



## **Ad Hoc Report**

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**on the implementation of  
Bachelor of Applied Science (BAS) Degrees**

**in  
Logistics Operations Management  
and  
Emergency Management/Homeland Security**

**and the pre-implementation of the  
Bachelor of Science (BS) Degree in Dental Hygiene**

**Prepared for  
The Northwest Commission on Colleges and Universities**

**Truckee Meadows Community College  
September 2018**

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## Introduction

Truckee Meadows Community College (TMCC) received a communication from the Northwest Commission of Colleges and Universities (NWCCU) on May 10, 2016, stating that it had reviewed and approved the College's *Substantive Change* proposal to offer a Bachelor of Applied Science program in Logistics Operation Management (BAS-LOM), and a Bachelor of Applied Science program in Emergency Management and Homeland Security (BAS-EMHS) and accordingly granted TMCC *candidacy status* at the baccalaureate level. The Commission further requested that the College submit an Ad Hoc Report with a visit in Fall 2018 to provide an update on the implementation of these degree programs.

On June 6, 2018, TMCC received a separate communication from the Commission stating that it had reviewed and approved the College's *Substantive Change* proposal to add a Bachelor of Science degree program in Dental Hygiene (BSDH), which is scheduled to begin in Fall 2019. The Commission further asked that the College submit an Ad Hoc Report with a pre-implementation visit in Fall 2018, which will be coupled with its previous request for the Ad Hoc Report and Fall 2018 visit to provide an update on the implementation of the BAS-LOM and BAS-EMHS

The Commission will take action on the College's *candidacy status* at its January 2019 meeting following evaluation of this Ad Hoc Report and accompanying visit.

Truckee Meadows Community College (TMCC) is pleased to submit the following Ad Hoc Report on the College's respective implementation and pre-implementation of its BAS-LOM and BAS-EMHS, and BSDH degree programs and looks forward to the Commission's evaluation team visit in October.

# BAS in Logistics Operations Management

## Introduction

The Logistics Operations Management Bachelor of Applied Science (BAS) degree provides students with the technical expertise and knowledge needed to meet the northern Nevada operations and logistics industry technical workforce needs. The program is designed to offer a four year degree option focused on the critical skills needed in the logistics workforce. It complements our certificate and two year program options in this discipline. The program prepares students in the areas of manufacturing, operations, logistics, and supply chain through an industry-driven curriculum encompassing such areas as manufacturing processes, quality principles, warehousing, sustainability, safety, and operations planning and control. Students in the program are given the skills and knowledge to manage both material and information flows in complex environments. This degree responds to employers' expressed needs to have a well-qualified logistics operations workforce trained and ready to meet workforce demand, thus ensuring long-term economic success for the region. The addition of this BAS degree completes an educational pathway for an important sector of the business workforce.

## Alignment to Institutional Mission, Core Themes, and Objectives

The college mission statement reads:

*Truckee Meadows Community College promotes student success, academic excellence and access to lifelong learning by supporting high-quality education and services within our diverse community.*

The Logistics Operations Management Bachelor of Applied Science degree provides students the opportunity to be successful in their educational endeavors as well as their career goals. The program structure allows students who earned AAS degrees to further their educational pursuits. The program directly aligns with the college mission.

The Logistics Operations Management BAS degree reinforces the college's commitment to providing northern Nevada a well-educated and prepared workforce. Moreover, it provides a diverse population access to a necessary and pertinent regional program. TMCC's Master Plan contains a number of themes and initiatives to which the program contributes, including:

*Core theme 1, Strategic Initiative 3 - Create, expand and/or strengthen partnerships with civic, community, educational and business/industry organizations to provide lifelong learning opportunities.*

*Core theme 2, Strategic Initiative 3 - Regularly assess the skills needed to meet workforce needs in the service area.*

The Division of Business and Social Sciences is committed to working with the business community to ensure that a prepared, relevant workforce remains available. The BAS program was developed as a direct response to current demands and anticipated workforce needs.

The Center for Applied Logistics Management (CALM), located at TMCC's Meadowood Center, bridges the gap between academic and professional logistics. The Meadowood Center is a satellite campus specializing in instruction and support of business and logistics students.

- CALM is a collaboration between industry, academia, and community dedicated to leading and coordinating educational and training efforts in order to build and enhance a competitive northern Nevada workforce in a global economy.
- CALM provides a nexus where all pertinent stakeholders collaborate in response to government and industry needs in order to foster economic development, as well as for the dissemination of practical, cutting-edge, interdisciplinary knowledge and technologies to advance logistics, trade, transportation, and warehousing/distribution.

The center provides practical industry and academic logistics knowledge through workshops, classes, and special programs as needs are identified. When industry identifies needs in relevant research areas, research is conducted on contract. The center also creates and coordinates logistics internships. Furthermore, it conducts employer workshops to assist employers in maximizing internship outcomes.

## **Impact of BAS Implementation on TMCC**

Implementation of the Logistics Operations Management Bachelor of Applied Science degree has provided positive effects for the college as interest in Logistics has experienced substantial growth:

- Registrations have increased by 235% from 74 in 2015 to 248 in 2017.
- Registration fees collected have increased by 290% from \$19,346 in 2015 to \$75,539 in 2017.
- The Logistics BAS degree webpage has had 2,274 views in the past calendar year.

Growth is expected to continue due to high employment demand in a high paying career field.

An additional positive impact concerns business partnerships. There are currently 16 companies actively involved in the program advisory board. Those companies have benefited not only from partnering with TMCC but also from realizing college responsiveness to business community needs. These companies have contributed time, money, experience, and expertise. Moreover, they promote our program through their networks of contacts. They have helped to improve the program and have supported our students through scholarships, internships, and offers of employment upon program completion.

There have been no negative impacts resulting from implementation of this program.

## **Admission Criteria**

Those wishing to be accepted into the Logistics Operations Management Bachelor of Applied Science degree program complete a program application that undergoes a standard approval process. Graduates of the TMCC Logistics Management AAS degree or the Productions Systems AAS degree may enter the program at junior status. If a student who earned an AAS or other degree different from the two above would like to declare into the BAS program, his/her transcripts are evaluated and completed coursework applied as appropriate. In the case of a student from outside one of the two TMCC feeder AAS degrees, he or she may be asked to complete additional lower division coursework as appropriate.

## **Adequacy of Faculty, Administration, Library, Financial and Facilities Support**

In accordance with Standards 2.B.1 and 2.B.4, a full-time tenured track instructor, Brian Addington, was hired in August 2015 whose expertise and sole focus is Logistics Operations Management. In his most recent position prior to TMCC, Mr. Addington worked as Partner for Success (PFS) program at Boeing as a supplier management project manager for cross airplane cost down initiatives. He worked with engineering, finance, and 787 partners to identify and reduce costs through value engineering and supply chain realignment. Mr. Addington brings further experience from Decagon Devices, Inc. as a supply chain manager, and Nichirei Foods of America, Inc., as a production supervisor (See Appendix A, *resume for Mr. Brian Addington*). Additionally, existing tenured faculty within the division teach courses within their areas of expertise. All hold a master's degree, law degree, and/or doctoral degree. There is a strong part-time instructor pool consisting of subject matter experts identified by the advisory board who fill out the remainder of the instructional needs of the program.

Administrative support is provided by existing administrative positions within the department and through the office of the Dean of the Division of Business and Social Sciences. College support is provided for this degree program as it is for all college degree programs. For example, the office of Access, Outreach and Recruitment features information on our BAS degree during high school visits, community events, family nights, and open houses. Financial Aid and Academic Advisement provide support for our students as well.

Supplies, operating expenses, and library resources, including two new electronic databases and 40 new hard copy books, will continue to be funded equally by state funds and industry philanthropic giving.

Courses are taught online or online/lecture hybrid with evening lectures to accommodate the working adult student population. Lectures are held at the Meadowood Center, a satellite campus that is a preferred location for working students due to the proximity of a central city bus depot to support class and work schedules. CALM, the Center for Applied Logistics Management, is also located at the Meadowood Center.

The program has adequate resources to meet its growing needs. A recommendation to hire an additional full time faculty member will likely be sought in fiscal 2019 or 2020 as program enrollment justifies the addition.

## **Assessment of Implementation**

The implementation of the Logistics Operations Management BAS degree program has gone extremely smoothly. The program was well planned out and vetted with industry partners who have supported the program beyond expectations. Local media have published and broadcast multiple stories, and the regional economic development board has effectively promoted the program. The college community has been very supportive. Enrollment increases and the doubling of declared BAS majors over a single year demonstrate effective implementation.

The one change we have made to the program during the implementation phase is to rework our suggested course sequence. It was found that the course sequences for the feeder degree programs and the classes needed for the bachelor's program could be better aligned and that for courses that were only offered once per year some changes were needed to the suggested sequence. Those changes were made this past fall and will be effective with our Fall 2018 catalog. In the meantime, if a student needs a special accommodation to ensure completion, we are committed to working with each student through independent study.

Many community colleges have removed the word "community" from their name when they begin to offer bachelor's degrees. TMCC has held discussions in this regard with no certain outcome at this time. Surveys of existing declared BAS majors will be followed by surveys of all students, faculty, staff, and other stakeholders to determine if a name change should occur. Another idea involves having a school of bachelors' studies within the college which issues these degrees. Research on this topic is expected to be concluded in Fall 2018.

## **Evidence of Program Effectiveness**

### **Student Learning Outcomes and Assessment**

As per TMCC assessment policies, all courses are assessed on a planned cycle based on an evaluation of how the course is meeting the published and college approved course outcomes using preapproved measures for each outcome. These Course Assessment Reports (CARs) are compiled by faculty and reviewed by the department chair, dean, assessment dean, and the academic vice president. Possible course changes are addressed at this time in order to close the assessment loop. Below is our course assessment cycle for the next five year period. Completed course assessment reports can be found on the TMCC website [\[link\]](#) or will be provided upon request.

|  | Fall 2017 | Sp 2018 | Fall 2018 | Sp 2019 | Fall 2019 | Sp 2020 | Fall 2020 | Sp 2021 | Fall 2021 | Sp 2021 | Fall 2021 |
|--|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| LGM 201 ESSENTIALS OF LOGISTICS MANAGEMENT                 |           |         |           |         |           |         |           |         |           |         | X         |
| LGM 202 INTERNATIONAL LOGISTICS MANAGEMENT                 |           |         |           |         |           |         |           |         |           |         | X         |
| LGM 207 SERVICE LOGISTICS                                  | X         |         |           |         |           |         |           |         |           |         |           |
| LGM 208 LOGISTICS AND QUALITY MANAGEMENT TOOLS I           |           | X       |           |         |           |         |           |         |           |         |           |
| LGM 209 LOGISTICS AND QUALITY MANAGEMENT TOOLS II          |           | X       |           |         |           |         |           |         |           |         |           |
| LGM 210 STUDIES IN PROCUREMENT & LOGISTICSX                |           |         | X         |         |           |         |           |         |           |         |           |
| LGM 212 TRANSPORTATION MANAGEMENT                          |           |         | X         |         |           |         |           |         |           |         |           |
| LGM 280 CURRENT TOPICS IN LOGISTICS                        |           |         |           | X       |           |         |           |         |           |         |           |
| LGM 285 CPIM PREP  |           |         |           | X       |           |         |           |         |           |         |           |
| LGM 320 LOGISTICS SECURITY                                 |           |         |           | X       |           |         |           |         |           |         |           |
| LGM 330 WAREHOUSING  |           |         |           |         | X         |         |           |         |           |         |           |
| LGM 340 PRODUCTION & LOGISTICS INFORMATION SYSTEMS         |           |         |           |         |           | X       |           |         |           |         |           |
| LGM 352 OPERATIONS MANAGEMENT                              |           |         |           |         |           |         | X         |         |           |         |           |
| LGM 410 FINANCE AND BUDGETING                              |           |         |           |         |           |         |           | X       |           |         |           |
| LGM 420 SAFETY AND RISK MANAGEMENTX                        |           |         |           |         |           |         |           |         |           |         | X         |
| LGM 450 SUSTAINABILITY: ENVIRONMENTAL AND FINANCIAL IMPACT |           |         |           |         |           |         |           | X       |           |         |           |
| LGM 460 LEGAL CONCEPTS FOR TRANSPORTATION AND LOGISTICS    |           |         |           |         |           |         |           |         | X         |         |           |
| LGM 470 IMPORT EXPORT MANAGEMENT                           |           |         |           |         |           | X       |           |         |           |         |           |
| LGM 490 FIELD STUDY AND RESEARCH CAPSTONE                  |           |         |           |         |           | X       |           |         |           |         |           |
| LGM 491 LOGISTICS OPERATIONS MANAGEMENT INTERNSHIP         |           |         |           |         |           |         |           | X       |           |         |           |

The program is also assessed as a whole on a cycle called a Program Unit Review (PUR). The BAS degree is part of the program assessment cycle for the entire Logistics program that provides an in-depth evaluation of the certificate, associate degree, and bachelor degree programs. The Logistics program completed this process in Fall 2017. A copy of this report can be found on the TMCC website [[link](#)] or made available upon request.

Degree and program objectives will also be assessed in accordance with additional established college requirements, including the use of data from student course evaluations and surveys of graduates and employers. Additionally, two capstone courses—Field Study and Research, and Logistics Operations Management Internship—will be used to assess the overall effectiveness of the program.

### Retention and Completion Data

TMCC had its first graduate of the Logistics Operations Management Bachelor of Applied Science degree program in May 2018. The program is so new that effective analysis of program completion data is impossible. Analysis on retention is challenging; however, preliminary data shows declared majors being retained at 82% in academic year 2016-17 and improving to 90% in Fall 2017. Using an analysis at the course level allows for a higher N and shows the students in the program being retained at 84% in the last academic year which is 6% higher than the overall college course retention rate. This compares favorably to the previous two academic years in Logistics: 75% retention in 2015-16 and only 59% in 2014-15, implying that the strengthened program and clear pathway with strong career options is having a positive effect on retention. Completion rates will be better analyzed with at least four years of accumulated data.

### Advisory Committee Feedback

The logistics program has a very involved logistics business advisory board. The current composition of the advisory board is:

- |    |                 |                   |                                  |
|----|-----------------|-------------------|----------------------------------|
| 1. | Andrew Duty     | Amazon            | Facilities Area Manager          |
| 2. | Michael Pender  | Ardagh Group      | Managing Director                |
| 3. | Zachary Urrutia | Arrow Electronics | Manager, Logistics/Value-Add Ops |

|     |                  |                        |                                  |
|-----|------------------|------------------------|----------------------------------|
| 4.  | Chris Bender     | Bender Group           | CEO                              |
| 5.  | Barry Duplantis  | Ebara                  | Global Trade Compliance          |
| 6.  | Harley Enochson  | HAWS                   | Director of Supply Chain         |
| 7.  | Toby Eck         | High Quality Organics  | SR VP of Supply Chain Operations |
| 8.  | Darryl Bader     | ITS Logistics          | COO                              |
| 9.  | Sonia Griffin    | Kimmie Candy           | Retail/Wholesale Manager         |
| 10. | Dan Oster        | NAI Alliance           | Senior Vice President & Partner  |
| 11. | Shanel Pistorius | Natures Way            | Distribution Manager             |
| 12. | Alvin Bolton     | NV Army National Guard | Logistic Management Officer      |
| 13. | Neil Oscarson    | NV Army National Guard | State Training Officer           |
| 14. | Sam Humphries    | Urban Outfitters       | Talent Manager                   |
| 15. | Derek Sine       | Vander Co              | Managing Director                |
| 16. | Sean Salyer      | Zulily                 | General Manager                  |

The advisory board meets once per semester. The advisory board is focused on creating awareness, providing scholarships for students, providing opportunities for field study projects, and maintaining active involvement in the internship program.

## Plans for Moving Forward

Tremendous growth in logistics is being experienced in the northern Nevada region. Between 2010 and 2015 average employment in this industry grew 45.6% and wages grew 49.9%. This growth is putting pressure on logistics companies to find, hire, and develop employees with logistics knowledge and skills. The Logistics Operations Management BAS degree is well positioned to provide employers with the shift leads, supervisors, analysts, and managers that they need to grow. Moreover, with the unemployment rate in the greater Reno-Sparks area at around 4%, companies are looking closely at developing their employees from within instead of competing for scarce labor. The TMCC Logistics Program is well positioned to meet the needs of working adults with mainly online courses or hybrid online/lecture course with evening lectures.

In March 2017 the Logistics Advisory Board approved the hiring of the public relations firm The ABBI Agency to develop a marketing campaign to increase the awareness of the logistics program in northern Nevada and to create an evergreen campaign with multiple marketing media (video, audio ads, social media, etc.) for future marketing campaigns to be coordinated with the TMCC marketing department and to coincide with annual enrollment campaigns. The logistics advisory board developed a successful media campaign for April 2018 in coordination with TMCC marketing for a Fall 2018 enrollment campaign. Funding has been covered by a donation from one of our advisory board members and company partners, the Bender Group. Additionally, the program director and full time instructor will continue to take advantage of speaking opportunities with professional organizations, media interviews, and community events to promote the program.

In addition to external marketing, efforts will be made internally with our logistics certificate and associate programs to ensure that students understand the bachelor's degree pathway available to them. Students will also be made aware of available scholarships donated by the Bender Group.

As the program grows, a fully online option for completion of this BAS degree will be explored. There have been multiple inquiries into the bachelor's degree from neighboring states like California

and as far away as New York. These underserved students seem to have a need for an online option in Logistics Management that is not being met elsewhere. The 100% online degree option must be carefully researched and a plan developed in order to address necessary curriculum strategies. A plan will be developed with constraints and impacts noted and presented to the Advisory Board in academic year 2018-19 for an anticipated start date, if approved, of 2019-20.

## **Conclusion**

Truckee Meadows Community College is proud of the institution's first applied baccalaureate programs. The addition of the Logistics Operations Management Bachelor of Applied Science degree has already benefited the college and the community. In May 2018, TMCC awarded its first two BAS degrees, one in Logistics Operations Management and one in Emergency Management/Homeland Security. The program is a great example of how the college meets its mission, vision, values, and core themes, and acts as a great community partner. We see potential for exponential growth in this program. We foresee graduates having the opportunity to be quickly placed in high paying positions and supported by our industry partners. The BAS program represents one of many exciting opportunities for our students and our college.

### **BAS-LOM Report Contributors:**

Amy Williams, Interim Dean, Technical Sciences Division  
Brian Addington, Instructor of Business

# **BAS in Emergency Management and Homeland Security**

## **Introduction**

Truckee Meadows Community College (TMCC) established its Bachelor of Applied Science (BAS) degree in Emergency Management and Homeland Security (EMHS) in 2015-16 with implementation in Fall 2016. The program is currently in its third semester with consistently increasing enrollment and full-time equivalency (FTE). The BAS program in EMHS has been well received by career-seeking students and by the community of interest, which continues to be actively involved in our endeavors.

## **Alignment with Institutional Mission, Core Themes, and Objectives**

The BAS degree in EMHS aligns with the TMCC mission, core themes, and objectives in the following ways. First, it is aligned with the college's mission of "promoting student success, academic excellence and access to lifelong learning by supporting high-quality education and services within our diverse community." The BAS program in EMHS provides an educational opportunity that leads to needed entry-level positions in our community and the nation. It extends opportunities for students who have earned an associate's degree in Prehospital Emergency Medicine or Fire Technology to further their education in emergency services to the bachelor degree level. The program also meets core theme IV: Stewardship of Resources, in that it is an online educational program, conserving the valuable material resources of the college while providing students a comprehensive, quality education.

## **Impact of BAS Implementation on TMCC**

The BAS in EMHS has clearly had a positive impact on Truckee Meadows Community College. The program has enjoyed steady and consistent growth over the three semesters of its existence. The first semester in Fall 2016 resulted in 6.4 full-time equivalency, Spring 2017 realized 11.07 FTE, and Fall 2017 had 17.47 FTE enrollment. This growth is anticipated to continue as students become more aware of and interested in this degree path. The program has also realized some interest from out of state and southern Nevada students. Finally, the program is an online degree program and therefore does not create an undue impact on facilities or staff.

## **Admission Criteria**

The EMHS BAS admission criteria require prospective students to have completed an associate level degree verified by transcript. Furthermore, prospective students must have completed either the EMHS 200 pre-requisite or five online courses offered through the Emergency Management Institute Independent Study program, which consists of the following courses: IS-100 Introduction to the Incident Command System, IS-200 ICS for Single Resources and Initial Action Incidents, IS-700 National Incident Management System (NIMS): An Introduction, IS-775 EOC Management and Operations, and IS-800 National Response Framework: An Introduction. These pre-requisites are uniformly applied to all program applications in order to introduce prospective students to the

language, concepts, and developments within the Emergency Management/Homeland Security professions.

In order for prospective students to be admitted to the program, they must complete an online application process that includes uploading their transcript(s) and verification of having met the prerequisite, either by transcript or course completion certificate(s). The program director reviews and verifies admission criteria. If all requirements are met, the director issues a letter of acceptance, and an administrative assistant contacts the applicant for further enrollment instruction. If the applicant does not meet the admission requirements, he or she is informed via email as to what is missing and given options for how to complete the requirements with instructions for re-applying once the requirements are complete.

## **Adequacy of Faculty, Administration, Library, Financial and Facilities Support**

The program is currently staffed entirely by adjunct faculty. In accordance with Standards 2.B.1 and 2.B.4, all adjunct faculty are experts in their subject areas as well as practitioners in the profession (See Appendix B, *Summary of BAS EMHS part-time faculty expertise and experience*). The program is supported by two administrative assistants who do an outstanding job of serving the interests and needs of our students. The program is also supported by the college's library, which has a digital resources access agreement with the Center for Homeland Defense and Security (CHDS). Students also have access to the Federal Emergency Management Agency (FEMA) Emergency Management Institute digital library as well as other relevant database resources.

One deficit area at this juncture is the absence of a specified operating budget. When the program was proposed and adopted by the Nevada System of Higher Education, the proposed budget was to remain within the operation of the Public Safety Department. This has worked so far but may become an issue moving forward as the college and the program seek full-time faculty. Fiscal resources, however, have been sufficient to date.

## **Assessment of Implementation**

The initial implementation of the program was smooth and without significant difficulties. Faculty and administration were well prepared for the launch of the new program. Since inception, the program has realized consistent growth. In the third semester of the program, the department brought on a part-time coordinator from existing adjunct faculty to assist the director with course scheduling, marketing, communications, articulation agreements, the development of outside organizational relationships for student internships, and the development of capstone opportunities for students completing the program.

Marketing and communication help to spread awareness to the community and beyond. Course scheduling has been somewhat difficult to date since there is not a substantial history to review on enrollments and delivery; over time this challenge will resolve itself as the program discovers the most promising avenues for development. The program is working on articulation agreements with University of Alaska Fairbanks and Boston University School of Medicine Healthcare Emergency Management so that TMCC BAS-EMHS graduates can enter graduate programs where their undergraduate work is recognized and accepted. We are also working on an articulation agreement

with the College of Southern Nevada (CSN) in order to expand the reach of the TMCC BAS EMHS degree. These efforts are anticipated to grow the program well into the future.

## Evidence of Program Effectiveness

### Student Learning Outcomes and Assessment

Adjunct faculty responsible for program delivery conducted Course Assessment Reports (CARs) on the first iteration of courses. CARs have been used to develop curricular changes or enhancements to more effectively achieve student learning outcomes. Each course has entered a three year cycle for consistent assessment. Completed course assessment reports and program unit review reports can be found on the TMCC website [\[link\]](#) or will be provided upon request.

The following CAR example details outcomes, assessment measurements, use of assessment results, and effects on the course:

| Course Outcomes  | Assessment Measures  | Assessment Results  | Use of Results   | Effect on Course   |
|--|--|---|--|--|
| In the boxes below, summarize the outcomes assessed in your course during the year.  | In the boxes below, summarize the methods used to assess course outcomes during the last year.   | In the boxes below, summarize the results of your assessment activities during the last year.                         | In the boxes below, summarize how you are or how you plan to use the results to improve student learning.  | Based on the results of this assessment, will you revise course curriculum or course outcomes? If so, please summarize how and why in the boxes below: |
| <b>Outcome #1</b>  |  |   |  |  |
| Evaluate and differentiate the needs, purposes and outcomes of incident command, emergency operations centers, and multi-agency coordinating groups. | Weekly posts with follow up by the instructor.<br>Research paper and an incident action plan exercise  | Internet learning makes principles hard to explain when students lack any field experience                            | Increase the use of case studies with demonstration examples of incident action plans  | Increase use of case studies with examples of incident action plans  |
| <b>Outcome #2</b>  |  |   |  |  |
| Analyze the role of the Emergency Manager in emergency operations center functions and operations.   | Student posts with instructor follow up. Tour of their local EOC while meeting their local emergency manager. Interview of their emergency manager exercise.<br>EOC exercise | Student awakening to the role of the emergency manager and lack of authority but reliance on meta-leadership concepts | Future lessons: use this point in class to recover some of the key points at the beginning and have the students explain them again with their new found understanding | Continue practice  |

| Course Outcomes   | Assessment Measures  | Assessment Results  | Use of Results   | Effect on Course  |
|---|--|---|--|---|
| <b>Outcome #3</b>   |  |   |  |   |
| Demonstrate through analysis of past events, alternative actions/solutions and how they may improve outcomes for survivors and communities during recovery efforts. | Case review paper. Weekly student posts with instructor feedback | Students grasped important concepts to apply to exercises from the case studies | Theme of the course is continuous process improvement through meta-leadership concepts and after action lesson learned | Continue to use current case studies from recent incidents: more vivid with radio traffic or actual incident action plans the better. |

### Retention and Completion Data

Since inception, the program has realized consistent growth in headcount and full-time equivalency. To date, 61 students have declared as BAS-EMHS degree majors. Average retention is 80 percent. One student graduated in Spring 2018 with the BAS-EMHS degree, only four semesters following program inception.

### Advisory Committee Feedback

The EMHS advisory committee was formed from local practitioners from a variety of disciplines. The members, many of whom ultimately developed curriculum and became adjunct faculty, come from a broad spectrum, including but not limited to: Nevada Division of Emergency Management, Federal Transportation Safety Administration, Nevada National Guard, city and county emergency managers, public health and fire services officials, and private sector and academic professionals.

The advisory committee has been extremely active throughout the process of program development and implementation. The committee meets twice per academic year, once in Fall semester and once in Spring. Substantial email communications supplement the committee's expert feedback throughout the academic and calendar year. The committee's expert feedback has been both constructive and directive. The head of the state Division of Homeland Security and Emergency Management acts as advisory committee chair and is working to develop a future conference co-hosted between his agency and TMCC. The current advisory committee is as follows:

- |                    |  |                     |
|--------------------|--|---------------------|
| 1. Caleb Cage      | Nevada Division of Emergency Management      | Chief               |
| 2. William Munns   | City of Reno                                 | Emergency Mgr (Ret) |
| 3. Aaron Kenneston | Washoe County Emergency Management           | Emergency Manager   |
| 4. Jeff Whitesides | Washoe County Public Health                  | Retired             |
| 5. Fred Lokken     | TMCC Tenured Faculty                         | Political Science   |
| 6. Paul Davis      | TMCC Tenured Faculty                         | Political Science   |
| 7. Tony Abbruzzese | Boston University Healthcare Emerg Mgmt      | Professor           |
| 8. Jeff Burkett    | Nevada Air National Guard                    | Colonel             |
| 9. Bruce Martin    | City of Fremont                              | Fire Chief (Ret)    |
| 10. Kevin Schaller | Various Local/State Gov't and Private Sector | Emergency Mgr (Ret) |

|                 |                                      |                      |
|-----------------|--------------------------------------|----------------------|
| 11. Chris Stack | Transportation Safety Administration | Airport Authority AD |
| 12. Don Stangle | County Emergency Manager             | Retired              |
| 13. Joe Curtis  | Storey County                        | Emergency Mgr        |

## Plans for Moving Forward

There is continual growth and opportunity in the fields of Emergency Management and Homeland Security. The most recent data from the United States Bureau of Labor Statistics show anticipated growth of 8% from 2016 to 2026 and an anticipated median income of \$70,500.00 annually.

The plan moving forward is to continue the strong relationship with the active advisory committee and work toward bringing in additional members from the EMHS community for broader input and fresh eyes to ensure the program's continued relevance. It is evident that there is steady growing interest amongst students from a variety of professional and academic backgrounds. Therefore, it is imperative that the program continue to evaluate its bearing to Emergency Management and Homeland Security practices in order to ensure that our students experience the most updated, relevant education.

The hiring of a part-time coordinator to assist in day-to-day operations and vital articulation agreements, as described above, will aid the program moving forward. The coordinator is also pursuing affiliation agreements with private industry and local and state governments for student internship opportunities. Marketing and branding the program will continue to generate additional interest and enrollments among a broader audience. An active coordinator position will likely help to justify the need to hire one to two full-time faculty positions in the coming years.

## Conclusion

The Emergency Management/Homeland Security Bachelor of Applied Science degree program at TMCC is clearly having a positive impact on students and the community served by the college. The program continues to grow at a steady pace. With improved, more assertive marketing efforts, increased enrollments and graduates are anticipated. In May 2018, TMCC awarded its first two BAS degrees, one in Logistics Operations Management and one in Emergency Management and Homeland Security. The EMHS program was excited to deliver one of the college's first baccalaureate degrees in Spring 2018, just four semesters following program inception.

### **BAS-EMHS Report Contributor:**

Darryl Cleveland, Director, Public Safety Department

# **BS in Dental Hygiene**

## **Introduction**

This portion of the report addresses TMCC's substantive change proposal for the implementation of the Bachelor of Science degree in Dental Hygiene (BSDH). The BSDH involves a four year course of study that emphasizes evidence-based clinical knowledge, inter-professional education, collaboration within the dental/medical arena, and career advancement in areas such as practice management, hospitals, school-based programs, long-term care facilities, education, public health, and research.

The development and implementation of the BSDH degree was prompted by two major factors: 1) the increased number of credits required by the program's external accrediting organization, the Commission on Dental Accreditation (CODA), and 2) the need for an entry level bachelor dental hygiene program to fill workforce needs.

Employment of dental hygienists is projected to grow 19% from 2014 to 2024, according to the U.S. Bureau of Labor Statistics, a faster than average rate for all occupations. The college's BSDH degree program responds to northern Nevada dental providers who have expressed needs for a well-trained workforce. The American Dental Educators Association (ADEA) has published a brief entitled "Bracing for the Future: Opening Up Pathways to the Bachelor's Degree for Dental Hygienists," which calls for institutions, associations, and states to develop strong BS degree completion and transfer systems.

A call for action among many state and national organizations such as the American Dental Association (ADA) and the Centers for Disease Control and Prevention (CDC) demonstrates the national need for access to oral health care. Several states have approved a Dental Therapist Model into their Dental Practice Acts. This has allowed dental hygienists with baccalaureate degrees to apply to programs that offer an Advanced Dental Hygiene Practitioner degree, increasing the opportunity for graduates to work more independently and with populations of individuals who have no access to dental care.

The BSDH degree will allow graduates a higher level of education as required in the public health arena, in government agencies, in medical/hospital settings, and in dental corporations. The BSDH degree aligns with Nevada System of Higher Education plans by producing more entry-level graduates. The program also allows for the development of new community partnerships within medical/hospital settings.

## **Alignment to Institution Mission and Core Themes**

The BSDH degree aligns with TMCC's mission of student success, academic excellence, and access to lifelong learning by fulfilling specific workforce needs which will benefit graduates by providing more opportunities for positions that require a baccalaureate degree.

The BSDH degree aligns with TMCC's Academic and Strategic Master Plan by meeting several Core Themes and Objectives, as detailed below:

- **Alignment with Core Theme I, Student Success, Objective 1**  
*Improve successful completion of students' educational goals, including graduation, transfer, and CTE completion by providing students a higher level degree or the opportunity to transfer into a graduate level degree program.*
- **Alignment with the Core Theme I, Student Success, Objective 3**  
*Provide student engagement opportunities that build interpersonal, intrapersonal, and practical skills.*

The new degree is based on the Interpersonal Education Model that will allow students to build interpersonal skills by collaborating with other health care professionals.

- **Alignment with Core Theme II, Academic Excellence, Objective 2**  
*Offer high-quality programs that meet the workforce educational needs of our community.*

The BSDH degree will fulfill workforce needs for positions in dental health care that require a bachelor's degree. The BSDH degree will address workforce needs in our service area by expanding opportunities into the medical arena via interprofessional education (IPE) not only in private practice dentistry but in other areas such as Dental Hygiene Education, Research, Public Health, Government Agencies, and Corporate Sales.

- **Alignment with Core Theme III, Access to Lifelong Learning**

The BSDH program provides associate level graduates an opportunity to return to college in order to complete a higher level degree, thereby opening up higher demand job opportunities.

## **Impact of BSDH Implementation on TMCC**

Implementation of the BSDH degree will occur in Fall 2019. There is currently no data to demonstrate the impact of the BSDH degree program on the college. The program's stakeholders anticipate that the impact will be positive with increased workforce need fulfillment and increased access to higher education and local, state, and national career organizations and opportunities.

This degree will allow Truckee Meadows Community College to provide students with educational and enrichment opportunities outside of their current rotations with Washoe County School District, Indian Health Service, Community Health Alliance (CHA), Early Headstart, Healthy Smiles, and Veterans Affairs by moving into the medical arena. Crossing over into the medical arena by way of interprofessional education (IPE) will not only serve our community as a resource but provide students with cultural enrichment by expanding and sharing knowledge between other allied health professionals in delivering the highest quality of patient care across all professions. This collaboration will create and strengthen new partnerships within the community and business/industry organizations, as well as providing lifelong learning opportunities.

TMCC currently offers two Bachelor of Applied Science (BAS) degrees, one in Emergency Management and Homeland Security and one in Logistics Management. Other disciplines are supportive and anticipate potential future collaboration with students from other allied health programs. Nutrition 223 was added as a pre-requisite for the BSDH degree, and Nutrition Program faculty anticipate student interest in the Dental Hygiene profession. Directors of the college's other allied health programs, including Radiology Technician, Nursing, and EMS, have conveyed an interest in having their students participate in the Interprofessional Education (IPE) course offered in the dental hygiene curriculum. This integration would give TMCC students from multiple allied health programs the opportunity to learn about each other's responsibilities and scopes of practice as well as providing the possibility to work with each other on external rotations in the community.

The College of Southern Nevada (CSN) was recently approved to offer a BSDH degree beginning Fall 2018 or 2019 with a focus on public health and education. TMCC's BSDH program will include some of CSN's coursework due to the Nevada System of Higher Education's Common Course Numbering policy. The BSDH program will incorporate concepts from public health, as this is the umbrella under which all professional dental hygiene roles fall. TMCC's degree will be set apart from CSN's degree, however, by focusing on the concept, theory, and application of the Interprofessional Education Model. This model is recommended by the Institute of Medicine as a best practice collaborative approach to developing healthcare students as future interprofessional team members within the healthcare system. TMCC will be one of the first community colleges to adopt this model as part of its dental hygiene curriculum. Students will have the opportunity to work collaboratively with other medical professionals in order to provide better health care services, ultimately improving health outcomes for northern Nevada residents.

## **Admission Criteria**

The minimum admission requirements to the BSDH program include:

1. High school diploma or GED
2. Completed TMCC new student application
3. Completed TMCC dental hygiene program application
4. Fifty-four (54) credits of lower division general education and pre-requisite courses with a minimum course grade of "C" or higher and GPA of 2.75 on a 4.0 scale
5. A minimum of eight (8) documented hours of dental office observation
6. The Health Education Systems, Inc. (HESI) or Test of Essential Academic Skills (TEAS) entrance exam six (6) months prior to application [the director is currently researching which test(s) to proctor]
7. Fine motor dexterity test within six (6) months of application

## **Adequacy of Faculty, Administration, Library, Financial and Facilities Support**

In accordance with Standards 2.B.1 and 2.B.4, the program has three full-time faculty who hold master's degrees. They have combined teaching experience of over 50 years. The full-time program

director can teach up to three contact hours per week on the current contract. A fourth full-time faculty position has been approved, and a hiring search will begin in Spring 2019 to fill the position for Fall 2019.

A strong pool of part-time instructors who have been teaching in the program for a minimum of five years will fill remaining instructional needs, if needed. Two part-time faculty are currently enrolled in a master's program at the University of Nevada, Reno.

The college's dental hygiene clinic serves patients in the northern Nevada region. The clinic is managed by a full-time professional position. The new degree does not increase the number of clinic sessions per week, so the clinical component will not be affected.

The Dental Hygiene program currently has a 0.33 FTE administrative assistant to assist with budget, payroll, application screening, and other duties. Current staffing can adequately support the new degree.

The existing capacity of student support services in admissions, financial aid, advising, library, and tutoring can adequately accommodate the BSDH degree. Financial Aid, Advising, and Admissions & Records participate in the college's curriculum review process and remain aware of BSDH degree implementation. Tutoring and library services have been informed and are excited for degree implementation. The Dental Hygiene Director is working with library staff to secure additional texts on inter-professional education and research that are covered by state funds.

The current lecture room holds 25 students. The new degree will not require any additional square footage or equipment.

## **Assessment of Implementation**

Currently there are no assessment data to report. Once the program is implemented, the director will be able to report at the end of Spring 2020.

## **Evidence of Program Effectiveness**

### **Student Learning Outcomes and Assessment**

The BSDH program will continue to pursue outcomes assessment including: final exams, assessment of clinical data, public health program outcomes, national board results, clinical board results, student exit surveys, graduate surveys, employee surveys, and employer surveys. Assessment data is gathered for each course annually for faculty review in order to modify the curriculum as needed. Reporting of course-level assessment occurs through TMCC's established Course Assessment Reports (CARs). Each course is reviewed by faculty and the program director annually. (See Course Assessment Cycle information below.) Completed course assessment reports and program unit review reports can be found on the TMCC website [\[link\]](#) or will be provided upon request.

The program is also assessed every five years with a Program Unit Review (PUR) covering curriculum, enrollment trends, demographics, and resources. The associate's program last had its unit review in December 2016 with minimal recommendations suggested. The PUR Committee recommended the DH program move forward with the BSDH degree proposal. The program has an external accreditation every seven years conducted by the Commission on Dental Accreditation (CODA). The program was granted approval status without reporting requirements on August 4, 2016. The next scheduled site visit is Spring 2022.

## Course Assessment Cycle

### Course Assessment Cycle for 2017-2022

Instructions - By May 19, please indicate by placing an "X" when you will assess each course within the Fall 2017 - Spring 2022 cycle. If not completed and turned in by May 19, the dean will establish the cycle.

| Y - means the course has been approved for General Education |          |       |  |          |                | X - means the course is scheduled for assessment that semester |           |         |           |         |           |         |           |         |           |         |
|--|----------|-------|--|----------|----------------|--|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| Prefix   | Course # | GenEd | Course   | Division | Department     | As Taught  | Fall 2017 | Sp 2018 | Fall 2018 | Sp 2019 | Fall 2019 | Sp 2020 | Fall 2020 | Sp 2021 | Fall 2021 | Sp 2022 |
| DH   | 102      | N     | ORAL BIOLOGY   | Science  | Dental Hygiene |  |           |         |           |         | X         |         | X         |         | X         |         |
| DH   | 103      | N     | HEAD AND NECK ANATOMY                                      | Science  | Dental Hygiene |  |           |         |           |         | X         |         | X         |         | X         |         |
| DH   | 304      | N     | DENTAL HYGIENE THEORY I                                    | Science  | Dental Hygiene |  |           |         |           |         | X         |         | X         |         | X         |         |
| DH   | 305      | N     | PRE CLINICAL PRACTICE                                      | Science  | Dental Hygiene |  |           |         |           |         | X         |         | X         |         | X         |         |
| DH   | 306      | N     | PREVENTATIVE ORAL HEALTH CONCEPTS                          | Science  | Dental Hygiene |  |           |         |           |         | X         |         | X         |         | X         |         |
| DH   | 314      | N     | ORAL RADIOLOGY   | Science  | Dental Hygiene |  |           |         |           |         | X         |         | X         |         | X         |         |
| DH   | 209      | N     | PAIN AND ANXIETY CONTROL                                   | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 311      | N     | PHARMACOLOGY   | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 312      | N     | GENERAL AND ORAL PATHOLOGY                                 | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 313      | N     | PERIODONTAL PRINCIPLES I                                   | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 315      | N     | CLINICAL PRACTICE I  | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 404      | N     | RESEARCH METHODOLOGY                                       | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 299      | N     | INDEPENDENT STUDY  | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 308      | N     | DENTAL MATERIALS & TECHNIQUES                              | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 403      | N     | PERIODONTICS I   | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 405      | N     | CLINICAL PRACTICE II                                       | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 407      | N     | DENTAL PUBLIC HEALTH CONCEPTS                              | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 410      | N     | FOUNDATIONS OF INTER-PROFESSIONAL COLLABORATIVE PRACTICE   | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 420      | N     | DENTAL MANAGEMENT OF SPECIAL PATIENTS                      | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 440      | N     | CAPSTONE I   | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 409      | N     | ETHICS, LAW AND BUSINESS PRACTICE                          | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 411      | N     | DENTAL PUBLIC HEALTH FIELD EXPERIENCE                      | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 413      | N     | PERIODONTICS II  | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 415      | N     | CLINICAL PRACTICE III                                      | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 416      | N     | INTER-PROFESSIONAL COLLABORATIVE PRACTICE FIELD EXPERIENCE | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 417      | N     | COMMUNITY HEALTH DENTAL II                                 | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |
| DH   | 442      | N     | CAPSTONE SEMINAR II  | Science  | Dental Hygiene |  |           |         |           |         |           | X       |           | X       |           | X       |

## Retention and Completion Data

There is no data currently available. The director will report after the first class of graduates in Spring 2021.

## Advisory Committee Membership

- Shelby Davis, RDH
- Julie Ellsworth, PhD, Dean, Division of Sciences
- Brian Evans, DDS
- Michael Gilman, DDSs
- Stacey Jacobs, RDH, Chairperson
- Kenneth Lang, DDS, MSD, Vice Chairperson
- Georgan Harriett, RDH
- Lori McDonald, RDH, MA
- Gene Pascucci, DDS
- Kathy Pinson, RDH, Secretary
- Patti Sanford, RDH, MA
- Julie Stage-Rosenberg, RDH, MA
- William Wager, DDS

## Advisory Committee Purpose and Goals

TMCC believes that quality education will result from a cooperative effort toward the development and implementation of relevant curricula shared between the college and the business community.

With this purpose in mind, the following goals have been established for members of the Dental Hygiene Advisory Board:

- To provide recommendations to the staff of the TMCC Dental Hygiene Program regarding the development and operation of the program
- To provide TMCC Dental Hygiene instructors with timely, professional information on the new methods, techniques, and procedures used in the dental field
- To help determine community needs and objectives in the area of curricula and placement
- To provide essential communication links between TMCC Dental Hygiene and the business community
- To advise on curriculum content, facilities, and equipment
- To provide assistance to the College in the areas of externship, guest speakers for selected courses, field trip sites, and public relations activities
- To commit to regular involvement via once-per-semester advisory committee meetings and in other ways as described in the list above

## **Plans for Moving Forward**

TMCC DH BS degree faculty, along with other TMCC allied health faculty, anticipate a smooth transition moving forward with the new BS degree program, as detailed in this report.

TMCC's full-time faculty, the college's Academic Standards and Assessment Committee, and the Dental Hygiene Advisory Board provide the needed structure and support for this in-demand degree program. The transition from the associate's to the BS degree is in line with the course requirements of the Commission on Dental Accreditation (CODA) and the recommendations of the American Dental Hygienists Association (ADHA) and the American Dental Education Association (ADEA). Our community's dental health professionals are excited to support the program transition to the BS degree. The high caliber of our graduates transitioning into the workforce will continue with the same excellence that the program has been known for over the past two decades.

## **Conclusion**

As healthcare moves toward integrated delivery systems, the need to expand dental hygiene practices increases as an integral factor in public health care. The Bachelor of Science in Dental Hygiene is becoming the "Gold Standard" for young professionals in the field. The TMCC BSDH degree program benefits graduates, the community, and the state by continuing to foster existing collaborations and by developing new partnerships within the growing northern Nevada region. The program continues to enhance and expand relationships begun with the establishment of the associate's degree program in 1998.

### **BSDH Report Contributor:**

Lori McDonald, Director, Dental Hygiene Program

**Appendix A**  
**Resume for Mr. Brian Addington, Logistics Instructor**

## Brian J Addington, MBA, MPM

Boeing Leadership Center, Functional Excellence Programs  
Supplier Management University

- SMU Practices, 2010
- SMU Application, 2011

Transition to Management Program

- October 2012

Professional Experience

Boeing, BCA – Boeing Commercial Airplanes

Business Operations Specialist Level 5, [Partner for Success Program](#)

787 PSE Factory Supplier Management Cross Airplane Project Manager, May 2013 to present.

- Project Manager for 787 Cost Down initiatives:
  - 787 CMK Realignment – realign Configurable Manufacturing Kits so parts are ordered at point of consumption.
  - 787 Business Commitments – work with contracts organization to identify and quantify outstanding business commitments and develop metrics with finance organization to help director develop burn down plans.
  - 787 P Clamp – 3PP (third party pricing) work with SM sustaining operations to offer 3PP of p clamps to 787 partners (MHI, FHI, KHI, and Alenia) [resulting in savings of over \\$2.8M to 787 LRBP EAC Forecast.](#)
  - 787 Bracket Optimization Project – partnered with engineering technical lead on trade study to evaluate replacing titanium brackets with alternate materials (aluminum, BMS-3899).

Boeing, BDS – Boeing Defense & Space Systems

Production Control / Materials Management

Functional Project Lead, DSM Demand Supply Management System Implementation Team, June 2009 to April 2013. Supply Chain Management Analyst Level 5

- Participated in Opportunity Evaluation process at request of BDS Director of Production Control / Materials Management to evaluate existing legacy shortage systems to identify system to be adopted by all sites across the enterprise as part of the Supply and Operations Chain strategic Common System deployment.
- Developed Business Case for a Common Shortage System for development, deployment, and sustainment of application.
- Developed communication plan for reporting project status to site project leads and OSM Common System Executive Steering Team and other stakeholders.
- Developed project plan with site project leads. Developed integrated test plans with site customers for Customer Acceptance Testing.
- Trained site Focals prior to implementation.
- Functional Project Implementation Lead for Team to implement DSM across BDS programs, business division, and sites:
- BDS Production Airplanes

- C17 - Macon, GA (2009), Long Beach, CA (2011)
  - Apache - Mesa, AZ (2010)
  - Chinook, V22 – Philadelphia (2012)
  - F22, P8, AWACS, Tanker - Puget Sound (2012)
  - F15, F18 – Saint Louis, MO (Planned July 2013)
- N&TS – Network and Tactical Systems (2010)
- Space Exploration (2011)
  - Houston, TX, Kennedy Space Center, FL
- Missile Defense Systems
  - Huntsville, AL (2011)
- N&SS – Network and Space Systems
  - El Segundo, CA (2010)
    - Developed user group and change board to manage system enhancement approval process.
    - Facilitated user conferences face to face meetings to continuously improve processes and develop shortage application roadmap.
    - Developed common shortage metric reporting across enterprise to automate site shortage metric reporting to the PCMM PAT’s first automated Metric Portal to support the Materials Management Council (MMC) strategic direction.
    - Facilitated BDS team across sites and divisions to develop P140 requirements for Common BDS shortage metrics to utilize IBI Integrated Business Intelligence system to common measure all sites the same and aggregate shortage metrics for reporting to the PCMM PAT and the Supplier Management Portal.
    - Functional responsibility for application sustainment and problem resolution system, process, and policies.
- Functional Project Lead, ARES Receiving System Implementation Team, Oct 2007 – June 2009
  - Developed Business Case and worked with business unit leaders and finance to identify impacts to LRBP’s (long Range Business Plans) and IDS allocation of site overhead to fund IDS overhead functional team.
  - Participated in interviews to select and hire sustainment personnel.
  - Developed Project Plans and resource loaded WBS to enable Earned Value Management.
  - Reported project status to site project leads, OSM Common System Executive Steering Team.
  - Developed integrated test plans with site customers for Customer Acceptance Testing.
  - Implemented ARES in Mesa, AZ; Saint Louis, MO; Wichita, KS; Puget Sound, WA.
  - IDS Standard Receiving System User Group functional lead. After an Operational Evaluation (OE) ARES was chosen by the OSM council to be the go-forward

system to be a common system in 2008. User Group is chartered to implement ARES receiving across IDS.

Supply Chain Integrator, Precision Assembly Center, Oct 2005 –Oct 2007

Improve and integrate processes supporting PAC/PPC in Saint Louis.

- Improved Point of Use production parts and developed POU IT tool to facilitate monitoring of part configuration across all Saint Louis programs.
- Lean Manufacturing Assessment Focal for PAC (Precision Assembly Center).
- Lean Manufacturing Assessor for Section 4 Materials Management, Huntsville & Macon 2006, 2007.
- PC-36 HPWO Team Member– participated in level 4 presentation in October 2007.
- Designed all POU storage (consumables, production parts) and processes to support new work cell flow layout in Tube Shop with HPWO team and industrial engineering
- Piloted passive RFID tracking of work orders in the Tube Shop working with Phantom Works advanced manufacturing technology group.
- Coordinated F15 Speedbrake kit conveyance with GKN, industrial engineering, packaging engineering, facilities and spares contract organization.

Washington State University

Operations Management Lecturer, Jan-May 2005

College of Business and Economics, Department of Management and Operations

“Introduction to Operations Management”, Mgt 340

University of Idaho

Production and Operations Management Lecturer, Sept – Dec 2004

College of Business and Economics, Production and Operations Management Department

“Advanced Planning and Control” Mgt 472

Decagon Devices, Inc., OEM Manufacturer of Scientific Instrumentation

Supply Chain Manager, 2004 – Jan 1, 2005

- Implemented transition from manual insertion of electronic components to automated surface mount machinery.
- Trained product managers how to forecast and plan for seasonality in our industry thus reducing inventory investment in their product lines by 20%, increasing inventory turns and improving customer on time delivery.
- Initiated VMI (vendor managed inventory) to reduce space requirements for all instrument case needs. By consolidating to a single supplier for cases achieved a drastic reduction in inventory space needs as the supplier stocked these cases and ships them on a Kanban and Just in Time basis.

Decagon Devices, Inc.

Production / Purchasing / Inventory Manager 2001-2004

- Managed purchasing/production/inventory/shipping employees.
- Initiated and implemented lean transformation with a Kaizen Blitz plant shutdown resulting in reduction of throughput by 50%, reducing WIP inventory by 60%, and decreasing lead times from 30 days to two weeks while increasing employee morale.

- During three years sales more than doubled and inventory investment increased only by 10% thus freeing up capital for other projects and expansions.

#### Purchasing / Inventory Manager, 2000-2001

- Sourced, negotiated, and maintained supplier relationships for following items/processes: metal enclosures, plastic injection molding, blow molded cases, die cut/ water jet cut foam inserts, elastomers, machined aluminum sensor blocks, and machined plastic parts.
- Purchased electronic components: passives (resistors, capacitors), electro-mechanical switches and motors, sensors, optoelectronics (LED's), thermistors, power supplies, and cable assemblies.
- Sourced, negotiated, and maintained supplier relationships to support electronic assembly: printed circuit boards, stencils, solder equipment, paste and all related production material and equipment.

#### Nichirei Foods of America, Inc., Food Processing Company

##### Production Supervisor, 1993-1999

- Reporting to plant manager. Responsibilities included: quality, safety, sanitation and production volumes. Responsible for training all personnel on Hazmat and USDA GMP's and HACCP. Supervised over 100 employees across both plants.
- Responsible for a capitol budget program to install a centralized sanitation system in both factories to meet and exceed USDA HAACP requirements. Budgeted, planned, designed, and sourced equipment and choosing contractors to install.

#### Education

Master of Project Management, Washington University in Saint Louis, May 2012

Master of Business Administration, Washington State University, 2002

Bachelor of Science, Business Administration / Operations Management, Oregon State University, 1991

#### Software

- Boeing BDS Production Systems: DSM (Demand Supply Management), Compass Contract, ARES Receiving Front End, Networks Procurement, BEST, BRAIDSS,
- Boeing Program Management Best Practice Tools: MET, Clearquest, BORIS.
- Competency: Microsoft Office (Outlook, Excel, Word, Access, PowerPoint, Project)

#### Accreditation

- Advanced Supply Chain Management Certificate, Saint Louis University, 2006
- Graduate Certificate in Project management, Washington University, 2010

#### Professional Memberships

- APICS Board of Directors – Commencement Bay Chapter, 1998-1999

## **Appendix B**

### **Summary of BAS EMHS Part-time Faculty Expertise and Experience**

#### **William Munns**

MS Public Administration and Emergency Management, American Public University  
IAEM Certified Emergency Manager  
Retired Division Chief and former Emergency Manager, City of Reno  
TMCC Wildland Fire Program Coordinator and EMHS Advisory Committee Member  
Over 20 years of part-time teaching experience at TMCC  
Course Developer and Instructor for:  
EMHS 300 – Principles, Practices Philosophy & Doctrine of Emergency Management  
EMHS 304 – Hazard Risk Management: Vulnerability and Risk

#### **Bruce Martin**

MA Security Studies (Homeland Defense and Security), United States Naval Postgraduate School  
Retired Fire Chief, City of Fremont  
EMHS Advisory Committee Member  
Twenty Years experience in academia and 3 years part-time teaching experience at TMCC  
Course Developer and Instructor for:  
EMHS 421 – Critical Thinking and Strategic Intelligence  
EMHS 425 – Emergency Management/Homeland Security Leadership & Communication

#### **Paul Davis**

Ph.D., Political Science, University of Utah  
TMCC Professor of Political Science  
Over 40 years in academia and 30 years of teaching full-time at TMCC  
Course Developer and Instructor for:  
EMHS 311 – International and Cyber Terrorism  
EMHS 315 – Domestic Terrorism and Homeland Security in the U.S.

#### **Chris Stack**

MS Management, University of Phoenix  
Assistant Federal Security Director, Reno-Tahoe International Airport  
EMHS Advisory Committee Member  
Five years teaching part-time at TMCC  
Course Developer and Instructor for:  
EMHS 313 – Homeland Security: Preparedness, Prevention, Deterrence & Emergency Management  
EMHS 325 – Terrorism, Weapons of Mass Destruction and Homeland Security  
EMHS 429 – Transportation Systems: Security and multi-modal transportation

#### **Kevin Schiller**

MA, Emergency and Disaster Management, American Public University  
Retired Law Enforcement Officer

EMHS Advisory Committee Member

Three years experience teaching part-time at TMCC

Course Developer and Instructor for:

EMHS 410 – Social Dimensions, Lifecycle and Ethics of Disaster

EMHS 414 - Organizational Crisis & Continuity Management

## **Appendix C**

### **Summary of BS Dental Hygiene Faculty Expertise and Experience**

#### **Lori L. McDonald (1.0 FTE)**

MA Educational Leadership (University of Nevada, Reno) 2012

BSDH (Oregon Health Sciences University Portland, OR) 1989

Certifications

NvLEND Certification UNR, 2013

Nevada Leadership Education in Neurodevelopmental Disabilities

Healthcare Provider CPR Local Anesthesia/Nitrous Oxide

Professional Licenses

Registered Dental Hygienist (RDH) #3023

CA #14033 (In-active Status)

Thirty-three years in dentistry and 11 years teaching experience at TMCC

Courses Taught

DH 104/304 Dental Hygiene I DH 105/305 Intro to Clinic/Co- Coordinator

DH 107/409 Legal and Ethical Implications in Dental Hygiene DH 110/306 Concepts of

Oral Health DH 112/314 Oral Radiology Lab

DH 115/315 Clinic I/Seminar/Co- Coordinator

DH 118/313 Advanced Clinical Topics Lab DH 209 Pain and Anxiety Control Lecture and  
Lab

DH 211/308 Dental Materials (Lab) DH 205/305 Clinical Practice II

DH 215/415 Clinical Practice II/Seminar (Taught for F/T faculty on sabbatical)

DH 299 Skills Lab

Awards and Activities

Excellence in Teaching Award: 2009

Developed/approved proposal for Differential Tuition

Developed a new professional position: Dental Clinic Associate

1<sup>st</sup> Year Clinic Coordinator

#### **Patti A. Sanford (1.0 FTE)**

MA, Health Care Administration (San Jose State University, San Jose, CA) 1989

BSDH (University of Southern California School of Dentistry, Los Angeles, California) 1980

Certification

Healthcare Provider CPR Local Anesthesia/Nitrous Oxide

Professional Licenses

Nevada #101031

California, RDH #9126

Thirty-eight years in dentistry and 14 years full-time teaching at TMCC

Courses Taught

DH 105/305 Intro to Clinic/Co- Coordinator

DH 112/314 Oral Radiology, Lecture and Lab

DH 115/315 Clinic I/Seminar

DH 118/313 Advanced Clinical Topics, Lecture and Lab

DH 205/305 Clinical Practice II/Seminar, Coordinator  
DH 207/403 Periodontics I  
DH 208/407 Community Dental Health I  
DH 215/415 Clinical Practice III/Seminar, Coordinator  
DH 214/413 Periodontics II  
DH 216 Practice Management 2011-2013, Interim Director

#### Awards and Activities

Implemented the use of computers and technology in the dental clinic  
2004-Present, Clinic Coordinator  
Researched and now implementing electronic tracking/grading for clinical requirements

#### **Julie A. Stage- Rosenberg**

MPH University of Nevada, Reno, 2007  
Certificate in Specialization in Aging, Sanford Center for Aging, 2000  
BSDH Northern Arizona University, 1979

#### Certifications

Healthcare Provider CPR Local Anesthesia/Nitrous Oxide

#### Professional Licenses

Nevada #2560  
California #13627 (In- active)

Forty-one years in dentistry and 19 years teaching at TMCC

#### Courses Taught

DH 102 Oral Biology – Dental Anatomy & Oral Embryology/Histology  
DH 113/312 General & Oral Pathology DH 118/313 Advanced Clinical Topics Lecture  
& Lab  
DH 120 Fundamentals of Nutrition in Dentistry  
DH 203/420 Special Patients  
DH 208/407 Community Dental Health I DH 218/417 Community Dental Health II  
DH 214/413 Periodontics II (Taught for F/T faculty on Sabbatical)  
DH 112/314 Radiology  
DH 103 Head & Neck Anatomy DH 209 Pain & Anxiety Control  
DH 205/305 & DH 215/415 2<sup>nd</sup> Year Clinic Coordinator

#### Awards and Activities

Student American Dental Hygienists' Association (SADHA) Advisor – multiple years  
Student American Dental Hygienists' Association (SADHA) Advisor – multiple years  
Instrumental in developing TMCC DH Program 1999 & actively involved in all subsequent  
accreditation cycles

#### Community outreach & community service activities with students:

Early Head Start Oral Screening and Fluoride Varnish once/semester (7- year partnership)  
with UNR Early Head Start (approx. 120 children/semester in 7- 8 centers) on going  
Developed and Coordinate TMCC Give Kids a Smile with DA Program (10 years) on  
going  
Oral health education for variety of populations including caregivers in long- term care  
facilities ongoing

Developed pilot program Adopt-A-Vet Program

Secured grant funding for community service activities including Give Kids a Smile, community outreach, and Golden Smiles Program, on-going

Serve on several state and national advisory boards:

Association of State and Territorial Dental Directors (ASTDD) Healthy Aging Committee &, Dental Hygiene Liaison to Head Start for Nevada and Region IX (AZ, CA, HI, NV)