129	23%	73	23%
TOTAL NUMBER OF ACCREDITED U.S. ALLIED DENTAL EDUCATION PROGRAMS	553	100%	321	100%

Notes: Percentages may not total 100% because of rounding. U.S. Census region according to the U.S. Census Bureau "Region and Division Codes and Federal Information Processing System (FIPS) Codes for States." U.S. Census Bureau, Population Division, Internet Release Date: May 2018

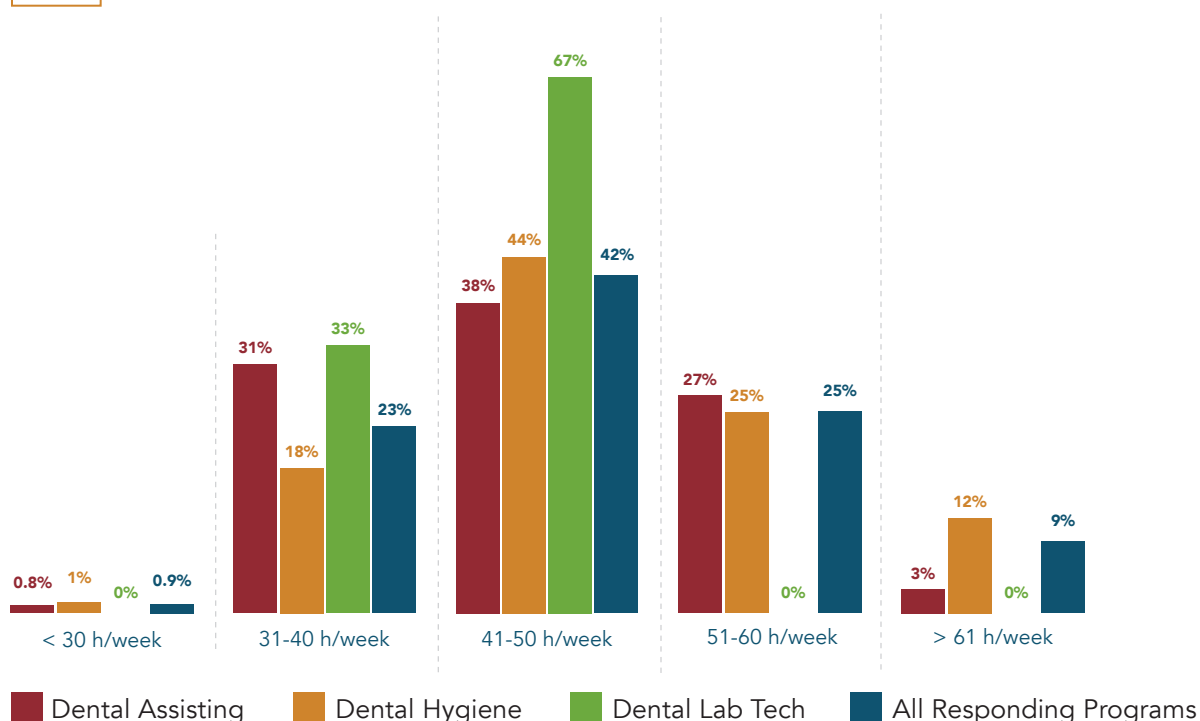
Source: Analysis of 2020 ADEA Survey of Allied Dental Program Directors data reflecting 2019-20 academic year; American Dental Association, Health Policy Institute, 2019-2020 Survey of Dental Education data.

2 PROGRAM DIRECTORS

Three-quarters (76%) of program directors at responding programs reported working more than a 40-hour week in the 2019-20 academic year (See Figure 1). While reporting working hours is a Commission on Dental Accreditation (CODA) requirement for the annual reports for accredited programs, the *2020 ADEA Allied Survey* asked program directors to state the number of weekly hours actually worked, even beyond the 40-hour week maximum allowed by the CODA report. Forty-two percent (42%) indicated working between a 41 and 50 hours a week, and another quarter of responding program directors stated working 51-60 hours per week. Dental hygiene program directors (81%) were the most likely to report working more than a 40-hour week.³ Forty-four percent (44%) of the reporting dental hygiene program directors mentioned working between 41-50 hours a week and a quarter, between 51-60 hours a week. At the end of the spectrum, there were 9% of responding program directors with more than 60 hours per week among the dental assisting and dental hygiene programs.

FIGURE
1

Weekly Workload of Program Directors at the Programs Responding to the 2020 ADEA Allied Survey, 2019-20 Academic Year



Source: American Dental Education Association, Survey of Allied Dental School Program Directors, 2020

**76% OF
PROGRAM
DIRECTORS AT
RESPONDING
PROGRAMS
REPORTED
WORKING
MORE THAN A
40-HOUR WEEK
IN 2019-20**

Less than half (43%) of the program directors at the responding programs had a 12-month contract in the 2019-20 academic year. Dental laboratory technology (75%) and dental hygiene (50%) programs stated higher percentages of their program directors having a 12-month contract. About three-quarters (74%) of the program directors with a 12-month contract mentioned that they earned less than \$100,000. All program directors with a 12-month contract at a dental laboratory technology program and an overwhelming majority of similar positions at dental assisting programs (85%) earned less than \$100,000, on average. For example, one of the responding dental assisting program directors with a 12-month contract mentioned that they earned between \$40,000 and \$49,000 in the 2019-20 academic year.

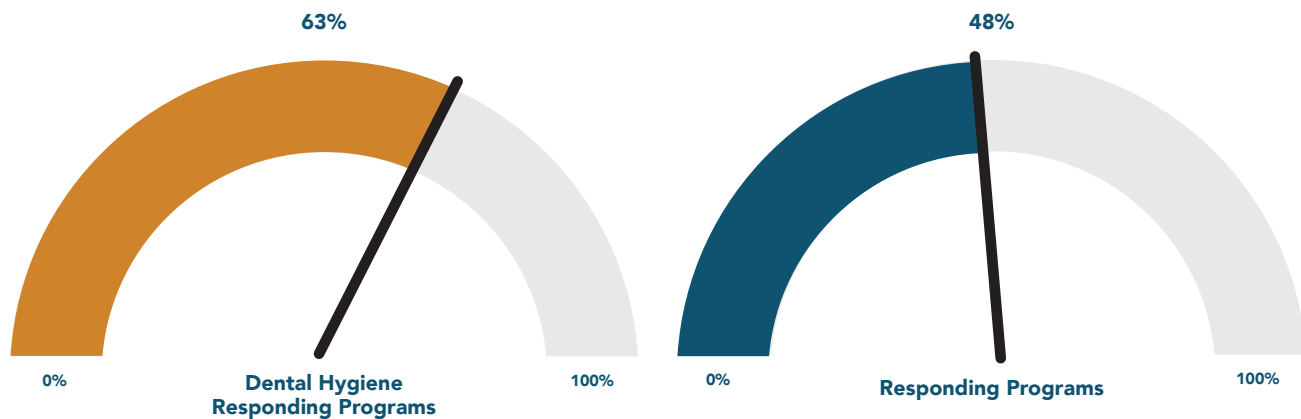
The majority of program directors at responding programs received additional financial compensation for administrative duties and/or teaching additional courses in the 2019-20 academic year. About half of program directors at participating programs (52%) got some compensation for administrative duties. Dental assisting and dental hygiene programs reported relatively similar rates with the overall rate. Fewer—about a third of responding dental laboratory technology programs—stated such compensation was available for program directors. Overall, respondent programs indicated 56% of program directors got some compensation for teaching additional courses. This rate is higher for dental assisting programs; almost two-thirds (64%) of dental assisting programs stated that their program directors received compensation for teaching additional courses.

3 STUDENT COMPETENCY ACHIEVEMENT AND GRADUATION REQUIREMENTS

Allied dental education programs aim to train and educate the next generation of dental professionals, such as dental assistants, dental hygienists and dental laboratory technicians. The 317 responding programs had 12,483 students enrolled during the 2019-20 academic year, with the overwhelming majority on a full-time status basis (96%). More than three-quarters (76%) of these students were enrolled in dental hygiene programs. Overall, responding programs had a 4 to 1 ratio of students to faculty, with dental hygiene and dental laboratory technology programs at a 3 to 1 ratio.

FIGURE
2

Proportion of 2020 ADEA Allied Survey Responding Programs Utilizing OSCEs, 2019-20 Academic Year



Note: Objective Structured Clinical Examinations (OSCEs) are employed in dental education to evaluate student competency achievement and/or graduation requirements.

Source: American Dental Education Association, Survey of Allied Dental School Program Directors, 2020

**63% OF
DENTAL
HYGIENE
RESPONDING
PROGRAMS
AND 48% OF
RESPONDING
PROGRAMS
USED OSCEs
IN 2019-20**

Allied dental education programs use a variety of assessment measures to measure the degree of competency achieved by students. Close to half (48%) of responding programs used Objective Structured Clinical Examinations (OSCEs) to evaluate student competency achievement and/or graduation requirements in the 2019-20 academic year (See Figure 2). Dental hygiene programs (63%) were more likely to use this type of examinations than the average allied dental education program respondent. A significant percentage (43%) of responding programs were employing portfolio assessment as a student-centered, nontraditional evaluation measure. The utilization rate of this assessment method was relatively similar across responding allied dental education programs.

Clinical sessions help students gain the necessary clinical skills to practice upon graduation. At the same time, these clinical sessions may generate income to support the budget-constrained program operations. More than half (59%) of the responding programs had activities that generated income, with dental hygiene reporting the highest rate (84%). The typical gross income generated at a responding program was \$350 per clinical session, ranging from \$450 for dental assisting programs to \$328 per clinical session at a dental hygiene program.

**81% OF
FACULTY AT
RESPONDING
PROGRAMS
DURING
THE 2019-20
ACADEMIC
YEAR WERE
WHITE**

**4 FACULTY
CHARACTERISTICS**

The data reported by the responding programs showed a lack of race and ethnicity diversity among faculty in the 2019-20 academic year. The overwhelming majority of the faculty (81%) was white, with similar high percentages across program types (See Figure 3). Only 13% of the faculty was from historically underrepresented racial and ethnic (HURE) communities. The minority faculty (HURE together with Asian faculty) represented 18% of all the faculty at responding programs.

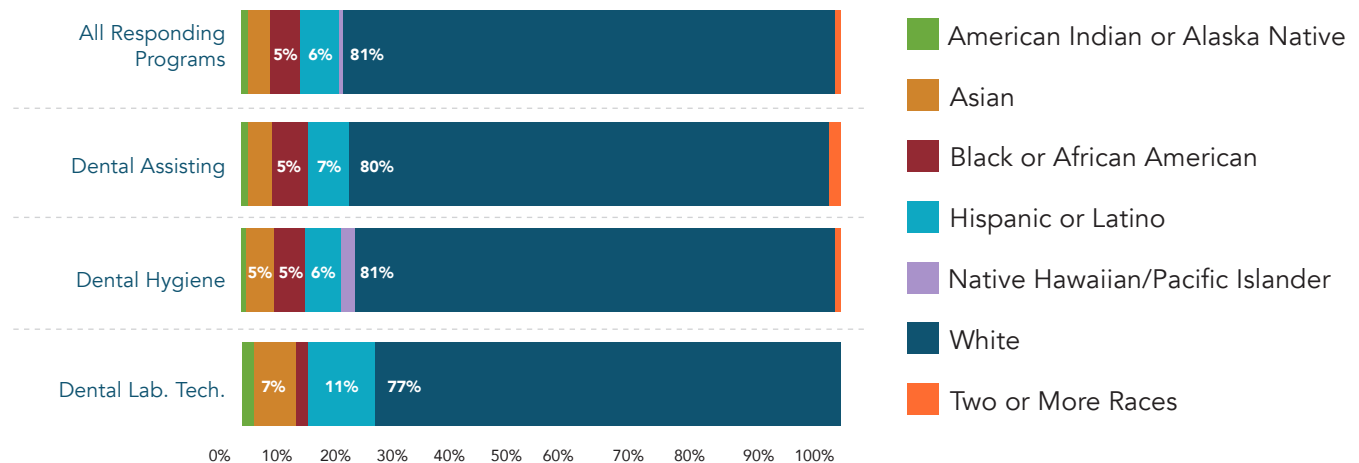
Women represented the overwhelming majority (88%) of faculty at responding programs in the 2019-20 academic year and an even higher percentage among full-time faculty (93%). Overall, the faculty in the response sample was relatively evenly distributed across the age groups of 30-39, 40-49, 50-59 and 60-69. Another 8% of faculty were under age 30 or above 69.

The majority of faculty at responding programs had a graduate degree. More than a third (37%) had a master's degree as their highest earned degree, followed by those holding a dental doctoral degree (15%) and other doctorate degrees (4%). Dental hygiene programs had an even higher rate: 59% of all faculty had a graduate degree in the 2019-20 academic year. Depending on the type of program, faculty had different certificates and licenses. For example, 85% of faculty at responding dental hygiene programs were registered dental hygienists. Among the dental assisting program faculty, almost half (49%) were certified dental assistants, 17% were registered dental assistants and 16% were expanded functions dental assistants. All faculty at responding dental tech lab programs were certified dental technicians.

Faculty at responding programs were more likely to be part-time and adjunct. Three out of five (60%) faculty members were part-timers and almost a third (30%) of faculty were adjunct in the 2019-20 academic year. Most of the part-time faculty were hired on a non-tenured basis in 2019-20.

FIGURE 3

Allied Dental Education Faculty by Race and Ethnicity at 2020 ADEA Allied Survey Responding Programs, 2019-20 Academic Year



Notes: Percentages may not sum up to 100 due to rounding. This analysis reflects 297 faculty for which responding allied dental education program directors reported race/ethnicity information.

Source: American Dental Education Association, Survey of Allied Dental School Program Directors, 2020

About two in five of the almost 3,500 faculty body at responding programs had full-time status in the 2019-20 academic year. Dental laboratory technology programs had the largest share of full-time faculty at 65%. Less than a third (31%) of full-time professors had a 12-month contract. In terms of tenure status, about half of all full-time faculty were tenured in the 2019-20 academic year, with full professors being the largest share. Another 23% of full-time faculty were on the tenure-track, mostly assistant professors and instructors. A significant percentage of full-time faculty (28%) worked on a non-tenure basis in 2019-20, comprised largely by assistant professors, instructors and adjuncts.

The overwhelming majority (91%) of full-time, teaching faculty with a 12-month contract at responding programs earned between \$50,000 and \$89,999 in the 2019-20 academic year. The largest percentage (35%) of those on a 12-month contract had an average salary between \$60,000 and \$69,999. The share for dental assisting was slightly higher than the rest, with 44% of their full-time teaching faculty with a 12-month contract earning in the \$60,000 range.

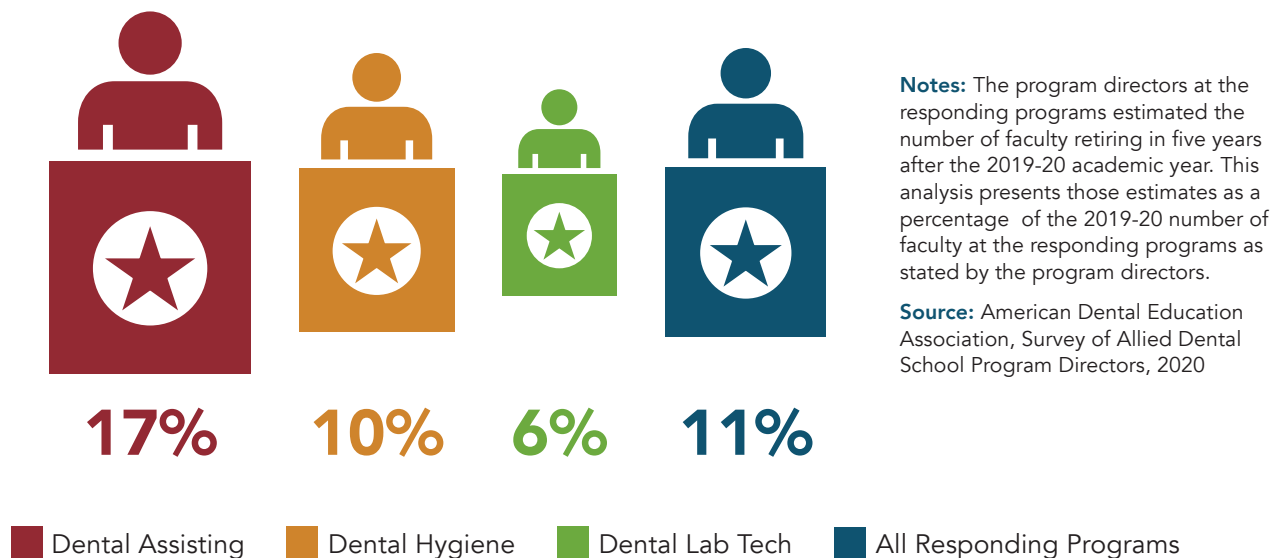
**11% OF
FACULTY AT
RESPONDING
PROGRAMS
ARE PREDICTED
TO BE
RETIRING IN
FIVE YEARS
AFTER THE
2019-20
ACADEMIC
YEAR**

5 NEW, LEFT, LOST AND VACANT FACULTY POSITIONS

2020 was a difficult year with the start of the COVID-19 pandemic. It affected a significant portion of the 2019-20 academic year with departures of about one-in-five faculty leaving a responding program with tenure were due to the COVID-19 pandemic. None of the faculty leaving the responding dental laboratory technology programs pursued this decision because of the pandemic, while 23% of those from the respondent dental hygiene programs left because of this major event.

Overall, most of the faculty leaving from responding programs were part-time and non-tenured (62%). More than quarter (27%) of this group left because of the pandemic. At the same time, full-time and tenured faculty represented a much higher share of the leaving (19%) than new faculty (5%) at responding programs. This resulted in one in six of the 2019-20 academic year vacancies being full-time and tenured positions.

In the 2019-20 academic year, program directors at responding programs estimated 11% of the existing faculty to retire in the next five academic years (See Figure 4). This rate varies from 17% for dental assisting and 10% for dental hygiene to 6% for dental laboratory technology programs. Program directors estimated their programs would lose about 17% of these retired positions and 35% of the retirements would result in vacancies. Full-time positions would constitute the bulk of the lost positions (73%) and of the vacant positions (64%).

FIGURE
4**Estimated Faculty Retirements in the Next Five Years at the 2020 ADEA Allied Survey Responding Programs, as % of 2019-20 Faculty**

CONCLUSION

2020 was a difficult year all-around. The results of the *2020 ADEA Allied Survey* reflect to a certain extent this unusual situation, but they also present the current realities for the accredited allied dental education programs in the United States. Most of the responding programs are in public institutions, especially community colleges. The budgetary constraints placed upon these higher education institutions contribute to challenging work conditions for program directors, such as work contracts often shorter than 12 months, low pay and high weekly workload. The results of the *2020 ADEA Allied Survey* in the years to come will tell whether the long work hours are a trend, or mainly a reflection of the unusual situation due to the COVID-19 pandemic.

Looking towards the future, the results point towards three critical issues: lack of faculty diversity, the widespread employment of part-time and adjunct faculty and impending faculty retirements. First, lack of gender, racial and ethnic diversity among allied dental education faculty is widespread. Further, most faculty are part-time, and a high percentage is adjunct. Program directors expected more than one in 10 of the current faculty to retire in the next five years. Other results show an increased diversification of student assessment methods. Almost half of the responding programs and close to two-thirds of the responding dental hygiene programs used OSCEs to evaluate student competency achievement and/or graduation requirements in 2019-20 academic year. Further, a significant proportion of responding programs employed portfolio assessments. Even in these difficult times, allied educators continued their dedicated efforts to train and educate the next generation of oral health professionals.

ACKNOWLEDGMENTS

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ENDNOTES

1. The analysis is limited to the 2019-20 academic year results and is not comparable with the 2018 ADEA Allied Survey results for the 2017-18 academic year due to different sampling frames and changes in methodology.
2. Two chi-square tests fail to reject the null hypothesis that the distribution of accredited U.S. allied dental education programs in the response group is the same as the distribution of programs in the population by type of program and by U.S. Census region. P-value for the chi-square statistic with 2 degrees of freedom from the test by type of program= 0.94. P-value for the chi-square statistic with 3 degrees of freedom from the test by U.S. Census region= 0.89.
3. All the percentage differences discussed in this report are statistically significant at 90% confidence interval.

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