

**SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION
ACADEMIC AFFAIRS
COMMITTEE RECOMMENDATION**

SUMMARY

Lake Area Technical College
Substantive Program Application
Associate of Applied Science
Dental Hygienist

COMMITTEE RECOMMENDATION

The Committee on Academic Affairs and Institutional Effectiveness (“Committee”) met on 4/25/2024 to consider the merits of the above application. After review, the Committee makes the following action recommendation to the Board of Technical Education:

- Approval
- Disapproval
- Deferral
- Other:

PROGRAM DESCRIPTION

Institution	Lake Area Technical College
Program Identifier Code (If applicable)	
Program Title	Dental Hygienist
Program Award Level: Check all that apply	<input type="checkbox"/> Short-Term Certificate <input type="checkbox"/> Long-Term Certificate <input type="checkbox"/> Diploma <input checked="" type="checkbox"/> Associate of Applied Science
CIP Code (6 Digit)	51.0602
Projected Implementation Date	8/25/2025
Location	<input checked="" type="checkbox"/> Main Campus <input type="checkbox"/> Other:

SUMMARY

Type of Substantive Change	<input checked="" type="checkbox"/> New Program (B.1.1) <input type="checkbox"/> Significant Curriculum Modification (B.1.2) <input type="checkbox"/> Other:
----------------------------	--

Describe the change the institution is seeking approval of.

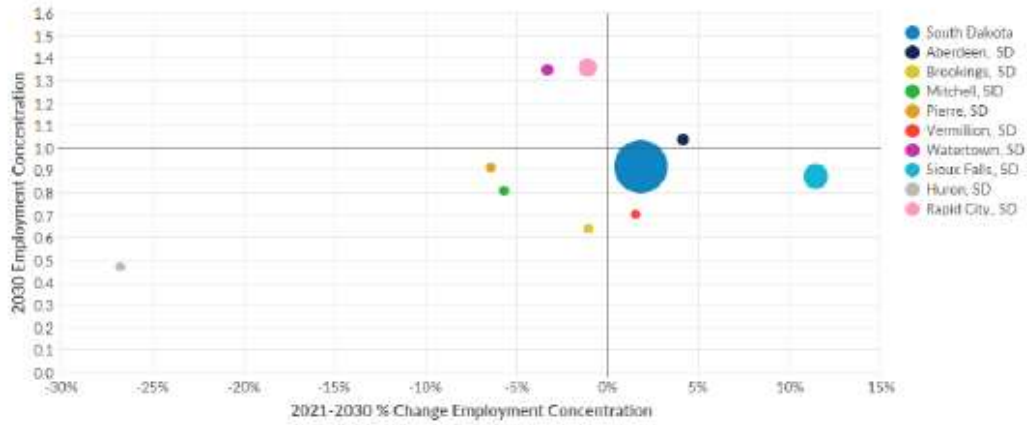
Lake Area Technical College (LATC) is seeking approval to establish an Associate of Applied Science (AAS) Degree in Dental Hygiene to address workforce needs for dental professionals. Dental Hygienists are a vital part of the dental team that are in short supply throughout the state of South Dakota. The AAS program will be the first of its kind in South Dakota and offer a unique configuration, giving students and employers a stackable credential option within the dental profession.

The program is designed in-line with requirements for South Dakota licensure as a Dental Hygienist and the Commission on Dental Accreditation's (CODA) requirements of quality educational programs. Licensed Dental Hygienists have the same scope of practice and provide the same services, whether they graduate with an AAS or a Bachelors degree.

Industry demand is driving this proposal. The data shows that the areas LATC serves (Codington, Brown, and Hughes Counties, especially) have high concentrations of dental professionals compared to the state concentration. In other words, LATC's service areas are the areas where people travel to get dental care in Central and Northeast South Dakota. And these are the areas where dentists are telling the college that they are not able to hire enough professionals to meet their existing and projected demand. Another training program in a strategic location is needed.

Lake Area Technical College is committed to providing a high-quality, high-value Dental Hygiene education program to give students the skills necessary to succeed in their career of choice. After successfully completing a Dental Assisting program, students can select to continue for an additional year of instruction to obtain their Associate of Applied Science Degree in Dental Hygiene at Lake Area Tech. When compared to the cost of a 4-year degree in Dental Hygiene, students graduating from LATC's AAS program will save 28% while entering the workforce a year earlier and earning back the cost of their degree in less than seven months.

Employment Concentration Breakdown - 2030 Employment Concentration



Occupation	Description	South Dakota	Aberdeen, SD	Brookings, SD	Mitchell, SD	Pierre, SD	Vermillion, SD	Watertown, SD	Sioux Falls, SD	Huron, SD	Rapid City, SD
31-9091	Dental Assistants	0.95	1.03	0.65	0.80	0.99	0.72	1.33	0.90	0.47	1.45
29-1292	Dental Hygienists	0.93	1.22	0.75	0.96	0.92	0.81	1.62	0.83	0.55	1.24
29-1021	Dentists, General	0.78	0.72	0.42	0.57	0.67	0.46	0.94	0.88	0.33	1.27
	Total	0.92	1.04	0.64	0.81	0.91	0.70	1.35	0.87	0.47	1.36

CRITERION 1: MISSION

The program aligns with the system's mission and strategic priorities.

1.1. The program aligns with the system's mission of preparing a technically skilled workforce prepared to serve the state of South Dakota and its regions.

1.2. The program aligns with the system's strategic priorities.

1.1. Describe how the proposed program aligns with the system's mission.

The mission of Lake Area Technical College (LATC), as part of the South Dakota Technical College System, is to provide superior, comprehensive technical education that changes lives and launches careers. The structure of LATC's proposed Dental Hygiene program ensures students can complete a college degree aligned with industry expectations and capture high personal returns.

Information available through the SD Department of Labor, Lightcast Analytics, and the Bureau of Labor Statistics supports what Lake Area Tech is hearing from dentists in the region. Employment for Dental Hygienists in South Dakota will have a 6.9% increase between 2023-2033, according to Lightcast Analytics. Counties in northeast, central and north central South Dakota will collectively see growth of 4.6%. Nearly a quarter of the dental hygienists in 2033 will be located in these counties. Watertown, Rapid City, and Aberdeen are projected to out-pace statewide growth. Lake Area Tech can serve two of those three areas directly.

The projected growth of the dental hygienist profession doesn't account for employee needs due to upcoming retirements and natural job turn over. Though there are typically only a handful of hygienists working in individual dental offices, when skilled professionals aren't available for open positions, existing staff is stretched thin, appointment booking timelines are extended, and new patients aren't able to be accepted. The need for hygienists is a high priority for South Dakota dentists and a great career opportunity for interested individuals.

CRITERION 2: DEMAND

The program leads to meaningful employment, adequate student enrollment, and/or fulfills needs not being met by existing education and training providers.

- 2.1. The program leads to high-wage occupations that have an average/mean wage greater than the median wage across all occupations.
- 2.2. The program leads to high-demand occupations that have project annual openings (a measure of demand for workers) greater than the average across all occupations or is shown as an economic and/or labor market emerging field for the state of South Dakota and its regions.
- 2.3. The program's student enrollment is adequate to justify program existence.
- 2.4. The program fulfills a demand not being met by existing education and training providers in the region and/or state.

2.1. Describe the wage projections for occupations associated with the proposed program by completing Appendix 2.A.

2.2. Describe the demand projections for occupations associated with the proposed program.

A. Complete Appendix 2.A.

B. If an emerging field for the state of South Dakota, describe the field. Letter(s) of support, detailing demand, should be attached as appendices.

This is not an emerging field.

2.3. Describe projected student enrollment for the proposed program by completing Appendix 2.B.

2.4. Describe how the proposed program fulfills a demand not being met by existing education and training providers in the region and/or state.

A. Identify closely related program(s) that currently exist at other public higher education institutions in the system or state. If none, write "None."

No South Dakota colleges or universities currently offer an Associate Degree in Dental Hygiene. The University of South Dakota (USD) offers a 4-year (120 credit hours) Bachelor's Degree in Dental Hygiene. They have recently expanded their program and graduates are primarily serving the southeast part of South Dakota. An additional program is necessary to serve mid-sized and rural communities.

North Dakota State College of Science (NDSCS) in Wahpeton offers both Dental Assisting and Dental Hygiene as Associate of Applied Science degrees. In 2022, NDSCS graduated 14 dental hygienists.

B. If applicable: Describe the ways in which the demand is not currently being met by the aforementioned program(s) and provide justification as to why the program should be approved by addressing the following conditions that warrant duplication ([BP 303.2](#)). Select all that apply.

- Unmet Demand (C.5.1.1)
 Industry Partnership (C.5.1.2)

- Increases Student Access (C.5.1.3)
 Other:

I. For each condition selected above, provide a brief justification.

Unmet Demand: According to the South Dakota Department of Labor and Regulation, there will be a 13.61% increase in employment of Dental Hygienists between 2020-2030 in South Dakota. In order to fulfill the increased need, more Dental Hygienists programs are necessary for students across the state. Many South Dakota Dentists have few applicants when they list an open position.

Industry Partnership: Many Dental offices, such as Pierre Dental Clinic, Family Dental Center, and Dakota Family Dentistry, have voiced their support in creating another Dental Hygienist program to meet the demands of the state. Lake Area Tech also has support from the South Dakota Dental Association for this educational expansion.

Increases Student Access: Lake Area Tech's program will give area students increased access to a Dental Hygiene education without having to relocate to North Dakota, Minnesota or southeast South Dakota. The design of the program also creates additional upskilling opportunities for individuals that work as dental assistants who wish to grow in their careers by training to be dental hygienists.

CRITERION 3: DESIGN

The program's learning assessment strategy, program of study, and delivery methods are designed to provide students with the necessary competencies, as demonstrated through program learning outcomes.

- 3.1. The program is aligned to competencies, as demonstrated through program learning outcomes, that are developed with and continually validated by relevant stakeholders.
- 3.2. The program has a learning assessment strategy to validate student mastery of the program learning outcomes.
- 3.3. The program has an integrated program of study designed to develop and reinforce the program learning outcomes.
- 3.4. The program, when appropriate, includes a work-based learning component that develops and reinforces the program learning outcomes.
- 3.5. The program, when appropriate, offers flexible delivery methods to increase student access.

3.0. Describe the proposed program's alignment with the program award level requirements established in [BP 301.1](#).

A. Does the program align with the requirements?

- Yes
 No (Requesting Exemption)

B. If no: Provide a detailed rationale for program exemption. Specify which requirement(s) in BP 301.1 are not met; cite specific policy sections (e.g., B.3.4), when appropriate. If external organizations are involved (accreditation, regulatory, licensure, etc.), reference the organization name(s), specific requirements (including citations), and a justification for why the exemption should be approved.

3.1. Describe the program learning outcomes.

A. Provide a list of program learning outcomes for each proposed award level. Learning outcomes should be specific to the program.

Dental Hygienist AAS Program Learning Outcomes

1. Demonstrate the clinical competence required to provide comprehensive, preventative, and therapeutic dental hygiene services.
2. Perform clinical support services including infection control and safety; as well as patient screening, referral, treatment planning and education.
3. Demonstrate critical decision-making skills utilizing ethical behavior, along with scientific theories, research, and current accepted standard of care.
4. Perform basic dental office business procedures and demonstrate management skills.
5. Exhibit professionalism and communicate effectively with patients and peers by utilizing written and oral communication.
6. Participate in health promotion, disease prevention and oral health activities in diverse populations and a variety of settings.

B. Describe the how the program learning outcomes were developed and validated.

The program learning objectives and design were heavily directed by the licensing requirements for South Dakota Dental Hygienists and the Commission on Dental Accreditation's (CODA) program requirements. In addition, extensive research was done to include necessary job skills and knowledge in the design of the program.

After the first years of the program and thorough assessment measures have been reviewed, the program learning outcomes will be revised, if necessary, in tandem with the LATC Dental Advisory Board.

3.2. Describe the program's learning assessment strategy.

A. Describe how students will demonstrate mastery of the program learning outcomes. Description should be specific to the program's learning assessment plan vs. the institutional assessment plan.

Students will demonstrate mastery of student learning outcomes through a variety of formative and summative assessments. These include locally developed course tests, nationally developed curriculum assessments, and OSCE's (Objective Structured Clinical Exams), which are performance-based tests to determine clinical competence. Post-graduation surveys conducted by employers and our placement report also help to determine the success of the program's graduates. To obtain licensure as a dental hygienist in South Dakota, graduates will need to successfully pass board exams including: 1) the National Board Dental Hygiene Examination, 2) Clinical competency exam with the Central Regional Dental Testing Services, and 3) the South Dakota Jurisprudence Examination. Board pass rates will give Lake Area Tech feedback on students' preparedness and the effectiveness of the program.

B. Is the program preparation for a professional licensure and/or certification examination?

- Yes (Detail in Appendix 4: Section 3)
 No

3.3. Describe the program of study by completing Appendix 3.

3.4. Describe the program's work-based learning component.

A. Does the program have a work-based learning component? If so, select all that apply.

- | | |
|---|--|
| <input type="checkbox"/> None | <input checked="" type="checkbox"/> Clinical |
| <input type="checkbox"/> Apprenticeship | <input type="checkbox"/> Capstone |
| <input type="checkbox"/> Internship or Externship | <input type="checkbox"/> Other: |

B. If none, describe why.

3.5. Describe the program's delivery methods.

A. Select the program's primary delivery method(s)¹. Select all that apply.

- | | |
|---|---|
| <input checked="" type="checkbox"/> On Campus | <input type="checkbox"/> Apprenticeship |
| <input type="checkbox"/> Online | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Blended | |

B. Describe how flexible delivery methods are being leveraged to increase student access.

Lake Area Tech will start the Dental Hygiene AAS program as a traditional program offering face-to-face instruction, on-campus simulation labs, and off-campus clinical rotations. Flexible delivery methods will be

¹ **In Person:** 100 percent of courses are available in-person. **Online:** 100 percent of courses are available via distance learning. Delivery is only via the Internet. **Blended:** Delivery includes a required combination of both in-person and online courses. If a student has the option to take courses online, but is not required to do so, the program is not necessarily considered blended.

considered as the program develops, though the required 12-16 hours per week of direct patient care will dictate how any future flexible program designs are structured.

CRITERION 4: ALIGNMENT

The program is vertically aligned to an education and training pathway.

- 4.1. The program is vertically aligned to an education and training pathway, reflecting efficient articulation of:
 - 4.1.1. Non-degree credential/industry certification
 - 4.1.2. Certificate to diploma
 - 4.1.3. Diploma to associate of applied science
 - 4.1.4. Associate of applied science to baccalaureate

4.1. Describe the alignment of the proposed program along an education and training pathway.

A. Complete Appendix 4.

B. Describe the projected alignment between the proposed program and existing academic programs within the technical college system.

Students enrolled at Lake Area Technical College have many career path options when they enroll in a healthcare program. In most cases, the general education core, including biomedical classes like Anatomy, Physiology, and Medical Terminology, is required no matter the health science program of study. This allows students to transfer between programs easily if they are exploring their best-fit healthcare career.

The proposed program structure for Dental Hygiene mirrors the success LATC has realized in its Nursing programs. Nursing students have multiple options, including:

1. Enrolling as a Licensed Practical Nursing (LPN) student and completing a diploma option in 11 months.
2. After completing the LPN program, students can choose to go to work, go on as a full-time student to earn their Registered Nursing (RN) AAS, or do both as a part-time student enrolled in the RN program while also working.
3. Licensed Practical Nurses can also choose later in life to come back to earn their RN degree, including completion of the appropriate general education courses. In this situation, students don't have to have completed the LATC LPN program to enroll in the RN program, providing a variety of opportunities as students navigate their lives.

Similarly, the Dental program will provide a variety of options for students:

1. Students can complete their Dental Assisting diploma program in 11 months.
2. After completing the Dental Assisting diploma, students can choose to go to work or continue their education in Dental Assisting, including the required general education and biomedical sciences coursework.
3. Similar to Nursing, individuals who have been in the workforce can choose to come back to earn their AAS in Dental Hygiene.

While unique in design, Lake Area Tech believes this program structure provides students a variety of options to access their desired education in ways that make sense for individuals' lives and professional goals. In the end, Dental Hygiene graduates from Lake Area Technical College will earn two degrees – an AAS in Dental Assisting and an AAS in Dental Hygiene – in three years at a 28% savings from a comparable course of study in a bachelor's degree program.

C. As applicable: Insert any additional comments here.

Acceptance criteria for Dental Hygiene will require students to have completed their AAS in Dental Assisting. This ensures that the individual has both the foundational dental science and health-focused academic background to succeed in the Dental Hygiene program. Further, applicants will be required to successfully pass

the DANB (Dental Assisting National Board) exam, hold an active CPR card, and take an admissions test. We are currently considering either the TEAS (Test of Essential Academic Skills) or the ATDH (Admissions Test for Dental Hygiene) as admissions tests.

Applications to the Fall, 2025 Dental Hygiene program will be accepted starting on January 10, 2025. All application process steps must be completed by the priority deadline of until March 1, 2025. Applications received on or after the priority deadline will be reviewed for consideration to the wait list. Conditional acceptances will be delivered by April 1st. Candidates will have until July 1st to meet all application conditions.

CRITERION 5: CAPACITY

The institution demonstrates the internal and external resources necessary to develop, implement, and sustain the program.

- 5.1. The institution demonstrates the financial resources necessary to develop, implement, and sustain the program.
- 5.2. The institution demonstrates appropriately certified and qualified faculty are in place with expertise in content, pedagogy, and related industry to develop and validate the program learning outcomes.
- 5.3. The institution's physical facilities (e.g., classrooms, laboratories) reflect current industry and/or occupational standards necessary to develop and validate the program learning outcomes.
- 5.4. The institution's equipment and technology resources reflect current industry and/or occupational standards necessary to develop and validate the program learning outcomes.
- 5.5. The institution demonstrates the ability of the program to meet institutional and programmatic accreditation standards, as applicable.

5.1. Describe the institution's financial capacity to develop, implement, and sustain the proposed program.

A. Complete Appendix 5.

B. Describe the proposed program's anticipated local fee structure. Description of fee structure should be specific to the program.

The local fee structure for Dental Hygiene will mirror that of other healthcare programs. Fees will help cover the costs of items such as student insurance, program insurance, supplies and materials for labs and clinicals, program accreditation, software, and other necessary operational expenses. Students will pay for licensing exams, uniforms, tools, and textbooks outside of the fees and tuition charged.

Due to the small ratio required by CODA for preclinical and clinical sessions and for radiography lab sessions (5 to 1, students to faculty), a 10 to 1 required ratio for all other dental sciences laboratory science sessions, and for the required, dedicated program administrator position, the Dental Hygiene program will have higher than normal staffing costs, so department fees will reflect the costs to operate a quality program. To maximize use of LATC's facilities between the Dental Assisting and Dental Hygiene programs, the college will cap enrollment at 25 students per year. It will take about four years to grow to that capacity. Lake Area Tech will admit 15 students per year in Years 1 & 2, 20 students in Year 3, and 25 students in Year 4.

C. What is the proposed program weight factor (funding formula)?

- Standard Cost (1)
- High Cost (3)
- High Cost, Low Density (5)

I. Provide rationale related to the selection of proposed program weight factor.

In addition to the operation realities noted in 5.1.B, CODA requires that the program administrator be a licensed Dentist or Dental Hygienist with at least a Master's degree. All other faculty must possess a bachelor's degree or higher. While some staff can be shared between Dental Assisting and Dental Hygiene, staffing ratios, required education, necessary program costs, and the maximum number of students enrolled make the Dental Hygiene program high cost, low density.

D. Describe the contingency plans in case anticipated enrollments, income, or resources do not materialize.

Lake Area Tech is currently doing a comprehensive renovation of the Dental Department that first opened in

1967 and was remodeled in the 1980s. The Dental Assisting program has been a steady presence at the college since it opened. The remodeled facilities, opening in Fall 2024, will include brand new operatories, patient rooms, lab spaces, simulation centers, and reception areas, designed to accommodate both Dental Assisting and Dental Hygiene programs. Existing classroom spaces at LATC will be used to deliver face-to-face instruction. Lab space will provide state of the art simulations to develop and refine critical thinking and hands-on skills.

New program equipment totaling more than \$900,000 has been provided through grant funds from Governor Noem and the Governor's Office of Economic Development (GOED) and Federal Perkins grants.

Should the program enrollment or income not materialize in Dental Hygiene, the program can be terminated without significant financial loss to Lake Area Tech as the resources are shared between the existing Dental Assisting program and the forthcoming Dental Hygiene program.

5.2. Describe how the institution will ensure the appropriate certified and qualified faculty are in place with the expertise in content, pedagogy, and the related industry to develop and validate the program learning outcomes.

A. Describe the necessary qualifications of faculty who will be involved in the program.

According to the Commission on Dental Accreditation, the program must have a full-time program administrator. The administrator must be a Dental Hygienist or a Dentist who is a graduate of a program accredited by the Commission of Dental Accreditation and possesses a masters or higher degree. Full-time and part-time faculty must possess a baccalaureate or higher degree.

B. Does the instructorship(s) currently exist in the roster of Instructor Salary Support market value determinations?

- Yes
 No

I. If no: Describe the SOC(s) codes and titles that will need to be added.

Lake Area Technical College proposes averaging the wage ranges for Dentists (29-1021) and Dental Hygienists (29-1292) for the Program Administrator pay. LATC anticipates a 197-day contract each year for the administrator. The daily rates proposed are as follows:

Minimum = \$362 per day

Market = \$429.05 per day

Maximum = \$472.57 per day

5.3. Describe the existing and/or new physical facilities that will be utilized or needed to reflect current industry and/or occupational standards. Outline short- and long-term investments in physical facilities.

Short-term: The Lake Area Tech's Dental Department is currently undergoing a renovation to include ten fully functioning dental operatories which will include radiography equipment. Six of the operatories will be dedicated for student use, and four will be utilized for a community clinic, which our students will utilize for additional clinical hours. The facilities also include a pre-clinical competency area with patient simulators and full dental materials lab. There is also a room for infection control and sterilization with procedure set up and emergency equipment. The physical facility will be shared with the Dental Assisting program.

Long-term: Lake Area Technical College is considering renovating the main entrance on the north end of campus, directly outside of the Dental Department to better allow for patient access to clinical experiences.

5.4. Describe the existing and/or new equipment and technology resources that will be utilized or needed to reflect current industry and/or occupational standards. Outline short- and long-term investments in equipment and technology resources.

Short-term: Lake Area Tech's Dental Assisting program has been operating for 57 years with equipment and technology in place to meet the current industry standards. With the start of the Dental Hygiene program, LATC will need to invest approximately \$30,000 in the first year for instruments specific to the Dental Hygiene program such as ultrasonic scalers, radiographic sensors for digital radiography, and clinic software for tracking students' competencies. Additional computers in the preclinical simulation area and cameras to monitor students may also be needed. These costs are built into the program budget and are in addition to the \$907,000 of equipment investments Lake Area Tech made in FY24 through grant funding.

Long-term: Additional radiography equipment, such as a panoramic machine or CBCT (cone-beam computed tomography) for better diagnosis and treatment planning may also be needed. Two supplementary operatory set-ups (chairs, units, computers and staff) may be necessary if we increase student numbers.

5.5. Describe the institution's and proposed program's ability to meet institutional and programmatic accreditation standards, as applicable.

A. Specify Higher Learning Commission (HLC) requirements.

- Notification Only
- Approval Required
- None
- Other:

B. Is there an accrediting or professional organization that has established standards for the program?

- Yes
- No

C. If yes: Describe the ability of the proposed program to meet professional accreditation standards. If the program does not or cannot meet those standards, describe the area(s) in which it is deficient and indicate steps needed to qualify the program for accreditation. Provide the date by which the program would be expected to be fully accredited.

If the institution does not plan to seek specialized accreditation, provide a rationale for not seeking.

The Commission of Dental Accreditation (CODA) is the organization that has established standards for this program under the Allied Dental Program. Lake Area Technical College is capable of meeting all six standards of Institutional Effectiveness, Educational Program, Administration, Faculty and Staff, Educational Support Services, Health and Safety Provisions and Patient Care Services.

LATC has communicated with the South Dakota Dental Association, and the South Dakota Board of Dentistry (SDBOD) has participated in recent meetings regarding workforce development where a Dental Hygiene AAS program has been discussed. The SDBOD is aware of LATC's intentions. LATC has long worked with the Board of Dentistry to ensure regulations are met for registered Dental Assistants in South Dakota and will continue to work with the board related to regulations for the practice of dental hygiene, including those in South Dakota Codified Law 36-6A and Administrative Rule 20:43:03.

In order for Lake Area Technical College graduates to attain licensure by the SDBOD, they need to be graduates from a CODA accredited program. However, CODA will not grant accreditation to a program in the first year, which means the first graduating class will not be graduated from a CODA-accredited program. Therefore, LATC will write a letter of exemption for the first few graduating classes explaining that we are in the accreditation process (there must be a successful graduation class prior to beginning the accreditation process). The graduate would need to keep a record of the letter for verification wherever they apply. Drawing from Lake Area Tech's present Dental Assisting program success, we have the institutional credibility to ensure students are competent in dental hygiene upon graduation and are qualified candidates for licensure in South Dakota. By granting allowances for our graduates to attain licensure after graduation, the South Dakota Board of Dentistry

will be following a precedent which they initiated with other start-up programs in the past. We anticipate the program to be fully accredited by Fall of 2026.

Outside of South Dakota, it would be very difficult to outline the licensing and continuing education requirements for every state as they vary so widely. Nonetheless, many states are working toward a portability compact to allow Dental Hygienists to move from state to state without needing an individual license in each state. South Dakota is part of that movement, and once the graduate is licensed, they would be able to practice in other states who are members of the compact.

Current licensure in South Dakota requires the graduate pass the National Board Dental Hygiene Exam, a clinical competency dental hygiene examination (on a live patient or equivalent mannequin-based) within five years preceding the date of application and the South Dakota Jurisprudence Exam. If the applicant desires, they may also apply for a permit to Administer Nitrous Oxide Sedation and a Radiographer license, both of which are available to dental assistants as well. Finally, regarding continuing education, there would be no issue with LATC graduates attaining continuing education to maintain their license as licensure is not verified when taking continuing education credits.

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION
Appendix 2.A: Labor Market Information

Lake Area Technical College
 Dental Hygiene Associate of Applied Science (AAS)

SOUTH DAKOTA								
SOC* CODE	SOC* TITLE	AVERAGE ANNUAL OPENINGS	2020 EMPLOYMENT	2030 EMPLOYMENT	NUMERIC CHANGE: 2020-2030	PERCENT CHANGE: 2020-2030	MEDIAN: ANNUAL WAGE (2022)	AVERAGE: ANNUAL WAGE (2022)
00-0000	Total, All Occupations	62,664	491,588	526,251	34,663	7.1	\$36,823	\$44,961
29-1292	Lightcast Analytics	not listed	611	653	42	6.90%	\$ 77,715.00	not listed
29-1292	Department of Labor and Regulation	48	529	601	72	13.61%	\$ 75,810.00	\$ 75,380.00
29-1292	Career One Stop	40	530	600	70	13.20%	\$ 76,350.00	not listed

NATIONAL								
SOC* CODE	SOC* TITLE	AVERAGE ANNUAL OPENINGS	2022 EMPLOYMENT	2032 EMPLOYMENT	NUMERIC CHANGE: 2022-2032	PERCENT CHANGE: 2022-2032	MEDIAN: ANNUAL WAGE (2022)	AVERAGE: ANNUAL WAGE (2022)
29-1292	BLS	16,400	219,400	235,700	16,300	6.90%	\$ 81,400.00	not listed
29-1292	Lightcast Analytics	not listed	353	385	31	8.90%	\$ 81,411.00	not listed

SOURCE: South Dakota Department of Labor and Regulation, Labor Market Information Center (LMIC) <https://dlr.sd.gov/lmic/>
DATE: 02/01/2024

NOTES:

SOURCE: South Dakota Labor & Regulation https://dlr.sd.gov/lmic/menu_occupational_wages.aspx
DATE: 02/01/2024 https://dlr.sd.gov/lmic/menu_projections_occupation_statewide.aspx

NOTES:

SOURCE: U.S. Bureau of Labor Statistics <https://www.bls.gov/ooh/healthcare/dental-hygienists.htm>
DATE: 02/01/2024

NOTES:

SOURCE: Lightcast Q4 2023 Data Set lightcast.io
DATE: 02/01/2024

NOTES: Lightcast data represents the national average adjusted for regional size comparable to Watertown, SD.

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION

Appendix 2.B: Student Demand Projections

Lake Area Technical College

Dental Hygiene Associate of Applied Science (AAS)

	YEAR 1	YEAR 2	YEAR 3
Student Full-Time Equivalent (FTE)	17	17	22
Headcount: Full-Time	15	20	20
Headcount: Part-Time			
Headcount: Total	15	15	20
Total Program or Site Capacity	15	15	20

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION

Appendix 3: Program of Study

Lake Area Technical College

Dental Hygiene Associate of Applied Science (AAS)

MONTHS:	19
SEMESTERS:	5
TOTAL CREDITS:	64.5

PREFIX AND NUMBER	TITLE	CREDITS	DESCRIPTION	EXISTING COURSE
--------------------------	--------------	----------------	--------------------	------------------------

I. GENERAL EDUCATION CORE

BIOL 221	Anatomy	4	A study of cells, tissues and organs making up the integumentary, muscular, skeletal, nervous, endocrine, digestive, respiratory, lymphatic and urinary systems of the body. Emphasis is on structure and function of the systems and the relationship of the body structures (anatomy) to their function (physiology). *College transferable.	Y
CHEM 106	Inorganic Chemistry	4	This course is an introductory course designed to give the student a positive understanding and appreciation of the chemistry in their lives. Basic inorganic topics such as the study of atoms and molecules, chemical reactions, chemical equilibrium, states of matter and nuclear processes will be covered. The course will cover those chemical concepts necessary for the continued study of organic and biochemistry in Chemistry 108.	Y
SOC 100	Introduction to Sociology	3	Comprehensive study of society, with analysis of group life and other forces shaping human behavior.	Y
CMST 101	Fundamentals of Communication	3	Introduces the study of speech fundamentals and critical thinking through frequent public speaking practice, including setting purpose, audience, and subject.	Y
MICRO 231	General Microbiology	4	Study of microorganisms emphasizing structure, metabolism, diseases, disease prevention and cure, immune systems and microbial ecology.	Y
ENGL 101	Composition	3	This course concentrates on all phases of the writing/communication process. Prewriting, drafting, revising and editing are used to help students develop clear, concise and unified writing styles that will serve them well in their chosen career areas.	Y
PSYC 101	General Psychology	3	This course is an introduction survey to the field of psychology with consideration of the biological bases of behavior, sensory and perceptual processes, learning and memory, human growth and development, social behavior and normal and abnormal behavior.	Y
MATH 103	Mathematical Reasoning	3	This course incorporates mathematical reasoning as it applies to dimensional analysis, equations, exponents, basic statistics, concepts related to financial security and other mathematical topics deemed necessary. The financial security portion of the course includes but is not limited to: financial planning, managing your money, putting together a budget plan, calculating compound interest, comparing interest rates and calculating loan payments with regards to student and consumer loans. These are all taught with an emphasis on practical application and problem solving. 3	Y
PHGY 210	Introduction to Human Physiology	4	Physiology teaches fundamental biochemical and physical concepts that explain the workings and regulation of all body functions in animals from molecular to organism level. The course examines the coordinated activities within the hierarchy of body organization and how these activities contribute to the overall homeostasis of the internal environment of the body.	Y
SUBTOTAL OF GENERAL EDUCATION CREDITS:		31	TOTAL NEW COURSES:	0

II. PROGRAM CORE

DH XXX	Advanced Dental Anatomy	1	Study of oral structures, tooth morphology, nomenclature, and head/neck anatomy.	N
DH XXX	Advanced Dental Radiography	1	Study of the use of x-rays in dentistry that includes equipment design and operation, radiation safety, and basic radiograph exposure techniques.	N
DH XXX	Clinical Dental Hygiene Procedures	2	Fundamental clinical dental hygiene skills, patient care and disease prevention.	N
DH XXX	Dental Nutrition	2	Principles of adequate nutrition and diet are covered with special emphasis on dietary evaluation and counseling related to prevention and control of dental disease.	N
DH XXX	Oral Histology and Pathology	3	The study of developing body tissues and pathology as it relates primarily to the oral cavity.	N

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION

Appendix 3: Program of Study

Lake Area Technical College

Dental Hygiene Associate of Applied Science (AAS)

DH XXX	Advanced Clinical Procedures	3	A continuation of DH XXX with topics on patient management and education.	N
DH XXX	Dental Preventative Health	2	This course introduces current theories and practices used in oral health education and preventive counseling for the dental hygiene patient. Oral physiotherapy aids, techniques, products, fluorides, nutrition, plaque, saliva, and patient motivation will be studied to achieve a preventive philosophy for the advocacy of oral health.	N
DH XXX	Introduction to Dental Hygiene Practice	1	This course will provide the student with the basic concepts and theories related to the performance of clinical dental hygiene. Opportunities will be provided for the student to identify his/her role as a dental hygienist with an emphasis on personal and professional development.	N
DH XXX	Oral Local Anesthesia	1.5	This course includes specialized study in anatomy, physiology, pharmacology, armamentarium and technique associated with the administration of oral local anesthetic agents. Prevention, recognition, and management of the anesthetic-associated medical emergencies are discussed.	N
DH XXX	Periodontology	2	A study of preventive periodontics, the diagnosis, etiology, and pathology of periodontal diseases. Laboratory and clinical experience with conservative periodontal therapies, TMJ assessment, pulp vitality testing, adjunctive antimicrobial therapy, and periodontal data analysis are associated with this course.	N
DH XXX	Ethics and Jurisprudence	1	Ethical conduct of the dental professional is discussed along with stat dental practice acts and other legal/regulatory issues affecting dental hygiene practice.	N
DH XXX	Dental Hygiene Practice	5.5	This course is designed to prepare the learner for the transition from student to practitioner. Didactic topics will include office management systems, professional liability, interviewing and team building. The clinical portion of this course is designed to help each student reach clinical competency and prepare for clinical practice	N
DH XXX	Community Health	2	Background and techniques in organization and evaluation of community health programs are studied using biostatistics as an evaluative tool. Emphasis on dental preventive and control measures in the field of community dental health will be designed, implemented, and evaluated by students.	N
DH XXX	Advanced Dental Hygiene Practice	5.5	This course will include a series of seminars and clinical opportunities in a selected dental setting which will provide the student with an in-depth experience in patient management and the development of advanced clinical skills. Self-instructional modules are available for review of clinical techniques for various procedures if needed.	N
DH XXX	Seminar for Dental Hygiene	1	Students will meet weekly in small groups to discuss and compare the learning outcomes they are achieving in their clinical experiences.	N
SUBTOTAL OF PROGRAM CREDITS:		33.5	TOTAL NEW COURSES:	15

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION
Appendix 4: Alignment Projection

Lake Area Technical College
 Dental Hygiene Associate of Applied Science (AAS)

TOTAL CREDITS IN PROPOSED PROGRAM:
 64.5

I. STACKABLE OPPORTUNITIES						
PROGRAM NAME		X	Existing	If Forthcoming:	Total Credits in	How many PROPOSED PROGRAM
Dental Assisting	Short-term Certificate		Forthcoming	Projected Timeline	Stackable Program	credits are in this stackable program opportunity?
	Long-term Certificate					
	Diploma					
	AAS	X			69.5	66
PROGRAM NAME			Existing	If Forthcoming:	Total Credits in	How many PROPOSED PROGRAM
	Short-term Certificate		Forthcoming	Projected Timeline	Stackable Program	credits are in this stackable program opportunity?
	Long-term Certificate					
	Diploma					
	AAS					
PROGRAM NAME			Existing	If Forthcoming:	Total Credits in	How many PROPOSED PROGRAM
	Short-term Certificate		Forthcoming	Projected Timeline	Stackable Program	credits are in this stackable program opportunity?
	Long-term Certificate					
	Diploma					
	AAS					
PROGRAM NAME			Existing	If Forthcoming:	Total Credits in	How many PROPOSED PROGRAM
	Short-term Certificate		Forthcoming	Projected Timeline	Stackable Program	credits are in this stackable program opportunity?
	Long-term Certificate					
	Diploma					
	AAS					

II. ARTICULATION AGREEMENTS (BACCALAUREATE)						
PROGRAM NAME	COLLEGE OR UNIVERSITY	X	Existing	If Forthcoming:	Total Credits in	How many PROPOSED PROGRAM
Dental Hygiene	University of South Dakota		Forthcoming	Projected Timeline	Bachelor's Degree	credits are projected to be accepted in the articulation agreement?
					120	31
PROGRAM NAME	COLLEGE OR UNIVERSITY		Existing	If Forthcoming:	Total Credits in	How many PROPOSED PROGRAM
			Forthcoming	Projected Timeline	Bachelor's Degree	credits are projected to be accepted in the articulation agreement?
PROGRAM NAME	COLLEGE OR UNIVERSITY		Existing	If Forthcoming:	Total Credits in	How many PROPOSED PROGRAM
			Forthcoming	Projected Timeline	Bachelor's Degree	credits are projected to be accepted in the articulation agreement?

III. LICENSURE AND CERTIFICATION OPPORTUNITIES		
<i>The PROPOSED PROGRAM will qualify students to pursue the following licensure and/or certification opportunities:</i>		
LICENSURE/CERTIFICATION	OVERSIGHT ORGANIZATION	Will the licensure/certification require reporting per SDCL 13-1-61?
Dental Hygiene License	South Dakota Board of Dentistry	Yes
LICENSURE/CERTIFICATION	OVERSIGHT ORGANIZATION	Will the licensure/certification require reporting per SDCL 13-1-61?
LICENSURE/CERTIFICATION	OVERSIGHT ORGANIZATION	Will the licensure/certification require reporting per SDCL 13-1-61?

NOTES: The following three exams must be completed successfully prior to SDBD issuing a license:

1. National Board Dental Hygiene Examination (NBDHE)
2. Clinical competency exam with the Central Regional Dental Testing Service (CRDTS)
3. South Dakota Jurisprudence Examination

Dental Hygiene DRAFT Budget

Updated:

03/20/2024

	Pre Year 2024-25	Year 1 2025-26	Year 2 2026-27	Year 3 2027-28	Year 4 2028-29
Headcount		15	15	20	25
Student FTE		17	17	22	28

Projected Expenditures

One-Time Expenditures

New/Renovated Facilities	\$ 5,200.00		\$ 1,300,000.00		
Equipment		\$26,050		\$ 13,025.00	\$ 17,453.50
Other		\$ 16,850.00	\$ 5,000.00		
Sub-Total: One-time	\$ 5,200.00	\$ 42,900.00	\$ 1,305,000.00	\$ 13,025.00	\$ 17,453.50

Recurring Expenditures

Personnel

FTE (Faculty and Staff)	\$ 41,102.58	\$ 209,625.77	\$ 209,625.77	\$ 278,501.78	\$ 278,501.78
Benefits	\$ 11,919.75	\$ 60,791.47	\$ 60,791.47	\$ 80,765.52	\$ 80,765.52
Sub-Total: Salary & Benefits	\$ 53,022.32	\$ 270,417.24	\$ 270,417.24	\$ 359,267.29	\$ 359,267.29

Operating

Rental / Lease					
Contractual Services	\$ 3,200.00	\$ 5,700.00	\$ 5,700.00	\$ 6,000.00	\$ 6,200.00
Equipment					
Supplies		\$ 4,500.00	\$ 4,500.00	\$ 6,000.00	\$ 7,500.00
Travel	\$ 1,500.00	\$ 2,000.00	\$ 2,000.00	\$ 2,600.00	\$ 2,600.00
Other		\$ 2,640.00	\$ 2,640.00	\$ 2,820.00	\$ 3,000.00
Sub-Total: Operating Expenditures	\$ 4,700.00	\$ 14,840.00	\$ 14,840.00	\$ 17,420.00	\$ 19,300.00
Total Projected Expenditures	\$ 62,922.32	\$ 328,157.24	\$ 1,590,257.24	\$ 389,712.29	\$ 396,020.79

Projected Revenue

Tuition		\$ 62,310.00	\$ 62,310.00	\$ 83,080.00	\$ 103,850.00
State Fees		\$ 23,637.60	\$ 23,637.60	\$ 31,516.80	\$ 39,396.00
Local Fees		\$ 60,540.00	\$ 60,540.00	\$ 80,720.00	\$ 100,900.00
Location-Based Fees					
State Sources			\$ 102,278.57	\$ 102,278.57	\$ 136,371.42
Federal Sources	\$ 62,925.00	\$158,600	\$ 18,400.00	\$ 13,025.00	\$ 17,453.50
Private Grants or Gifts			\$ 1,300,000.00		
Other		\$ 23,100.00	\$ 23,100.00	\$ 30,800.00	\$ 38,500.00
TOTAL PROJECTED REVENUE	\$ 62,925.00	\$ 328,187.60	\$ 1,590,266.17	\$ 341,420.37	\$ 436,470.92

Revenue - Expenditures \$ 2.68 \$ 30.36 \$ 8.93 \$ (48,291.93) \$ 40,450.13

Not included:

- Board exams
- Uniforms
- Tools
- Textbooks
- Housing
- Living expenses/food



South Dakota DENTAL ASSOCIATION

A constituent society of the American Dental Association

S.D. Dental Association
804 N. Euclid, Ste 103
Pierre, SD 57501-1194
Phone (605) 224-9133
FAX (605) 224-9168
www.sddental.org

March 20, 2024

Mr. Dana Dykhouse, Chair
South Dakota Board of Technical Education
800 Governor's Drive
Pierre, SD 57501

Dear Mr. Dykhouse:

On behalf of the South Dakota Dental Association, I am writing to ask the South Dakota Board of Technical Education to approve the proposed dental hygiene program at Lake Area Technical College. The profession needs more dental hygienists. A recent survey of our members indicates that 58 percent of dental offices in South Dakota are actively seeking to hire a dental hygienist. While our survey indicates that there is a current shortage of hygienists, national data indicates that the need will only grow as 31 percent of hygienists in the country are expected to retire within the next five years.

Dental hygienists are key members of the dental office team. The preventive and therapeutic services provided by hygienists ensure that patients maintain optimum oral health. Multiple studies have made the link between oral health and overall health. An adequate dental workforce serves to help improve the overall health of people living in South Dakota and vacant dental hygiene positions have reduced dental practice capacity.

A dental hygiene program at LATC would also serve to benefit the existing dental assisting program by attracting students with the intention of starting with dental assisting and continuing with dental hygiene.

The approval of the program is important to the future of the dental profession in South Dakota as well as the future health of the people living in our great state.

Sincerely,

A handwritten signature in black ink that reads "Paul Knecht".

Paul Knecht

Executive Director

February 16, 2024

Murray M. Thompson DDS, PC (DBA Pierre Dental Clinic)
Murray M. Thompson DDS, president
640 E. Sioux Ave.
Pierre, SD 57501
murraythompsondental@gmail.com
605-370-4431

South Dakota Board of Technical Education
800 Governors Drive
Pierre, SD 575436

South Dakota Board of Technical Education Members:

I have been practicing general dentistry in both the government and civilian sectors since 2005 and never before have I seen the overwhelming need for registered dental hygienists in SD. I own and operate a private general dentistry practice in Pierre, SD. We draw patients from a roughly three-hour radius around our town. We have almost 5500 active patients in our two-dentist practice. We currently have two full-time dental hygienists, but have space for two or three more. Doing the math, you can see that it is impossible to be able to care for all of our patients and provide preventive services at the level recommended. We are currently booked out 6-8 months for routine preventive appointments. Because of this delay, many patients are having to travel to other larger towns/practices for their care sometimes far outside of the Pierre area.

I have built my small business with a goal of providing the most compassionate, efficient, and professionally excellent dental care available in SD. The lack of workforce in central SD is palpable across most small businesses across our community. I am not the only dental office in Pierre struggling to care for our patients. We are all in the same situation needing adequately trained and licensed employees. We furthermore cannot compromise in state law and ethical standards in providing patient care.

The only dental hygiene training program in SD is USD. USD is not meeting the need for our state. This is a four-year degree program, but historically it seems that many of their students are not from SD and/or choose to leave our state once graduated. Furthermore, if they do decide to stay, many tend to live only in the SE SD area. Last year, my two hygienists averaged almost \$93,000+ in compensation working an average 32 hours/week with full benefits far generous than other state competitors. As a small business owner, I do not know what more I can do balancing my staff's desires and my patients' needs. We need more dental hygienists in central SD. Without this ancillary staff, we will not be able to continue to provide the preventive services necessary and expected by our patients. I will publicly and professionally support whatever LATC needs to provide this critical dental hygiene training.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Thompson', written in a cursive style.

Murray M. Thompson DDS



February 28, 2024

Ross K Schulte, DDS
20 19th St SE
Watertown, SD 57201
drross@fdcwtn.com
(605)886-2805

South Dakota Board of Technical Education
800 Governors Drive
Pierre, SD 575436

South Dakota Board of Technical Education Members:

My name is Ross Schulte, and I am a dentist in Watertown, SD. I would like to personally thank you for taking the time to read this letter and your consideration in evaluating a dental hygiene education endeavor at Lake Area Technical College.

I have been in private dental practice in Watertown, SD since 2002. Our office name is Family Dental Center, and we provide dental care for patients of all ages. We currently employ 4 dentists, 5 dental hygienists, 5 dental assistants and 4 front desk personnel.

Our office is in full support of expanding the dental training options at Lake Area Technical College to include a dental hygiene program. In my 20+ year dental history in the Watertown community, our office has always struggled to maintain dental hygiene staffing, and this problem has become increasingly worse since 2020 with the effects of COVID 19 on the dental industry.

We have been limited on the number of patients our office can see, directly due to the limited number of dental hygienists on our team. Many times, when we've had a dental hygiene position open, we've had no applicants at all or 1 applicant who has already applied at several other dental offices in the area. Since students travel away from this area to receive their dental hygiene training, many of them do not return to this area to start their careers. By keeping more students here with a local program, there will be more students looking to stay here and start their careers here as well.

As far as the future of dentistry, there are no signs of demand slowing down anytime soon. With a substantial percentage of the dental profession retiring in the next 5 years there is a high demand just to replace the existing workforce. Add increased life expectancy and more people keeping their teeth longer, there will be plenty of dental care needed.

Our office will be adding at least 1 dental hygienist in the next year just to keep up with demand. After that, we may be adding 1 or 2 more dental hygienists over the next 5 years. The training for these students is technical, but their skill set is compensated well with an average salary range around \$40/hr.

Thank you again for your time, and if you have further questions feel free to contact our office at the information above.

Sincerely,

A handwritten signature in black ink, appearing to read "Ross K Schulte DDS".

Ross K Schulte, DDS

Ross K. Schulte, DDS • Erika Beste Zink, DDS • Grant S. Titze, DDS

Twenty 19th Street SE, Watertown, SD 57201 • (605) 886-2805



Dakota Family Dentistry™

February 27, 2024

Dakota Family Dentistry

Jesse Fast DDS, MAGD

1010 Dakota Ave S.

Huron, SD 57350

South Dakota Board of Technical Education Members:

800 Governors Drive

Pierre, SD 575436

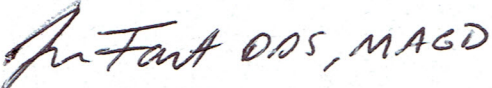
My name is Dr. Jesse Fast and I own Dakota Family Dentistry in Huron. I have been practicing dentistry since 2008. At no other time in my career has dental hygienists been in such short supply and high demand. Therefore, I am writing this letter to express my support for Lake Area Technical College to establish a Dental Hygiene program.

There are several obvious reasons I support this initiative. First, like I stated before, supply and demand require it. Currently in my practice the hygienists are booked out 7 months making it almost impossible to care for new adult patients and service current patients. Hygienists are a vital part of the dental care team and without a strong workforce of hygienists then patient care is hindered. Second, LATI has done an excellent job educating and preparing dental assistants. I employ 7 LATI trained dental assistants so I am confident LATI will do an excellent job with a Dental Hygiene program!

The need for dental hygienists is only going to grow the next 10-20 years as some near retirement age and many hygienists will request working part time. It took me over 1 year to hire one hygienist. Currently, I am still looking to add another hygienist to meet the dental demand. In the next 3- 5 years I foresee needing to hire 2-3 more hygienists to fill retirements and part time employment requests. Also, hygienists make a nice living with an expected wage range of \$40-\$50/hr. depending on location and experience.

Thank you for your consideration as I express my support for Lake Area Technical College to establish a Dental Hygiene program.

Sincerely,


Jesse Fast DDS, MAGD

Jesse D. Fast, D.D.S.

1010 Dakota Avenue South • Huron, South Dakota 57350 • (605) 352-6999