



Baccalaureate Degree Program (BDP)
Workforce Need and Evidence of Sufficient Demand for the Proposed Program
Cycle #3, August 2023

The purpose of this form is to obtain evidence of both demand and necessity of a four-year degree for your proposed program.

Form Instructions

Complete the questions below and upload this form in a pdf format in response to the BDP Application Question #5. Evidence of Sufficient Demand. **Please limit your response to no more than ten (10) pages**

Name of College/Applicant	Oxnard College/Ventura County Community College District
Title of proposed program	Bachelor of Science in Dental Hygiene

A. Necessity

The Oxnard College Dental Hygiene baccalaureate program addresses the issues of workforce development, equity, affordability, and opportunity for economic advancement for our underserved and underrepresented individuals and families in Ventura County. Increasing access to affordable higher education opportunities is integral to our college’s mission and vital to our local community. Oxnard College (OC) is a proud Hispanic Serving Institution. Since 1975, we have served the hardworking Hispanic families of Ventura County who face several barriers to education. These include higher poverty rates and more non-native English speakers than the rest of our County, coupled with lower median household income and educational attainment. Oxnard College is an institution with 84% of students from racial/ethnic minorities (73% Hispanic/Latinx). More than 65% of the college’s students are classified as low-income and more than 44% are first-generation college students. Furthermore, the City of Oxnard has low rates of 4-year baccalaureate degree attainment (18.9%) for individuals 25 years of age and older, especially when juxtaposed against the county (34%) and state (35.3%). Over 76% of Oxnard College Dental Hygiene students receive some form of financial aid and are low-income, first generation, place-bound individuals seeking a career to enhance their socio-economic condition who are unlikely to continue their education if a bachelor’s degree program is not available locally despite their desire to do so.

Integrating a liberal and professional education for our graduates fulfills the objectives and philosophy of higher education. Healthcare requires an ever-increasing interdisciplinary collaboration. The value of the proposed degree supports the need for dental hygienists to

possess a wide range of analytical and communication skills developed in higher education programs. The four semesters that make up our full-time dental hygiene curriculum focus on quality teaching with appropriate breadth and depth of biomedical, dental hygiene sciences, and clinical skills taught by the dental hygiene faculty. The curriculum strengths are in providing depth of knowledge, exposure to new knowledge, skill development, technology, diverse experiences, and an array of community service-learning activities. Because of the advanced skill required for dental hygiene licensure, many of our current associate degree students graduate with 120 units or more after completing the prerequisites and major coursework. This unit load is more in line with a baccalaureate degree. Promoting baccalaureate degrees in California's dental hygiene educational programs follows the vision and goals of the California Community Colleges of increasing degree attainment and reducing excess unit accumulation by students. The addition of the proposed BSDH program at Oxnard College will benefit the students, the community, and the state and help close the workforce gap with no adverse effect on our four-year partners.

The proposed bachelor's degree in Dental Hygiene will also help to address the lack of qualified dental hygiene educators in the region, which directly impacts the ability to expand the existing Oxnard College Dental Hygiene program. Our associate degree program annually receives three to four times the number of applicants than can be admitted, largely due to the limited pool of available instructors. The minimum qualification for Dental Hygiene program faculty is a baccalaureate degree or higher from a college or university accredited by an agency recognized by the U.S. Department of Education or Council for Higher Education Accreditation.¹ With only two of the community colleges in the state of California currently offering the opportunity for a baccalaureate degree in dental hygiene, and two recently approved to develop their programs, and no UC or SCU's with dental hygiene educational programs, the lack of qualified educators with BSDH degrees to educate and prepare students to pass licensing exams in the other 23 associate degree programs in California is a major cause for concern and a dilemma that we have already been experiencing with hiring at Oxnard College. The ADHA² also identified the need to move toward the baccalaureate degree as the entry point for the profession with a universal core curriculum that integrates oral health with interdisciplinary studies.

The American Dental Education Association^{3,4} states the following:

- Creating a clear pathway to a bachelor's degree in dental hygiene will improve individual upward career mobility by making it easier for dental hygienists to earn a bachelor's degree.
- Baccalaureate degrees in Dental Hygiene will improve the country's oral health by increasing the number of qualified dental hygienists available to serve as educators and leaders.
- Dental Hygienists with bachelor's degrees have broader career paths available to them within dental hygiene education, administration, public health, and corporate dental hygiene sales and education.

The Journal of Dental Hygiene⁵ indicates the following:

- A growing body of evidence suggests the baccalaureate degree is needed for dental hygiene (DH) graduates to address the changes in oral health delivery and health

systems, develop the societal expectations of a professional, and practice to the full extent of their education.

- Transitioning from the associate to the baccalaureate as the minimum entry-level degree in DH will better prepare graduates to address the increasingly complex oral health care needs of the public.
- The higher degree prepares the dental hygienist to serve in roles that will improve access to high-quality care and allow for interprofessional collaboration as a part of a healthcare team.
- A higher entry-level degree is also needed to advance the public perception of DH and its recognition as a unique healthcare profession.

B. Workforce Need

In assessing the viability and significance of the proposed Baccalaureate Degree Program in Dental Hygiene at Oxnard College, a crucial aspect lies in understanding the prevailing workforce needs within the dental hygiene field. This section aims to provide a comprehensive overview of the growing demand for skilled dental hygienists, highlighting the regional and national factors that underscore the necessity for a well-structured and advanced program. Supported by a detailed analysis, the forthcoming information will shed light on the program's vital role in bridging the workforce gap and cultivating highly qualified professionals to meet the evolving demands of the dental hygiene industry.

The severe shortage of hygienists in California and throughout the nation is having a negative impact on access to care, with patients having to wait months to receive preventive dental care in both private practice and public health settings. A 2020 study by the American Dental Hygienists' Association (ADHA) found that the pandemic resulted in a reduction, mainly due to voluntary retirement, of the U.S. dental hygiene workforce by an estimated 3.75% or approximately 7,500 dental hygienists. The Commission on Dental Accreditation received a letter in January 2023 from 17 state dental associations, including California, expressing their concerns about the workforce shortage nationwide. Locally, the Ventura County Dental Hygiene Association job board is overwhelmed with postings for dental hygiene positions and the Oxnard College Dental Hygiene program receives a minimum of four to five emails and/or phone calls weekly from employers seeking dental hygiene graduates to fill vacant positions.

According to the Occupation Overview by Lightcast, Oxnard College is the only Dental Hygiene program (CIP Code 51.0602) in the South Central Coast Region. The report stated that there were 135 job openings in 2021 with only 17 completions from the only regional institution, Oxnard College. The average number of openings for an occupation in this region is 195. A practical approach to this significant undersupply would be to increase enrollment; however, this viable solution is hampered by a lack of applicants with baccalaureate degrees in dental hygiene who meet the qualifications to teach the clinical courses.

Labor Market Research data compiled by the South Central Coast Center of Excellence shows the following:

- In the South Central Coast region, **the number of jobs related to Dental Hygienist are expected to remain steady** for all three aligned occupations.
- Dental Hygienist is anticipated to experience a **low risk of automation** for all three related occupations.

- In 2021 there were 169 regional completions in programs related to the occupations identified as aligned with Dental Hygienist and **439 openings**, indicating an **undersupply**.
- Completers of Dental Hygienist programs from the 2019-2020 academic year in the South Central Coast region had a **median annual wage upon completion of \$51,430**.
- 82% of students are **employed within a year** after completing a program.
- 72% of students **attained a living wage** within a year of completion.
- Completers experienced an average of **+74% change in earnings after exiting**.

It is essential to highlight that Oxnard College's Dental Hygiene program is **the only Community College Dental Hygiene program in the South Central Coast region**. This region consists of San Luis Obispo County, Santa Barbara County, Ventura County, and the following cities from North Los Angeles County: Canyon Country, Castaic, Lake Hughes, Lancaster, Littlerock, Llano, Newhall, Palmdale, Pearblossom, Santa Clarita, Stevenson Ranch, and Valencia.

The American Dental Association, Health Policy Institute, 2021-22 Survey of Dental Hygiene Education Programs found that over 67% of male Dental Hygiene faculty were over the age of 50 with 50% age 60 and over and forty three percent of female DH faculty were over the age of 50 with 20% over age 60.6 Based on these statistics, and the likelihood that many current educators are approaching retirement age, recruiting qualified faculty to meet the demand to enroll more applicants will only get more dire in California if dental hygiene baccalaureate programs in community colleges do not become the norm.

Confronting the workforce need by offering a baccalaureate degree program would not only succeed in addressing the demand for qualified faculty to expand the program and help alleviate the workforce shortage but would improve dental care access, provide additional career opportunities for graduates, and contribute to the overall health and well-being of our community. According to data collected on the employment pattern of those enrolled in the initial California baccalaureate pilot programs, 94% of graduates from the programs remained in California to work. Additionally, place bound students tend to seek employment where they finish their degree. These facts support our efforts to offer a BSDH to meet local workforce demands that four-year institutions cannot because they do not offer programs in this field.

C. Completer Data

The course success rates for the existing Associate of Science in Dental Hygiene Education program at Oxnard college have consistently exceeded the college's overall success rates. Oxnard College projects that the course success rates will be similar for the proposed Bachelor of Science degree.

Oxnard College is pleased to share the positive outcomes of the recent analysis conducted by our Office of Institutional Effectiveness on the Dental Hygiene program. The results have been truly impressive, revealing **consistent high completion rates** that reflect our unwavering commitment to student success.

A notable aspect of the Dental Hygiene program is its ability to empower individuals from diverse backgrounds, enabling them to achieve their academic and career goals. It is

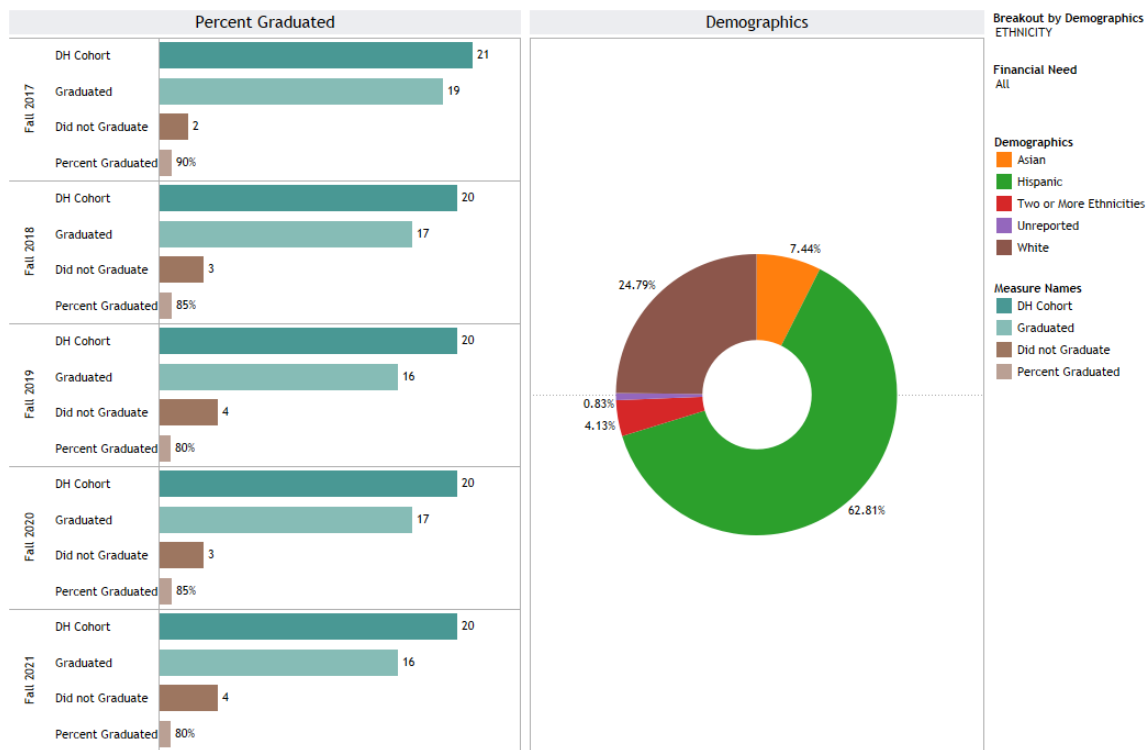
particularly heartening to see a **significant enrollment of low-income Hispanic students**, highlighting our dedication to promoting diversity and fostering an inclusive educational environment.

Additionally, our program caters to the needs of non-traditional college-going students, with a substantial **78% of enrolled individuals being older adults aged 25 and above**. We take great pride in providing accessible educational opportunities for learners of all ages, allowing them to pursue their aspirations and advance their careers.

What stands out the most from the analysis is the consistently **outstanding overall graduation rates, ranging between 80% to 90%, which are much higher than for the institution as a whole**. For example, for students who began their studies in Fall 2019, the overall Oxnard College graduation rate was just 32%, while the Dental Hygiene graduation rate was an impressive 80%. This remarkable achievement showcases the effectiveness and excellence of our Dental Hygiene program in nurturing skilled professionals. The size of the cohort is designed to meet the clinical needs for students' hands on experience and quality control.

The specific data produced by our Office of Institutional Effectiveness can be seen below (Students with financial need is an aggregate and includes all types of financial needs, including Pell and BOG, meaning they are low-income students):

Dental Hygiene Program- Completion Rates by Ethnicity (All Students)

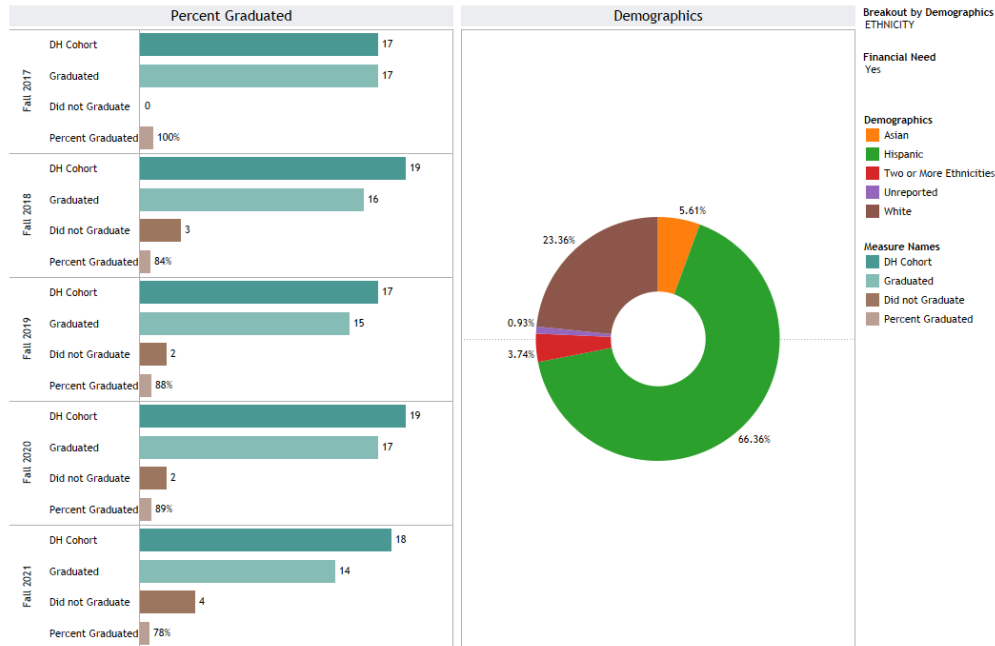


Furthermore, the dedication of our faculty and staff to supporting **low-income students** has yielded even more exceptional results, with **graduation rates for this group ranging from 78% to an astounding 100%, which are on par with or exceeding those for the entire dental hygiene student population**. This focus on empowering underserved

communities and providing tailored support reflects our institution's commitment to creating pathways to success for all our students.

The Dental Hygiene program's impressive completion rates, dedication to serving diverse communities, and exceptional outcomes for low-income students truly embody the excellence and impact we strive to achieve in our baccalaureate degree programs. We take great pride in offering a transformative educational experience and will continue to uphold our commitment to student success and community advocacy.

Dental Hygiene Program- Completion Rates by Ethnicity (Students with Financial Need)



D. Student Interest

Every year between 80 to 90 students apply for admission to the Oxnard College Dental Hygiene program which accepts a cohort of twenty students. Applicants must have completed two years of program prerequisites and have a minimum cumulative college GPA of 3.0 as well as a minimum prerequisite science GPA of 3.0 which also has a 5-year recency requirement. This preparation and dedication show their continuing interest despite understanding how competitive the applicant pool is, knowing that only one quarter of the applicants are admitted through a fair and equitable lottery system. The applicant pool reflects all aspects of our diverse community by welcoming students from a broad range of socio-economic, racial, ethnic, age, gender, and cultural backgrounds. The steady demand speaks to the reputation and continuing success of the program which boasts a 100% pass rate on licensing exams and 100% placement upon graduation.

Recruitment efforts are conducted through middle school and high school career fairs, community health fairs, and collaborations with the Ventura County Office of Education at Virtual Labor Market Summits for teachers and counselors throughout Ventura County. Additionally, OC Dental Hygiene program information seminars and application workshops are

offered once a month, both online and in person, with equal access for all interested students to attend. Designated DH program counselors are available to assist with applicant’s career planning.

Survey: To determine potential interest and support of a bachelor's degree in dental hygiene at Oxnard College, a survey of currently enrolled students and alumni was taken in the fall of 2022. Eighty surveys were distributed with a response rate of 32%. The Survey asked:

1. If Oxnard College offered a BSDH how likely would you be to apply?
2. If you already possess an ASDH how likely would you be to enroll in a BSDH degree completion program at OC?
3. How likely are you to pursue a teaching career in dental hygiene/healthcare?

The results of the survey indicate substantial interest in a dental hygiene baccalaureate degree program and in a future teaching career. This was a 5-point scale survey with the extremes being Very Unlikely to Very Likely. The table below summarizes the significant student interest in pursuing a BSDH and pursuing related teaching positions.

Very likely to pursue BSDH if offered (all respondents)	Very unlikely to pursue BSDH if offered (all respondents)	Current students & alumni stating they are likely to enroll in an OC BSDH completion program	Very likely to pursue a teaching position in healthcare/dental hygiene education
70%	4%	62%	80%

The addition of a baccalaureate program in Dental Hygiene meets the demands of students, who seek a competitive advantage in employment, and for employers, who seek a qualified workforce. The Oxnard College Baccalaureate Dental Hygiene program strives to provide an affordable avenue to prepare qualified dental hygienists for positions in a variety of healthcare settings, many of which require a baccalaureate degree, and to eliminate any constraints that limit their personal growth or human potential. The interrelated roles of a professional dental hygienist who possesses a baccalaureate degree include opportunities in education, administration, clinical supervision, public health, research, corporate sales, marketing, and as community project coordinators and health and oral care advocates. The additional opportunity to work independently in nursing homes, schools, and with underserved populations as a Registered Dental Hygienist in Alternative Practice (RDHAP) also requires a bachelor’s degree.

E. Workforce Data

Questions #6 and #7 on the BDP Application ask you to submit statewide and regional workforce data and evidence to support the need for your proposed program. Please identify the page number or location of the following:

1. Evidence that employers are having difficulty filling positions that require a baccalaureate degree?

Page 8 of the Lightcast report shows that there were 17 completions in the occupational program CIP Code 51.0602 Dental Hygiene/Hygienist in 2021 for 135 job openings in the South Central Coast Region.

Page 13 of the Centers for Excellence Labor Market Research Report shows there were 14 programs with 169 regional completions in 2021 and 439 regional openings for

programs related to the three occupations in the standard occupational classification (SOC) system that were identified as related to Dental Hygienist.

In addition, A 2021 poll from the ADA Health Policy Institute found that compared with before the pandemic, more than 66.3% of dentists said recruitment for dental hygienists was *extremely challenging* and 19.7% reported it was *very challenging*. (See https://surveys.ada.org/reports/RC/public/YWRhc3VydMv5cy02MGE1MjUxOGNlYjEwNjAwMTA2OTJjZjYtVjVjfm3BaeGhzWm12TnNMdjB4?_ga=2.196820268.1815606274.1690838319-1266707456.1690838318)

The Commission on Dental Accreditation requires Dental Hygiene instructors to possess a minimum of a baccalaureate degree in order to teach. With the current hygienist shortage and more than half of dental hygiene faculty nearing retirement, we will need more Bachelor’s-prepared dental hygienists to qualify and work as faculty to train enough next generation of dental hygienists to meet the growing dental needs of the aging population. As Elizabeth Carr, Rachel Ennis and Laura Baus point out in their article *The Dental Hygiene Faculty Shortage: Causes, Solution and Recruitment Tactics*, not only do we need more bachelor’s-prepared hygienists to meet the need for faculty, but the “conversion of existing associate degree dental hygiene programs to baccalaureate degree is also needed to address the dental hygiene educator shortage.” (Carr, etc. al., The Journal of Dental Hygiene, Volume 84, Issue 4. Article included in Section 7. Additional Evidence).

- Evidence that employers are willing to pay baccalaureate degree holders more than those with a related associate degree or no postsecondary degree?

Page 3 of the Centers for Excellence Labor Market Research Report outlines the hourly wages for dental hygienists and page 1 reports a +74% change in earnings after exiting the program. A baccalaureate degree is required in order to teach Dental Hygiene at the associate degree level, opening up additional job opportunities for completers of a BS in Dental Hygiene as well as higher wages.

As shown here, the Bureau of Labor Statistics projects a mean annual wage of \$127,640 for Postsecondary Health Specialties Instructors.

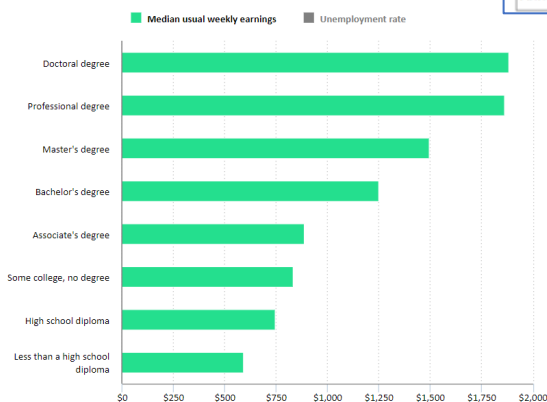
National estimates for Health Specialties Teachers, Postsecondary:
Employment estimate and mean wage estimates for Health Specialties Teachers, Postsecondary:

Employment (1)	Employment RSE (3)	Mean hourly wage (4)	Mean annual wage (2)	Mean wage RSE (3)
207,700	0.4 %		\$ 127,640	0.6 %

Percentile wage estimates for Health Specialties Teachers, Postsecondary:

Percentile	10%	25%	50% (Median)	75%	90%
Annual Wage (2)	\$ 48,670	\$ 64,730	\$ 100,300	\$ 167,120	

Median weekly earnings and unemployment rate by education attainment, 2019



Click legend items to change data display. Hover over chart to view data.
Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
Source: Current Population Survey, U.S. Department of Labor, U.S. Bureau of Labor Statistics.

Further, Bureau of Labor Statistics data show that the median earnings for workers with a bachelor’s degree is \$375 higher per week, or \$19,500/year, higher than for workers with an associate degree. (<https://www.bls.gov/careeroutlook /2020/data-on-display/education-pays.htm>)

3. Evidence that employers prefer candidates with the proposed baccalaureate degree?

According to DentalCareerNow.com, an associate degree is the minimum requirement for general dental hygienist positions, but a bachelor's degree in dental hygiene would provide candidates with a competitive advantage, particularly to advance in the field with positions in dentistry research, sales, education or administrative positions. (See <https://dentalcareernow.com/articles/dental-hygiene-associate-vs-bachelors-degree>)

4. Evidence of job placement and/or promotion opportunities for candidates with a baccalaureate degree?

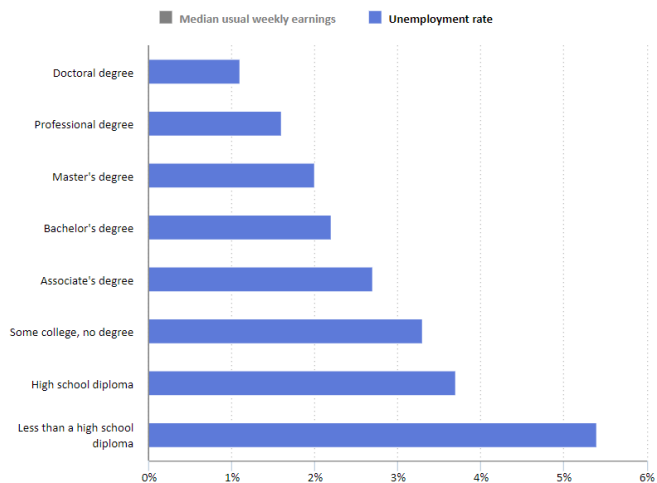
Page 13 of the Centers for Excellence Labor Market Research Report shows there were 169 dental hygiene regional completions in 2021 and 439 regional openings in related fields, showing an undersupply in the field and significant job and promotional opportunities. As outlined in question #2 above, a baccalaureate degree in dental hygiene provides an opportunity to teach in dental hygiene educational programs which would address the workforce shortage by training a future generation of students for careers in dental hygiene.

As mentioned above DentalCareerNow.com estimates bachelor's prepared dental hygienists have increased job placement rates as it opens up opportunities in advanced industry positions such as dentistry research, sales, education, and administrative positions. (See <https://dentalcareernow.com/articles/dental-hygiene-associate-vs-bachelors-degree>)

The Bureau of Labor Statistics also shows that unemployment rates are lower for candidates with a bachelor's degree when compared to those with associate degrees.

(<https://www.bls.gov/careeroutlook/2020/data-on-display/education-pays.htm>)

Median weekly earnings and unemployment rate by education attainment, 2019



Click legend items to change data display. Hover over chart to view data.
Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
Source: Current Population Survey, U.S. Department of Labor, U.S. Bureau of Labor Statistics.

5. Evidence that the occupation/field the proposed baccalaureate degree is in will provide for higher-wage job opportunities?

Pages 3 and 7 of the Lightcast report included in section #6 of this application (Evidence of Unmet Workforce Need) shows average compensation in our area at \$101,829, higher than the national average of \$77,771.

In addition, Bureau of Labor Statistics show excellent wage and job prospects for dental hygienists. About 16,300 openings for dental hygienists are projected each year, on average, over the coming decade. As evidenced below, the #1 reason to pursue a baccalaureate in Dental Hygiene is more job opportunities.

Bureau of Labor Statistics- Quick Facts: Dental Hygienists	
2021 Median Pay	\$77,810 per year \$37.41 per hour
Number of Jobs, 2021	214,000
Job Outlook, 2021-31	9% (Faster than average)
Employment Change, 2021-31	19,000
<i>Excerpted from https://www.bls.gov/ooh/healthcare/dental-hygienists.htm Note: Median yearly pay for all workers was \$45,760.</i>	

Per [Healthcare-Administration-Degree.net](https://www.healthcare-administration-degree.net), **more job opportunity**, is reason #1 to pursue a Bachelor's Degree in Dental Hygiene:

“A four-year degree in dental hygiene will provide more opportunity than an associate's degree or a career diploma. Someone with this degree can choose to work in more areas of dental care. Besides being in higher demand in private clinics and hospitals, dental hygienists can find a job in working in education helping prepare dental students for the work field. Pharmacy companies also hire people with this degree to manage dental products. The equipment and supplies used in dental offices come from factories and companies that specialize in making them and ensuring they meet a certain standard.”

From: <https://www.healthcare-administration-degree.net/lists/5-benefits-of-completing-a-bachelors-in-dental-hygiene/>

¹ **Title 16 § 1105. Requirements for RDH Educational Programs**

Barclays Official California Code of Regulations

§ 1105.1. Faculty.

(b) “Program faculty” means an individual having a full-time or part-time agreement with the institution to instruct one or more of the courses in the educational program’s curriculum. The individual shall hold a baccalaureate degree or higher from a college or university accredited by an agency recognized by the U.S. Department of Education or Council for Higher Education Accreditation and possess the following: an active California dental or dental hygiene license or special permit with no disciplinary actions; or a postsecondary credential generally recognized in the field of instruction; or a degree in the subject being taught or evaluated. All program faculty shall have documented background in educational methodology every two years, consistent with teaching assignments.

² Source: American Dental Association, Health Policy Institute, 2021-22 *Survey of Dental Hygiene Education Programs*, CODA Survey of Allied Dental Education, Dental Hygiene, Table 17b, Faculty of Accredited Dental Hygiene Programs by Age, Ethnicity/Race & Gender. <https://www.ada.org/resources/research/health-policy-institute/dental-education>

³[American Dental Education Association- Facing for the Future: Opening Up Pathways to the Bachelor’s Degree for Dental Hygienists](#)

⁴[American Dental Education Association- Program Types](#)

⁵[Journal of Dental Hygiene- The Baccalaureate as the Minimum Entry-Level Degree in Dental Hygiene](#)

⁶[American Dental Hygienists’ Association- Focus on Advancing the Profession](#)